



BCG03 General Construction Training Package

Volume 3 of 5

Version Number: 4
Review Date: 30 November 2006



BCG03 General Construction Training Package

The General Construction Training Package (BCG03) is comprised of five volumes. This division is necessitated by the size of the contents and the need to reduce costs to clients. Each volume contains common information together with the competency units essential for the particular sub-sectors.

Volume 3 of 5 General Construction Training Package (Volume 3)

This Training Package was endorsed by NTQC in 30 November 2003.

BCG03 - General Construction Training Package

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Version Modification History

The version details of this endorsed Training Package are in the table below. The latest information is at the top of the table.

Version	Release Date	Comments
4	08.12.2006	<u>Four additional qualifications</u> Certificate III in Low Rise Structural Framing BCG31706 Certificate II in Steel Fixing BCG20206 Certificate II in Concreting BCG20306 Certificate II in Stonemasonry BCG20406
3	24.10.06	<u>Two additional qualifications</u> Certificate III in Formwork/Falsework BCG31506 Certificate III Wall & Ceiling Lining (Plasterboard) BCG31606 <u>Twenty-eight additional units of competency:</u> BCGPB3001A Fix standard plasterboard wall sheets BCGPB3002A Fix standard plasterboard ceiling sheets BCGPB3003A Fix battens BCGPB3004A Fix wet area sheets BCGPB3005A Fix ceiling sheets to external protected areas BCGPB3006A Fix fibre cement board BCGPB3007A Apply levels of finish standards to planning and inspection of own work BCGPB3008A Mix plastering compounds BCGPB3009A Finish plasterboard joins by hand BCGPB3010A Hand sand plaster work BCGPB3011A Finish category 1 & 2 wet areas BCGPB3012A Cut and fix paper faced cornice BCGPB3013A Plan travel routes BCGPB3014A Install batt insulation products BCGPB3015A Set up, move and dismantle scaffolding up to 4 metres BCGPB3016A Install and finish columns BCGPB3017A Rectify faults in plaster applications BCGPB3018A Use vacuum/electric sanding equipment to finish plaster work BCGPB3019A Install PartiWall plaster products BCGPB3020A Match, mitre and install cast ornamental cornice BCGPB3021A Install and fix residential acoustic plaster

Version	Release Date	Comments
		products BCGPB3022A Use mechanical jointing equipment to finish joints BCGPB3023A Load and unload plaster and plaster related products BCGPB3024A Use manual handling equipment to manoeuvre plaster products BCGPB3025A Store plasterboard/products BCGPB3026A Erect and maintain trestle and plank systems BCGPB3027A Inspect equipment for serviceability BCGCM1006A Work safely at heights
2	24/08/2006	Release of new volume to provide Certificate 4-6 qualifications
1	05/08/2004	Cat 1 change, Delete core unit BCGCO2004B Carry out concrete work from Certificate II in General Construction and Insert new core unit BCGCO2003B Carry out concreting to simple forms Current entry BCGWC2004B Install cast plaster and paper faced cornices be amended to read BCGWC3004B Install cast plaster and paper faced cornices.
1	18/06/2004	Cat 1 change, Replace unit BCGCO2004 Carry out Concrete Work as a core unit in Certificate III in Carpentry with unit BCGCO2003 Carry out concreting to simple forms.
1	09/01/2004	Primary Release, based on revision of the BCG98 Package

Forms control: All endorsed training packages will have a version number displayed on the imprint page of every volume constituting that training package. Every training package will display an up-to-date copy of this modification history form, to be placed immediately after the contents page of the first volume of the training package. Comments on changes will only show sufficient detail to enable a user to identify the nature and location of the change. Changes to training packages will generally be batched at quarterly intervals. This modification history form will be included within any displayed sample of that training package and will constitute all detail available to identify changes.

Qualifications Framework

The Australian Qualifications Framework

What is the Australian Qualifications Framework?

A brief overview of the Australian Qualifications Framework (AQF) follows. For a full explanation of the AQF see the *AQF Implementation Handbook, 3rd Edition 2002*. You can download it from the Australian Qualifications Advisory Board (AQFAB) website (www.aqf.edu.au) or obtain a hard copy by contacting AQFAB on phone 03 9639 1606 or by emailing AQFAB on aqfab@curriculum.edu.au

The AQF provides a comprehensive, nationally consistent framework for all qualifications in post-compulsory education and training in Australia. In the vocational education and training (VET) sector it assists national consistency for all trainees, learners, employers and providers by enabling national recognition of qualifications and Statements of Attainment.

Training Package qualifications in the VET sector must comply with the titles and guidelines of the AQF. Endorsed Training Packages provide a unique title for each AQF qualification which must always be reproduced accurately.

Qualifications

Training Packages can incorporate the following eight AQF qualifications.

- Certificate I in ...
- Certificate II in ...
- Certificate III in ...
- Certificate IV in ...
- Diploma of ...
- Advanced Diploma of ...
- Vocational Graduate Certificate of ...
- Vocational Graduate Diploma of ...

On completion of the requirements defined in the Training Package, a Registered Training Organisation (RTO) may issue a nationally recognised AQF qualification. Issuance of AQF qualifications must comply with the advice provided in the *AQF Implementation Handbook* and the Australian Quality Training Framework *Standards for Registered Training Organisations*, particularly Standard 10.

Statement of Attainment

Where an AQF qualification is partially achieved through the achievement of one or more endorsed units of competency, an RTO may issue a Statement of Attainment. Issuance of Statements of Attainment must comply with the advice provided in the *AQF Implementation Handbook* and the Australian Quality Training Framework *Standards for Registered Training Organisations*, particularly Standard 10.

Under the *Standards for Registered Training Organisations*, RTOs must recognise the achievement of competencies as recorded on a qualification or Statement of Attainment issued by other RTOs. Given this, recognised competencies can progressively build towards a full AQF qualification.

AQF Guidelines and Learning Outcomes

The *AQF Implementation Handbook* provides a comprehensive guideline for each AQF qualification. A summary of the learning outcome characteristics and their distinguishing features for each VET related AQF qualification is provided below.

Certificate I

Characteristics of Learning Outcomes

Breadth, depth and complexity of knowledge and skills would prepare a person to perform a defined range of activities most of which may be routine and predictable.

Applications may include a variety of employment related skills including preparatory access and participation skills, broad-based induction skills and/or specific workplace skills. They may also include participation in a team or work group.

Distinguishing Features of Learning Outcomes

Do the competencies enable an individual with this qualification to:

- demonstrate knowledge by recall in a narrow range of areas;
- demonstrate basic practical skills, such as the use of relevant tools;
- perform a sequence of routine tasks given clear direction
- receive and pass on messages/information.

Certificate II

Characteristics of Learning Outcomes

Breadth, depth and complexity of knowledge and skills would prepare a person to perform in a range of varied activities or knowledge application where there is a clearly defined range of contexts in which the choice of actions required is usually clear and there is limited complexity in the range of operations to be applied.

Performance of a prescribed range of functions involving known routines and procedures and some accountability for the quality of outcomes.

Applications may include some complex or non-routine activities involving individual responsibility or autonomy and/or collaboration with others as part of a group or team.

Distinguishing Features of Learning Outcomes

Do the competencies enable an individual with this qualification to:

- demonstrate basic operational knowledge in a moderate range of areas;
- apply a defined range of skills;
- apply known solutions to a limited range of predictable problems;
- perform a range of tasks where choice between a limited range of options is required;
- assess and record information from varied sources;
- take limited responsibility for own outputs in work and learning.

Certificate III

Characteristics of Learning Outcomes

Breadth, depth and complexity of knowledge and competencies would cover selecting, adapting and transferring skills and knowledge to new environments and providing technical advice and some leadership in resolution of specified problems. This would be applied across a range of roles in a variety of contexts with some complexity in the extent and choice of options available.

Performance of a defined range of skilled operations, usually within a range of broader related activities involving known routines, methods and procedures, where some discretion and judgement is required in the selection of equipment, services or contingency measures

and within known time constraints.

Applications may involve some responsibility for others. Participation in teams including group or team co-ordination may be involved.

Distinguishing Features of Learning Outcomes

Do the competencies enable an individual with this qualification to:

- demonstrate some relevant theoretical knowledge
- apply a range of well-developed skills
- apply known solutions to a variety of predictable problems
- perform processes that require a range of well-developed skills where some discretion and judgement is required
- interpret available information, using discretion and judgement
- take responsibility for own outputs in work and learning
- take limited responsibility for the output of others.

Certificate IV

Characteristics of Learning Outcomes

Breadth, depth and complexity of knowledge and competencies would cover a broad range of varied activities or application in a wider variety of contexts most of which are complex and non-routine. Leadership and guidance are involved when organising activities of self and others as well as contributing to technical solutions of a non-routine or contingency nature.

Performance of a broad range of skilled applications including the requirement to evaluate and analyse current practices, develop new criteria and procedures for performing current practices and provision of some leadership and guidance to others in the application and planning of the skills. Applications involve responsibility for, and limited organisation of, others.

Distinguishing Features of Learning Outcomes

Do the competencies enable an individual with this qualification to:

- demonstrate understanding of a broad knowledge base incorporating some theoretical concepts
- apply solutions to a defined range of unpredictable problems
- identify and apply skill and knowledge areas to a wide variety of contexts, with depth in some areas
- identify, analyse and evaluate information from a variety of sources
- take responsibility for own outputs in relation to specified quality standards
- take limited responsibility for the quantity and quality of the output of others.

Diploma

Characteristics of Learning Outcomes

Breadth, depth and complexity covering planning and initiation of alternative approaches to skills or knowledge applications across a broad range of technical and/or management requirements, evaluation and co-ordination.

The self directed application of knowledge and skills, with substantial depth in some areas where judgement is required in planning and selecting appropriate equipment, services and techniques for self and others.

Applications involve participation in development of strategic initiatives as well as personal

responsibility and autonomy in performing complex technical operations or organising others. It may include participation in teams including teams concerned with planning and evaluation functions. Group or team co-ordination may be involved.

The degree of emphasis on breadth as against depth of knowledge and skills may vary between qualifications granted at this level.

Distinguishing Features of Learning Outcomes

Do the competencies or learning outcomes enable an individual with this qualification to:

- demonstrate understanding of a broad knowledge base incorporating theoretical concepts, with substantial depth in some areas
- analyse and plan approaches to technical problems or management requirements
- transfer and apply theoretical concepts and/or technical or creative skills to a range of situations
- evaluate information, using it to forecast for planning or research purposes
- take responsibility for own outputs in relation to broad quantity and quality parameters
- take some responsibility for the achievement of group outcomes.

Advanced Diploma

Characteristics of Learning Outcomes

Breadth, depth and complexity involving analysis, design, planning, execution and evaluation across a range of technical and/or management functions including development of new criteria or applications or knowledge or procedures.

The application of a significant range of fundamental principles and complex techniques across a wide and often unpredictable variety of contexts in relation to either varied or highly specific functions. Contribution to the development of a broad plan, budget or strategy is involved and accountability and responsibility for self and others in achieving the outcomes is involved.

Applications involve significant judgement in planning, design, technical or leadership/guidance functions related to products, services, operations or procedures.

The degree of emphasis on breadth as against depth of knowledge and skills may vary between qualifications granted at this level.

Distinguishing Features of Learning Outcomes

Do the competencies or learning outcomes enable an individual with this qualification to:

- demonstrate understanding of specialised knowledge with depth in some areas
- analyse, diagnose, design and execute judgements across a broad range of technical or management functions
- generate ideas through the analysis of information and concepts at an abstract level
- demonstrate a command of wide-ranging, highly specialised technical, creative or conceptual skills
- demonstrate accountability for personal outputs within broad parameters
- demonstrate accountability for personal and group outcomes within broad parameters.

Vocational Graduate Certificate

Characteristics of competencies or learning outcomes

- The self-directed development and achievement of broad and specialised areas of knowledge and skills, building on prior knowledge and skills.

- Substantial breadth and complexity involving the initiation, analysis, design, planning, execution and evaluation of technical and management functions in highly varied and highly specialised contexts.
- Applications involve making significant, high-level, independent judgements in major broad or planning, design, operational, technical and management functions in highly varied and specialised contexts. They may include responsibility and broad ranging accountability for the structure, management and output of the work or functions of others.
- The degree of emphasis on breadth, as opposed to depth, of knowledge and skills may vary between qualifications granted at this level.

Distinguishing features of learning outcomes

- Demonstrate the self-directed development and achievement of broad and specialised areas of knowledge and skills, building on prior knowledge and skills.
- Initiate, analyse, design, plan, execute and evaluate major broad or technical and management functions in highly varied and highly specialised contexts.
- Generate and evaluate ideas through the analysis of information and concepts at an abstract level.
- Demonstrate a command of wide-ranging, highly specialised technical, creative or conceptual skills in complex contexts.
- Demonstrate responsibility and broad-ranging accountability for the structure, management and output of the work or functions of others.

Vocational Graduate Diploma

Characteristics of competencies or learning outcomes

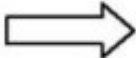
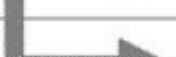
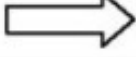
- The self-directed development and achievement of broad and specialised areas of knowledge and skills, building on prior knowledge and skills.
- Substantial breadth, depth and complexity involving the initiation, analysis, design, planning, execution and evaluation of major functions, both broad and highly specialised, in highly varied and highly specialised contexts.
- Further specialisation within a systematic and coherent body of knowledge.
- Applications involve making high-level, fully independent, complex judgements in broad planning, design, operational, technical and management functions in highly varied and highly specialised contexts. They may include full responsibility and accountability for all aspects of work and functions of others, including planning, budgeting and strategy development.
- The degree of emphasis on breadth, as opposed to depth, of knowledge and skills may vary between qualifications granted at this level.

Distinguishing features of learning outcomes

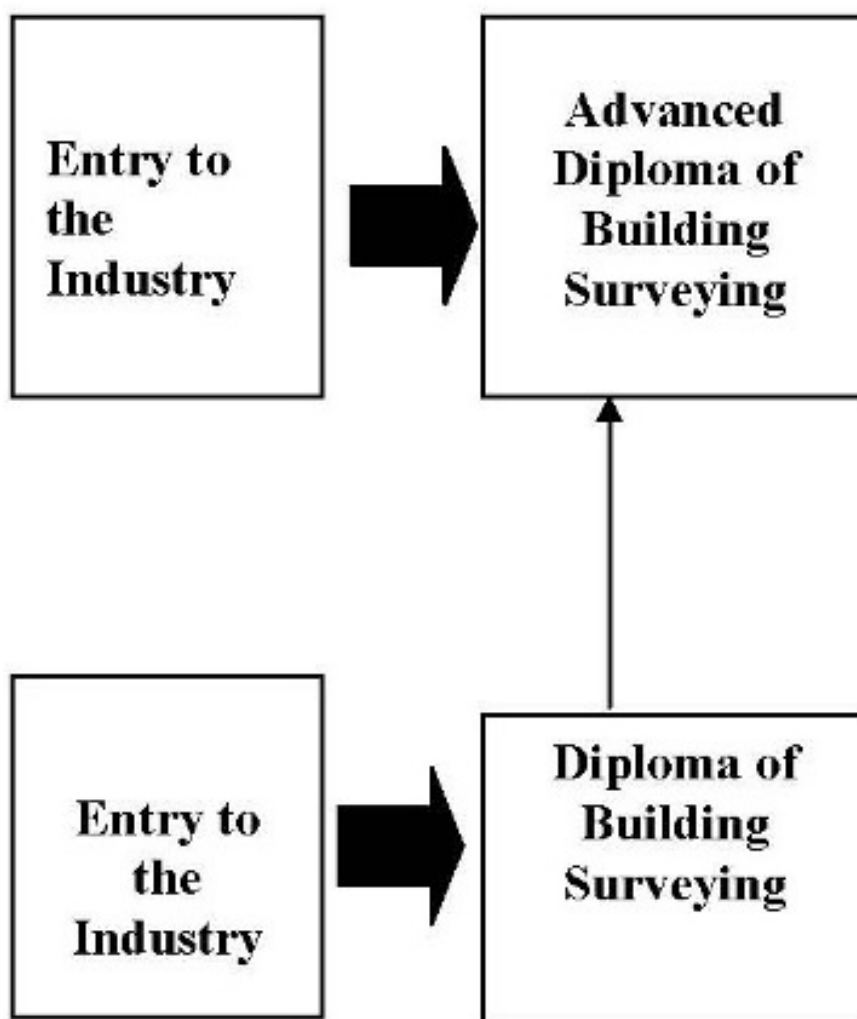
- Demonstrate the self-directed development and achievement of broad and highly specialised areas of knowledge and skills, building on prior knowledge and skills.
- Initiate, analyse, design, plan, execute and evaluate major functions, both broad and within highly varied and highly specialised contexts.
- Generate and evaluate complex ideas through the analysis of information and concepts at an abstract level.
- Demonstrate an expert command of wide-ranging, highly specialised, technical, creative or conceptual skills in complex and highly specialised or varied contexts.
- Demonstrate full responsibility and accountability for personal outputs.
- Demonstrate full responsibility and accountability for all aspects of the work or functions of others, including planning, budgeting and strategy.

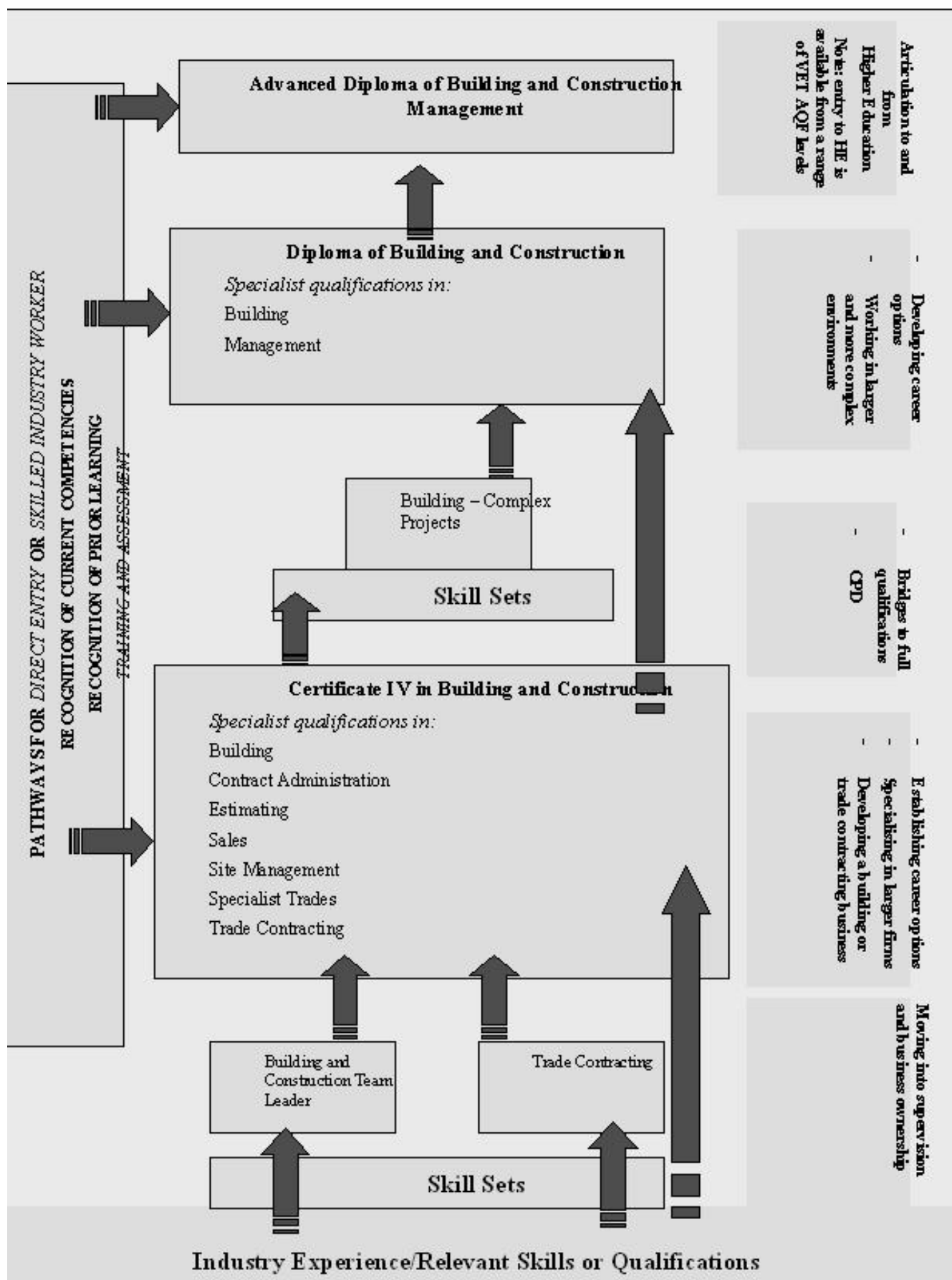
Training Pathways Outline

Entry levels and articulation are shown in the following diagrams:

ENTRY	CERTIFICATE		
	I	II	III
	General Construction (BCG 10103)		
		General Construction (BCG 20103)	
			Bricklaying/blocklaying (BCG30103)
			Carpentry (BCG30203)
			Concreting (BCG30303)
			Demolition (General Construction) (BCG30403)
			Dogging (BCG30503)
			Painting and Decorating (BCG30603)
			Rigging (BCG30703)
			Roof Tiling (BCG30803)
			Scaffolding (BCG30903)
			Solid Plastering (BCG31003)
			Steel Fixing (BCG31103)
			Wall and Ceiling Lining (BCG31203)
			Wall and Floor Tiling (BCG31303)
			Waterproofing (General Construction) (BCG31403)

Pathways to building surveying qualifications





Skill Sets

Definition

Skill sets are defined as single units of competency, or combinations of units of competency from an endorsed Training Package, which link to a licence or regulatory requirement, or defined industry need.

Wording on Statements of Attainment

Skill sets are a way of publicly identifying logical groupings of units of competency which meet an identified need or industry outcome. Skill sets are not qualifications.

Where skill sets are identified in a Training Package, the Statement of Attainment can set out the competencies a person has achieved in a way that is consistent and clear for employers and others. This is done by including the wording 'these competencies meet [the relevant skill set title or industry need is included]' on the Statement of Attainment. This wording applies only to skill sets that are formally identified as such in the endorsed Training Package.

All Statements of Attainment must include the wording 'A Statement of Attainment is issued by a Registered Training Organisation when an individual has completed one or more units of competency from a nationally recognised qualification'. The following may also be used 'these competencies form part of the [the relevant qualification(s) code and title are inserted]'.

This section below provides information on skill sets within this Training Package, with the following important disclaimer: **Readers should ensure that they have also read the part of the Training Package that outlines licensing and regulatory requirements.**

Skill Sets in this Training Package

Trade contracting

This skill set addresses the skills used by experienced tradespeople operating as a sole trader, or with limited staff, contracting their services to builders. The contractors may be in the early stages of developing and growing their newly established businesses.

The intent of the skill set is to provide an initial set of business skills to support contractors' existing trade skills.

The completion of this skill set provides a pathway to a range of Certificate IV qualifications.

BCGBC4004A	Identify and produce estimated costs for building and construction projects
BCGBC4024A	Resolve business disputes
BCGBC4034A	Apply codes and standards to building trade and services contracting
BSBCMN310A	Deliver and monitor a service to customers
BSBOHS403A	Identify hazards and assess OHS risks
BSBSBM401A	Establish business and legal requirements
BSBSBM406A	Manage finances

PLUS one of the following units:

BCGBC4025A	Manage personal work priorities and professional development
BCGBC4031A	Process client requirements
BSBCMN420A	Write complex documents

The suggested form of words for inclusion on a Statement of Attainment is: These units from BCG03 General Construction Training Package meet industry requirements for experienced tradespersons performing trade contracting work in the construction industry.

Building, construction and services team leader

This skill set addresses the skills used by experienced tradespeople and operators who are moving into roles with additional responsibility and team leadership, typically in smaller businesses. The intent of the skill set is to identify the team leadership and other skills that will enable the development of staff under the supervision of an experienced site supervisor or builder. The completion of this skill set provides a pathway to a range of Certificate IV qualifications.

BCGBC4002A	Manage occupational health and safety in the building and construction workplace
BCGBC4009A	Apply legal requirements to building and construction projects
BSBFLM404A	Lead work teams

The suggested form of words for inclusion on a Statement of Attainment is: These units from BCG03 General Construction Training Package meet industry requirements for experienced tradespersons and operators working as building, construction and services team leaders in the construction industry.

Building - complex projects

The role of a builder requires the acquisition and use of a complex and diverse range of skills. The range and depth of skills required of a builder is amplified by the size and complexity of projects on which he or she works.

This skill set is designed as a 'bridge' for experienced builders already operating at the Certificate IV level who are preparing to undertake larger scale projects which may entail developing additional skills and also, possibly, seeking a higher level of builders' license in the relevant State/Territory. This skill set may be supported by a continuing professional development programs which are increasingly being required of builders.

The completion of this skill set provides a pathway to the Diploma qualification.

BCGBC5003A	Supervise the planning of on-site medium-rise building or construction work
BCGBC5007A	Administer the legal obligations of a building or construction contract
BCGBC5008A	Apply structural principals to the construction of medium-rise buildings
BSBFLM507B	Manage quality customer service
BSBPM505A	Manage project quality
BSBPM508A	Manage project risk

The suggested form of words for inclusion on a Statement of Attainment is: These units from BCG03 General Construction Training Package meet industry requirements for experienced builders in building-complex projects where it is necessary to apply a diverse range of skills to projects amplified by their size and complexity.

Assessment Guidelines

Introduction

These Assessment Guidelines provide the endorsed framework for assessment of units of competency in this Training Package. They are designed to ensure that assessment is consistent with the Australian Quality Training Framework (AQTF) *Standards for Registered Training Organisations*. Assessments against the units of competency in this Training Package must be carried out in accordance with these Assessment Guidelines.

Assessment System Overview

This section provides an overview of the requirements for assessment when using this Training Package, including a summary of the AQTF requirements; licensing/registration requirements; and assessment pathways.

Benchmarks for Assessment

Assessment within the National Training Framework is the process of collecting evidence and making judgements about whether competency has been achieved to confirm whether an individual can perform to the standards expected in the workplace, as expressed in the relevant endorsed unit of competency.

In the areas of work covered by this Training Package, the endorsed units of competency are the benchmarks for assessment. As such, they provide the basis for nationally recognised Australian Qualifications Framework (AQF) qualifications and Statements of Attainment issued by Registered Training Organisations (RTOs).

Australian Quality Training Framework Assessment Requirements

Assessment leading to nationally recognised AQF qualifications and Statements of Attainment in the vocational education and training sector must meet the requirements of the AQTF as expressed in the *Standards for Registered Training Organisations*.

The *Standards for Registered Training Organisations* can be downloaded from the DEST website at www.dest.gov.au or can be obtained in hard copy from DEST. The following points summarise the assessment requirements under the AQTF.

Registration of Training Organisations

Assessment must be conducted by, or on behalf of, an RTO formally registered by a State or Territory Registering/Course Accrediting Body in accordance with the *Standards for Registered Training Organisations*. The RTO must have the specific units of competency and/or AQF qualifications on its scope of registration. See Section 1 of the *Standards for Registered Training Organisations*.

Quality Training and Assessment

Each RTO must have systems in place to plan for and provide quality training and assessment across all its operations. See Standard 1 of the *Standards for Registered Training Organisations*.

Assessor Competency Requirements

Each person involved in training, assessment or client service must be competent for the functions they perform. See Standard 7 of the *Standards for Registered Training Organisations* for assessor competency requirements. Standard 7 also specifies the competencies that must be held by trainers.

Assessment Requirements

The RTOs assessments must meet the requirements of the endorsed components of Training Packages within its scope of registration. See Standard 8 of the *Standards for Registered Training Organisations*.

Assessment Strategies

Each RTO must identify, negotiate, plan and implement appropriate learning and assessment strategies to meet the needs of each of its clients. See Standard 9 of the *Standards for Registered Training Organisations*.

Mutual Recognition

Each RTO must recognise the AQF qualifications and Statements of Attainment issued by any other RTO. See Standard 5 of the *Standards for Registered Training Organisations*.

Access and Equity and Client Services

Each RTO must apply access and equity principles, provide timely and appropriate information, advice and support services that assist clients to identify and achieve desired outcomes. This may include reasonable adjustment in assessment. See Standard 6 of the *Standards for Registered Training Organisations*.

Partnership Arrangements

RTOs must have, and comply with, written agreements with each organisation providing training and/or assessment on its behalf. See Standard 1.6 of *Standards for Registered Training Organisations*.

Recording Assessment Outcomes

Each RTO must have effective administration and records management procedures in place, and must record AQF qualifications and Statements of Attainment issued. See Standards 4 and 10.2 of the *Standards for Registered Training*.

Issuing AQF Qualifications and Statement of Attainment

Each RTO must issue AQF qualifications and Statements of Attainment that meet the requirements of the *AQF Implementation Handbook* and the endorsed Training Packages within the scope of its registration. An AQF qualification is issued once the full requirements for a qualification, as specified in the nationally endorsed Training Package are met. A Statement of Attainment is issued where the individual is assessed as competent against fewer units of competency than required for an AQF qualification. See Standard 10 and Section 2 of the *Standards for Registered Training Organisations*.

Industry advice for skilled delivery

The Construction and Property Services Industry Skills Council (CPSISC), on behalf of its industry, is committed to ensuring the quality of training and assessment outcomes. Critical to the achievement of this goal is the delivery of training and assessment services by skilled and experienced trainers and assessors.

In order to deliver the qualifications at Certificate IV to Advanced Diploma (excluding the Diploma and Advanced Diploma Building Surveying) within this Training Package, all trainers and assessors should have the following minimum competency, recognition and experience:

Certificate IV

Recommended construction industry requirements for trainers and assessors relative to relevant vocational competencies:

- relevant and current industry experience at a professional or para-professional level.

This may be evidenced by registration on the National Building Professionals Register (at either Levels 1 or 2) or registration on the National Building Technologists Register (at Level 1).

Examples of appropriate employment include:

- the principal or senior manager of a building practice constructing several complete houses a year
- project manager, contracts manager; site manager; quantity surveyor or general foreman on larger construction projects
- possession of the competencies being taught, and/or accepted by industry as subject matter experts, that will be evidenced by a relevant AQF qualification or other formal recognition at this or at a higher AQF level.

Examples of formal recognition are:

- proof of membership of a relevant professional body to at least Associate or Corporate (Chartered) level.

Diploma

Recommended construction industry requirements for trainers and assessors relative to relevant vocational competencies:

- relevant and current industry experience at a professional or para-professional level.

This may be evidenced by registration on the National Building Professionals Register (at level 1).

Examples of appropriate employment include:

- the principal or senior manager of a building practice working in the commercial construction sector and/or which completes a significant number of residential or commercial projects each year, including a number of concurrent projects
- project manager, contracts manager or other senior manager for a building practice working in the commercial construction sector and/or which completes a significant number of residential or commercial projects each year, including a number of concurrent projects
- possession of the competencies being taught, and/or accepted by industry as subject matter experts, that will be evidenced by a relevant AQF qualification or other formal recognition at this or at a higher AQF level.

Examples of formal recognition are:

- proof of membership of a relevant professional body to at least Corporate (Chartered) level.

Advanced Diploma

Recommended construction industry requirements for trainers and assessors relative to relevant vocational competencies:

- relevant and current industry experience at a professional or para-professional level.

This may be evidenced by registration on the National Building Professionals Register (at Level 1).

Examples of appropriate employment include:

- the principal or senior manager of a building practice working in the commercial construction sector and/or which completes a significant number of large scale and high rise projects each year including a number of concurrent projects
- project manager, contracts manager or other senior manager for a building practice working in the commercial construction sector and/or which completes a significant number of large scale and high rise projects each year, including a number of concurrent projects
- possession of the competencies being taught, and/or accepted by industry as subject matter experts, that will be evidenced by a relevant AQF qualification or other formal recognition at this or at a higher AQF level.

Examples of formal recognition are:

- proof of membership of a relevant professional body to at least Corporate (Chartered) level.

Licensing/ Registration Requirements

General construction

Licensing and registration requirements that apply to specific industries, and vocational education and training, vary between each State/ and Territory, and can regularly change. The developers of this Training Package, together with DEST, consider that the licensing/registration requirements described in this section apply to RTOs, assessors or candidates with respect to this Training Package. While reasonable care has been taken in its preparation, the developers of this Training Package and DEST cannot guarantee that the list is definitive or accurate at the time of reading; the information in this section is provided in good faith on that basis.

A number of occupations and roles within the building and construction are regulated in some or all of the States and Territories.

The regulatory authorities for the building and construction industry are:

Jurisdiction	Name of Regulatory Body	Address
Australian Capital Territory	ACT Planning and Land Authority	Second Floor South Dame Pattie Menzies House 16 Challis Street Dickson ACT 2602
New South Wales	Office of Fair Trading	Licensing and Industry Standards - Home Building Service Office of Fair Trading Level 4, 1 Fitzwilliam Street Parramatta NSW 2150
Northern Territory	Northern Territory Building Practitioners Board	First Floor Cavenagh House 38 Cavenagh Street Darwin NT 0800
Queensland	Building Services Authority	11 Edmondstone Street

		South Brisbane Qld 4101
South Australia	Office of Consumer and Business Affairs	Chesser House Level 3, 91-97 Grenfell Street Adelaide SA 5000
Tasmania	Building Standards and Regulation	30 Gordons Hill Road Rosny Park TAS 7018
Victoria	Building Practitioners Board	Level 27 Casselden Place 2 Lonsdale Street Melbourne VIC 3000
West Australia	Builders Registration Board	Parliament Court 18 Harvest Terrace West Perth WA 6005

Certification responsibilities and systems are administered by State legislation and may differ between States and Territories. In order to conduct assessments for statutory licensing or other industry registration conditions, assessors may need to meet additional requirements. While Registered Training Organisations may have information on the licensing requirements for their particular State or Territory, these requirements may change over time and differ between State and Territory jurisdictions. Assessors are therefore advised to contact the relevant licensing or registration body, details of which are outlined in the following chart.

The driving of plant on public roads will require the driver to obtain the relevant class drivers license from the relevant transport department or equivalent in their jurisdiction.

License/ Registration	Jurisdiction	Contact Details
Boom type elevating work platform (boom length 11m or more) Forklift truck Scaffolding - basic Scaffolding - intermediate Dogging Rigging - basic Rigging - intermediate Materials hoist Personnel and materials hoist Explosive power tools Demolition Asbestos removal Vehicle loading crane (including and over 10m tonne) Concrete placing boom	Australian Capital Territory	ACT WorkCover www.workcover.act.gov.au

Boom type elevating work platform (boom length 11m or more) Forklift truck Scaffolding - basic Scaffolding - intermediate Dogging Rigging - basic Rigging - intermediate Materials hoist Personnel and materials hoist Explosive power tools Formwork Welding Demolition Asbestos removal Vehicle loading crane (including and over 10m tonne) Concrete placing boom	New South Wales	WorkCover New South Wales www.workcover.nsw.gov.au
Boom type elevating work platform (boom length 11m or more) Industrial truck (forklift) operation Scaffolding - basic Scaffolding - intermediate Dogging Rigging - basic Rigging - intermediate Materials hoist Personnel and materials hoist Vehicle loading crane (including and over 10m tonne) Asbestos Removal Concrete placing boom	Northern Territory	Northern Territory Work Health Authority www.deet.nt.gov.au/wha/
Operator of a boom type elevating work platform with a boom length of 11m or more Operator of a fork lift truck (other than pedestrian operated) Scaffolding - basic	Queensland	Department of Industrial Relations (Workplace Health and Safety Division) www.dir.qld.gov.au

Scaffolding - intermediate Dogging Rigging - basic Rigging - intermediate Materials hoist Man and materials hoist Vehicle loading crane (including and over 10m tonne) Concrete placing boom		
Boom type elevating work platform (boom length 11m or more) Forklift truck Scaffolding - basic Scaffolding - intermediate Dogging Rigging - basic Rigging - intermediate Materials hoist Personnel and materials hoist Vehicle loading crane (including and over 10m tonne) Asbestos removal Concrete placing boom	South Australia	South Australia Workcover Corporation www.workcover.com
Boom type elevating work platform (boom length 11m or more) Forklift truck Scaffolding - basic Scaffolding - intermediate Dogging Rigging - basic Rigging - intermediate Materials hoist Personnel and materials hoist Vehicle loading crane (including and over 10m tonne) Asbestos removal Concrete placing boom	Tasmania	Workplace Standards Tasmania www.wst.tas.gov.au
Boom type elevating work platform	Victoria	Victorian WorkCover Authority

(boom length 11m or more) Forklift truck Scaffolding - basic Scaffolding - intermediate Dogging Rigging - basic Rigging - intermediate Materials hoist Personnel and materials hoist Vehicle loading crane (including and over 10m tonne) Asbestos removal Concrete placing boom		www.workcover.vic.gov.au
Forklift truck (optional) Boom type elevating work platform (boom length 11m or more) Scaffolding - basic Scaffolding - intermediate Dogging Rigging - basic Rigging - intermediate Personnel and materials hoist Vehicle loading crane (including and over 10m tonne) Demolition Asbestos removal Concrete placing boom	Western Australia	Department of Consumer and Employment Protection (Worksafe) www.safetyline.wa.gov.au

Building Surveyors

In some States and Territories, building surveyors need to obtain accreditation/registration/license from the relevant State or Territory Authority to practice their profession. The relevant authorities in the States and Territories are indicated below.

All States and Territories have agreed to introduce a system of accreditation/registration for building surveyors. In the States and Territories where there is no statutory requirement at present for accreditation/registration/licensing, the local chapter of the Australian Institute of Building Surveyors offer accreditation to those who request it.

In order to conduct assessments for statutory accreditation/registration/licensing purpose the assessors in addition to the requirements stated in the Assessment Guidelines, assessors need to be accredited with (or have the ability to be accredited) with the Australian Institute of Building Surveyors at Assistant Building Surveyor (ABS) or Building Surveyor (BS) level. It is

highly recommended that RTOs check with the relevant Authority or the local chapter of the Australian Institute of Building Surveying to find out about the latest assessor accreditation arrangements before commencing assessment activities

The regulatory authorities for building surveying are:

New South Wales - Planning NSW

www.planning.nsw.gov.au

Victoria - Building Control Commission

PO Box 536E, Melbourne Vic 3000

Queensland - Building Services Authority

www.bsa.qld.gov.au

Western Australia - There is no statutory requirement for accreditation at present.

South Australia - Planning SA requests that AIBS Chapter in SA accredits

Tasmania - The *Tasmanian Building Act 2000* requires building practitioners, including building surveyors, to be accredited.

Northern Territory - Building Practitioners Board NT

GPO Box 1680, Darwin NT 0801

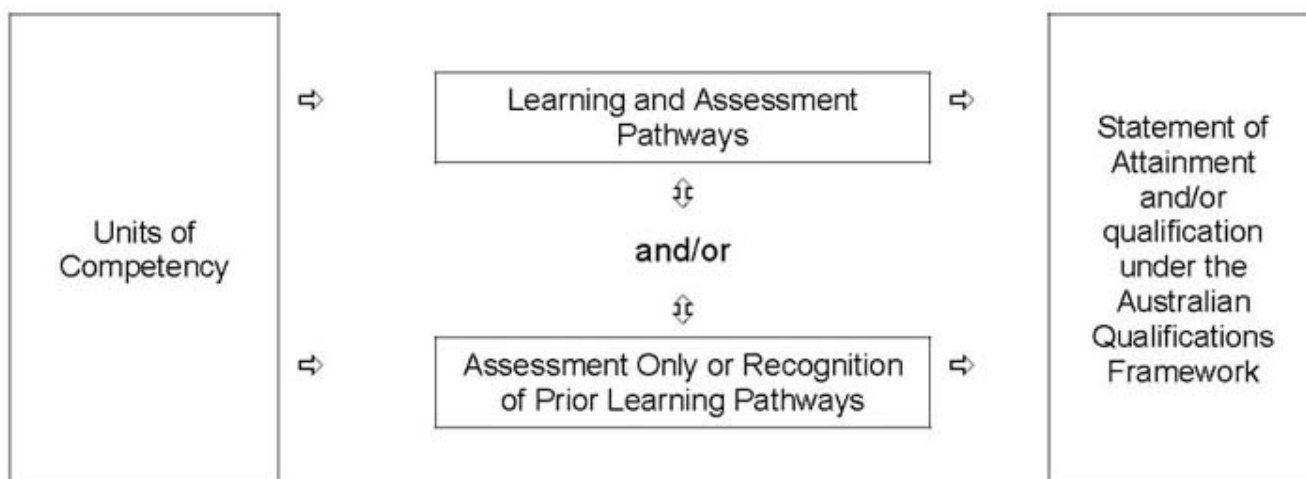
Australian Capital Territory - There is no statutory requirement for accreditation at present.

Pathways

The competencies in this Training Package may be attained in a number of ways including through:

- formal or informal education and training
- experiences in the workplace
- general life experience, and/or
- any combination of the above.

Assessment under this Training Package leading to an AQF qualification or Statement of Attainment may follow a learning and assessment pathway, an assessment-only or recognition pathway, or a combination of the two as illustrated in the following diagram.



Each of these assessment pathways leads to full recognition of competencies held - the critical issue is that the candidate is competent, not how the competency was acquired.

Assessment, by any pathway, must comply with the assessment requirements set out in the *Standards for Registered Training Organisations*.

Learning and Assessment Pathways

Usually, learning and assessment are integrated, with assessment evidence being collected and feedback provided to the candidate at anytime throughout the learning and assessment process.

Learning and assessment pathways may include structured programs in a variety of contexts using a range of strategies to meet different learner needs. Structured learning and assessment programs could be: group-based, work-based, project-based, self-paced, action learning-based; conducted by distance or e-learning; and/or involve practice and experience in the workplace.

Learning and assessment pathways to suit New Apprenticeships have a mix of formal structured training and structured workplace experience with formative assessment activities through which candidates can acquire and demonstrate skills and knowledge from the relevant units of competency.

Assessment-Only or Recognition of Prior Learning Pathway

Competencies already held by individuals can be formally assessed against the units of competency in this Training Package, and should be recognised regardless of how, when or where they were achieved.

In an assessment-only or Recognition of Prior Learning (RPL) pathway, the candidate provides current, quality evidence of their competency against the relevant unit of competency. This process may be directed by the candidate and verified by the assessor, such as in the compilation of portfolios; or directed by the assessor, such as through observation of workplace performance and skills application, and oral and/or written assessment. Where the outcomes of this process indicate that the candidate is competent, structured training is not required. The RPL requirements of Standard 8.2 of the *Standards for Registered Training Organisations* must be met.

As with all assessment, the assessor must be confident that the evidence indicates that the candidate is currently competent against the endorsed unit of competency. This evidence may take a variety of forms and might include certification, references from past employers, testimonials from clients, and work samples. The onus is on candidates to provide sufficient evidence to satisfy assessors that they currently hold the relevant competencies. In judging evidence, the assessor must ensure that the evidence of prior learning is:

- authentic (the candidate's own work)
- valid (directly related to the current version of the relevant endorsed unit of competency)
- reliable (shows that the candidate consistently meets the endorsed unit of competency)
- current (reflects the candidate's current capacity to perform the aspect of the work covered by the endorsed unit of competency), and
- sufficient (covers the full range of elements in the relevant unit of competency and addresses the four dimensions of competency, namely task skills, task management skills, contingency management skills, and job/role environment skills).

The assessment only or recognition of prior learning pathway is likely to be most appropriate in the following scenarios:

- candidates enrolling in qualifications who want recognition for prior learning or current competencies
- existing workers
- individuals with overseas qualifications
- recent migrants with established work histories

- people returning to the workplace, and
- people with disabilities or injuries requiring a change in career.

Combination of Pathways

Where candidates for assessment have gained competencies through work and life experience and gaps in their competence are identified, or where they require training in new areas, a combination of pathways may be appropriate.

In such situations, the candidate may undertake an initial assessment to determine their current competency. Once current competency is identified, a structured learning and assessment program ensures that the candidate acquires the required additional competencies identified as gaps.

Assessor Requirements

This section identifies the mandatory competencies for assessors, and clarifies how others may contribute to the assessment process where one person alone does not hold all the required competencies.

Assessor Competencies

The *Standards for Registered Training Organisations* specify mandatory competency requirements for assessors. For information, Standard 7.3 from the *Standards for Registered Training Organisations* follows:

7.3	a	The RTO must ensure that assessments are conducted by a person who has:
		• the following competencies* from the Training Package for Assessment and Workplace Training, or demonstrated equivalent competencies: • TAAASS401A Plan and organise assessment; • TAAASS402A Assess competence; • TAAASS404A Participate in assessment validation; • relevant vocational competencies, at least to the level being assessed.
	b	However, if a person does not have all of the competencies in Standards 7.3 a (i) and the vocational competencies as defined in 7.3 a (ii), one person with the competencies listed in Standard 7.3 a (i), and one or more persons who have the competencies listed in Standard 7.3 a (ii) may work together to conduct assessments.
		* A person who holds the competencies BSZ401A Plan assessment, BSZ402A Conduct assessment, and BSZ403A Review assessment from the Training Package for Assessment and Workplace Training will be accepted for the purposes of this standard. A person who has demonstrated equivalent competencies to BSZ401A and BSZ402A and BSZ403A in the period up to 12 months following publication of the Training and Assessment Training Package will also be accepted for the purposes of this standard.

Designing Assessment Tools

This section provides an overview on the use and development of assessment tools.

Use of Assessment Tools

Assessment tools provide a means of collecting the evidence that assessors use in making judgements about whether candidates have achieved competency.

There is no set format or process for the design, production or development of assessment tools. Assessors may use prepared assessment tools, such as those specifically developed to support this Training Package, or they may develop their own.

Using Prepared Assessment Tools

If using prepared assessment tools, assessors should ensure these are benchmarked, or mapped, against the current version of the relevant unit of competency. This can be done by checking that the materials are listed on the National Training Information Service (<http://www.ntis.gov.au>). Materials on the list have been noted by the National Quality Council as meeting their quality criteria for Training Package support materials.

Developing Assessment Tools

When developing assessment tools, assessors must ensure that they:

- are benchmarked against the relevant unit or units of competency
- are reviewed as part of the validation of assessment strategies as required under 9.2 (i) of the *Standards for Registered Training Organisations*
- meet the assessment requirements expressed in the *Standards for Registered Training Organisations*, particularly Standards 8 and 9.

A key reference for assessors developing assessment tools is TAA04 Training and Assessment Training Package and the unit of competency TAAASS403A *Develop assessment tools*. There is no set format or process for the design, production or development of assessment materials.

Conducting Assessment

This section details the mandatory assessment requirements and provides information on equity in assessment including reasonable adjustment.

Mandatory Assessment Requirements

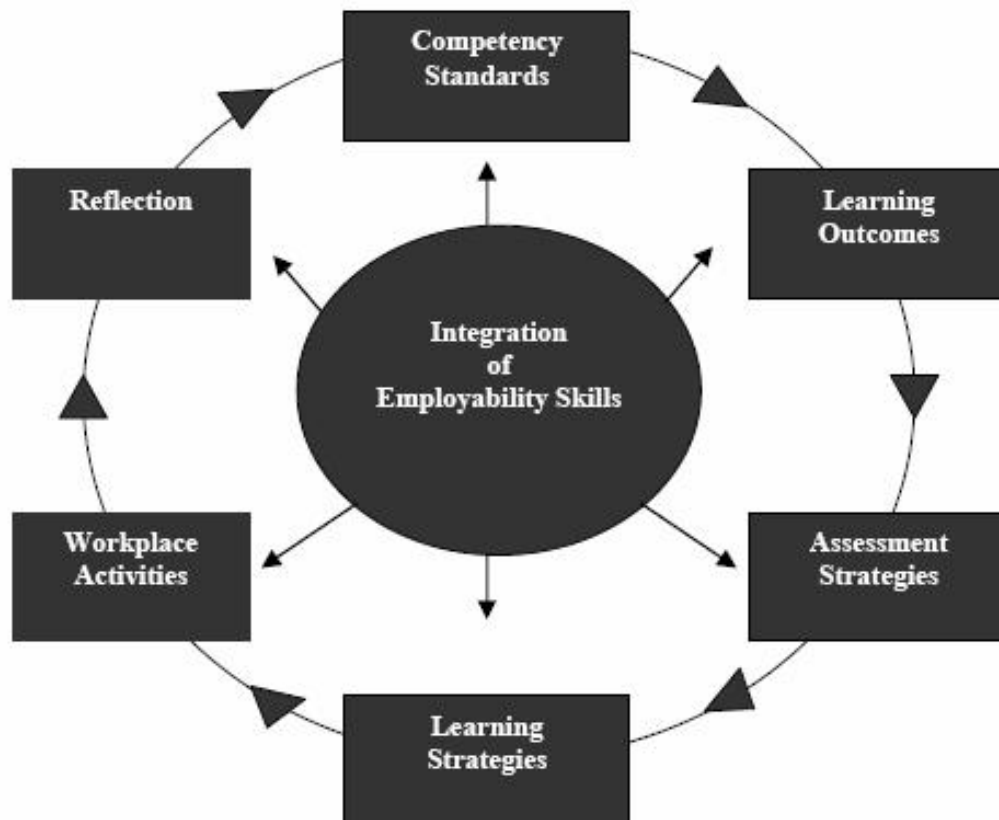
Assessments must meet the criteria set out in Standard 8 from the *Standards for Registered Training Organisations*. For information, Standard 8 from the *Standards for Registered Training Organisations* is reproduced below.

8		RTO Assessments
		The RTOs assessments meet the requirements of the endorsed components of Training Packages and the outcomes specified in accredited courses within the scope of its registration.
8.1		The RTO must ensure that assessments (including RPL):
	i.	comply with the assessment guidelines included in the applicable nationally endorsed Training Packages or the assessment requirements specified in accredited courses;
	ii.	lead to the issuing of a statement of attainment or qualification under the AQF when a person is assessed as competent against nationally endorsed unit(s) of competency in the applicable Training Package or modules specified in the applicable accredited course;
	iii.	are valid, reliable, fair and flexible;
	iv.	provide for applicants to be informed of the context and purpose of the assessment

		and the assessment process;
	v.	where relevant, focus on the application of knowledge and skill to standard of performance required in the workplace and cover all aspects workplace performance, including task skills, task management skills, contingency management skills and job role environment skills;
	vi.	involve the evaluation of sufficient evidence to enable judgements to be made about whether competency has been attained;
	vii.	provide for feedback to the applicant about the outcomes of the assessment process and guidance on future options in relation to those outcomes;
	viii.	are equitable for all persons, taking account of individual needs relevant to the assessment; and
	ix.	provide for reassessment on appeal.
8.2	a	The RTO must ensure that RPL is offered to all applicants on enrolment
	b	The RTO must have an RPL process that:
		i. is structured to minimise the time and cost to applicants; and ii. provides adequate information, support and opportunities for participants to engage in the RPL process.

Delivery and assessment of Employability Skills

Employability Skills are integral to workplace competency and, as such, must be considered in the design, customisation, delivery and assessment of vocational education and training programs in an integrated and holistic way, as represented diagrammatically below.



Training providers must analyse the Employability Skills information contained in units of competency in order to design valid and reliable learning and assessment strategies. This analysis includes:

- reviewing unit(s) of competency to determine how each relevant Employability Skill is found and applied within the unit
- analysing the Employability Skills Summary for the qualification in which the unit(s) is/are packaged to help clarify relevant industry/workplace contexts with regard to the application of Employability Skills at that qualification level
- designing learning and assessment activities that address the Employability Skills requirements.

For more information on Employability Skills in Construction and Property Services Industry Skills Council Training Packages go to the Construction and Property Services Industry Skills Council website at <http://www.cpsisc.com.au>.

Access and Equity

An individual's access to the assessment process should not be adversely affected by restrictions placed on the location or context of assessment beyond the requirements specified in this Training Package.

Reasonable adjustments can be made to ensure equity in assessment for people with disabilities. Adjustments include any changes to the assessment process or context that meet the individual needs of the person with a disability, but do not change competency outcomes. Such adjustments are considered reasonable if they do not impose an unjustifiable hardship on a training provider or employer. When assessing people with disabilities, assessors are encouraged to apply good practice assessment methods with sensitivity and flexibility.

Industry Assessment Contextualisation 2

Assessment in the General Construction Industry

When assessing an area covered by a licence, or other regulatory requirement, the assessment must be conducted according to the requirements of the managing authority and according to the Assessment Guidelines contained within this Training Package. In the case of certificated occupations managed by a Regulator or NOHSC, assessment must be carried out by a certificated assessor in accordance with their guidelines. Interpretation and implementation of these guidelines are the responsibility of the relevant state or territory authority.

For further information on licensing requirements refer to:

the State/Territory Regulator listed in the Assessment guidelines; and/or

the National Occupational Health and Safety Commission or other relevant and current standards.

Further Sources of Information

The section provides a listing of useful contacts and resources to assist assessors in planning, designing, conducting and reviewing of assessments against this Training Package.

Contacts

Contacts

Contact details for the National Network of Building and Construction Industry Training Advisory Bodies are as follows:

State or Territory	Organisation	Contact Details
New South Wales	Construction Industry Advisory Board (NSW) PO Box 1925 HORNSBY WESTFIELD NSW 1635	Chief Executive Officer Tel (02) 9987 4027 Fax (02) 9987 4072 Email: douglasg@citab.com.au
Queensland	Construction Training Queensland PO Box 28 SALISBURY QLD 4107	General Manager Tel (07) 3274 7999 Fax (07) 3276 7888 Email: info@ctq.com.au
Northern Territory	Major Industries Training Advisory Council GPO Box 1610 DARWIN NT 0801	Executive Director Tel (08) 8981 0077 Fax (08) 8922 9699 Email: tim@mitac.com.au
Western Australia	Building and Construction Industry Training Council (Inc) 1 st Floor	Executive Director Tel (08) 9381 3900 Fax (08) 9297 3635

	1152 Hay St WEST PERTH WA 6005	Email: bcticwa@bcticwa.com.au
South Australia	Construction Industry Training Board (SA) PO Box 1227 UNELY SA 5034	Chief Executive Officer Tel (08) 8172 9500 Fax (08) 8172 9501 Email: info@cpsisc.com.au
Tasmania	Tasmanian Building and Construction Industry Board PO Box 105 SANDY BAY TAS 7006	Executive Director Tel (03) 6223 7804 Fax (03) 6234 6327 Email: email@tbcitb.com.au
Australian Capital Territory	ACT Building and Construction Industry Training Council PO Box 882 DICKSON ACT 2602	Executive Director Tel (02) 6241 3977 Fax (02) 6241 3262 Email: citc@iimetro.com.au
National	Construction and Property Service Industry Skills Council PO Box 314 HALL ACT 2618	Chief Executive Officer Tel (02) 6230 2907 Fax (02) 6230 2849 Email: info@cpsisc.com.au

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192 Burwood Road

HAWTHORN VIC 3122

Telephone: (03) 9815 7000

Fax: (03) 9815 7001

Email: virtual@ibsa.org.au

General Resources

Refer to <http://antapubs.dest.gov.au/publications/search.asp> to locate the following ANTA publications.

AQF Implementation Handbook, third Edition. Australian Qualifications Framework Advisory Board, 2002, aqf.edu.au

Australian Quality Training Framework (AQTF) - for general information go to:
www.dest.gov.au/sectors

Australian Quality Training Framework (AQTF) - for resources and information go to:
www.dest.gov.au

Australian Quality Training Framework *Standards for Registered Training Organisations*, Australian National Training Authority, Melbourne, 2005. Available in hard copy from State and Territory Training Authorities or can be downloaded from www.dest.gov.au

TAA04 Training and Assessment Training Package. This is available from the Innovation and Business Skills Australia (IBSA) Industry Skills Council and can be viewed, and components downloaded, from the National Training Information Service (NTIS). National Training Information Service, an electronic database providing comprehensive information about RTOs, Training Packages and accredited courses - www.ntis.gov.au *Style Guide for Training Package Support Materials*, Australian National Training Authority, Melbourne, 2003. Can be downloaded from the ANTA page at www.dest.gov.au

Assessment Resources

Training Package Assessment Guides - a range of resources to assist RTOs in developing Training Package assessment materials developed by DEST with funding from the Department of Education, Training and Youth Affairs. It is made up of 10 separate titles, as described at the ANTA publications page of www.dest.gov.au. Go to www.resourcegenerator.gov.au/loadpage.asp?TPAG.htm

Printed and/or CD ROM versions of the Guides can be purchased from Australian Training Products (ATP). The resource includes the following guides:

- 1 Training Package Assessment Materials Kit
- 2 Assessing Competencies in Higher Qualifications
- 3 Recognition Resource
- 4 Kit to Support Assessor Training
- 5 Candidates Kit: Guide to Assessment in New Apprenticeships
- 6 Assessment Approaches for Small Workplaces
- 7 Assessment Using Partnership Arrangements
- 8 Strategies for ensuring Consistency in Assessment
- 9 Networking for Assessors
- 10 Quality Assurance Guide for Assessment

An additional guide "Delivery and Assessment Strategies" has been developed to complement these resources.

Assessment Tool Design and Conducting Assessment

VETASSESS & Western Australian Department of Training and Employment 2000, *Designing Tests - Guidelines for designing knowledge based tests for Training Packages*. Vocational Education and Assessment Centre 1997, *Designing Workplace Assessment Tools, A self-directed learning program*, NSW TAFE.

Manufacturing Learning Australia 2000, *Assessment Solutions*, Australian Training Products,

Melbourne.

Rumsey, David 1994, *Assessment practical guide*, Australian Government Publishing Service, Canberra.

Assessor Training

Australian Committee on Training Curriculum (ACTRAC) 1994, *Assessor training program - learning materials*, Australian Training Products, Melbourne.

Australian National Training Authority, *A Guide for Professional Development*, ANTA, Brisbane.

Australian Training Products Ltd *Assessment and Workplace Training, Training Package - Toolbox*, ATPL Melbourne.

Green, M, et al. 1997, *Key competencies professional development Package*, Department for Education and Children's Services, South Australia.

Victorian TAFE Association 2000, *The professional development CD: A learning tool*, VTA, Melbourne.

Assessment System Design and Management

Office of Training and Further Education 1998, *Demonstrating best practice in VET project - assessment systems and processes*, OTFE Victoria.

Toop, L., Gibb, J. & Worsnop, P. *Assessment system designs*, Australian Government Publishing Service, Canberra.

Western Australia Department of Training and VETASSESS 1998, *Kit for Skills Recognition Organisations*, WADOT, Perth.

BCGPD2001B**Unit Descriptor****Handle painting and decorating materials**

This unit specifies the competency required to handle, sort and store painting and decorating materials.

The unit includes the planning and preparation for the work, the identification, handling and storage of materials, the selection and distribution of appropriate housekeeping standards.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Painting and Decorating

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Tools and equipment are selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.5 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Identify, handle and store painting and decorating materials	2.1 Painting and decorating material and components are identified and checked for conformity to material schedule, plans and specifications 2.2 Handling characteristics of painting and decorating material and components are identified and safe and effective handling techniques adopted 2.3 Storage locations are confirmed as satisfying fire safety, ventilation and product dispersal requirements 2.4 Materials are handled safely and effectively according to Material Safety Data Sheets and requirements of regulatory authorities 2.5 Painting and decorating materials are sorted to suit material type and size, stacked for ease of identification and retrieval 2.6 Painting and decorating material and components are protected against physical and water damage and stored clear of traffic ways

- 3. Select and distribute painting and decorating materials in preparation for use
 - 3.1 Painting and decorating products, material and components are identified, selected from stock and safely handled and distributed to required job location
 - 3.2 Storage/holding area at job location is checked to ensure provision of adequate ventilation, fire safety and dispersal
 - 3.3 Painting and decorating materials are stored to best serve their subsequent use
 - 3.4 Work areas are prepared including the removal of objects and the use of drop sheets to protect surrounding surfaces
- 4. Clean up
 - 4.1 Hazardous material is identified for separate handling by authorised personnel
 - 4.2 Work area is cleared and material disposed of in a safe and effective manner in accordance with State and Territory requirements
 - 4.3 Unused materials are sealed and stored/stacked in accordance with standard material handling practices
 - 4.4 Waste and unwanted materials are removed and placed into job waste bins or rubbish stockpile in a safe and effective manner in accordance with environmental protection requirements
 - 4.5 The possibility of spontaneous combustion is identified and suitable protective measures are applied
 - 4.6 Tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for the handling of painting and decorating materials, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	1
Planning and organising activities	Conduct activities associated with the handling of painting and decorating materials, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	1
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, calculate volume, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	1
Using technology	Use workplace technology related to the handling of painting and decorating materials, including the use of calculators, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope

- Paint products, materials and components are to include coatings, cleaning solvents, fillers and adhesives and may include wall and decorative covering materials
- Protection of stacked/stored materials may include covering, barricades, signs and lock away (hazardous materials)
- Coating types may include water-based, solvent-based, two-pack and textures
- Dust suppression procedures may include spraying with water, covering and use of vacuum cleaner
- Waste material and debris include but are not limited to unwanted paint materials, banding straps, packing pieces, cardboard and excess material

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with solvents, lead, chemicals, fumes/gases, confined work areas, manual handling, falling objects, electrical and fire and/or explosion from combustible materials, restricted access barriers, traffic control, working at heights, working in proximity to others, worksite visitors and the public
- Emergency procedures related to operations are to include but may not be limited to extinguishing fires, poor ventilation, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust, stormwater protection and clean-up management

Quality Requirements	• Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified
Statutory/Regulatory Authorities	• Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice
Communications	• Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals • On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues
Information	• Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches • Safe work procedures related to the handling of painting and decorating materials • Regulatory/legislative requirements pertaining to the handling of painting and decorating materials • Manufacturers' specifications and instructions where specified • Organisation work specifications and requirements • Instructions issued by authorised organisational or external personnel • Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools and equipment
- Communication and working effectively and safely with others
- The safe and effective identification, handling, storage and distribution of painting and decorating materials which are to include a range of coatings and two each of:
 - cleaning solvents
 - fillers
 - adhesives

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - Painting and decorating terminology
 - The types, titles, packaging and storage requirements for commonly encountered painting and decorating materials
 - Basic spontaneous combustion theory
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Materials handling, storage and environmentally friendly waste management
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to the handling of painting and decorating materials
 - tools and equipment appropriate to the handling of painting and decorating materials
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGPD2002B**Use painting and decorating tools and equipment****Unit Descriptor**

This unit specifies the competency required to use painting and decorating tools, plant and equipment.

The unit includes the identification, selection and safe use of a range of commonly used painting and decorating tools, plant and equipment and the storage and user maintenance of these.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Painting and Decorating

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Material quantity requirements are calculated in accordance with plans and/or specifications 1.5 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use 1.6 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Identify hand and power tools	2.1 Hand and power tools, their functions, operations and limitations are identified 2.2 OH&S requirements for using hand tools are recognised and adhered to 2.3 OH&S requirements for using power tools are recognised and adhered to
3. Select tools for project	3.1 Tools are selected consistent with job requirements 3.2 Tools, including leads and hoses, are checked for tags, serviceability and safety and any faults rectified or reported 3.3 Power tools guards, retaining bolts, couplings, gauges and controls are checked and maintained in accordance with manufacturers' recommendations 3.4 Equipment to hold or support material during operation is selected 3.5 Pre-operational checks, including lubricants, hydraulic fluid and water, are completed in accordance with manufacturers' recommendations

4. Use tools	4.1 Power and/or compressed air supply is connected to work area
	4.2 Start up and shut down procedures are followed
	4.3 Tools are safely and effectively used according to manufacturers' recommendations and OH&S requirements
	4.4 Tools are safely located when not in immediate use
5. Select plant and equipment	5.1 Function and limitations of plant/equipment used in painting and decorating are identified
	5.2 Plant and equipment are selected consistent with hazard minimization and needs of job
	5.3 Method of operation of plant/equipment is identified
	5.4 OH&S requirements for operating and using plant and equipment are recognised and adhered to
	5.5 Plant and equipment are checked for safety and faults are rectified or reported
6. Use plant and equipment	6.1 Plant and equipment are safely and effectively used
	6.2 Plant and equipment are safely located when not in immediate use
	6.3 Plant and equipment are cleaned, maintained and stored after use
7. Clean up	7.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification
	7.2 Machinery, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for the use of painting and decorating tools and equipment including work instructions, plans/sketches/ diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	1
Planning and organising activities	Conduct activities associated with the handling of painting and decorating tools and equipment to avoid backtracking and rework	1
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	1
Using technology	Use workplace technology related to the handling of painting and decorating materials, including the use of plant items, calculators, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope

- Tools and equipment are to include scrapers, filling knives/blades, putty knives, duster brushes, hand sanders, paint stirrers, drop sheets, heat guns, wire brushes, hammers, nail punches, paint pots/buckets, brush-ware and brush-ware accessories, roller frames, covers, buckets and roller accessories
- Mechanical sanders may include random orbital, orbital, disc and belt
- Plant and equipment may include conventional spray equipment (compressor), airless spray equipment and water blasters

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with working with cutting edges, power equipment, power leads and sources, lighting, trip hazards, manual handling, working in proximity to others, noise, dust and ventilation
- Emergency procedures related to this unit are to include but may not be limited to emergency shutdown and stopping, extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust, stormwater protection and clean-up management

Quality Requirements

- Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified

**Statutory/Regulatory
Authorities**

- Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice

Communications

- Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals
- On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues

Information

- Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches
- Safe work procedures related to the use of painting and decorating tools and equipment
- Regulatory/legislative requirements pertaining to painting and decorating tools and equipment
- Manufacturers' specifications and instructions where specified
- Organisation work specifications and requirements
- Instructions issued by authorised organisational or external personnel
- Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Communication and working effectively and safely with others
- The use and maintenance of the mandatory tools listed in the Range Statement
- The use and maintenance of at least two of the mechanical sanding equipment types listed in the Range Statement
- The use and operator maintenance of conventional and airless spray equipment

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - Painting and decorating industry terminology
 - Types, characteristics, uses and limitations of painting and decorating hand tools
 - Types, characteristics, uses and limitations of painting and decorating power tools
 - Types, characteristics, uses and limitations of painting and decorating plant items
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - painting and decorating hand and power tools, plant and equipment
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGPD2003B**Remove and replace doors and door and window furniture****Unit Descriptor**

This unit specifies the competency required to remove and replace doors and door and window furniture for the purpose of painting or replacement. It does not include the removal of windows or reglazing.

The unit includes the planning and preparation for the work, the removal and replacement of the door and the door and window furniture and the completion of clean-up activities.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Painting and Decorating

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Tools and equipment are selected to carry out tasks that are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.5 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use 1.6 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Remove door and window furniture	2.1 Screens and fittings are carefully removed and stored safely 2.2 Window furniture is carefully removed and located or stored safely 2.3 Door furniture is carefully removed and located or stored safely 2.4 Doors are carefully removed and located or stored safely
3. Replace doors and window furniture	3.1 Doors are carefully handled, placed, hung and fixed into original place 3.2 Door furniture is refitted and fixed back into place to specifications and without marking door or surrounds 3.3 Window furniture is refitted and fixed back into place to specifications and without marking window surfaces or surrounds 3.4 Screens are replaced securely in position without damage to surrounds

- 4. Clean up
 - 4.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification
 - 4.2 Tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for the removal and replacement of door and window furniture, including work instructions, plans/ sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	1
Planning and organising activities	Conduct activities associated with the removal and replacement of door and window furniture, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	1
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate measurements, establish levels, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	1
Using technology	Use workplace technology related to the removal and replacement of door and window furniture, including the use of calculators, the use of basic levelling aids, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope	• Door furniture is to include screens, hinges, locks, latches, handles, closers and safety chains • Window furniture is to include screens, catches, handles, stays, locks and brackets • Hinges and brackets may be designed to be painted over or kept in own natural finished state
Safety (OH&S)	• OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances • Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices • Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with manual handling, working with glass, the use of hand and power tools, trip hazards, power leads, traffic control, working at heights, working in proximity to others, worksite visitors and the public • Emergency procedures related to operations are to include but may not be limited to extinguishing fires, organisational first aid requirements and evacuation
Environmental Requirements	• Environmental requirements are to include but are not limited to waste management, noise, dust and clean-up management
Quality Requirements	• Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified
Statutory/Regulatory Authorities	• Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice

Communications

- Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals
- On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues

Information

- Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches
- Safe work procedures related to the removal and replacement of door and window furniture
- Regulatory/legislative requirements pertaining to the removal and replacement of door and window furniture
- Manufacturers' specifications and instructions where specified
- Organisation work specifications and requirements
- Instructions issued by authorised organisational or external personnel
- Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools and equipment
- Communication and working effectively and safely with others
- The safe and effective removal and replacement of a minimum of:
 - one door with an independent screen
 - the furniture from two different door types
 - the furniture from two different window types with at least one having independent screens

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - Painting and decorating and basic carpentry terminology
 - The types, uses and limitations of tools used in the removal and replacement of door and window furniture
 - Door and window furniture removal and replacement techniques
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to the removal and replacement of door and window furniture
 - hand and power tools and equipment appropriate to the removal and replacement of door and window furniture
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGPD3001B**Unit Descriptor****Prepare surfaces for painting**

This unit specifies the competency required to restore, repair and prepare different material surfaces for the application of paint.

The unit includes the planning and preparation for the work, the preparation of new or uncoated surfaces, the preparation of previously coated surfaces, the preparation of previously wall papered surfaces for painting and the completion of clean-up activities.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Painting and Decorating

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Tools and equipment selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Prepare new or uncoated surfaces for painting or clear finish	2.1 The suitability of the surface for painting or clear finish application is determined in accordance with manufacturers' recommendations and job specifications 2.2 The surface preparation method is correctly selected in accordance with the environment, finish and substrate requirements 2.3 Surface is prepared to manufacturers' specifications in compliance with substrate requirements, specifications and relevant standards 2.4 Surface imperfections are stopped, filled and sanded to a smooth finish ready for painting in accordance with manufacturers' recommendations and job specifications

3. Prepare previously coated surfaces for painting or clear finish	3.1 Condition and nature of existing substrate and surface material are determined and tested in accordance with relevant standards
	3.2 Potential hazards are identified and correct procedures are used to reduce risks in accordance with manufacturers' recommendations and job specifications
	3.3 The surface preparation method is correctly selected in accordance with the environment, finish and substrate requirements
	3.4 Surfaces are prepared by removing unwanted coatings and loose debris
	3.5 Surface defects are repaired and imperfections stopped, filled and sanded to smooth finish ready for painting in accordance with manufacturers' recommendations and job specifications
4. Remove wallpaper and prepare surface for painting	4.1 Type, condition and nature of existing type of wallpaper are determined prior to removal
	4.2 The surface preparation method is correctly selected in accordance with the environment, finish and substrate requirements
	4.3 Wallpaper is removed using the most appropriate method
	4.4 Surfaces are prepared for paint application by removing loose debris
	4.5 Surface defects are repaired and imperfections stopped, filled and sanded to smooth finish ready for painting in accordance with manufacturers' recommendations and job specifications
5. Clean up	5.1 Waste and unwanted materials are removed and placed into job waste bins or rubbish stockpile in accordance with sound work practices and compliance with the environmental requirements
	5.2 Painting tools and equipment are cleaned with correct solutions without damage and stored safely and effectively to manufacturers' specifications
	5.3 Unused materials are sealed and stored/stacked in accordance with standard material handling practices and techniques and company requirements
	5.4 Work area is cleared and materials disposed of or recycled in a manner to avoid spontaneous combustion and in accordance with state or territory legislation

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for the preparation of surfaces for painting, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	1
Planning and organising activities	Conduct activities associated with the preparation of surfaces for painting, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	1
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances and levels, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	1
Using technology	Use workplace technology related to the preparation of surfaces for painting, including the use of calculators, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope

- Preparation of previously coated surfaces is to include but is not limited to the use of heat guns, water blasting, grinding, sanding, scraping (mechanical and hand), washing down and chemical stripping
- Wall paper removal methods are to include but are not limited to dry stripping, soaking and steam stripping
- The application of tests for paint may include but are not limited to solvent test, adhesion test and testing procedures to determine the presence of lead based paints
- Surfaces may be horizontal, vertical, inclined or curved, internal or external and be timber, metal, masonry, concrete or plaster
- Previously coated surfaces may be contaminated with films of grease, dust, mould, mild efflorescence, mild chalking, smoke damage or paint films which are blistering, flaking, peeling or cracking

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with solvents, lead, chemicals, fumes/gases, confined work areas, manual handling, falling objects, electrical and fire explosion from combustible materials, traffic control, working at heights, working in proximity to others, worksite visitors and the public
- Emergency procedures related to operations are to include but may not be limited to emergency equipment shutdown and stopping, extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust, stormwater protection and clean-up management

Quality Requirements	• Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified
Statutory/Regulatory Authorities	• Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice
Tools and equipment	• Tools and equipment are to include but are not limited to scrapers, filling knives/blades, putty knives, duster brushes, hand sanders, mechanical sanders, drop sheets, heat removal equipment, wire brushes, hammers, nail punches and water blasters • Work platforms may include but are not limited to step ladders, trestles, planks, hop-ups, aluminium mobile scaffold, scissor-lift and elevating work platform
Communications	• Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals • On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues
Information	• Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches • Safe work procedures related to the preparation of surfaces for painting • Regulatory/legislative requirements pertaining to the preparation of surfaces for painting • Manufacturers' specifications and instructions where specified • Organisation work specifications and requirements • Instructions issued by authorised organisational or external personnel • Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools and equipment
- Communication and working effectively and safely with others
- The preparation to specification of a minimum of three previously coated surfaces for painting with one being an external timber surface, one metal surface and at least one being an internal surface
- The removal of wallpaper from a room/cubicle or equivalent and the preparation of the surface for painting

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - Painting and decorating terminology
 - Surface coatings technology
 - Surface coatings defects - prevention and/or rectification procedures
 - Hazards associated with lead, solvents, chemicals and dust
 - Paint application testing procedures
 - Properties and surface preparation requirements of new substrates
 - Procedures, products and techniques associated with removal of wallpaper
 - Procedures, products and techniques associated with preparation of surfaces
 - Corrosion processes and techniques for the protection of metals
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to the preparation of surfaces for painting
 - hand and power tools, plant and equipment appropriate to the preparation of surfaces for painting
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGPD3002B**Unit Descriptor****Apply paint by brush and roller**

This unit specifies the competency required to apply brushed or rolled paint coatings to different materials to form a protective and decorative painted finish.

The unit includes the planning and preparation for the work, the preparation of the work area, the mixing of materials, the application of paint, the finishing of the surface and the completion of clean-up activities.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Painting and Decorating

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Tools and equipment are selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Prepare the work area and materials	2.1 Materials and substrate surfaces are prepared in accordance with manufacturers' recommendations and relevant Australian Standards 2.2 Surrounding surfaces not to be painted are protected by drop sheets, masking or removal of objects in accordance with manufacturers' recommendations and job specifications 2.3 Job location is checked to ensure provision of adequate ventilation and precautions are taken to prevent fire and/or explosion in accordance with manufacturers' recommendations and MSDS data 2.4 Materials for specified paint finish are mixed to designed proportion and consistency in accordance with manufacturers' recommendations and job specifications 2.5 Paint and colours are thoroughly stirred using separate stirring sticks 2.6 Correct amounts of paint material are prepared to specified ratio with specified drying time in accordance with manufacturers' recommendations and specifications

3. Apply paint with brush/roller	3.1 Brush, roller or brush/roller combination is selected for specified surface profile, size of area and type of paint and finish specified in accordance with manufacturers' recommendations and job specifications
	3.2 Paint is applied to achieve required level of opacity, finish, texture and sheen in accordance with manufacturers' recommendations and job specifications
4. Finish the application	4.1 Finished paint surface is cured using curing method in accordance with manufacturers' recommendations and job specifications
	4.2 Finished paint surface is tested using testing procedures in accordance with manufacturers' recommendations and job specifications
5. Clean up	5.1 Painting tools and equipment are cleaned with correct solutions without damage and stored safely and effectively to manufacturers' specifications
	5.2 Unused materials are sealed and stored/stacked in accordance with standard material handling practices and techniques and company requirements
	5.3 Tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices
	5.4 Work area is cleared and materials disposed of or recycled in accordance with state or territory legislation

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for the application of paint by brush and roller, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	2
Planning and organising activities	Conduct activities associated with the application of paint by brush and roller, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	1
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements and distances, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	1
Using technology	Use workplace technology related to the application of paint by brush and roller, including the use of calculators, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope

- Paint coatings are to include solvent-based, water-based, two-pack and water repellent for timber
- Paint products may be classified as sealers, primers, sealer/undercoats, undercoats/intermediate coats and finish coats
- Surfaces to be painted may be horizontal, vertical, inclined or curved and be wood, metal, masonry, concrete or plaster
- Tests for paint application are to include wet film thickness test
- Paint applications are to be in accordance with Australian Standards unless this is replaced by other authorised job specifications

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with solvents, chemicals, fumes/gases, confined work areas, manual handling, tripping, falling objects, electrical, fire, faults associated with work access platforms, traffic control, working at heights, working in proximity to others, worksite visitors and the public
- Emergency procedures related to this unit are to include but may not be limited to extinguishing fires, poor ventilation, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust, stormwater protection and clean-up management

Quality Requirements	Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified
Statutory/Regulatory Authorities	Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice
Tools and equipment	- Tools and equipment are to include paint stirrers, drop sheets, paint pots/buckets, brush-ware and brush-ware accessories, roller frames and may include scrapers, filling knives/blades, putty knives, duster brushes, hand sanders, mechanical sanders, heat and flame paint removal equipment, wire brushes, hammers and nail punches - Work platforms may include but are not limited to step ladders, trestles, planks, hop-ups, aluminium mobile scaffold, scissor-lifts and elevated work platforms
Materials	Paint products, materials and components are to include coatings, cleaning solvents, fillers and adhesives
Communications	- Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals - On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues
Information	- Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams and sketches - Safe work procedures related to the application of paint by brush and roller - Regulatory/legislative requirements pertaining to the application of paint by brush and roller - Manufacturers' specifications and instructions where specified - Organisation work specifications and requirements - Instructions issued by authorised organisational or external personnel - Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools and equipment
- Communication and working effectively and safely with others
- The minimum application of paint by brush and roller including:
 - four different applications
 - a minimum of three different surface types
 - at least one application of each of the mandatory types listed in the Range Statement
- with finishes being to specification including in terms of defects, thickness, colour, level of opacity, finish, texture and sheen

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - Painting and decorating terminology
 - Surface coatings technology including specification of paint systems for interior and exterior painting projects to maximise durability, protection and aesthetic considerations
 - Compatibility of preparatory materials and paint systems
 - Theoretical principles relating to pigmentation and colouring agents, drying and curing processes and the role of solvents
 - Theoretical principles relating to adhesion and cohesion of paint
 - Types, uses and limitations of commonly used brushes and rollers
 - Hazards associated with solvents, chemicals and dust
 - Testing techniques and support materials
 - Variances in work carried out within sectors of painting and decorating industry:
 - new building (residential/commercial/high rise)
 - maintenance/renovation/refurbishment
 - restoration
 - conservation
 - Responsibilities with regard to:
 - heritage listed buildings
 - conservation areas
 - environmental requirements
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to the application of paint by brush and roller
 - hand and power tools and equipment appropriate to the application of paint by brush and roller
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGPD3003B**Apply texture coat paint finishes by brush, roller and spray****Unit Descriptor**

This unit specifies the competency required to apply texture coat paint finishes to different surfaces by using brush, roller and spray

The unit includes the planning and preparation for the work, the preparation of the work area and materials, the application of the texture coat paint and other completion of clean-up activities.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Painting and Decorating

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare

- 1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied
- 1.2 Safety requirements are followed in accordance with safety plans and policies
- 1.3 Signage/barricade requirements are identified and implemented
- 1.4 Plant, tools and equipment are selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement
- 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications
- 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use
- 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied

2. Prepare materials and application area

- 2.1 Area is set up for application processes to suit the application system being used
- 2.2 Adjoining surfaces to application area are protected by masking off or covering prior to application of texture coat paint
- 2.3 Adequate ventilation to application area is provided to maintain a safe environment
- 2.4 Measures are taken to ensure application area remains free of dust and foreign matter
- 2.5 Application system/equipment is prepared for use
- 2.6 Fittings are checked for function and security prior to use in accordance with manufacturers' recommendations
- 2.7 Texture coat paint is mixed and adjusted to allow for application process in accordance with manufacturers' recommendations and plans/specification

3. Apply texture coat by brush and roller	3.1 Application equipment is used in accordance with manufacturers' recommendations and job specifications
	3.2 Texture coat paint is applied to surface using correct application technique to achieve an even finish with opacity and sheen level in accordance with the job specification
	3.3 Defects in coating are identified and corrective action taken to achieve the required finish in accordance with the job specification
4. Apply texture coat by spray	4.1 Spray equipment is operated to standard operating procedures in accordance with manufacturers' recommendations
	4.2 Texture coat paint is applied to surface using correct application technique to achieve an even finish with opacity and sheen level in accordance with the job specification
	4.3 Defects in coating are identified and corrective action taken to achieve the required paint finish in accordance with the job specification
5. Clean up	5.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification
	5.2 Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for the application of texture coat paint finishes, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	2
Planning and organising activities	Conduct activities associated with the application of texture coat paint finishes, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	2
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances and levels, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	1
Using technology	Use workplace technology related to the application of texture coat paint finishes, including the use of calculators, the use of spray equipment, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope

- Applications of texture coat paint are to be by brush and roller and may be by spray or other application system
- Texture coat paint finishes are to include high-build (acrylic or styrene/acrylic) coatings and may include proprietary products or lines
- Surfaces for application of textured paint finishes may include but not be limited to off-form concrete, fibrous cement sheeting, tilt-up concrete slabs and other brick and masonry surfaces and paper-faced plasterboard
- Application is to conform with AS 2311, The Painting of Buildings

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with solvents, lead, chemicals, fumes/gases, confined work areas, manual handling, falling objects, electrical and fire, explosion from combustible materials, traffic control, working at heights, working in proximity to others, worksite visitors and the public
- Emergency procedures related to this unit are to include but may not be limited to equipment emergency shutdown and stopping, extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust, vibration, sedimentation control and clean-up management

Quality Requirements

- Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified

Statutory/Regulatory Authorities	• Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice
Tools and equipment	• Tools and equipment are to include roller equipment, brushes, mixers, vacuum cleaners, brooms and may include compressors, hoses and fittings, hopper guns, trestles and planks, step ladders or mobile scaffold
Communications	• Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals • On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues
Information	• Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches • Safe work procedures related to the application of texture coat paint • Regulatory/legislative requirements pertaining to the application of texture coat paint • Manufacturers' specifications and instructions where specified • Organisation work specifications and requirements • Instructions issued by authorised organisational or external personnel • Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools, plant and equipment
- Communication and working effectively and safely with others
- The preparation and application to specification of texture coat paints using brush and roller and either spray or one other applicator systems

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - Painting and decorating terminology
 - Texture coat paint systems technology
 - Texture coatings and their properties, uses and limitations
 - Surface preparation techniques related to texture coatings
 - Applicator system types, characteristics, uses and limitations
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to the application of texture coat paint finishes,
 - hand and power tools, plant and equipment appropriate to the application of texture coat paint finishes,
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGPD3004B**Unit Descriptor****Apply paint by spray**

This unit specifies the competency required to apply paint by spray onto different surfaces to form a protective paint finish.

The unit includes the planning and preparation for the work, the preparation of materials and the application area, the setting up and testing of the spray equipment, the application of paint and the completion of clean-up activities.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Painting and Decorating

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Plant, tools and equipment selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Prepare materials and application area	2.1 Area is set up for application processes to suit spray system being used 2.2 Adjoining surfaces to application area are protected by masking off or covering prior to application of spray paint 2.3 Adequate ventilation to application area is provided to maintain a safe environment 2.4 Measures are taken to ensure application area remains free of dust and foreign matter 2.5 Paint is mixed and viscosity adjusted to allow for application process for spray paint finishing materials in accordance with manufacturers' recommendations and plans/specification

3. Set up and test spray equipment	3.1 Spray equipment components, accessories and lines for the selected spray system are identified, selected and set up in the operating location in accordance with manufacturers' recommendations and plans/specification
	3.2 Fittings are checked for function and security prior to use in accordance with manufacturers' recommendations
	3.3 Safety devices are identified, tested and defects corrected in accordance with standard operational and manufacturers' requirements
4. Apply paint using the spray system	4.1 Spray equipment is operated to standard operating procedures in accordance with manufacturers' recommendations
	4.2 Paint is applied to surface using correct application technique to achieve an even finish with opacity and sheen level in accordance with the job specification
	4.3 Defects in coating are identified and corrective action taken to achieve the required spray paint finish in accordance with the job specification
5. Clean up and store equipment	5.1 Spray gun and associated components and equipment are dismantled, checked, cleaned and maintained in accordance with manufacturers' recommendations and operator's manual
	5.2 Spray paint materials and solvents are stored safely to manufacturers' specifications and company procedures
	5.3 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for the application of paint by spray, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	2
Planning and organising activities	Conduct activities associated with the application of paint by spray, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	2
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances and levels, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	1
Using technology	Use workplace technology related to the application of paint by spray, including the use of calculators, the use of spray unit equipment, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope	- Spray systems are to include conventional spray units, airless spray units and HVLP spray applications and may include electrostatic spray applications - Paint coatings may include but are not limited to solvent-based (alkyd, urethane, urethane/alkyd, urethane oil or modified alkyd resins), water based, two-pack and water repellents for timber - Spray equipment, accessories and lines are to include but are not limited to compressors, regulators, spray guns, hoses, spray tips and filters and diaphragm or piston airless spray unit (electrical/pneumatic/petrol)
Safety (OH&S)	- Spray systems are to include conventional spray units, airless spray units and HVLP spray applications and may include electrostatic spray applications - Paint coatings may include but are not limited to solvent-based (alkyd, urethane, urethane/alkyd, urethane oil or modified alkyd resins), water based, two-pack and water repellents for timber - Spray equipment, accessories and lines are to include but are not limited to compressors, regulators, spray guns, hoses, spray tips and filters and diaphragm or piston airless spray unit (electrical/pneumatic/petrol)
Environmental Requirements	Environmental requirements are to include but are not limited to waste management, noise, dust, stormwater protection and clean-up management
Quality Requirements	Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified
Statutory/Regulatory Authorities	Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice
Tools and equipment	Tools and equipment may include but are not limited to spray equipment, respirators, sanders, brushes, vacuum cleaners, drop sheets, masking equipment and scaffold including planks, trestles, step ladders and aluminium mobile

Communications

- Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals
- On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues

Information

- Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches
- Safe work procedures related to the application of paint by spray
- Regulatory/legislative requirements pertaining to the application of paint by spray
- Manufacturers' specifications and instructions where specified
- Organisation work specifications and requirements
- Instructions issued by authorised organisational or external personnel
- Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools, plant and equipment
- Communication and working effectively and safely with others
- The application of paint by spray using the following systems:
 - Conventional
 - Airless
 - HVLP
- with finishes being to specification including in terms of defects, thickness, sheen, opacity, colour and sharpness

Relationship to other units

- Pre-requisite units are:
- BCGCM1001B Follow OH&S policies and procedures
- Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements including respiratory protection
 - Quality requirements
 - Painting and decorating terminology
 - The rules (regulations, Australian Standards and Codes of Practice) of spray painting
 - Spray equipment types, characteristics, uses and limitations
 - Paint types, their uses and limitations
 - Compatibility of surface coating to substrates
 - Preparatory materials relevant to spray operations
 - Techniques for the application of paint by spray
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - JSA's/Safe work method statement

The context of assessment

- A knowledge of
 - Workplace and equipment safety requirements including respiratory protection
 - Quality requirements
 - Painting and decorating terminology
 - The rules (regulations, Australian Standards and Codes of Practice) of spray painting
 - Spray equipment types, characteristics, uses and limitations
 - Paint types, their uses and limitations
 - Compatibility of surface coating to substrates
 - Preparatory materials relevant to spray operations
 - Techniques for the application of paint by spray
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - JSA's/Safe work method statement

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

The following resources should be made available:

- workplace location or simulated workplace
- materials relevant to the application of paint by spray
- hand and power tools, plant and equipment appropriate to the application of paint by spray
- realistic activities covering the mandatory task requirements
- specifications and work instructions

BCGPD3005B**Unit Descriptor****Match specified paint colour**

This unit specifies the competency required to colour match new and existing painting finishes.

The unit includes the planning and preparation for the work, the matching of paint colour to a specified sample and the completion of clean-up activities.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Painting and Decorating

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Tools and equipment are selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Match paint colour to specified sample	2.1 Base colour is identified from analysis of sample 2.2 Paint type, tint base and sheen level of sample are established in accordance with manufacturers' recommendations and specifications 2.3 Colorants are selected as suitable for colour match 2.4 Colour is mixed and matched against sample and allowed to dry to establish accuracy of colour match 2.5 Full quantity of paint is mixed and colour match retested prior to application in accordance with specifications
3. Clean up	3.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification 3.2 Machinery, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for the colour matching of paints, including work instructions, safety instructions, signage, labels, quality procedures, manufacturers' instructions, colour charts or equivalent, material safety data sheets and equipment instructions	2
Planning and organising activities	Conduct activities associated with the colour matching of paint, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	1
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, calculate mix ratios, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	1
Using technology	Use workplace technology related to the colour matching of paint, including the use of calculators, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope	• Paints to be matched are to include solvent-based and latex/acrylics • A sample may include, but not be limited to an in-situ previously painted unit or area, paint manufacturers' colour card and fan decks
Safety (OH&S)	• OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances • Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices • Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with solvents, chemicals, fumes/gases, confined spaces, manual handling, falling objects, electrical, fire, faults associated with work access platforms, traffic control, working at heights, working in proximity to others, worksite visitors and the public • Emergency procedures related to operations are to include but may not be limited to extinguishing fires, organisational first aid requirements and evacuation
Environmental Requirements	• Environmental requirements are to include but are not limited to waste management, noise, dust, stormwater protection and clean-up management
Quality Requirements	• Quality requirements are to include but not be limited to relevant Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified
Statutory/Regulatory Authorities	• Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice

Tools and equipment	Tools and equipment are to include stirring implements, colorant dispenser, mixing receptacles, paint brushes and may include mechanical paint mixers (shakers)
Communications	- Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals - On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues
Information	- Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, memos, material safety data sheets (MSDS) and diagrams or sketches - Safe work procedures related to the colour matching of paint - Manufacturers' specifications and instructions where specified - Organisation work specifications and requirements - Instructions issued by authorised organisational or external personnel - Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools and equipment
- Communication and working effectively and safely with others
- Colour match a minimum of two solvent-based and two latex/acrylic paints to specification

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - Painting and decorating terminology
 - Colour theory related to primary, secondary, tertiary and intermediate colours
 - The use of the colour wheel
 - Colour principles related to monochromatic, complementary, split complementary, analogous and triadic colours
 - The effect, over time, of light on colours
 - The presentation of paint formulae
 - Factors that affect the apparent colour of paint including:
 - the gloss level and paint type
 - colour and opacity of the paint
 - age and deterioration of painted sample if in-situ
 - lighting conditions
 - colour of surface covered by paint
 - colour of drapes and other furnishings
 - colour considerations regarding durability of colours in exterior locations
 - Colours used in heritage painting or restoration
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to the colour matching of paint
 - hand and power tools and equipment appropriate to the colour matching of paint
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGPD3006B**Unit Descriptor****Apply stains and clear timber finishes**

This unit specifies the competency required to apply stains and clear timber finishes to different material surfaces to form a protective and decorative finish.

The unit includes the planning and preparation for the work, the preparation of the work area and materials, the staining of bare timber, the application of clear finishes and the completion of clean-up activities.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Painting and Decorating

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Tools and equipment are selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Prepare materials and application area	2.1 Area is set up for application processes to suit application system being used 2.2 Adjoining surfaces to application area are protected by masking off or covering prior to application of stains and finishes 2.3 Adequate ventilation to application area is provided to maintain a safe environment 2.4 Measures are taken to ensure application area remains free of dust and foreign matter

- 3. Stain bare timber surface
 - 3.1 Stain is selected for type of timber allowing for aesthetics and durability in accordance with manufacturers' recommendations and job specifications
 - 3.2 Stain is prepared to proportions and consistency in accordance with manufacturers' recommendations and job specification
 - 3.3 Application method for the specified surface, area size and type of finish is selected in accordance with manufacturers' recommendations and job specifications
 - 3.4 Stain is applied to bare timber surface to specifications and manufacturers' instructions
 - 3.5 Wood filler and putty are selected, mixed, colour matched and applied to timber in accordance with job specifications
- 4. Apply clear finishes
 - 4.1 Stain is selected for type of timber allowing for aesthetics and durability in accordance with manufacturers' recommendations and job specifications
 - 4.2 Stain is prepared to proportions and consistency in accordance with manufacturers' recommendations and job specification
 - 4.3 Application method for the specified surface, area size and type of finish is selected in accordance with manufacturers' recommendations and job specifications
 - 4.4 Stain is applied to bare timber surface to specifications and manufacturers' instructions
 - 4.5 Wood filler and putty are selected, mixed, colour matched and applied to timber in accordance with job specifications
- 5. Clean up
 - 5.1 Unused materials are sealed and stored/stacked in accordance with standard material handling practices and techniques and company requirements
 - 5.2 Painting tools and equipment are cleaned with correct solutions without damage and stored safely and effectively to manufacturers' specifications
 - 5.3 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for the application of stains and clear timber finishes, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	2
Planning and organising activities	Conduct activities associated with the application of stains and clear timber finishes, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	1
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements and distances, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	1
Using technology	Use workplace technology related to the application of stains and clear timber finishes, including the use of calculators, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope

- The types of timber finish materials are to include timber stains (water, spirit, oil or slightly pigmented varnish/polyurethane), grain fillers (water, spirit, oil), single pack clear finish and putty, and may include clear finishes for timber including lacquers and two pack polyurethane, acrylic clear and two pack epoxy clear, shellac, tinting agents and waxes
- Application methods are to include brush, roller, rag and paint pad (sponge) and may include spray
- Surfaces to be finished/pre-finished may be horizontal, vertical, inclined or curved and may be all common profiles encompassing the full range natural timber products, ply, building boards (including MDF and particle board), previously coated/treated timber surfaces, in sound or unsound conditions, floors, panelling, stairs and doors
- Types of applied finish may include but not be limited to flat, satin, semi-gloss and full gloss
- Applications are to be in accordance with the relevant Australian Standard unless this is replaced by other authorised job specifications

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with solvents, chemicals, fumes/gases, confined spaces, manual handling, falling objects, electrical, fire, faults associated with work access platforms, traffic control, working at heights, working in proximity to others, worksite visitors and the public
- Emergency procedures related to this unit are to include but may not be limited to extinguishing fires, poor ventilation, organisational first aid requirements and evacuation

Environmental Requirements	• Environmental requirements are to include but are not limited to waste management, noise, dust, stormwater protection and clean-up management
Quality Requirements	• Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified
Statutory/Regulatory Authorities	• Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice
Tools and equipment	• Tools and equipment may include but not be limited to scrapers, filling knives/blades, putty knives, duster brushes, hand sanders, mechanical sanders, paint stirrers, drop sheets, heat guns, hammers, nail punches, paint pots/buckets, brush ware, brush ware accessories, roller frames, buckets, roller accessories and spray equipment • Work platforms may include but not be limited to step ladders, trestles and planks
Communications	• Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals • On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues
Information	• Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams and sketches • Safe work procedures related to the application of stains and clear timber finishes • Regulatory/legislative requirements pertaining to the application of stains and clear timber finishes • Manufacturers' specifications and instructions where specified • Organisation work specifications and requirements • Instructions issued by authorised organisational or external personnel • Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools and equipment
- Communication and working effectively and safely with others
- The application of stains and clear timber finishes which is at a minimum to cover:
 - one oil-based stain product
 - one water and spirit-based timber stain
 - one water-based clear finish
 - one oil-based clear finish
 - grain filler applications
 - putty applications
 - with finishes being to specification including in terms of defects, colour, level of opacity, finish and sheen

Are there any other units which should be assessed with this unit or which relate directly to this unit?

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - Painting and decorating terminology
 - Basic softwood and hardwood timber technology
 - Types, properties, uses and limitations of timber stains
 - Types, properties, uses and limitations of clear timber finishes
 - Surface preparation techniques for clear wood finishing
 - Theoretical principles relating to pigmentation and colouring agents, drying and curing processes and the role of solvents
 - Types, uses and limitations of commonly used brushes, rollers and other applicators
 - Hazards associated with solvents, chemicals and dust
 - Testing techniques and support materials
 - Variances in work carried out within sectors of painting and decorating industry:
 - new building (residential/commercial/high rise)
 - maintenance/renovation/refurbishment
 - restoration
 - conservation
 - Responsibilities with regard to:
 - heritage listed buildings
 - conservation areas
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to the application of stains and clear timber finishes
 - hand and power tools and equipment appropriate to the application of stains and clear timber finishes
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGPD3007B**Unit Descriptor****Apply wallpaper**

This unit specifies the competency required to apply wallpaper to walls of different materials to form a protective and decorative finish.

The unit includes the planning and preparation for the work, the preparation of the surfaces and materials, the application of the wallpaper and the completion of clean-up activities.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Painting and Decorating

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Tools and equipment are selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Prepare surface for wallpaper	2.1 Condition, suitability and nature of existing substrate and surface material are determined and removal process is selected 2.2 Hazards are identified and correct procedures used to reduce risk to self and others in accordance with manufacturers' recommendations and specifications 2.3 Surfaces are prepared for wallpapering application by removing existing coating and loose debris 2.4 Surface defects are repaired and imperfections stopped, filled and sanded to smooth finish ready for wallpapering in accordance with manufacturers' recommendations and job specifications

3. Prepare for the hanging process	3.1 Final application plan for hanging of wallpaper is determined and documented in accordance with manufacturers' recommendations and with client requirements 3.2 Selected adhesives are prepared in accordance with manufacturers' recommendations 3.3 Materials are checked for conformity to dye lot, batch number and other shading requirements in accordance with manufacturers' recommendations and client requirements
4. Apply wallpaper	4.1 Size coating is applied to work area in accordance with manufacturers' recommendations 4.2 Wallpaper is applied to work area ensuring an even surface, seams are butted, paper is plumb and pattern is free of defects 4.3 Trimming around fittings is completed accurately and with minimal impact on surroundings 4.4 Wallpaper application is completed in accordance with manufacturers' recommendations and job specifications
5. Clean up	5.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification 5.2 Tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for the application of wallpaper, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	1
Planning and organising activities	Conduct activities associated with the application of wallpaper, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	1
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete work, complete measurements, establish levels, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	1
Using technology	Use workplace technology related to the application of wallpaper, including the use of calculators, the use of levelling tools, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope

- Wallpaper and wall covering materials are to include unpasted and ready pasted wallpapers (simplex and duplex), washable wallpaper, vinyl wallpaper, lining paper and borders
- Wallpaper applications are to include those to walls which may be flat or curved and constructed of set plaster, plasterboard, fibrous plaster, medium density fibre board and fibre cement products
- Adhesives are to include cellulose and latex and may include starch, PVA and other special adhesive blends

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with solvents, chemicals, fumes/gases, confined work areas, manual handling, falling objects, electrical and fire from combustible materials, traffic control, working at heights, working in proximity to others, worksite visitors and the public
- Emergency procedures related to operations are to include but not be limited to extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust, stormwater protection and clean-up management

Quality Requirements

- Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified

Statutory/Regulatory Authorities	• Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice
Tools and equipment	• Tools and equipment are to include lay brushes, smoothing blocks, applicators, rubber rollers, scissors, sponges, seam rollers, steam strippers, trimming knives and cutters, broad knives, tape measures, plumb bobs and string lines, spirit levels, scrapers and filling blades • Work platforms may include but not be limited to step ladders, trestles and planks and mobile scaffold
Communications	• Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals • On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues
Information	• Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS) and diagrams or sketches • Safe work procedures related to the application of wallpaper • Regulatory/legislative requirements pertaining to the application of wallpaper • Manufacturers' specifications and instructions where specified • Organisation work specifications and requirements • Instructions issued by authorised organisational or external personnel • Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools and equipment
- Communication and working effectively and safely with others
- Apply wallpaper to specification on a minimum of three jobs covering:
 - lining paper, vinyl wallpaper and unpasted wallpaper
 - walls and internal and external corners, reveal, window and arch
 - walls containing power points and switches

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - Painting and decorating terminology
 - Types and properties of wall coverings and their suitability to various substrates
 - Common wallpapering defects
 - Wallpapering tools and equipment, their uses and limitations
 - Compatibility of preparatory materials and wallpaper
 - Surface preparation techniques for the application of wallpaper
 - Procedures used to apply straight pattern match, drop pattern match and random match wallpapers
 - Types, uses and limitations of commonly used adhesives
 - Wallpaper hanging processes and techniques
 - Responsibilities with regard to:
 - heritage listed buildings
 - conservation areas
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to the application of wallpaper
 - hand and power tools and equipment appropriate to the application of wallpaper
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGPD3008B**Unit Descriptor****Apply decorative paint finishes**

This unit specifies the competency required to apply decorative paint finishes to a range of different material surfaces.

The unit includes the planning and preparation for the work, the preparation of the application area, the application of mirror paint finishes, broken colour effects, imitation marble effects, imitation wood grain effects, the application of stencils and lines by brush and the completion of clean-up activities.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Painting and Decorating

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Tools and equipment are selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Prepare application area	2.1 Area is set up for application processes to suit surfaces to be painted 2.2 Adjoining surfaces to application area are protected by masking off or covering prior to application of decorative paint finishing materials 2.3 Ventilation is provided in application area to maintain safety of self and others 2.4 Measures are taken to ensure application area is dust free
3. Apply mirror paint finish	3.1 Paint viscosity is adjusted to suit climatic conditions and method of application in accordance with manufacturers' specifications and/or job specifications 3.2 Prime and intermediate coats are applied to specifications, allowed to dry thoroughly and sanded to a smooth, even finish 3.3 Final coat is applied without imperfections, flowing out to an even, smooth finish in accordance with manufacturers' specifications and/or job specifications

4. Apply broken colour effects	4.1 Ground coat to specified colour and consistency is applied evenly to prepared surface 4.2 Scumble glaze is applied to prepared ground and desired broken colour effect is produced to match sample in accordance with manufacturers' specifications and/or job specifications 4.3 Clear coating is applied to achieve an even finish to specified sheen level in accordance with manufacturers' specifications and/or job specifications
5. Produce imitation marble effects	5.1 Ground coat to specified colour and consistency is applied evenly to prepared surface 5.2 Marbling medium is mixed to designed proportions and colour and correctly applied to produce veins and markings as per sample in accordance with manufacturers' specifications and/or job specifications 5.3 Clear coating is applied to achieve an even finish to specified sheen level in accordance with manufacturers' specifications and/or job specifications
6. Produce imitation wood grain effects	6.1 Ground coat to specified colour and consistency is applied evenly to prepared surface 6.2 Wood graining medium is mixed to designed proportions and colour and correctly applied to produce grain markings as per sample and in accordance with manufacturers' specifications and/or job specifications 6.3 Specific highlights are added to match sample of decorative paint finishing materials in accordance with manufacturers' specifications and/or job specifications 6.4 Clear coating is applied to achieve an even finish to specified sheen level in accordance with manufacturers' specifications and/or job specifications
7. Apply stencils	7.1 Stencil design is selected and laid out onto recommended material 7.2 Specified transfer method is used and design cut accurately for multiple colours using a 'register' mark 7.3 Initial stencil is placed and taped to designed location and paint is applied to produce first colour to specifications 7.4 Subsequent stencils are located accurately to pattern with each separate colour applied to specifications to produce designed finish in accordance with manufacturers' specifications and/or job specifications
8. Apply lining by brush	8.1 Lining work is selected and set out to designed effect on prepared surface to specifications 8.2 Paint materials, applicators and brush ware are identified and selected in accordance with suitability of use for lining application and job specifications 8.3 Specified application techniques are applied to produce designed lining work effects and finish in accordance with manufacturers' specifications and/or job specifications

- 9. Clean up and store equipment
 - 9.1 Special effect painting equipment and spray painting equipment are dismantled, cleaned, maintained and stored
 - 9.2 Waste and unwanted materials are removed and placed into job waste bins or rubbish stockpile in a safe and effective manner in accordance with sound work practices compliant with environmental protection requirements
 - 9.3 Unused materials are sealed and stored/stacked in accordance with standard material handling practices and techniques and company requirements
 - 9.4 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification
 - 9.5 Tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' specifications and/or standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for the application of decorative finishes, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	2
Planning and organising activities	Conduct activities associated with the application of decorative finishes, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	2
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances and levels, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	1
Using technology	Use workplace technology related to the application of decorative finishes, including the use of calculators, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope

- Decorative paint finishes are to include mirror finish, broken colour effects, imitation marble/wood grain effects, stencilling and lines and may include gilding and luminescent finishes
- Mirror finishing is to be applied by brush and brush/ roller and may be applied by spray and flood coating
- Broken colour effects are to be achieved using rag rolling, sponging and stippling and may use bagging, flouncing, dragging, blending and highlighting
- Imitation marble and wood graining effects may be achieved using softeners, floggers, over-grainers, mottlers, fitches, brush-grainer, cutters, rubber combs, heart grain simulator, check roller, steel combs, veining horn, chamois, stippling brushes, pencils, crayons, feathers and sponges
- Stencilling is to include the use of drawing/tracing materials, cutting knives/scalpels, cutting boards, stencil materials and stencil brushes

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with solvents, lead, chemicals, fumes/gases, confined work areas, manual handling, falling objects, electrical and fire and/or explosion from combustible materials, traffic control, working at heights, working in proximity to others, worksite visitors and the public
- Emergency procedures related to operations are to include but may not be limited to extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust, stormwater protection and clean-up management

Quality Requirements	• Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified
Statutory/Regulatory Authorities	• Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice
Tools and equipment	• Tools and equipment may include but not be limited to brushes, rollers, spray equipment, sanders, scrapers, vacuum cleaners, compressors, trestles, planks, stepladders and mobile scaffold
Materials	• Materials may include oil-based products, water-based products, clear finishes, linseed oil, fillers, stainers, scumbling mediums, terebine dryers and manufacturers' proprietary products
Communications	• Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals • On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues
Information	• Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS) and diagrams or sketches • Safe work procedures related to the application of decorative paint finishes • Regulatory/legislative requirements pertaining to the application of decorative paint finishes • Manufacturers' specifications and instructions where specified • Organisation work specifications and requirements • Instructions issued by authorised organisational or external personnel • Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools and equipment
- Communication and working effectively and safely with others
- Completion, to specification, of the following decorative finishes:
 - a mirror finish to a minimum of a door or standard panel
 - a minimum of two broken colour effects on walls or standard panel size surfaces
 - a minimum of one marble graining effect on a standard panel size surface
 - a minimum of one wood graining effect on a standard panel size surface
 - the design and cutting of a multi-plate stencil and at least two applications of the stencil
 - the use of lining within a decorative finish

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - Painting and decorating terminology
 - Decorative painted finishes technology
 - Compatibility of surface coatings to substrates
 - Colour fleck materials and application techniques
 - Imitation marble materials and application techniques
 - Imitation wood grain materials and application techniques
 - Gilding materials and application techniques
 - Stencilling materials and application techniques
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to the application of decorative finishes
 - hand and power tools and equipment appropriate to the application of decorative finishes
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGPD3009B Unit Descriptor

Remove graffiti and apply protective coatings

This unit specifies the competency required to remove graffiti and apply preventative materials to different material surfaces to form graffiti resistant surface systems.

The unit includes the planning and preparation for the work, the preparation of the work site and materials, the removal of graffiti, the application of preventative material and the completion of clean-up activities.

Prerequisite Unit(s) Unit Sector

BCGCM1001B Follow OH&S policies and procedures
Painting and Decorating

ELEMENT

PERFORMANCE CRITERIA

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Plant, tools and equipment are selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Prepare site and materials	2.1 Site area is set up for graffiti removal and preventative application processes to suit surfaces to be treated 2.2 Adjoining surfaces to application area are protected by masking off or covering prior to application of graffiti preventative coatings 2.3 Adequate ventilation is provided for application area
3. Remove graffiti	3.1 Preparation processes are selected to suit the substrate surfaces and the graffiti circumstances 3.2 Type of coating previously used to cover graffiti is identified in accordance with current industry standards of practice, manufacturers' recommendations and specifications 3.3 Graffiti removal processes are applied to the affected area in accordance with current industry standards of practice, manufacturers' recommendations and specifications

- 4. Apply preventative application material
 - 4.1 Substrate surfaces are cleaned and prepared for preventative application coatings in accordance with current industry standards of practice and manufacturers' recommendations
 - 4.2 Type of preventative application coating to cover specific type of graffiti is identified and prepared in accordance with manufacturers' recommendations and job specifications
 - 4.3 Preventative application coating to cover specific type of graffiti is applied in accordance with manufacturers' recommendations and job specifications
- 5. Clean up and store equipment
 - 5.1 Painting equipment is dismantled, cleaned, maintained and stored in accordance with manufacturers' recommendations and standard work practices
 - 5.2 Unused materials are sealed and stored/stacked in accordance with standard material handling practices and company procedure
 - 5.3 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification
 - 5.4 Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for the removal of graffiti and application of protective coatings, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	2
Planning and organising activities	Conduct activities associated with the removal of graffiti and application of protective coatings, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	2
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances and levels, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	1
Using technology	Use workplace technology related to the removal of graffiti and application of protective coatings, including the use of calculators, the use of spray applications, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope	• Preventative coatings are to include sacrificial and non sacrificial and may include siliconised and other types • Application systems are to include brush/roller and spray • Application is to conform with the relevant Australian Standard
Safety (OH&S)	• OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances • Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices • Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with solvents, chemicals, fumes/gases, confined work areas, manual handling, falling objects, electrical and fire from combustible materials, traffic control, working at heights, working in proximity to others, worksite visitors and the public • Emergency procedures related to operations are to include but not be limited to extinguishing fires, organisational first aid requirements and evacuation
Environmental Requirements	• Environmental requirements are to include but are not limited to waste management, noise, dust, stormwater protection and clean-up management
Quality Requirements	• Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified
Statutory/Regulatory Authorities	• Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice

Tools and equipment	• Tools and equipment may include but not be limited to brushes, rollers, airless spray equipment, scrapers, vacuum cleaners, water blasters, trestles, planks, step ladders and mobile scaffold
Materials	• Materials may include solvents and cleaning materials
Communications	• Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals • On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues
Information	• Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams and sketches • Safe work procedures related to the removal of graffiti and application of protective coatings • Regulatory/legislative requirements pertaining to the removal of graffiti and application of protective coatings • Manufacturers' specifications and instructions where specified • Organisation work specifications and requirements • Instructions issued by authorised organisational or external personnel • Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools, plant and equipment
- Communication and working effectively and safely with others
- Remove graffiti from two different substrates using two approved cleaning methods
- Apply a minimum of one sacrificial and one non-sacrificial preventative coating, each to a different substrate

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - Painting and decorating terminology
 - Types and properties of commonly used graffiti materials
 - Types, characteristics, uses and limitations of graffiti removal materials
 - Types, uses, limitations and operating techniques of graffiti removal equipment
 - Graffiti resistant material technologies and applications
 - Surface preparation techniques
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

What methods of assessment should apply?

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to the removal of graffiti and application of protective coatings
 - hand and power tools, plant and equipment appropriate to the removal of graffiti and application of protective coatings
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGPD3010B**Unit Descriptor****Apply protective paint coating systems**

This unit specifies the competency required to apply specialised paint coating systems as a protective measure against atmospheric conditions, sanitation and hygiene risks and the impacts of high traffic areas.

The unit includes the planning and preparation for the work, the preparation of the work area and materials, the application of the coating system and the completion of clean up activities.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Painting and Decorating

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Plant, tools and equipment are selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Prepare surfaces for protective coating	2.1 The suitability of the surface for the protective coating is determined in accordance with manufacturers' recommendations and job specifications 2.2 The surface preparation method is correctly selected in accordance with the environment, finish and substrate requirements 2.3 Surface is prepared to manufacturers' specifications in compliance with substrate requirements, specifications and relevant standards 2.4 Surface imperfections are repaired or stopped, filled and sanded to a smooth finish ready for the protective coating in accordance with manufacturers' recommendations and job specifications

- 3. Apply protective coating system
 - 3.1 Job location is checked to ensure provision of adequate ventilation and precautions taken to prevent fire and/or explosion
 - 3.2 Protective coating system application is selected consistent with the job location, type of paint, type and condition of surface and climatic conditions
 - 3.3 Protective coating system is applied and finished in accordance with job/manufacturers' specifications and relevant standards
 - 3.4 Dry and wet testing is carried out in accordance with manufacturers' specifications and relevant standards
- 4. Clean up
 - 4.1 Waste and unwanted materials are removed and placed into job waste bins or rubbish stockpile in accordance with sound work practices and compliance with the environmental requirements
 - 4.2 Painting tools, equipment and plant are cleaned with correct solutions without damage and stored safely and effectively to manufacturers' specifications
 - 4.3 Unused materials are sealed and stored/stacked in accordance with standard material handling practices and techniques and company requirements
 - 4.4 Work area is cleared and materials disposed of or recycled in a manner to avoid spontaneous combustion and in accordance with state or territory legislation

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for the application of protective paint coating systems, including work instructions, plans/sketches/ diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	2
Planning and organising activities	Conduct activities associated with the application of protective paint coating systems, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	1
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances and levels, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	1
Using technology	Use workplace technology related to the application of protective paint coating systems, including the use of calculators, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope

- Material surfaces to be prepared and coated may be new and previously coated and include but not be limited to concrete, metallic (iron, steel, ferrous and non ferrous metals), fibreglass, plastics and PVC
- Paint coating applications may include but not be limited to trafficable areas, corrosion control, hygiene and sanitation protection and decoration
- Paint coatings may include polyurethane primer (two pack), epoxy primer (two pack), high build epoxy and high build chlorinated rubber
- Preparation of surfaces may include but is not limited to heat gun, water blasting, abrasive blasting, grinding, sanding, scraping (mechanical and hand), washing down using sugar soap and chemical stripping
- Measurement and testing techniques are those required to confirm the wet film meets specifications
- Applications are to comply with the relevant Australian Standards

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with solvents, lead, chemicals, other hazardous substances, fumes/gases, confined work areas, manual handling, falling objects, electrical and fire, explosion from combustible materials, traffic control, working at heights, working in proximity to others, worksite visitors and the public
- Emergency procedures related to operation are to include but may not be limited to emergency shutdown and stopping, extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust, chemical fumes, stormwater protection and clean-up management

Quality Requirements	Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified
Statutory/Regulatory Authorities	Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice
Tools and equipment	- Tools and equipment may include but not be limited to scrapers, hand sanders, mechanical sanders, mechanical grinders, paint stirrers, drop sheets, hand and mechanical wire brushes, paint pots/buckets, brush ware and brush ware accessories, wet and dry film thickness gauges, roller frames, covers, buckets and roller accessories, high pressure water blasters, spray equipment, rags and duster brushes - Work platforms may include but not be limited to ladders, step ladders, trestles, planks, hop ups, aluminium mobile scaffold, scissor lifts, elevated work platforms and in-situ scaffold erected by qualified personnel
Materials	Materials may include solvents, cleaning chemicals and cleaning aids
Communications	- Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals - On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues
Information	- Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches - Safe work procedures related to the application of protective paint coating systems - Regulatory/legislative requirements pertaining to the application of protective paint coating systems - Manufacturers' specifications and instructions where specified - Organisation work specifications and requirements - Instructions issued by authorised organisational or external personnel - Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools, plant and equipment
- Communication and working effectively and safely with others
- The preparation for an application of a minimum of three different protective paint coating systems to specification

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - Painting and decorating terminology
 - The impact of atmospheric conditions and high traffic on new and existing structures and coatings
 - Protective surface coating technology
 - The types of commonly used protective paint coatings, their uses and limitations
 - Protective paint coating application equipment and techniques and their uses and limitations
 - Hazards associated with solvent vapour, chemical fumes, gases, harmful dusts, metal chips, abrasive grit and asbestos fibres
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to the application of protective paint coating systems,
 - hand and power tools, plant and equipment appropriate to the application of protective paint coating systems,
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGPD3011B**Unit Descriptor****Treat lead paint hazards**

This unit specifies the competency required to treat lead paint hazards, including removal of lead-based paints from surfaces, encapsulation and the control of associated hazards.

The unit includes the planning and preparation for the work, the definition and preparation of the work area, the removal of contaminated material, the encapsulation of contaminated material and the completion of clean-up activities.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Painting and Decorating

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Tools and equipment are selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Define and prepare work area	2.1 Circumstances in which lead based paints may be encountered are determined 2.2 Location of lead based paint to be treated is determined from plans/specifications 2.3 Testing is undertaken using approved testing methods 2.4 Options for the management and treatment of pre-existing lead based paints in buildings are considered and determined in accordance with regulatory requirements 2.5 A safe working area is maintained around lead based paint locations using temporary control measures, barriers and signage 2.6 Plant, tools and equipment are positioned to suit job requirements

3. Remove contaminated materials	3.1 Appropriate removal processes are determined to suit job requirements 3.2 Contamination area is quarantined and people at risk are protected in accordance with regulatory requirements 3.3 Furnishings, other surfaces, surrounding ground areas, drinking vessels, water storage and foodstuffs are protected and all doors and windows sealed where appropriate 3.4 Waste management procedures are identified for lead contamination from flake, chalk and dust 3.5 Removal processes are applied and contaminated materials are containerised for movement 3.6 Substrates are repaired, restored and prepared for subsequent coatings
4. Encapsulate contaminated materials	4.1 Stabilisation method is determined to make the building lead safe by applying temporary control measures 4.2 Appropriate methods for the containment of existing surfaces are determined or confirmed in accordance with regulatory requirements 4.3 Over painting is conducted using oil based paints by applying a high quality undercoat sealer and two coats of quality topcoats 4.4 Specialised liquid encapsulant is applied in accordance with manufacturers' specifications 4.5 Contaminated surface is enclosed using overlaying materials such as plasterboard or weatherboard and applying warning notices of the latent lead hazard
5. Clean up	5.1 Work area is cleared and materials disposed of or recycled in accordance with state or territory legislation 5.2 Waste and unwanted materials are removed and placed into containment vessels for disposal in accordance with authorised systems and relevant standards 5.3 Surface and soil tests are conducted to verify that no contamination has taken place and building is safe for occupation 5.4 Tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for the treatment of lead paint hazards, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	2
Planning and organising activities	Conduct activities associated with the treatment of lead paint hazards, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	2
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	2
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances and levels, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	2
Using technology	Use workplace technology related to the treatment of lead paint hazards, including the use of calculators, the use of test kits, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope

- Treatments are to include stripping and removal, and encapsulation
- Removal process is to include chemical stripping and may include wet scraping, wet sanding and heat gun and scraper
- Testing is to include lead test kits and may include x-ray fluorescence equipment and laboratory testing of field samples
- Debris and waste may include paint flakes, paint dust, paint chalk, waste materials, soil contaminants, empty containers and plastic sheeting, paper and cardboard and other receptacles and protective clothing

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with solvents, lead, chemicals, fumes/gases, confined work areas, manual handling, falling objects, electrical and fire, explosion from combustible materials, traffic control, working at heights, working in proximity to others, worksite visitors and the public
- Emergency procedures related to operations are to include but may not be limited to lead contamination, extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to lead contamination, waste management, noise, dust, stormwater protection and clean-up management

Quality Requirements	Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified
Statutory/Regulatory Authorities	Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice
Tools and equipment	Tools and equipment are to include but not be limited to disposable heavy duty drop sheets, disposable personal boot covers and coveralls, High Efficiency Particulate Accumulator (HEPA) filtered vacuum cleaner, measuring tapes/rules, chemical strippers (caustic based, flammable, methylene chloride), HEPA filtered sanders, respirators (maintained to AS 1716), containment receptacles (heavy duty) and may include shovels, wet mops, heat guns, wheelbarrows and masking tape
Materials	Materials may include solvents and approved cleaning materials
Communications	- Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals - On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues
Information	- Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams and sketches - Safe work procedures related to the treatment of lead paint hazards - Regulatory/legislative requirements pertaining to the treatment of lead paint hazards - Manufacturers' specifications and instructions where specified - Organisation work specifications and requirements - Instructions issued by authorised organisational or external personnel - Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools and equipment
- Communication and working effectively and safely with others
- The application of treatments for a minimum of two different lead paint hazards including:
 - a chemical stripping treatment and
 - an encapsulation treatment
 - where the processes and outcomes are to be in accordance with current regulations and relevant Australian Standards

Relationship to other units

- Pre- requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - Painting and decorating terminology
 - Types and specifications of lead based paints and the manufacturers' recommendations for removal
 - Health risks associated with lead and lead based paint products
 - Containment techniques and processes for lead based paint flakes, dust and chalk
 - The agents available for chemical stripping treatments, their uses and limitations
 - The agents and techniques available for encapsulation, their uses and limitations
 - Sanding equipment and techniques
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in a realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment will normally be under simulated project conditions and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to the treatment of lead paint hazards
 - equipment , hand and power tools appropriate to the treatment of lead paint hazards
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGPD3012B**Unit Descriptor****Apply advanced wallpaper techniques**

This unit specifies the competency required to apply wallpaper and specialty materials to walls and ceilings to form a protective and decorative finish.

The unit includes the planning and preparation for the work, the preparation of the surfaces and materials, the application of the wallpaper and specialty materials and the completion of clean-up activities.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Painting and Decorating

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Tools and equipment are selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Prepare surface for wallpaper	2.1 Condition, suitability and nature of existing substrate and surface material are determined and removal process is selected 2.2 Hazards are identified and correct procedures used to reduce risk to self and others in accordance with manufacturers' recommendations and specifications 2.3 Surfaces are prepared for wallpapering application by removing existing coating and loose debris 2.4 Surface defects are repaired and imperfections stopped, filled and sanded to smooth finish ready for wallpapering in accordance with manufacturers' recommendations and job specifications

3. Prepare for the hanging process	3.1 Final application plan for hanging of wallpaper and specialty material is determined and documented in accordance with manufacturers' recommendations and with client requirements 3.2 Selected adhesives are prepared in accordance with manufacturers' recommendations 3.3 Materials are checked for conformity to dye lot, batch number and other shading requirements in accordance with manufacturers' recommendations and client requirements
4. Apply wallpaper	4.1 Size coating is applied to work area in accordance with manufacturers' recommendations 4.2 Wallpaper and specialty materials are applied to work area ensuring an even surface, seams are butted, paper is plumb and pattern is free of defects 4.3 Trimming around fittings is completed accurately and with minimal impact on surroundings 4.4 Wallpaper and specialty material application are completed in accordance with manufacturers' recommendations and job specifications
5. Clean up	5.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification 5.2 Tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for the application of advanced wallpaper techniques, including work instructions, plans/sketches/ diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	2
Planning and organising activities	Conduct activities associated with the application of advanced wallpaper techniques, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	2
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete work, complete measurements, establish levels, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	2
Using technology	Use workplace technology related to the application of wallpaper, including the use of calculators, the use of levelling tools, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope

- Wallpaper and wall covering materials may include anaglypta, suede grass weaves, photomurals, lyncrusta, flock, metallic foils, linen backed vinyl, frontrunner and other commercial grade materials
- Wallpaper applications are to include those to walls and ceilings which may be flat or curved and constructed of set plaster, plasterboard, fibrous plaster, medium density fibre board and fibre cement products
- Adhesives are to include cellulose and latex and may include starch, PVA and other special adhesive blends

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with solvents, chemicals, fumes/gases, confined work areas, manual handling, falling objects, electrical, fire from combustible materials, traffic control, working at heights, working in proximity to others, worksite visitors and the public
- Emergency procedures related to operations are to include but not be limited to extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust, stormwater protection and clean-up management

Quality Requirements

- Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified

Statutory/Regulatory Authorities

- Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice

Tools and equipment

- Tools and equipment are to include lay brushes, smoothing blocks, plastic applicators, rubber rollers, scissors, sponges, seam rollers, steam strippers, trimming knives and cutters, broad knives, tape measures, plumb bobs and string lines, spirit levels, scrapers and filling blades
- Work platforms may include but not be limited to step ladders, trestles and planks and mobile scaffold

Communications

- Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals
- On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues

Information

- Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS) and diagrams or sketches
- Safe work procedures related to the application of advanced wallpaper techniques
- Regulatory/legislative requirements pertaining to the application of advanced wallpaper techniques
- Manufacturers' specifications and instructions where specified
- Organisation work specifications and requirements
- Instructions issued by authorised organisational or external personnel
- Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools and equipment
- Communication and working effectively and safely with others
- Apply specialty wallpaper to specification on a minimum of two jobs covering:
- One anaglypta and one other with surfaces containing power points, vents and switches

Relationship to other units

- Pre-requisite units are :

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - Painting and decorating terminology
 - Types and properties of wall coverings and their suitability to various substrates
 - Common wallpapering defects
 - Wallpapering tools and equipment, their uses and limitations
 - Compatibility of preparatory materials and wallpaper
 - Surface preparation techniques for the application of wallpaper
 - Procedures used to apply straight pattern match, drop pattern match and random match wallpapers
 - Types, uses and limitations of commonly used adhesives
 - Wallpaper hanging processes and techniques
 - Responsibilities with regard to:
 - heritage listed buildings
 - conservation areas
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to the application of advanced wallpaper techniques
 - hand and power tools and equipment appropriate to the application of advanced wallpaper techniques
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGPB3001A**Unit Descriptor****Fix standard plasterboard wall sheets**

This unit applies to the fixing of standard plasterboard wall sheets to comply with manufacturers and job specifications

Unit Sector

Plasterboard

ELEMENT**PERFORMANCE CRITERIA**

1. Identify work requirements	1.1 Job specifications/work sheets are consulted to identify work required 1.2 Framing/substrate is checked to confirm suitability for the fixing work and problems reported 1.3 Supervisor instructions are followed to: 1.3.1 assemble required materials 1.3.2 identify manufacturer recommended fixing and back blocking processes for wall sheets 1.3.3 plan appropriate work sequence and safety procedures 1.3.4 measure sheets to minimise waste and joins in problem areas while maximising board use
2. Plan and cut wallboard	2.1 Wall dimensions are matched to sheet size 2.2 Cuts are planned to locate joints where the effects of glancing light highlighting the jointing are minimised 2.3 Cutting process and provision for penetrations follows manufacturer and employer approved procedures minimising dust exposure to others and using appropriate personal protective equipment 2.4 Cut sheets are relocated to fixing site and stored to minimise damage and facilitate planned fixing activities
3. Fix standard wallboard sheets	3.1 Sheets are hung using: 3.1.1 Manufacturers recommended methods and fasteners 3.1.2 Employer approved manual handling techniques 3.2 Work sequences and fixing processes : 3.2.1 Minimise waste, maximise board use, minimise joints 3.2.2 Facilitate finishing techniques appropriate to system 3.2.3 Minimise finishing problems
4. Check work and clean up work area	4.1 Completed work is checked to ensure stop up activities will be easily completed, appropriate fastening systems have been used and work will retain structural integrity 4.2 Site area is cleaned up with: 4.2.1 waste board collected for recycling 4.2.2 adhesives and waste fasteners disposed of in approved bins and reusable materials collected and stored for next job

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required knowledge and skills may include:

- the implications on work quality for instruction to be followed
- the names and functions of equipment, components and materials
- manufactures product installation procedures and nominated specifications for the work process
- identifying materials' type and purpose and potential for health and safety risks from workplace information and labels
- safely use equipment, shift and handle products and materials
- requirements for a systematic approach to planning own work
- application of product and process knowledge to identify problems and predict consequences

Language and literacy requirements

Reading (NRS 1.2):

- Recognises and interprets work related signs including road signs, safety logos, warnings.
- Recognises and follows instructions on a safety signs, labels or tags
- Locates and matches pieces of information, dates and times, information on pay slips, invoices and work order

Writing (NRS 1.4)

- Write key words/phrases used everyday
- Copy names, addresses and details from job/work orders
- Write own personal details
- Write times, dates, quantities and locations
- Copy details of product names and prices on orders or notes

Numeracy (NRS 2)

- Identify digital and analogue time
- Identifies value of Australian notes and coins
- Uses simple fractions, proportions
- Read simple diagrams, measurements and weights
- Check length of product against known measurement
- Count and record quantities
- Compare counted quantities with delivery notes and orders

Oral Communication (NRS2.5)

- Asks questions to clarify instructions and work requirements
- Reports problems and work progress to supervisors

Resource implications:

Building framework, materials, tools and equipment

Method of assessment:

Assessment should be by direct observation of tasks and questioning on underpinning knowledge

Assessment should be conducted over time and will generally be in conjunction with

assessment of other units of competency

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts

Context for assessment

Assessment may occur on the job or in a workplace simulated facility with relevant equipment, materials, work instructions and deadlines

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	2
Planning and organising activities	2
Working with others and in teams	2
Using mathematical ideas and techniques	2
Solving problems	2
Using technology	-

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the Performance Criteria, is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts.

Workplace context:

- This unit must be assessed with the relevant Australian Standard 2589 - 1997
- Work involves the planning and execution of measuring, cutting and fixing of plasterboard sheets to wall applications
- Work follows established procedures
- Plaster work is undertaken on work sites within new construction, renovation/refurbishment and maintenance
- Information about installation processes, product requirements, customer requirements is used to inform planning of own work.
- Work generally performed under supervision, within a team / group environment
- Environment includes movement of equipment, goods, materials and vehicular traffic
- Hazards may include:
 - construction activity involving other workers and contractors
 - work at heights, manual handling, hazardous materials
 - dust / vapours, noise, light, energy sources, air temperature, moisture
 - electrical equipment, stationary and moving plant, equipment and materials

Plastering Trade Activity Requirements:

This unit covers work involving the installation of plaster products, maintaining personal safety and the safety of others within the context of required work deadlines and quality standards

- Work is governed by authorised site work procedures
- Consultative processes may involve:
 - other employees and supervisors
 - employer
 - employee OH&S representatives
 - principal contractor
 - industrial relations, Occupational Health and Safety specialists
 - other professional or technical staff
- Work activities require the application of relevant procedures including:
 - hazard policies and procedures
 - issue resolution procedures
 - job procedures and work instructions
 - guidelines relating to the safe use of machinery and equipment
 - quality assurance procedures (where existing)
 - sexual harassment and equal opportunity policies
 - housekeeping processes and security procedures
 - waste, pollution and recycling management processes
 - emergency procedures
 - reporting of accidents and incidents within regulatory requirements and following workplace procedures
 - relevant agreements, codes of practice and other legislative requirements
 - appropriate workplace language and communication technologies
 - identification of products, materials and work processes appropriate for the work
 - interpretation of relevant safety information within requirements of duty of care

Sources of information / documents may include:

- Job specifications and procedures
- Equipment operating instructions and notes from previous work
- Information on characteristics of materials
- Manufacturer's instructions and specifications for products, plant and equipment
- Workplace operating procedures and policies
- Employer, supplier and/or client instructions
- Materials Safety Data Sheets, labels and other product safety information
- Building Code of Australia and relevant Australian Standards
- Communications technology equipment, oral, aural or signed communications
- Personal and work site work procedures and practices
- Conditions of service, legislation and employment agreement
- Occupational Health & Safety legislation, Codes of Practice and Regulations
- Applicable State, Territory, Commonwealth legislation and regulations which relate to:
 - Workplace Relations
 - Workers Compensation
 - License, Patent or copyright arrangements
 - Hazardous Substances and Dangerous Goods
 - Environment Protection
 - Equal Opportunity, Equal Employment Opportunity
 - Standards and certification requirements
 - Quality assurance procedures
 - Emergency procedures

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for the Training Package.

Critical aspects of evidence to be considered:

Assessment must confirm appropriate knowledge and skills to:

- select and use materials and work methods appropriate for the customer order and the Australian Standard
- follow manufacturers installation information without constant supervision
- identify faults in substrate/frame, plasterboard sheets, fasteners, adhesives and personal tools and equipment
- explain the reasons for:
 - lifting wall sheets off the floor and clear of windows and door openings
 - butt joints between studs and backblocking the join
 - position joints over windows and doors away from the corner of the opening
 - drilling or sawing openings for power points and light switches
 - marking wires without brackets as directed by the builder
 - use of temporary surface fixing of wallboard
 - using paper tape
- execute work within agreed timeframes and standards
- interpret delivery documentation, work orders and locate relevant materials
- apply knowledge of industry products and specifications to identify:
 - matching Manufacturers' components/materials
 - warranty compliance issues
 - suitable adhesives and fasteners for fixing plasterboard
 - faults and report problems
- follow work instructions, operating procedures and inspection practices to:
 - prevent damage to goods, equipment or products
 - select and use appropriate personal protection equipment
 - work effectively with, and minimise the risk of injury to, self and other workers
 - modify work activities to cater for variations in worksite procedures, personnel, contexts and environment
 - maintain workplace records in relation to materials use
 - use safe handling requirements, based on information provided, for equipment, products and materials

Interdependent assessment of units

This unit of competency may be assessed in conjunction with other units that form part of a job role. BCGCM1006A Work safely at heights is a co-requisite for this unit.

BCGPB3002A**Unit Descriptor****Unit Sector****Fix standard plasterboard ceiling sheets**

This unit applies to the fixing of standard plasterboard ceiling sheets to comply with manufacturers and job specifications

Plasterboard

ELEMENT**PERFORMANCE CRITERIA**

1. Identify work requirements	1.1 Job specifications/work sheets are consulted to identify work required 1.2 Requirements for fixing ceiling sheets to support structures are identified 1.3 Framing is checked to ensure straightness of cornice line and problems reported to supervisor 1.4 Supervisor instructions are followed to: 1.4.1 Select and assemble required fasteners, adhesives, board and equipment 1.4.2 identify manufacturer recommended processes for fixing ceiling sheets 1.4.3 plan appropriate work sequence and safety procedures to lift, place and support the sheets
2. Plan and cut ceiling sheets	2.1 Ceiling dimensions are matched to sheet size 2.2 Cuts are planned to locate joints where the effects of glancing light highlighting jointing is minimised 2.3 Cutting process follows employer approved procedures minimising dust exposure to others and using appropriate personal protective equipment 2.4 Cut sheets are relocated to fixing site and stored to minimise damage and facilitate planned fixing location
3. Fix standard ceiling sheets	3.1 Sheets are fixed using: 3.2 Manufacturers recommended methods and fastening systems including backblocking 3.3 Employer approved manual handling techniques 3.4 Completed fixing processes : 3.4.1 Minimise waste, minimise joints 3.4.2 Facilitate stopping and sanding 3.4.3 Minimise visual effects of joints 3.4.4 Ensures structural integrity of the ceiling
4. Check work and clean up work area	4.1 Completed work is checked to ensure stop up activities will be easily completed and appropriate fastening systems have been used 4.2 Site area is cleaned up with: 4.2.1 waste board collected for recycling 4.2.2 adhesives and waste fasteners disposed of in approved bins and 4.2.3 reusable materials collected and stored for next job

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required knowledge and skills may include:

- the implications on work quality for instruction to be followed
- the names and functions of equipment, components and materials
- manufactures product installation procedures and nominated specifications for the work process
- manufacturers/suppliers instructions for plant and equipment
- identifying materials' type and purpose and potential for health and safety risks from workplace information and labels
- safely use equipment, shift and handle products and materials
- identifying faults in operation of equipment or materials quality
- adjust work activity to maintain quality standards
- identifying the purpose of tags and logs of use for equipment
- requirements for a systematic approach to planning own work
- application of product and process knowledge to identify problems and predict consequences

Language and literacy requirements

Reading (NRS 1.2):

- Recognises and interprets work related signs including road signs, safety logos, warnings.
- Recognises and follows instructions on a safety signs, labels or tags
- Locates and matches pieces of information, dates and times, information on pay slips, invoices and work order

Writing (NRS 1.4)

- Write key words/phrases used everyday
- Copy names, addresses and details from job/work orders
- Write own personal details
- Write times, dates, quantities and locations
- Copy details of product names and prices on orders or notes

Numeracy (NRS 2)

- Identify digital and analogue time
- Identifies value of Australian notes and coins
- Uses simple fractions, proportions
- Read simple diagrams, measurements and weights
- Check length of product against known measurement
- Count and record quantities
- Compare counted quantities with delivery notes and orders

Oral Communication (NRS2.5)

- Asks questions to clarify instructions and work requirements
- Reports problems and work progress to supervisors

Resource implications:

Building framework, materials, tools and equipment

Method of assessment:

Assessment should be by direct observation of tasks and questioning on underpinning knowledge

Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts

Context for assessment

Assessment may occur on the job or in a workplace simulated facility with relevant equipment, materials, work instructions and deadlines

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	2
Planning and organising activities	2
Working with others and in teams	2
Using mathematical ideas and techniques	2
Solving problems	2
Using technology	2

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the Performance Criteria, is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts.

Workplace context:

- This unit must be assessed with the relevant Australian Standard 2589 - 1997
- Work involves the planning and execution of measuring, cutting and fixing of plasterboard sheets to ceiling applications
- Work follows established procedures
- Ceiling support structures include truss only, batten and rafter systems
- Plaster work is undertaken on work sites within new construction, renovation/refurbishment and maintenance
- Information about installation processes, product requirements, customer requirements is used to inform planning of own work.
- Work generally performed under supervision, within a team / group environment
- Environment includes movement of equipment, goods, materials and vehicular traffic
- Hazards may include:
 - construction activity involving other workers and contractors
 - work at heights, manual handling, hazardous materials
 - dust / vapours, noise, light, energy sources, air temperature, moisture
 - electrical equipment, stationary and moving plant, equipment and materials

Plastering Trade Activity Requirements:

This unit covers work involving the installation of plaster products, maintaining personal safety and the safety of others within the context of required work deadlines and quality standards

- Work is governed by authorised site work procedures
- Consultative processes may involve:
 - other employees and supervisors
 - employer
 - employee OH&S representatives
 - principal contractor
 - industrial relations, Occupational Health and Safety specialists
 - other professional or technical staff
- Work activities require the application of relevant procedures including:
 - hazard policies and procedures
 - issue resolution procedures
 - job procedures and work instructions
 - guidelines relating to the safe use of machinery and equipment
 - quality assurance procedures (where existing)
 - sexual harassment and equal opportunity policies
 - housekeeping processes and security procedures
 - waste, pollution and recycling management processes
 - emergency procedures
 - reporting of accidents and incidents within regulatory requirements and following workplace procedures
 - relevant agreements, codes of practice and other legislative requirements
 - appropriate workplace language and communication technologies
 - identification of products, materials and work processes appropriate for the work
 - interpretation of relevant safety information within requirements of duty of care

Sources of information / documents may include:

- Job specifications and procedures
- Equipment operating instructions and notes from previous work
- Information on characteristics of materials
- Manufacturer's instructions and specifications for products, plant and equipment
- Workplace operating procedures and policies
- Employer, supplier and/or client instructions
- Materials Safety Data Sheets, labels and other product safety information
- Building Code of Australia and relevant Australian Standards
- Communications technology equipment, oral, aural or signed communications
- Personal and work site work procedures and practices
- Conditions of service, legislation and employment agreement
- Occupational Health & Safety legislation, Codes of Practice and Regulations
- Applicable State, Territory, Commonwealth legislation and regulations which relate to:
 - Workplace Relations
 - Workers Compensation
 - License, Patent or copyright arrangements
 - Hazardous Substances and Dangerous Goods
 - Environment Protection
 - Equal Opportunity, Equal Employment Opportunity
 - Standards and certification requirements
 - Quality assurance procedures
 - Emergency procedures

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for the Training Package.

Critical aspects of evidence to be considered:

Assessment must confirm appropriate knowledge and skills to:

- select and use appropriate plasterboard ceiling materials and work methods
- explain the reasons for:
 - screw fixing of ceiling sheets
 - using particular types of screws for timber or metal frame/furring channel
 - use of trimmers and noggins
 - butt joints centered between battens and staggered
 - drilling or sawing openings as required
 - backblocking of all joints
- using paper tape for all joints
- backblocking and stitching of butt joints
- follow manufacturers instructions for installation without constant supervision
- identify faults in plasterboard fixing, joining and finishing
- execute work within agreed timeframes and standards
- interpret delivery documentation, work orders and locate relevant materials
- apply knowledge of industry products and specifications to identify:
 - matching Manufacturers' components/materials
 - warranty compliance issues
 - suitable materials for a wide range of applications
 - faults and report problems
- follow work instructions, operating procedures and inspection practices to:
 - prevent damage to goods, equipment or products
 - select and use appropriate personal protection equipment
 - work effectively with, and minimise the risk of injury to, self and other workers
 - modify work activities to cater for variations in worksite procedures, personnel, contexts and environment
 - maintain workplace records in relation to materials, plant and equipment use
 - use safe handling requirements, based on information provided, for equipment, products and materials

Interdependent assessment of units

This unit of competency may be assessed in conjunction with other units that form part of a job role. BCGCM1006A Work safely at heights is a co-requisite for this unit.

BCGPB3003A**Unit Descriptor****Fix battens**

This unit applies to the fixing of battens to ceiling joists or roof trusses preparatory to fixing ceiling system sheets

Unit Sector

Plasterboard

ELEMENT**PERFORMANCE CRITERIA**

1. Identify work requirements	1.1 Job specifications/work sheets are consulted to identify work required 1.2 Requirements for fixing battens to support structures are identified and appropriate fasteners, equipment to work at heights and hand held tools are assembled 1.3 Joists/trusses are checked to confirm suitability for fixing the battens and requirements to correct unevenness in joists/trusses are noted 1.4 Supervisor instructions are followed to: 1.4.1 Identify and assemble required materials and equipment 1.4.2 identify manufacturer recommended processes for fixing battens 1.4.3 plan appropriate work sequence and safety procedures to lift, place and support the battens
2. Cut and fix battens	2.1 Packing materials are used to correct uneven joists where required 2.2 Battens are measured and cut using approved work methods and required personal protection equipment 2.3 Battens are fixed using selected fasteners at specified centres
3. Check work and clean up work area	3.1 Completed work is checked for correct alignment and fixing 3.2 Site area is cleaned up with: 3.2.1 waste batten materials collected for disposal 3.2.2 waste fasteners disposed of in approved bins and 3.2.3 reusable materials collected and stored for next job

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required knowledge and skills may include:

- the implications on work quality for instruction to be followed
- the names and functions of equipment, components and materials
- manufacturers system installation procedures and nominated specifications for the work process
- manufacturers/suppliers instructions for plant and equipment
- identifying materials' type and purpose and potential for health and safety risks from workplace information and labels
- safely use equipment, shift and handle products and materials
- identifying faults in operation of equipment or materials quality
- adjust work activity to maintain quality standards
- identifying the purpose of tags and logs of use for equipment
- requirements for a systematic approach to planning own work
- application of product and process knowledge to identify problems and predict consequences

Language and literacy requirements

Reading (NRS 1.2):

- Recognises and interprets work related signs including road signs, safety logos, warnings.
- Recognises and follows instructions on a safety signs, labels or tags
- Locates and matches pieces of information, dates and times, information on pay slips, invoices and work order

Writing (NRS 1.4)

- Write key words/phrases used everyday
- Copy names, addresses and details from job/work orders
- Write own personal details
- Write times, dates, quantities and locations
- Copy details of product names and prices on orders or notes

Numeracy (NRS 2)

- Identify digital and analogue time
- Identifies value of Australian notes and coins
- Uses simple fractions, proportions
- Read simple diagrams, measurements and weights
- Check length of product against known measurement
- Count and record quantities
- Compare counted quantities with delivery notes and orders

Oral Communication (NRS2.5)

- Asks questions to clarify instructions and work requirements
- Reports problems and work progress to supervisors

Resource implications:

Building framework, batten materials, tools and equipment

Method of assessment:

Assessment should be by direct observation of tasks and questioning on underpinning knowledge

Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts

Context for assessment

Assessment may occur on the job or in a workplace simulated facility with relevant equipment, materials, work instructions and deadlines

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	2
Planning and organising activities	2
Working with others and in teams	2
Using mathematical ideas and techniques	2
Solving problems	2
Using technology	2

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the Performance Criteria, is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts.

Workplace context:

- This unit must be assessed with the relevant Australian Standard 2589 - 1997
- Work involves the planning and execution of measuring, cutting and fixing of ceiling battens to roof trusses/ceiling joists
- Work follows established procedures
- Ceiling support structures include truss only and rafter systems
- Plaster work is undertaken on work sites within new construction, renovation/refurbishment and maintenance
- Information about installation processes, product requirements, customer requirements is used to inform planning of own work.
- Work generally performed under supervision, within a team / group environment
- Environment includes movement of equipment, goods, materials and vehicular traffic
- Hazards may include:
 - construction activity involving other workers and contractors
 - work at heights, manual handling, hazardous materials
 - dust / vapours, noise, light, energy sources, air temperature, moisture
 - electrical equipment, stationary and moving plant, equipment and materials

Plastering Trade Activity Requirements:

This unit covers work involving the preparation work for the installation of plaster products, maintaining personal safety and the safety of others within the context of required work deadlines and quality standards

- Work is governed by authorised site work procedures
- Consultative processes may involve:
 - other employees and supervisors
 - employer
 - employee OH&S representatives
 - principal contractor
 - industrial relations, Occupational Health and Safety specialists
 - other professional or technical staff
- Work activities require the application of relevant procedures including:
 - hazard policies and procedures
 - issue resolution procedures
 - job procedures and work instructions
 - guidelines relating to the safe use of machinery and equipment
 - quality assurance procedures (where existing)
 - sexual harassment and equal opportunity policies
 - housekeeping processes and security procedures
 - waste, pollution and recycling management processes
 - emergency procedures
 - reporting of accidents and incidents within regulatory requirements and following workplace procedures
 - relevant agreements, codes of practice and other legislative requirements
 - appropriate workplace language and communication technologies
 - identification of products, materials and work processes appropriate for the work
 - interpretation of relevant safety information within requirements of duty of care

Sources of information / documents may include:

- Job specifications and procedures
- Equipment operating instructions and notes from previous work
- Information on characteristics of materials
- Manufacturer's instructions and specifications for products, plant and equipment
- Workplace operating procedures and policies
- Employer, supplier and/or client instructions
- Materials Safety Data Sheets, labels and other product safety information
- Building Code of Australia and relevant Australian Standards
- Communications technology equipment, oral, aural or signed communications
- Personal and work site work procedures and practices
- Conditions of service, legislation and employment agreement
- Occupational Health & Safety legislation, Codes of Practice and Regulations
- Applicable State, Territory, Commonwealth legislation and regulations which relate to:
 - Workplace Relations
 - Workers Compensation
 - License, Patent or copyright arrangements
 - Hazardous Substances and Dangerous Goods
 - Environment Protection
 - Equal Opportunity, Equal Employment Opportunity
 - Standards and certification requirements
 - Quality assurance procedures
 - Emergency procedures

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for the Training Package.

Critical aspects of evidence to be considered:

Assessment must confirm appropriate knowledge and skills to:

- select and use appropriate batten materials and work methods
- operate from basic instruction without constant supervision
- identify faults in substrate/frame and rectify or report as required by contract
- execute work within agreed timeframes and standards
- interpret delivery documentation, work orders and locate relevant materials
- apply knowledge of industry products to identify:
- matching Manufacturers' components/materials
- Australian Standards, BCA and manufacturers/contractors warranty compliance issues
- suitable materials for a wide range of applications
- faults and report problems
- follow work instructions, select and use appropriate tools, materials, fasteners, equipment for safe work at heights to:
 - prevent damage to goods, equipment or products
 - select and use appropriate personal protection equipment
 - work effectively with, and minimise the risk of injury to, self and other workers
 - modify work activities to cater for variations in worksite procedures, personnel, contexts and environment
 - maintain workplace records in relation to materials, plant and equipment use
 - use safe work behaviours and handling requirements for equipment, products and materials

Interdependent assessment of units

This unit of competency may be assessed in conjunction with other units that form part of a job role. BCGCM1006A Work safely at heights is a co-requisite for this unit.

BCGPB3004A**Unit Descriptor****Fix wet area sheets**

This unit applies to the fixing of wet area sheets to comply with manufacturers and job specifications

Unit Sector

Plasterboard

ELEMENT**PERFORMANCE CRITERIA**

1. Identify work requirements	1.1 Job specifications/work sheets are consulted to identify work required 1.2 Framing/substrate is checked to confirm suitability for the fixing work 1.3 Supervisor instructions are followed to: 1.3.1 assemble required materials 1.3.2 identify manufacturer recommended processes for fixing sheets 1.3.3 plan appropriate work sequence and safety procedures 1.3.4 measure sheets to minimise waste and joints in problem areas while maximising board use 1.3.5 cover (where fitted) baths, shower bases and basins with scrap sheets
2. Plan and cut wet area sheets	2.1 Wall dimensions are matched to sheet size 2.2 Cuts are planned to locate joints where visual and performance function effects of the jointing processes are minimised 2.3 Cutting process follows employer approved procedures minimising dust exposure to others and using appropriate personal protective equipment 2.4 Penetrations are made following manufacturer approved tools, personal protective equipment and procedures 2.5 Cut sheets are relocated to fixing site and stored to minimise damage and facilitate planned fixing activities
3. Fix wet area sheets	3.1 Sheets are hung using: 3.1.1 Manufacturers recommended methods and fasteners 3.1.2 Employer approved manual handling techniques 3.2 Work sequences and fixing processes : 3.2.1 Minimise waste, maximise board use, minimise joints 3.2.2 Facilitate finishing techniques appropriate to system 3.2.3 Minimise finishing problems

- 4. Finish work and clean up work area
 - 4.1 Completed work is checked to ensure stop up activities will be easily completed, appropriate fastening systems have been used and work will retain structural integrity
 - 4.2 Site area is cleaned up with:
 - 4.2.1 waste board collected for recycling
 - 4.2.2 adhesives and waste fasteners disposed of in approved bins and reusable materials collected and stored for next job

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required knowledge and skills may include:

- the implications on work quality for instruction to be followed
- the names and functions of equipment, components and materials
- manufactures product installation procedures and nominated specifications for the work process
- identifying materials' type and purpose and potential for health and safety risks from workplace information and labels
- safely use equipment, shift and handle products and materials
- identifying faults in operation of equipment or materials quality
- requirements for a systematic approach to planning own work
- application of product and process knowledge to identify problems and predict consequences

Language and literacy requirements

Reading (NRS 1.2):

- Recognises and interprets work related signs including road signs, safety logos, warnings.
- Recognises and follows instructions on a safety signs, labels or tags
- Locates and matches pieces of information, dates and times, information on pay slips, invoices and work order

Writing (NRS 1.4)

- Write key words/phrases used everyday
- Copy names, addresses and details from job/work orders
- Write own personal details
- Write times, dates, quantities and locations
- Copy details of product names and prices on orders or notes

Numeracy (NRS 2)

- Identify digital and analogue time
- Identifies value of Australian notes and coins
- Uses simple fractions, proportions
- Read simple diagrams, measurements and weights
- Check length of product against known measurement
- Count and record quantities
- Compare counted quantities with delivery notes and orders

Oral Communication (NRS2.5)

- Asks questions to clarify instructions and work requirements
- Reports problems and work progress to supervisors

Resource implications:

Building framework, materials, tools and equipment

Method of assessment:

Assessment should be by direct observation of tasks and questioning on underpinning knowledge

Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts

Context for assessment

Assessment may occur on the job or in a workplace simulated facility with relevant equipment, materials, work instructions and deadlines

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	2
Planning and organising activities	2
Working with others and in teams	2
Using mathematical ideas and techniques	2
Solving problems	2
Using technology	2

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the Performance Criteria, is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts.

Workplace context

- This unit must be assessed with the relevant Australian Standard 3740
- Work involves the planning and execution of measuring, cutting and fixing of sheets to wall applications
- Work follows established procedures
- Plaster work is undertaken on work sites within new construction, renovation/refurbishment and maintenance
- Information about installation processes, product requirements, customer requirements is used to inform planning of own work.
- Work generally performed under supervision, within a team / group environment
- Environment includes movement of equipment, goods, materials and vehicular traffic
- Hazards may include:
 - construction activity involving other workers and contractors
 - work at heights, manual handling, hazardous materials
 - dust / vapours, noise, light, energy sources, air temperature, moisture
 - electrical equipment, stationary and moving plant, equipment and materials

Plastering Trade Activity Requirements:

This unit covers work involving the installation of plaster products, maintaining personal safety and the safety of others within the context of required work deadlines and quality standards

- Work is governed by authorised site work procedures
- Consultative processes may involve:
 - other employees and supervisors
 - employer
 - employee OH&S representatives
 - principal contractor
 - industrial relations, Occupational Health and Safety specialists
 - other professional or technical staff
- Work activities require the application of relevant procedures including:
 - hazard policies and procedures
 - issue resolution procedures
 - job procedures and work instructions
 - guidelines relating to the safe use of machinery and equipment
 - quality assurance procedures (where existing)
 - sexual harassment and equal opportunity policies
 - housekeeping processes and security procedures
 - waste, pollution and recycling management processes
 - emergency procedures
 - reporting of accidents and incidents within regulatory requirements and following workplace procedures
 - relevant agreements, codes of practice and other legislative requirements
 - appropriate workplace language and communication technologies
 - identification of products, materials and work processes appropriate for the work
 - interpretation of relevant safety information within requirements of duty of care

Sources of information / documents may include:

- Job specifications and procedures
- Equipment operating instructions and notes from previous work
- Information on characteristics of materials
- Manufacturer's instructions and specifications for products, plant and equipment
- Workplace operating procedures and policies
- Employer, supplier and/or client instructions
- Materials Safety Data Sheets, labels and other product safety information
- Building Code of Australia and relevant Australian Standards
- Communications technology equipment, oral, aural or signed communications
- Personal and work site work procedures and practices
- Conditions of service, legislation and employment agreement
- Occupational Health & Safety legislation, Codes of Practice and Regulations
- Applicable State, Territory, Commonwealth legislation and regulations which relate to:
 - Workplace Relations
 - Workers Compensation
 - License, Patent or copyright arrangements
 - Hazardous Substances and Dangerous Goods
 - Environment Protection
 - Equal Opportunity, Equal Employment Opportunity
 - Standards and certification requirements
 - Quality assurance procedures
 - Emergency procedures

Critical aspects of evidence to be considered:

Assessment must confirm appropriate knowledge and skills to:

- select and use appropriate wet area materials and work methods
- operate from basic instruction without constant supervision
- explain the reasons for:
 - lifting sheets off the floor and clear of windows, door openings and plumbing fixtures
 - providing flashing for wet areas
 - only using mechanical fastening systems in tiled areas
 - using full sheets over windows and doors
 - drilling or sawing openings for plumbing, power points and light switches
 - marking wires without brackets clearly
 - use of personal protective equipment
- identify faults in wet area fixing, joining and finishing
- execute work within agreed timeframes and standards
- interpret delivery documentation, work orders and locate relevant materials
- apply knowledge of industry products to identify:
 - matching Manufacturers' components/materials
 - warranty compliance issues
 - suitable materials for a wide range of applications
 - faults and report problems
- follow work instructions, operating procedures and inspection practices to:
 - prevent damage to goods, equipment or products
 - meet required work output and quality
 - select and use appropriate personal protection equipment
 - work effectively with, and minimise the risk of injury to, self and other workers
 - modify work activities to cater for variations in worksite procedures, personnel, contexts and environment
 - maintain workplace records in relation to materials, plant and equipment use
 - use safe handling requirements, based on information provided, for equipment, products and materials

Interdependent assessment of units

This unit of competency may be assessed in conjunction with other units that form part of a job role. BCGCM1006A Work safely at heights is a co-requisite for this unit.

BCGPB3005A**Unit Descriptor****Fix ceiling sheets to external protected areas**

This unit applies to the fixing of ceiling sheets to external protected areas to comply with manufacturers and job specifications

Unit Sector

Plasterboard

ELEMENT**PERFORMANCE CRITERIA**

1. Identify work requirements	1.1 Job specifications/work sheets are consulted to identify work required 1.2 Requirements for fixing ceiling sheets to support structures are explained 1.3 Framing is checked to confirm suitability for fixing the ceiling sheets 1.4 Supervisor instructions are followed to: 1.4.1 assemble required materials and equipment 1.4.2 identify manufacturer recommended processes for fixing ceiling sheets 1.4.3 plan appropriate work sequence and safety procedures to lift, place and support the sheets
2. Plan and cut ceiling sheets	2.1 Ceiling dimensions are matched to sheet size 2.2 Cuts are planned to locate joints where visual effects of jointing processes are minimised 2.3 Cutting process follows employer approved procedures minimising dust exposure to others and using appropriate personal protective equipment 2.4 Cut sheets are relocated to fixing site and stored to minimise damage and facilitate planned fixing location
3. Fix standard ceiling sheets	3.1 Sheets are fixed using: 3.1.1 Manufacturers recommended methods and fastening systems including backblocking 3.1.2 Employer approved manual handling techniques 3.2 Completed fixing processes : 3.2.1 Minimise waste, minimise joints 3.2.2 Facilitate stopping and sanding 3.2.3 Minimise visual effects of joints 3.2.4 Ensures structural integrity of the ceiling
4. Check work and clean up work area	4.1 Completed work is checked to ensure stop up activities will be easily completed and appropriate fastening systems have been used 4.2 Site area is cleaned up with: 4.2.1 waste board collected for recycling 4.2.2 adhesives and waste fasteners disposed of in approved bins and 4.2.3 reusable materials collected and stored for next job

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required knowledge and skills may include:

- the implications on work quality for instruction to be followed
- the names and functions of equipment, components and materials
- manufactures product installation procedures and nominated specifications for the work process
- manufacturers/suppliers instructions for plant and equipment
- identifying materials' type and purpose and potential for health and safety risks from workplace information and labels
- safely use equipment, shift and handle products and materials
- identifying faults in operation of equipment or materials quality
- adjust work activity to maintain quality standards
- identifying the purpose of tags and logs of use for equipment
- requirements for a systematic approach to planning own work
- application of product and process knowledge to identify problems and predict consequences

Language and literacy requirements

Reading (NRS 1.2):

- Recognises and interprets work related signs including road signs, safety logos, warnings.
- Recognises and follows instructions on a safety signs, labels or tags
- Locates and matches pieces of information, dates and times, information on pay slips, invoices and work order

Writing (NRS 1.4)

- Write key words/phrases used everyday
- Copy names, addresses and details from job/work orders
- Write own personal details
- Write times, dates, quantities and locations
- Copy details of product names and prices on orders or notes

Numeracy (NRS 2)

- Identify digital and analogue time
- Identifies value of Australian notes and coins
- Uses simple fractions, proportions
- Read simple diagrams, measurements and weights
- Check length of product against known measurement
- Count and record quantities
- Compare counted quantities with delivery notes and orders

Oral Communication (NRS2.5)

- Asks questions to clarify instructions and work requirements
- Reports problems and work progress to supervisors

Resource implications:

Building framework, materials, tools and equipment

Method of assessment:

Assessment should be by direct observation of tasks and questioning on underpinning knowledge

Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts

Context for assessment

Assessment may occur on the job or in a workplace simulated facility with relevant equipment, materials, work instructions and deadlines

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	2
Planning and organising activities	2
Working with others and in teams	2
Using mathematical ideas and techniques	2
Solving problems	2
Using technology	2

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the Performance Criteria, is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts.

Workplace context:

- Work involves the planning and execution of measuring, cutting and fixing of plasterboard sheets to ceiling applications
- Work follows established procedures
- Ceiling support structures include truss only, batten and rafter systems
- Plaster work is undertaken on work sites within new construction, renovation/refurbishment and maintenance
- Information about installation processes, product requirements, customer requirements is used to inform planning of own work.
- Work generally performed under supervision, within a team / group environment
- Environment includes movement of equipment, goods, materials and vehicular traffic
- Hazards may include:
 - construction activity involving other workers and contractors
 - work at heights, manual handling, hazardous materials
 - dust / vapours, noise, light, energy sources, air temperature, moisture
 - electrical equipment, stationary and moving plant, equipment and materials

Plastering Trade Activity Requirements:

This unit covers work involving the installation of plaster products, maintaining personal safety and the safety of others within the context of required work deadlines and quality standards

- Work is governed by authorised site work procedures
- Consultative processes may involve:
 - other employees and supervisors
 - employer
 - employee OH&S representatives
 - principal contractor
 - industrial relations, Occupational Health and Safety specialists
 - other professional or technical staff
- Work activities require the application of relevant procedures including:
 - hazard policies and procedures
 - issue resolution procedures
 - job procedures and work instructions
 - guidelines relating to the safe use of machinery and equipment
 - quality assurance procedures (where existing)
 - sexual harassment and equal opportunity policies
 - housekeeping processes and security procedures
 - waste, pollution and recycling management processes
 - emergency procedures
 - reporting of accidents and incidents within regulatory requirements and following workplace procedures
 - relevant agreements, codes of practice and other legislative requirements
 - appropriate workplace language and communication technologies
 - identification of products, materials and work processes appropriate for the work
 - interpretation of relevant safety information within requirements of duty of care

Sources of information / documents may include:

- Job specifications and procedures
- Equipment operating instructions and notes from previous work
- Information on characteristics of materials
- Manufacturer's instructions and specifications for products, plant and equipment
- Workplace operating procedures and policies
- Employer, supplier and/or client instructions
- Materials Safety Data Sheets, labels and other product safety information
- Building Code of Australia and relevant Australian Standards
- Communications technology equipment, oral, aural or signed communications
- Personal and work site work procedures and practices
- Conditions of service, legislation and industrial agreements including:
 - certified agreements and awards
 - industry agreements
 - Occupational Health & Safety legislation, Codes of Practice and Regulations
- Applicable State, Territory, Commonwealth legislation and regulations which relate to:
 - Workplace Relations
 - Workers Compensation
 - License, Patent or copyright arrangements
 - Hazardous Substances and Dangerous Goods
 - Environment Protection
 - Equal Opportunity, Equal Employment Opportunity
 - Standards and certification requirements
 - Quality assurance procedures
 - Emergency procedures

Critical aspects of evidence to be considered:

Assessment must confirm appropriate knowledge and skills to:

- select and use appropriate plasterboard ceiling materials and work methods
- operate from basic instruction without constant supervision
- identify faults in plasterboard fixing, joining and finishing
- execute work within agreed timeframes and standards
- interpret delivery documentation, work orders and locate relevant materials
- apply knowledge of industry products to identify:
 - matching Manufacturers' components/materials
 - warranty compliance issues
 - suitable materials for a wide range of applications
 - faults and report problems
- follow work instructions, operating procedures and inspection practices to:
 - prevent damage to goods, equipment or products
 - meet required work output and quality
 - select and use appropriate personal protection equipment
 - work effectively with, and minimise the risk of injury to, self and other workers
 - modify work activities to cater for variations in worksite procedures, personnel, contexts and environment
 - maintain workplace records in relation to materials, plant and equipment use
 - use safe handling requirements, based on information provided, for equipment, products and materials

Interdependent assessment of units

This unit of competency may be assessed in conjunction with other units that form part of a job role. BCGCM1006A Work safely at heights is a co-requisite for this unit.

BCGPB3006A**Unit Descriptor****Fix fibre cement board**

This unit applies to the fixing of fibre cement board to comply with manufacturers and job specifications

Unit Sector

Plasterboard

ELEMENT**PERFORMANCE CRITERIA**

1. Identify work requirements	1.1 Job specifications/work sheets are consulted to identify work required 1.2 Framing is checked to confirm suitability for the fixing work 1.3 Supervisor instructions are followed to: 1.3.1 assemble required materials 1.3.2 identify manufacturer recommended processes for fixing board 1.3.3 plan appropriate work sequence and safety procedures 1.3.4 measure sheets to minimise waste and joins in problem areas while maximising board use
2. Plan and cut board	2.1 Wall dimensions are matched to sheet size 2.2 Cuts are planned to locate joints where visual effects of jointing processes are minimised 2.3 Cutting process follows employer approved procedures minimising dust exposure to others and using appropriate personal protective equipment 2.4 Cut sheets are relocated to fixing site and stored to minimise damage and facilitate planned fixing location
3. Fix fibre cement board	3.1 Sheets are hung using: 3.1.1 Manufacturers recommended methods and fasteners 3.1.2 Employer approved manual handling techniques 3.2 Work sequences and fixing processes : 3.2.1 Minimise waste, maximise board use, minimise joints 3.2.2 Facilitate finishing techniques appropriate to system 3.2.3 Minimise finishing problems
4. Check work and clean up work area	4.1 Completed work is checked to ensure stop up activities will be easily completed, appropriate fastening systems have been used and work will retain structural integrity 4.2 Site area is cleaned up with: 4.2.1 waste board collected for recycling 4.2.2 adhesives and waste fasteners disposed of in approved bins and reusable materials collected and stored for next job

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required knowledge and skills may include:

- the implications on work quality for instruction to be followed
- the names and functions of equipment, components and materials
- manufactures product installation procedures and nominated specifications for the work process
- manufacturers/suppliers instructions for plant and equipment
- identifying materials' type and purpose and potential for health and safety risks from workplace information and labels
- safely use equipment, shift and handle products and materials
- identifying faults in operation of equipment or materials quality
- adjust work activity to maintain quality standards
- identifying the purpose of tags and logs of use for equipment
- requirements for a systematic approach to planning own work
- application of product and process knowledge to identify problems and predict consequences

Language and literacy requirements

Reading (NRS 1.2):

- Recognises and interprets work related signs including road signs, safety logos, warnings.
- Recognises and follows instructions on a safety signs, labels or tags
- Locates and matches pieces of information, dates and times, information on pay slips, invoices and work order
- Writing (NRS 1.4)
- Write key words/phrases used everyday
- Copy names, addresses and details from job/work orders
- Write own personal details
- Write times, dates, quantities and locations
- Copy details of product names and prices on orders or notes

Numeracy (NRS 2)

- Identify digital and analogue time
- Identifies value of Australian notes and coins
- Uses simple fractions, proportions
- Read simple diagrams, measurements and weights
- Check length of product against known measurement
- Count and record quantities
- Compare counted quantities with delivery notes and orders
- Oral Communication (NRS2.5)
- Asks questions to clarify instructions and work requirements
- Reports problems and work progress to supervisors

Resource implications:

Building framework, materials, tools and equipment

Method of assessment:

Assessment should be by direct observation of tasks and questioning on underpinning knowledge

Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts

Context for assessment

Assessment may occur on the job or in a workplace simulated facility with relevant equipment, materials, work instructions and deadline

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	2
Planning and organising activities	2
Working with others and in teams	2
Using mathematical ideas and techniques	2
Solving problems	2
Using technology	2

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the Performance Criteria, is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts.

Workplace context

- Work involves the planning and execution of measuring, cutting and fixing of plasterboard sheets to wall applications
- Work follows established procedures
- Plaster work is undertaken on work sites within new construction, renovation/refurbishment and maintenance
- Information about installation processes, product requirements, customer requirements is used to inform planning of own work.
- Work generally performed under supervision, within a team / group environment
- Environment includes movement of equipment, goods, materials and vehicular traffic
- Hazards may include:
 - construction activity involving other workers and contractors
 - work at heights, manual handling, hazardous materials
 - dust / vapours, noise, light, energy sources, air temperature, moisture
 - electrical equipment, stationary and moving plant, equipment and materials

Plastering Trade Activity Requirements:

This unit covers work involving the installation of plaster products, maintaining personal safety and the safety of others within the context of required work deadlines and quality standards

- Work is governed by authorised site work procedures
- Consultative processes may involve:
 - other employees and supervisors
 - employer
 - employee OH&S representatives
 - principal contractor
 - industrial relations, Occupational Health and Safety specialists
 - other professional or technical staff
- Work activities require the application of relevant procedures including:
 - hazard policies and procedures
 - issue resolution procedures
 - job procedures and work instructions
 - guidelines relating to the safe use of machinery and equipment
 - quality assurance procedures (where existing)
 - sexual harassment and equal opportunity policies
 - housekeeping processes and security procedures
 - waste, pollution and recycling management processes
 - emergency procedures
 - reporting of accidents and incidents within regulatory requirements and following workplace procedures
 - relevant agreements, codes of practice and other legislative requirements
 - appropriate workplace language and communication technologies
 - identification of products, materials and work processes appropriate for the work
 - interpretation of relevant safety information within requirements of duty of care

Sources of information / documents may include:

- Job specifications and procedures
- Equipment operating instructions and notes from previous work
- Information on characteristics of materials
- Manufacturer's instructions and specifications for products, plant and equipment
- Workplace operating procedures and policies
- Employer, supplier and/or client instructions
- Materials Safety Data Sheets, labels and other product safety information
- Building Code of Australia and relevant Australian Standards
- Communications technology equipment, oral, aural or signed communications
- Personal and work site work procedures and practices
- Conditions of service, legislation and industrial agreements including:
 - certified agreements and awards
 - industry agreements
 - Occupational Health & Safety legislation, Codes of Practice and Regulations
- Applicable State, Territory, Commonwealth legislation and regulations which relate to:
 - Workplace Relations
 - Workers Compensation
 - License, Patent or copyright arrangements
 - Hazardous Substances and Dangerous Goods
 - Environment Protection
 - Equal Opportunity, Equal Employment Opportunity
 - Standards and certification requirements
 - Quality assurance procedures
 - Emergency procedures

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for the Training Package.

Critical aspects of evidence to be considered:

Assessment must confirm appropriate knowledge and skills to:

- select and use appropriate fibre cement materials and work methods
- operate from basic instruction without constant supervision
- identify faults in materials and fixing methods
- execute work within agreed timeframes and standards
- interpret delivery documentation, work orders and locate relevant materials
- apply knowledge of industry products to identify:
 - matching Manufacturers' components/materials
 - warranty compliance issues
 - suitable materials for a wide range of applications
 - faults and report problems
- follow work instructions, operating procedures and inspection practices to:
 - prevent damage to goods, equipment or products
 - meet required work output and quality
 - select and use appropriate personal protection equipment
 - work effectively with, and minimise the risk of injury to, self and other workers
 - modify work activities to cater for variations in worksite procedures, personnel, contexts and environment
 - maintain workplace records in relation to materials, plant and equipment use
 - use safe handling requirements, based on information provided, for equipment, products and materials

Interdependent assessment of units

This unit of competency may be assessed in conjunction with other units that form part of a job role. BCGCM1006A Work safely at heights is a co-requisite for this unit.

BCGPB3007A**Apply levels of finish standards to planning and inspection of own work****Unit Descriptor**

This unit applies to the identification of level of finish standards and the application to the inspection of own work

Unit Sector

Plasterboard

ELEMENT**PERFORMANCE CRITERIA**

1. Identify levels of finish	1.1 Level of finish documentation is accessed 1.2 Features of each level of finish are identified 1.3 Differences between levels of finish are identified from photographs and personal observation
2. Establish level of finish requirements	2.1 Workplace documents, specifications, contract and/or supervisors are used to establish customer levels of finish requirements 2.2 Recommended work practices to produce the required level of finish required by the customer are identified 2.3 Any required modifications to materials or work processes to meet required level of finish are identified 2.4 Required modifications to materials or work methods are communicated to appropriate personnel
3. Inspect completed work for level of finish	3.1 Distinguishing features of levels of finish are identified in the completed work 3.2 Effects of framing tolerances, windows, light fittings and location of joins on finish of plasterboard are explained 3.3 Identified features are compared to level of finish descriptions 3.4 Build up on joins is inspected for influence on level of finish 3.5 Level of finish classification is allocated to inspected work
4. Provide advice for surface finishing	4.1 Requirements for painting are identified 4.2 Explanations are provided to customer/painter

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required knowledge and skills may include:

- identification of architectural styles, structures and fittings which will influence glancing light
- identifying and reading manufactures product installation procedures and nominated specifications for the work process to produce level 4 & 5 finishes
- identifying and applying appropriate safety precautions to safely use equipment, shift and handle products and materials
- identifying faults in building structure, materials quality and finished joints and edges
- adjusting work activity to maintain quality standards
- application of product and process knowledge to predict consequences and identify improvements

Language and literacy requirements

Reading (NRS 3)

- Follow instructions and diagrams in manual for equipment, installation of plasterboard
- Skim read manufacturers technical specifications to locate specific information
- Read warranty and contract information

Writing (NRS 3.4)

- Write with reasonable accuracy in spelling, grammar and punctuation using correct technical terminology
- Take personal notes at technical session or meeting

Numeracy (NRS 3)

- Total weights of individual items to estimate overall load and compare with safe working load(s) for vehicles/scaffold/equipment/manual handling
- Identify shape, load and balance characteristics of products and equipment used
- Identify dimensions and mass of items to be shifted/transported and compare with vehicle/building
- Identify and match numbers/representations in regulations to own job requirements

Oral Communication (NRS 3.8)

- Express own opinion about workplace matters and elicits the opinion of others
- Chooses appropriate actions after listening to spoken instructions
- Listens to instructions, customer comments and notes those requiring actions to comply/improve/assist

Resource implications:

Completed plasterwork and planned work, level of finish standards

Method of assessment:

- Assessment should be by direct observation of tasks and questioning on underpinning knowledge
- Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency
- Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts

Context for assessment:

Assessment may occur on the job or in a workplace simulated facility with relevant equipment, materials, work instructions and deadlines

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	2
Planning and organising activities	2
Working with others and in teams	2
Using mathematical ideas and techniques	2
Solving problems	2
Using technology	2

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the Performance Criteria, is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts.

Workplace context:

- This unit must be assessed with the relevant Australian Standard AS/NZS 2589.1:1997
- Work involves the inspection of planned or completed work and comparison with level of finish standards
- Work follows established procedures
- Plaster installation work is undertaken on domestic work sites within new construction, renovation/refurbishment and maintenance
- Information about installation processes, product requirements, customer requirements is used to inform planning of own work.
- Work generally performed under some supervision, within a team / group environment
- Environment includes movement of equipment, goods, materials and vehicular traffic
- Hazards may include:
 - construction activity involving other workers and contractors that may constitute personal risk
 - work at heights, manual handling and hazardous materials
 - dust / vapours, noise, light, energy sources, air temperature, moisture
 - electrical equipment, stationary and moving plant, equipment and materials

Plastering Trade Activity Requirements:

This unit covers work involving the installation of plaster products, maintaining personal safety and the safety of others within the context of required work deadlines and quality standards

- Work is governed by authorised site work procedures
- Consultative processes may involve:
 - other employees and supervisors
 - employer
 - employee OH&S representatives
 - principal contractor
 - industrial relations, Occupational Health and Safety specialists
 - other professional or technical staff
- Work activities require the application of relevant procedures including:
 - hazard policies and procedures
 - issue resolution procedures
 - job procedures and work instructions
 - guidelines relating to the safe use of machinery and equipment
 - quality assurance procedures (where existing)
 - sexual harassment and equal opportunity policies
 - security procedures
 - housekeeping processes
 - waste, pollution and recycling management processes
 - emergency procedures
 - reporting of accidents and incidents within regulatory requirements and following workplace procedures
 - relevant agreements, codes of practice and other legislative requirements
 - appropriate workplace language and communication technologies
 - identification of products, materials and work processes appropriate for the work
 - interpretation of relevant safety information within requirements of duty of care

Sources of information / documents may include:

- Job specifications and procedures
- Notes from previous work
- Equipment operating instructions
- Information on characteristics of materials
- Manufacturer's instructions and specifications for products, plant and equipment
- Workplace operating procedures and policies
- Employer, supplier and/or client instructions,
- Materials Safety Data Sheets, labels and other product safety information
- Building Code of Australia and relevant Australian Standards
- Communications technology equipment, oral, aural or signed communications
- Personal and work site work procedures and practices
- Conditions of service, legislation and employment agreement
- Applicable State, Territory, Commonwealth legislation and regulations which relate to:
 - Workplace Relations
 - Workers Compensation
 - License, Patent or copyright arrangements
 - Hazardous Substances and Dangerous Goods
 - Environment Protection
 - Equal Opportunity, Equal Employment Opportunity
 - Standards and certification requirements
 - Quality assurance procedures
 - Emergency procedures

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for the Training Package.

Critical aspects of evidence to be considered:

Assessment must confirm knowledge and skills to:

- Explain key differences and typical application of level 3, 4, & 5 finishes
- select and use appropriate level of finish standard
- plan and execute work within agreed timeframe and to a high standard under general supervision
- apply a broad knowledge of industry products to identify:
 - matching Manufacturers' components/materials
 - warranty compliance issues
 - suitable materials for a wide range of applications
- identify problems to level of finish and suggest appropriate alternative rectifications
- interpret work order and locate and apply relevant information from building plans and delivery documents
- follow work instructions, operating procedures and inspection practices to:
 - prevent damage to goods, equipment or products
 - meet required work output and product quality
 - select and use appropriate personal protection equipment
 - minimise the risk of injury to self or others
- work effectively with other workers on and off site
- modify work activities to cater for variations in worksite procedures, personnel, contexts and environment
- maintain workplace records in relation to materials, plant and equipment use
- follow safe handling requirements of equipment, products and materials

Interdependent assessment of units:

This unit of competency may be assessed in conjunction with other units that form part of a job role. BCGCM1006A Work safely at heights is a co-requisite for this unit.

BCGPB3008A**Unit Descriptor****Mix plastering compounds**

This unit applies to the mixing of plastering compounds using hand or mechanical mixing techniques

Unit Sector

Plasterboard

ELEMENT**PERFORMANCE CRITERIA**

1. Identify work requirements	1.1 Types of finishing compounds required are identified to match work requirements 1.2 Manufacturers advice is used to identify required: 1.2.1 join finishing materials 1.2.2 processes for mixing compounds 1.2.3 sequences and number of coats 1.2.4 quality checks for compound 1.2.5 personal protection equipment required
2. Select materials, equipment and work area	2.1 Mixing equipment and processes are selected to match tasks 2.2 Compounds compatible with the system performance are selected to match manufactures specifications 2.3 Suitable work area is selected to minimise dust exposure to self and others and to minimise manual handling risks when lifting, mixing and blending
3. Mix compound	3.1 Work sequences and mixing requirements are followed to: 3.1.1 follow manufacturers' requirements for mixing compound 3.1.2 adjust mixture consistency to suit intended use 3.1.3 minimise finishing problems due to contamination or inadequate blending 3.1.4 wear PPE and use employer approved manual handling techniques 3.1.5 Safe work practices with mechanical mixing tools 3.2 Completed work is checked to ensure work will meet manufacturers specifications and requirements for intended use 3.3 Mixing equipment is cleaned using employer approved work practices disposing of silica based material following required environmental controls 3.4 Site area is cleaned up with waste materials collected for recycling or disposal, containers are covered to prevent spills and contamination

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required knowledge and skills may include:

- identifying by name and function equipment, components and materials
- identifying and reading manufactures product installation procedures and nominated specifications for the work process
- identifying potential for health and safety risks from workplace information and labels
- identifying and applying appropriate safety precautions to safely use equipment, shift and handle products and materials
- requirements for a systematic approach to planning own work
- application of product and process knowledge to predict consequences and identify improvements

Language and literacy requirements

Reading (NRS 1.2):

- Recognises and interprets work related signs including road signs, safety logos, warnings.
- Recognises and follows instructions on a safety signs, labels or tags
- Locates and matches pieces of information, dates and times, information on pay slips, invoices and work order

Writing (NRS 1.4)

- Write key words/phrases used everyday
- Copy names, addresses and details from job/work orders
- Write own personal details
- Write times, dates, quantities and locations
- Copy details of product names and prices on orders or notes

Numeracy (NRS 2)

- Identify digital and analogue time
- Identifies value of Australian notes and coins
- Uses simple fractions, proportions
- Read simple diagrams, measurements and weights
- Check length of product against known measurement
- Count and record quantities
- Compare counted quantities with delivery notes and orders

Oral Communication (NRS2.5)

- Asks questions to clarify instructions and work requirements
- Reports problems and work progress to supervisors

Resource implications:

Building framework, finishing materials, tools and equipment

Method of assessment:

- Assessment should be by direct observation of tasks and questioning on underpinning knowledge
- Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency

- Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts

Context for assessment:

Assessment may occur on the job or in a workplace simulated facility with relevant equipment, materials, work instructions and deadlines

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	2
Planning and organising activities	2
Working with others and in teams	2
Using mathematical ideas and techniques	2
Solving problems	2
Using technology	2

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the Performance Criteria, is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs if the candidate, accessibility of the item, and local industry and regional contexts.

Workplace context:

- Work involves the mixing of plaster compounds
- Work follows established procedures
- Work is undertaken on work sites within new construction, renovation/refurbishment and maintenance
- Information about installation processes, product requirements, customer requirements is used to inform planning of own work.
- Work generally performed under some supervision, within a team / group environment
- Environment includes movement of equipment, goods, materials and vehicular traffic
- Hazards may include:
 - construction activity involving other workers and contractors that may constitute personal risk
 - work at heights, manual handling and hazardous materials
 - dust / vapours, noise, light, energy sources, air temperature, moisture
 - electrical equipment, stationary and moving plant, equipment and materials

Plastering Trade Activity Requirements:

This unit covers work involving the installation of plaster products, maintaining personal safety and the safety of others within the context of required work deadlines and quality standards

- Work is governed by authorised site work procedures
- Consultative processes may involve:
 - other employees and supervisors
 - employer
 - employee OH&S representatives
 - principal contractor
 - industrial relations, Occupational Health and Safety specialists
 - other professional or technical staff
- Work activities require the application of relevant procedures including:
 - hazard policies and procedures
 - issue resolution procedures
 - job procedures and work instructions
 - guidelines relating to the safe use of machinery and equipment
 - quality assurance procedures (where existing)
 - sexual harassment and equal opportunity policies
 - security procedures
 - housekeeping processes
 - waste, pollution and recycling management processes
 - emergency procedures
 - reporting of accidents and incidents within regulatory requirements and following workplace procedures
 - relevant agreements, codes of practice and other legislative requirements
 - appropriate workplace language and communication technologies
 - identification of products, materials and work processes appropriate for the work
 - interpretation of relevant safety information within requirements of duty of care

Sources of information / documents may include:

- Job specifications and procedures
- Notes from previous work
- Equipment operating instructions
- Information on characteristics of materials
- Manufacturer's instructions and specifications for products, plant and equipment
- Workplace operating procedures and policies
- Employer, supplier and/or client instructions,
- Materials Safety Data Sheets, labels and other product safety information
- Building Code of Australia and relevant Australian Standards
- Communications technology equipment, oral, aural or signed communications
- Personal and work site work procedures and practices
- Conditions of service, legislation and industrial agreements including:
 - certified agreements and awards
 - industry agreements
 - Occupational Health & Safety legislation, Codes of Practice and Regulations
- Applicable State, Territory, Commonwealth legislation and regulations which relate to:
 - Workplace Relations
 - Workers Compensation
 - License, Patent or copyright arrangements
 - Hazardous Substances and Dangerous Goods
 - Environment Protection
 - Equal Opportunity, Equal Employment Opportunity
 - Standards and certification requirements
 - Quality assurance procedures
 - Emergency procedures

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for the Training Package.

Critical aspects of evidence to be considered:

Assessment must confirm knowledge and skills to:

- select and use appropriate compounds, consistency and mixing methods
- apply a broad knowledge of industry products to identify:
 - matching Manufacturers' components/materials
 - reasons why manufacturers recommend a three coat system for finishing plaster joints
 - finished textures for hand and mechanical finishing of joints
 - impact of glancing light on finished joints
 - suitable materials for a wide range of applications
- follow work instructions, operating procedures and inspection practices to:
 - prevent damage to goods, equipment or products
 - meet required work output and product quality
 - select and use appropriate personal protection equipment
 - minimise the risk of injury to self or others
- work effectively with other workers on and off site
- follow safe handling requirements of equipment, products and material

Interdependent assessment of units:

This unit of competency may be assessed in conjunction with other units that form part of a job role.

BCGPB3009A**Unit Descriptor****Unit Sector****Finish plasterboard joins by hand**

This unit applies to the finishing of plasterboard joins to comply with manufacturers instructions, job specifications and Australian Standards

Plasterboard

ELEMENT**PERFORMANCE CRITERIA**

1. Identify work requirements	1.1 Job specifications/work sheets are consulted to identify customer requirements for joint finishing 1.2 Manufacturers installation advice is used to identify required: 1.2.1 Join finishing materials 1.2.2 Processes for finishing system joins 1.2.3 Work sequence 1.2.4 Quality checks for joint finishing 1.3 Relationship between Manufacturers Specifications and Australian Standards are identified
2. Select materials, processes and equipment	2.1 Specifications and work requirements are compared and any variations reported to supervisor 2.2 Equipment and processes are selected to match tasks 2.3 Base coat, cements and tapes compatible with the system performance are selected from manufactures specifications
3. Finish joins	3.1 Work sequences and finishing requirements are planned to: 3.1.1 Implement manufacturers' requirements for joint finishing 3.1.2 Facilitate finishing techniques appropriate to joint system 3.1.3 Minimise finishing problems 3.2 Joins are finished using: 3.2.1 Manufacturers recommended methods and materials 3.2.2 Employer approved manual handling techniques
4. Check work and clean up work area	4.1 Completed work is checked to ensure work will meet manufacturers specifications and Australian Standards 4.2 Site area is cleaned up with waste materials collected for recycling or disposal

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required knowledge and skills may include:

- identifying by name and function equipment, components and materials
- identifying and reading manufactures product installation procedures and nominated specifications for the work process
- interpreting manufacturers/suppliers instructions for plant and equipment
- identifying materials' type and purpose and potential for health and safety risks from workplace information and labels
- identifying and applying appropriate safety precautions to safely use equipment, shift and handle products and materials
- identifying faults in operation of equipment or materials quality
- adjusting work activity to maintain quality standards
- identifying the purpose of tags and logs of use for equipment
- requirements for a systematic approach to planning own work
- application of product and process knowledge to predict consequences and identify improvements

Language and literacy requirements

Reading (NRS 1.2):

- Recognises and interprets work related signs including road signs, safety logos, warnings.
- Recognises and follows instructions on a safety signs, labels or tags
- Locates and matches pieces of information, dates and times, information on pay slips, invoices and work order

Writing (NRS 1.4)

- Write key words/phrases used everyday
- Copy names, addresses and details from job/work orders
- Write own personal details
- Write times, dates, quantities and locations
- Copy details of product names and prices on orders or notes

Numeracy (NRS 2)

- Identify digital and analogue time
- Identifies value of Australian notes and coins
- Uses simple fractions, proportions
- Read simple diagrams, measurements and weights
- Check length of product against known measurement
- Count and record quantities
- Compare counted quantities with delivery notes and orders

Oral Communication (NRS2.5)

- Asks questions to clarify instructions and work requirements

Reports problems and work progress to supervisors

Resource implications:

Building framework, finishing materials, tools and equipment

Method of assessment:

- Assessment should be by direct observation of tasks and questioning on underpinning knowledge
- Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency
- Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts

Context for assessment:

Assessment may occur on the job or in a workplace simulated facility with relevant equipment, materials, work instructions and deadlines

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	2
Planning and organising activities	2
Working with others and in teams	2
Using mathematical ideas and techniques	2
Solving problems	2
Using technology	2

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the Performance Criteria, is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts.

Workplace context:

- This unit must be assessed with the relevant Australian Standard AS/NZ2589
- Work involves the finishing of plasterboard joins
- Work follows established procedures
- Work is undertaken on work sites within new construction, renovation/refurbishment and maintenance
- Information about installation processes, product requirements, customer requirements is used to inform planning of own work.
- Work generally performed under some supervision, within a team / group environment
- Environment includes movement of equipment, goods, materials and vehicular traffic
- Hazards may include:
 - construction activity involving other workers and contractors that may constitute personal risk
 - work at heights, manual handling and hazardous materials
 - dust / vapours, noise, light, energy sources, air temperature, moisture
 - electrical equipment, stationary and moving plant, equipment and materials

Plastering Trade Activity Requirements:

This unit covers work involving the installation of plaster products, maintaining personal safety and the safety of others within the context of required work deadlines and quality standards

- Work is governed by authorised site work procedures
- Consultative processes may involve:
 - other employees and supervisors
 - employer
 - employee OH&S representatives
 - principal contractor
 - industrial relations, Occupational Health and Safety specialists
 - other professional or technical staff
- Work activities require the application of relevant procedures including:
 - hazard policies and procedures
 - issue resolution procedures
 - job procedures and work instructions
 - guidelines relating to the safe use of machinery and equipment
 - quality assurance procedures (where existing)
 - sexual harassment and equal opportunity policies
 - security procedures
 - housekeeping processes
 - waste, pollution and recycling management processes
 - emergency procedures
 - reporting of accidents and incidents within regulatory requirements and following workplace procedures
 - relevant agreements, codes of practice and other legislative requirements
 - appropriate workplace language and communication technologies
 - identification of products, materials and work processes appropriate for the work
 - interpretation of relevant safety information within requirements of duty of care

Sources of information / documents may include:

- Job specifications and procedures
- Notes from previous work
- Equipment operating instructions
- Information on characteristics of materials
- Manufacturer's instructions and specifications for products, plant and equipment
- Workplace operating procedures and policies
- Employer, supplier and/or client instructions,
- Materials Safety Data Sheets, labels and other product safety information
- Building Code of Australia and relevant Australian Standards
- Communications technology equipment, oral, aural or signed communications
- Personal and work site work procedures and practices
- Conditions of service, legislation and industrial agreements including:
 - certified agreements and awards
 - industry agreements
 - Occupational Health & Safety legislation, Codes of Practice and Regulations
- Applicable State, Territory, Commonwealth legislation and regulations which relate to:
 - Workplace Relations
 - Workers Compensation
 - License, Patent or copyright arrangements
 - Hazardous Substances and Dangerous Goods
 - Environment Protection
 - Equal Opportunity, Equal Employment Opportunity
 - Standards and certification requirements
 - Quality assurance procedures
 - Emergency procedures

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for the Training Package.

Critical aspects of evidence to be considered:

Assessment must confirm knowledge and skills to:

- select and use appropriate finishing materials and work methods
- plan and execute work within agreed timeframe and to a high standard under general supervision
- apply a broad knowledge of industry products to identify:
 - matching Manufacturers' components/materials
 - warranty compliance issues
 - suitable materials for a wide range of applications
 - identify problems to supervisors and suggest appropriate alternative rectifications
- interpret work order and locate and apply relevant information from building plans and delivery documents
- follow work instructions, operating procedures and inspection practices to:
 - prevent damage to goods, equipment or products
 - meet required work output and product quality
 - select and use appropriate personal protection equipment
 - minimise the risk of injury to self or others
- work effectively with other workers on and off site
- modify work activities to cater for variations in worksite procedures, personnel, contexts and environment
- maintain workplace records in relation to materials, plant and equipment use
- follow safe handling requirements of equipment, products and materials

Interdependent assessment of units:

This unit of competency may be assessed in conjunction with other units that form part of a job role. BCGCM1006A Work safely at heights is a co-requisite for this unit.

BCGPB3010A**Unit Descriptor****Hand sand plaster work**

This unit applies to the hand sanding of joints in plaster walls, ceilings or cornice

Unit Sector

Plasterboard

ELEMENT**PERFORMANCE CRITERIA**

1. Determine work requirements	1.1 Work area is inspected to determine: 1.1.1 joins to be hand sanded 1.1.2 grade of paper to be used 1.1.3 readiness of topcoat for sanding 1.1.4 method of accessing work site 1.2 Level of finish as specified in the contract/job order is noted and any mismatches between quality of fixing and finishing recorded and reported to supervisor (or rectified as appropriate for contract) 1.3 Personal protection equipment suitable for the task is selected based on manufacturers recommended and employer approved specification
2. Sand joins	2.1 Worksite access is gained using approved workplace methods based on the risk assessment for the task/site/circumstance 2.2 Sanding floats, any required dust protection or warning signs are set up for use 2.3 Sanding is completed to the required standard of finish
3. Inspect work and clean up work area	3.1 Completed sanding work is inspected for compliance with workplace and customer requirements included contracted level of finish 3.2 (any) sand-through areas are reported to appropriate personnel 3.3 Sanded area is brushed down 3.4 Sanding dust is cleaned up and contained for disposal in accordance with approved workplace procedures

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required knowledge and skills may include:

- the implications on work quality for instruction to be followed
- manufacturers product mixing and/or application procedures and nominated specifications for the work process
- manufacturers/suppliers instructions for plant and equipment
- identifying materials' type and purpose and potential for health and safety risks from workplace information and labels
- safely use equipment, shift and handle products and materials
- requirements for a systematic approach to planning own work
- application of product and process knowledge to identify problems and predict consequences
- factors that influence level of finish
- the effects of glancing light on plasterboard joins when paint is applied

Language and literacy requirements

Reading (NRS 1.2):

- Recognises and interprets work related signs including road signs, safety logos, warnings.
- Recognises and follows instructions on a safety signs, labels or tags
- Locates and matches pieces of information, dates and times, information on pay slips, invoices and work order

Writing (NRS 1.4)

- Write key words/phrases used everyday
- Copy names, addresses and details from job/work orders
- Write own personal details
- Write times, dates, quantities and locations
- Copy details of product names and prices on orders or notes

Numeracy (NRS 2)

- Identify digital and analogue time
- Identifies value of Australian notes and coins
- Uses simple fractions, proportions
- Read simple diagrams, measurements and weights
- Check length of product against known measurement
- Count and record quantities
- Compare counted quantities with delivery notes and orders

Oral Communication (NRS2.5)

- Asks questions to clarify instructions and work requirements
- Reports problems and work progress to supervisors

Resource implications:

Stopped plasterboard walls and ceilings, sanding materials and access methods

Method of assessment:

Assessment should be by direct observation of tasks and questioning on underpinning knowledge

Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts

Context for assessment

Assessment may occur on the job or in a workplace simulated facility with relevant equipment, materials, work instructions and deadlines

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	2
Planning and organising activities	2
Working with others and in teams	2
Using mathematical ideas and techniques	2
Solving problems	2
Using technology	2

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the Performance Criteria, is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs if the candidate, accessibility of the item, and local industry and regional contexts.

Workplace context:

- Work involves the sanding of stopped plaster joins and fixings on plaster walls, ceiling and cornice
- Work follows established procedures
- Plaster work is undertaken on work sites within new construction, renovation/refurbishment and maintenance
- Information about installation processes, product requirements, customer requirements is used to inform planning of own work.
- Work generally performed under supervision, within a team / group environment
- Environment includes movement of equipment, goods, materials and vehicular traffic
- Hazards may include:
 - construction activity involving other workers and contractors
 - work at heights, manual handling, hazardous materials
 - dust / vapours, noise, light, energy sources, air temperature, moisture
 - electrical equipment, stationary and moving plant, equipment and materials

Plastering Trade Activity Requirements:

This unit covers work involving the installation of plaster products, maintaining personal safety and the safety of others within the context of required work deadlines and quality standards

- Work is governed by authorised site work procedures
- Consultative processes may involve:
 - other employees and supervisors
 - employer
 - employee OH&S representatives
 - principal contractor
 - industrial relations, Occupational Health and Safety specialists
 - other professional or technical staff
- Work activities require the application of relevant procedures including:
 - hazard policies and procedures
 - issue resolution procedures
 - job procedures and work instructions
 - guidelines relating to the safe use of machinery and equipment
 - quality assurance procedures (where existing)
 - sexual harassment and equal opportunity policies
 - housekeeping processes and security procedures
 - waste, pollution and recycling management processes
 - emergency procedures
 - reporting of accidents and incidents within regulatory requirements and following workplace procedures
 - relevant agreements, codes of practice and other legislative requirements
 - appropriate workplace language and communication technologies
 - identification of products, materials and work processes appropriate for the work
 - interpretation of relevant safety information within requirements of duty of care

Sources of information / documents may include:

- Job specifications and procedures
- Equipment operating instructions and notes from previous work
- Information on characteristics of materials
- Manufacturer's instructions and specifications for products, plant and equipment
- Workplace operating procedures and policies
- Employer, supplier and/or client instructions
- Materials Safety Data Sheets, labels and other product safety information
- Building Code of Australia and relevant Australian Standards
- Communications technology equipment, oral, aural or signed communications
- Personal and work site work procedures and practices
- Conditions of service, legislation and employment contract
- Occupational Health & Safety legislation, Codes of Practice and Regulations
- Applicable State, Territory, Commonwealth legislation and regulations which relate to:
 - Workplace Relations
 - Workers Compensation
 - License, Patent or copyright arrangements
 - Hazardous Substances and Dangerous Goods
 - Environment Protection
 - Equal Opportunity, Equal Employment Opportunity
 - Standards and certification requirements
 - Quality assurance procedures
 - Emergency procedures

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for the Training Package.

Critical aspects of evidence to be considered:

Assessment must confirm appropriate knowledge and skills to:

- select and use appropriate sanding materials and work methods
- operate from basic instruction without constant supervision
- identify requirements to achieve the specified level of finish
- identify faults in plasterboard fixing, joining and finishing
- execute work within agreed timeframes and standards
- interpret delivery documentation, work orders and locate relevant materials
- explain warranty/guarantee/liability requirements for plastering work
- apply knowledge of industry requirements to identify:
 - the condition and color of the top coat when set
 - matching Manufacturers' components/materials
 - contract compliance requirements
 - reasons for use of P1 or P2 mask and protective clothing when sanding topcoats
 - faults and report problems in materials and work
- follow work instructions, operating procedures and inspection practices to:
 - prevent damage to goods, equipment or products
 - select and use appropriate personal protection equipment
 - work effectively with, and minimise the risk of injury to, self and other workers
 - modify work activities to cater for variations in worksite procedures, contexts and environment
 - identify and use appropriate behaviour for interactions with other workers, supervisors, clients and members of the public

Interdependent assessment of units

This unit of competency may be assessed in conjunction with other units that form part of a job role. BCGCM1006A Work safely at heights is a co-requisite for this unit.

BCGPB3011A**Unit Descriptor****Finish category 1 & 2 wet areas**

This unit applies to the finishing of wet area systems to comply with manufacturers instructions, job specifications and Australian Standards

Unit Sector

Plasterboard

ELEMENT**PERFORMANCE CRITERIA**

1. Identify work requirements	1.1 Job specifications/work sheets are consulted to identify customer requirements for wet area 1.2 Manufacturers installation advice is used to identify required: 1.2.1 Materials and processes for sealing wet area system to category 1 1.2.2 Materials and work sequence to finish wet areas to Category 2 1.2.3 Quality checks for wet area lining installation 1.3 Work site is inspected to confirm suitability of substrate for the installation of wet area system 1.4 The relationship between Manufacturers Specifications and Australian Standards is identified
2. Select materials, processes and equipment	2.1 Specifications and work requirements are compared and any variations reported to supervisor 2.2 Equipment and processes are selected to match tasks 2.3 Sealers, penetration seals and finishing compounds compatible with the wet area classification and manufacturers system specification are selected
3. Stop and finish joins, penetrations and edges	3.1 Work sequences are planned to: 3.1.1 Implement manufacturers' requirements for wet finishing/sealing 3.1.2 Minimise problems in Category 2 classified areas from glancing light 3.1.3 Maximise potential for category 1 areas to perform within Australian Standard 3.2 Stopping material to match the wet area system is used including: 3.2.1 wet area acrylic taping cement 3.2.2 paper tape 3.2.3 topcoat applying the required number of coats and allowing for drying time 3.3 Edges of wet area board to be caulked are sealed using appropriate caulking material 3.4 Board in Category 1 areas is sealed to meet manufacturers instructions and Australian Standard requirements

- 4. Check work and clean up work area
 - 4.1 Completed work is checked to work will meet manufacturers specifications and Australian Standards
 - 4.2 Site area is cleaned up with:
 - 4.2.1 waste board collected for recycling,
 - 4.2.2 adhesives and waste fasteners disposed of in approved bins and
 - 4.2.3 Reusable materials collected and stored for next job

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required knowledge and skills may include:

- identifying on plans Category 1 and 2 wet areas
- describing how the Australian Standards vary between Categories 1 and 2
- identifying by name and function equipment, components and materials appropriate for wet areas
- identifying and reading manufactures product installation procedures and specifications for the wet area installation
- identifying materials' type and purpose and potential for health and safety risks from workplace information and labels for wet area materials
- identifying and applying appropriate safety precautions to safely use materials for wet area sealing and finishing
- requirements for a systematic approach to planning own work
- application of product and process knowledge to predict consequences and identify improvements

Language and literacy requirements

Reading (NRS 2.9)

- Interpret safety information on labels and tags
- Interpret manufacturers instructions in diagrams, photographs and written form for equipment and installation of plasterboard
- Use a street directory, handrawn maps and road maps
- Extract required information:
- Numbers from phone books
- Quantity and delivery locations from manifests
- Compare prices in catalogues

Writing (NRS 3.4)

- Complete forms that require factual data and individualised responses
- Take personal notes at technical sessions or meetings

Numeracy (NRS 2)

- Use calculator to add a number of items and check against estimated approximate sum
- Calculate time required to complete set task(s)

Oral Communication (NRS 3.2)

- Uses simple grammatical forms and vocabulary to give instructions appropriate for the listeners, give explanations, ask questions, express viewpoints

Resource implications:

Building framework, wet area materials, tools and equipment

Method of assessment:

- Assessment should be by direct observation of tasks and questioning on underpinning knowledge
- Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency
- Assessment methods must confirm consistency of performance over time and in a range

of workplace relevant contexts

Context for assessment:

Assessment may occur on the job or in a workplace simulated facility with relevant equipment, materials, work instructions and deadlines

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	2
Planning and organising activities	2
Working with others and in teams	2
Using mathematical ideas and techniques	2
Solving problems	2
Using technology	2

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the Performance Criteria, is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs if the candidate, accessibility of the item, and local industry and regional contexts.

Workplace context:

- This unit must be assessed with the relevant Australian Standard 3740 - 1994
- Work involves the installation of wet area lining systems
- Work follows established procedures
- Plaster installation work is undertaken on work sites within new construction, renovation/refurbishment and maintenance
- Information about installation processes, product requirements, customer requirements is used to inform planning of own work.
- Work generally performed under some supervision, within a team / group environment
- Environment includes movement of equipment, goods, materials and vehicular traffic
- Hazards may include:
 - construction activity involving other workers and contractors that may constitute personal risk
 - work at heights, manual handling and hazardous materials
 - dust / vapours, noise, light, energy sources, air temperature, moisture
 - electrical equipment, stationary and moving plant, equipment and materials

Plastering Trade Activity Requirements:

This unit covers work involving the installation of wet area plaster products, maintaining personal safety and the safety of others within the context of required work deadlines and quality standards

- Work is governed by authorised site work procedures
- Consultative processes may involve:
 - other employees and supervisors
 - employer
 - employee OH&S representatives
 - principal contractor
 - industrial relations, Occupational Health and Safety specialists
 - other professional or technical staff
- Work activities require the application of relevant procedures including:
 - hazard policies and procedures
 - issue resolution procedures
 - job procedures and work instructions
 - guidelines relating to the safe use of machinery and equipment
 - quality assurance procedures (where existing)
 - sexual harassment and equal opportunity policies
 - security procedures
 - housekeeping processes
 - waste, pollution and recycling management processes
 - emergency procedures
 - reporting of accidents and incidents within regulatory requirements and following workplace procedures
 - relevant agreements, codes of practice and other legislative requirements
 - appropriate workplace language and communication technologies
 - identification of products, materials and work processes appropriate for the work
 - interpretation of relevant safety information within requirements of duty of care

Sources of information / documents may include:

- Job specifications and procedures
- Notes from previous work
- Equipment operating instructions
- Information on characteristics of materials
- Manufacturer's instructions and specifications for products, plant and equipment
- Workplace operating procedures and policies
- Employer, supplier and/or client instructions,
- Materials Safety Data Sheets, labels and other product safety information
- Building Code of Australia and relevant Australian Standards
- Communications technology equipment, oral, aural or signed communications
- Personal and work site work procedures and practices
- Conditions of service, legislation and employment agreement
- Occupational Health & Safety legislation, Codes of Practice and Regulations
- Applicable State, Territory, Commonwealth legislation and regulations which relate to:
 - Workplace Relations
 - Workers Compensation
 - License, Patent or copyright arrangements
 - Hazardous Substances and Dangerous Goods
 - Environment Protection
 - Equal Opportunity, Equal Employment Opportunity
 - Standards and certification requirements
 - Quality assurance procedures
 - Emergency procedures

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for the Training Package.

Critical aspects of evidence to be considered:

Assessment must confirm knowledge and skills to:

- interpret work order and locate and apply relevant information from building plans and delivery documents
- select and use appropriate wet area materials and work methods
- explain reasons for use of sealers in Category 2 areas and care in finishing Category 1 areas to deal with glancing light in wet areas
- plan and execute work within agreed timeframe and to a high standard under general supervision
- apply a broad knowledge of industry products to identify:
 - available wet area systems
 - implications of mixing and matching Manufacturers' components/materials
 - warranty compliance issues for wet area installation and Australian Standard requirements
- identify problems to supervisors and suggest appropriate alternative rectifications
- follow work instructions, operating procedures and inspection practices to:
 - prevent damage to goods, equipment or products
 - meet required work output and product quality
 - select and use appropriate personal protection equipment
 - minimise the risk of injury to self or others
- work effectively with other workers on and off site
- modify work activities to cater for variations in worksite procedures, personnel, contexts and environment
- maintain workplace records in relation to materials, plant and equipment use
- follow safe handling requirements of equipment, products and materials

Interdependent assessment of units:

This unit of competency may be assessed in conjunction with other units that form part of a job role. BCGCM1006A Work safely at heights is a co-requisite for this unit.

BCGPB3012A**Unit Descriptor****Cut and fix paper faced cornice**

This unit applies to those required to measure, cut and fix paper faced cornice

Unit Sector

Plasterboard

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and measure for cornice work	1.1 Work area is inspected to determine work requirements 1.2 Style of paper faced cornice to be fitted is determined from work instructions or supervisor 1.3 Cornice length for each work area are determined and noted 1.4 Requirements for safe work at heights are identified and planned for use
2. Cut cornice lengths	2.1 Cornice is handled following employer approved manual handling procedures 2.2 Noted measurements are transferred to cornice stock, allowing for mitre requirements 2.3 Cornice is cut using workplace approved guides and cutting methods, minimising bending and kneeling with use of personal protective equipment where advised by manufacturer or required by employer
3. Prepare cornice adhesive	3.1 Manufacturers instructions are consulted and applied to the preparation of the adhesive 3.2 Preparation is carried out using: 3.2.1 clean container 3.2.2 clean water 3.2.3 approved personal protection equipment 3.3 Adhesive powder is added to water until powder can absorb no more water 3.4 Consistency of mix is adjusted to suit hand or mechanical application of adhesive
4. Fix cornice	4.1 Means for safe access for work at heights is used where required 4.2 Methods of holding cornice temporarily in place at the wall/ceiling junction are planned and used following workplace approved procedures 4.3 Appropriate amount of adhesive is applied to cornice 4.4 Cornice is fitted following workplace approved practices for work at heights and manual handling

- 5. Finish work
 - 5.1 Excess cornice adhesive on cornice faces is removed
 - 5.2 Joins and junctions are filled and smoothed
 - 5.3 (any) temporary fixings and supports are removed and holes filled
 - 5.4 Work area is cleaned and tidied, tools and equipment are cleaned
 - 5.5 Unused adhesive is placed in approved containers and disposed of in approved bins
 - 5.6 Usable lengths of cornice are set aside for later use and waste is collected for recycling

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required knowledge and skills may include:

- identifying by name and general application paper faced and hand made cornice
- identifying and reading manufactures product installation procedures and nominated specifications for mixing adhesives, fixing and cutting cornice
- identifying materials' type and purpose and potential for health and safety risks from workplace information and labels for cornice and adhesives
- identifying and applying appropriate safety precautions to safely use equipment, shift and handle products and materials
- identifying faults in materials
- adjusting work activity to maintain quality standards
- requirements to plan own work using a systematic approach to allow for efficient and safe handling of cornice and safe access to work at heights
- application of product and process knowledge to predict consequences and identify improvements

Language and literacy requirements

Reading (NRS 2.9)

- Interpret safety information on labels and tags
- Interpret manufacturers instructions in diagrams, photographs and written form for equipment and installation of plasterboard
- Use a street directory, handrawn maps and road maps
- Extract required information:
- Numbers from phone books
- Quantity and delivery locations from manifests
- Compare prices in catalogues

Writing (NRS 3.4)

- Complete forms that require factual data and individualised responses
- Take personal notes at technical sessions or meetings

Numeracy (NRS 2)

- Use calculator to add a number of items and check against estimated approximate sum
- Calculate time required to complete set task(s)

Oral Communication (NRS 3.2)

Uses simple grammatical forms and vocabulary to give instructions appropriate for the listeners, give explanations, ask questions, and express viewpoints

Resource implications:

Building framework with plasterboard clad walls, cast cornice, materials, tools and equipment

Method of assessment:

- Assessment should be by direct observation of tasks and questioning on underpinning knowledge
- Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency
- Assessment methods must confirm consistency of performance over time and in a range

of workplace relevant contexts

Context for assessment:

Assessment may occur on the job or in a workplace simulated facility with relevant equipment, materials, work instructions and deadlines

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	2
Planning and organising activities	2
Working with others and in teams	2
Using mathematical ideas and techniques	2
Solving problems	2
Using technology	2

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the Performance Criteria, is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs if the candidate, accessibility of the item, and local industry and regional contexts.

Workplace context:

- Work involves the cutting and fixing of paper faced cornice.
- Work follows established procedures
- Plaster installation work is undertaken on work sites within new construction, renovation/refurbishment and maintenance
- Information about installation processes, product requirements, customer requirements is used to inform planning of own work.
- Work generally performed under some supervision, within a team / group environment
- Environment includes movement of equipment, goods, materials and vehicular traffic
- Hazards may include:
 - construction activity involving other workers and contractors that may constitute personal risk
 - work at heights, manual handling and hazardous materials
 - dust / vapours, noise, light, energy sources, air temperature, moisture
 - electrical equipment, stationary and moving plant, equipment and materials

Plastering Trade Activity Requirements:

This unit covers work involving the installation of plaster products, maintaining personal safety and the safety of others within the context of required work deadlines and quality standards

- Work is governed by authorised site work procedures
- Consultative processes may involve:
 - other employees and supervisors
 - employer
 - employee OH&S representatives
 - principal contractor
 - industrial relations, Occupational Health and Safety specialists
 - other professional or technical staff
- Work activities require the application of relevant procedures including:
 - hazard policies and procedures
 - issue resolution procedures
 - job procedures and work instructions
 - guidelines relating to the safe use of machinery and equipment
 - quality assurance procedures (where existing)
 - sexual harassment and equal opportunity policies
 - security procedures
 - housekeeping processes
 - waste, pollution and recycling management processes
 - emergency procedures
 - reporting of accidents and incidents within regulatory requirements and following workplace procedures
 - relevant agreements, codes of practice and other legislative requirements
 - appropriate workplace language and communication technologies
 - identification of products, materials and work processes appropriate for the work
 - interpretation of relevant safety information within requirements of duty of care

Sources of information / documents may include

- Job specifications and procedures
- Notes from previous work
- Equipment operating instructions
- Information on characteristics of materials
- Manufacturer's instructions and specifications for products, plant and equipment
- Workplace operating procedures and policies
- Employer, supplier and/or client instructions,
- Materials Safety Data Sheets, labels and other product safety information
- Building Code of Australia and relevant Australian Standards
- Communications technology equipment, oral, aural or signed communications
- Personal and work site work procedures and practices
- Conditions of service, legislation and employment agreement
- Applicable State, Territory, Commonwealth legislation and regulations which relate to:
 - Occupational Health & Safety legislation, Codes of Practice and Regulations
 - Workplace Relations
 - Workers Compensation
 - License, Patent or copyright arrangements
 - Hazardous Substances and Dangerous Goods
 - Environment Protection
 - Equal Opportunity, Equal Employment Opportunity
 - Standards and certification requirements
 - Quality assurance procedures
 - Emergency procedures

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for the Training Package.

Critical aspects of evidence to be considered:

Assessment must confirm knowledge and skills to:

- identify work order or contract and delivery documentation and match to delivered cornice
- select and use appropriate cornice materials and work methods
- plan and execute work within agreed timeframe and to a high standard under general supervision
- identify problems in fitting cornice and suggest appropriate alternative rectifications
- follow work instructions, operating procedures and inspection practices to:
 - prevent damage to goods, equipment or products
 - explain the reasons for use of cornice reinforcing systems
 - meet required work output and product quality
 - select and use appropriate personal protection equipment
 - minimise the risk of injury to self or others
- work effectively with other workers on and off site
- modify work activities to cater for variations in worksite procedures, personnel, contexts and environment
- maintain workplace records in relation to materials, plant and equipment use
- follow safe handling requirements of equipment, products and materials

Interdependent assessment of units:

This unit of competency may be assessed in conjunction with other units that form part of a job role. BCGCM1006A Work safely at heights is a co-requisite for this unit.

BCGPB3013A**Unit Descriptor****Plan travel routes**

This unit applies to employees required to deliver product or transport self and/or others to the worksite

Unit Sector

Plasterboard

ELEMENT**PERFORMANCE CRITERIA**

1. Identify travel requirement	1.1 Reason for journey is determined 1.2 Route planning is varied to suit the type of vehicle and load to be carried 1.3 Relevant regulations regarding the transport of dangerous goods are identified and compared to the load to be transported
2. Identify and determine the most appropriate route	2.1 Street directory and road map symbols are recognised and interpreted. 2.2 Points of departure and destination are identified in a directory index and the information used to locate the places on the appropriate map. 2.3 Directions for a pre-determined route are interpreted and the route traced using a street directory and road map. 2.4 Key intersections and other landmarks along the route are identified for use in the following planned route 2.5 Time required to complete the trip is estimated based on speed limits, time of day, expected traffic conditions, distance and controlled intersections
3. Follow planned route	3.1 Route is memorised or marked out on map 3.2 Pre-determined route is followed 3.3 Time taken is compared to predicted time and reasons for any discrepancy identified

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required knowledge and skills may include:

- use of indexes, grid references, landmarks
- the implications on work quality for instructions to be followed
- the names and functions of equipment, components and materials
- safely use equipment, shift and handle products and materials
- traffic patterns, road rules and conditions that impact on travel route selection and travel times

Language and literacy requirements

Reading (NRS 1.2):

- Recognises and interprets work related signs including road signs, safety logos, and warnings.
- Recognises and follows instructions on a safety signs, labels or tags
- Locates and matches pieces of information, dates and times, information on maps, street directories, invoices and work orders
- Match safe working load and dangerous goods signage to rules for transport

Writing (NRS 1.4)

- Write key words/phrases used everyday
- Copy names, addresses and details from job/work orders
- Write own personal details
- Write times, dates, quantities and locations
- Copy details of product names and prices on orders or notes

Numeracy (NRS 2)

- Identify digital and analogue time
- Identifies value of Australian notes and coins
- Uses simple fractions, proportions
- Read simple diagrams, measurements and weights
- Check length of product against known measurement
- Count and record quantities
- Compare counted quantities with delivery notes and orders

Oral Communication (NRS2.5)

- Asks questions to clarify instructions and work requirements
- Reports problems and work progress to supervisors

Resource implications:

Travel requirement, street directory/map, work order

Method of assessment:

Assessment should be by direct observation of tasks and questioning on underpinning knowledge

Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts

Context for assessment

Assessment may occur on the job or in a workplace simulated facility with relevant equipment, materials, work instructions and deadlines

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	2
Planning and organising activities	2
Working with others and in teams	2
Using mathematical ideas and techniques	2
Solving problems	2
Using technology	2

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the Performance Criteria, is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts.

Workplace context:

- Work involves the planning of travel routes to suit the purpose of the journey
- Work follows established procedures
- Work generally performed under supervision, within a team / group environment
- Environment includes movement of equipment, goods, materials and vehicular traffic
- Hazards may include:
 - construction activity involving other workers and contractors
 - work at heights, manual handling, hazardous materials
 - dust / vapours, noise, light, energy sources, air temperature, moisture
 - electrical equipment, stationary and moving plant, equipment and materials

Plastering Trade Activity Requirements:

This unit covers work involving transportation of self, others and any load maintaining personal safety and the safety of others within the context of required deadlines

- Work is governed by authorised site work procedures
- Consultative processes may involve:
 - other employees and supervisors
 - employer
 - employee OH&S representatives
 - principal contractor
 - industrial relations, Occupational Health and Safety specialists
 - other professional or technical staff
- Work activities require the application of relevant procedures including:
 - hazard policies and procedures
 - issue resolution procedures
 - job procedures and work instructions
 - guidelines relating to the safe use of machinery and equipment
 - quality assurance procedures (where existing)
 - sexual harassment and equal opportunity policies
 - housekeeping processes and security procedures
 - waste, pollution and recycling management processes
 - emergency procedures
 - reporting of accidents and incidents within regulatory requirements and following workplace procedures
 - relevant agreements, codes of practice and other legislative requirements
 - appropriate workplace language and communication technologies
 - identification of products, materials and work processes appropriate for the work
 - interpretation of relevant safety information within requirements of duty of care

Sources of information / documents may include:

- Job specifications and procedures
- Equipment operating instructions and notes from previous work
- Information on characteristics of materials
- Manufacturer's instructions and specifications for products, plant and equipment
- Workplace operating procedures and policies
- Employer, supplier and/or client instructions
- Materials Safety Data Sheets, labels and other product safety information
- Building Code of Australia and relevant Australian Standards
- Communications technology equipment, oral, aural or signed communications
- Personal and work site work procedures and practices
- Conditions of service, legislation and employment contracts
- Occupational Health & Safety legislation, Codes of Practice and Regulations
- Applicable State, Territory, Commonwealth legislation and regulations which relate to:
 - Workplace Relations
 - Workers Compensation
 - License, Patent or copyright arrangements
 - Hazardous Substances and Dangerous Goods
 - Environment Protection
 - Equal Opportunity, Equal Employment Opportunity
 - Standards and certification requirements
 - Quality assurance procedures
 - Emergency procedures

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for the Training Package.

Critical aspects of evidence to be considered:

Assessment must confirm appropriate knowledge and skills to:

- select and use appropriate travel routes using maps, street directory and verbal instructions
- operate from basic instruction without constant supervision
- interpret delivery documentation, work orders and locate relevant materials
- follow work instructions to:
 - prevent damage to goods, equipment or products
 - meet required work output and quality
 - work effectively with, and minimise the risk of injury to, self and other workers
 - identify and use appropriate behaviour for interactions with other workers, supervisors, clients and members of the public
 - maintain workplace records

Interdependent assessment of units

This unit of competency may be assessed in conjunction with other units that form part of a job role.

BCGPB3014A**Unit Descriptor****Install batt insulation products**

This unit applies to the installation of thermal and acoustic insulation products to comply with manufacturers and job specifications

Unit Sector

Plasterboard

ELEMENT**PERFORMANCE CRITERIA**

1. Identify work requirements	1.1 Job specifications/work sheets are consulted to identify work required 1.2 Supervisor instructions are followed to: 1.2.1 assemble required materials and equipment for safe work at heights 1.3 Identify manufacturer recommended processes for insulation material 1.4 Plan appropriate work sequence and safety procedures 1.5 Measure insulation to minimise waste while maximising insulation use 1.6 Confirm R rating or STC/FSTC rating
2. Cut and fix insulation	2.1 Insulation is cut to fit area using manufacturer approved procedures 2.2 Insulation is installed using: 2.2.1 Manufacturers recommended methods and fasteners 2.2.2 Employer approved manual handling techniques 2.3 Work sequences and fixing processes minimise waste, maximise material use
3. Check work and clean up work area	3.1 Completed work is checked to ensure stop up activities will be easily completed, appropriate fastening systems have been used and work will retain structural integrity 3.2 Site area is cleaned up with: 3.2.1 waste material collected for recycling or disposal 3.2.2 reusable materials collected and stored for next job

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required knowledge and skills may include:

- the implications on work quality for instruction to be followed
- matching requirements for types and R or STC/FSTC rating of insulation materials
- manufactures product installation procedures and nominated specifications for the work process
- identifying materials' type and purpose and potential for health and safety risks from workplace information and labels
- safely use equipment, shift and handle products and materials and access work at height
- identifying faults in insulation materials
- adjust work activity to maintain quality standards
- identifying the purpose of tags and logs of use for equipment
- requirements for a systematic approach to planning own work
- application of product and process knowledge to identify problems and predict consequences

Language and literacy requirements

Reading (NRS 1.2):

Recognises and interprets work related signs including road signs, safety logos, and warnings.

Recognises and follows instructions on a safety signs, labels or tags

Locates and matches pieces of information, dates and times, information on pay slips, invoices and work order

Writing (NRS 1.4)

- Write key words/phrases used everyday
- Copy names, addresses and details from job/work orders
- Write own personal details
- Write times, dates, quantities and locations
- Copy details of product names and prices on orders or notes

Numeracy (NRS 2)

- Identify digital and analogue time
- Identifies value of Australian notes and coins
- Uses simple fractions, proportions
- Read simple diagrams, measurements and weights
- Check length of product against known measurement
- Count and record quantities
- Compare counted quantities with delivery notes and orders
- Oral Communication (NRS2.5)
- Asks questions to clarify instructions and work requirements
- Reports problems and work progress to supervisors

Resource implications:

Ceiling and wall spaces, materials and tools

Method of assessment:

Assessment should be by direct observation of tasks and questioning on underpinning

knowledge

Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts

Context for assessment

Assessment may occur on the job or in a workplace simulated facility with relevant equipment, materials, work instructions and deadlines

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	2
Planning and organising activities	2
Working with others and in teams	2
Using mathematical ideas and techniques	2
Solving problems	2
Using technology	2

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the Performance Criteria, is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts.

Workplace context:

- This unit must be assessed with the relevant Australian Standard 3999 - 1992
- Work involves the planning and execution of measuring, cutting and fixing of insulation batts to walls and ceiling
- Work follows established procedures
- Plaster work is undertaken on domestic work sites within new construction, renovation/refurbishment and maintenance
- Information about installation processes, product requirements, customer requirements is used to inform planning of own work.
- Work generally performed under supervision, within a team / group environment
- Environment includes movement of equipment, goods, materials and vehicular traffic
- Hazards may include:
 - construction activity involving other workers and contractors
 - work at heights, manual handling, hazardous materials
 - dust / vapours, noise, light, energy sources, air temperature, moisture
 - electrical equipment, stationary and moving plant, equipment and materials

Plastering Trade Activity Requirements:

This unit covers work involving the installation of plaster products, maintaining personal safety and the safety of others within the context of required work deadlines and quality standards

- Work is governed by authorised site work procedures
- Consultative processes may involve:
 - other employees and supervisors
 - employer
 - employee OH&S representatives
 - principal contractor
 - industrial relations, Occupational Health and Safety specialists
 - other professional or technical staff
- Work activities require the application of relevant procedures including:
 - hazard policies and procedures
 - issue resolution procedures
 - job procedures and work instructions
 - guidelines relating to the safe use of machinery and equipment
 - quality assurance procedures (where existing)
 - sexual harassment and equal opportunity policies
 - housekeeping processes and security procedures
 - waste, pollution and recycling management processes
 - emergency procedures
 - reporting of accidents and incidents within regulatory requirements and following workplace procedures
 - relevant agreements, codes of practice and other legislative requirements
 - appropriate workplace language and communication technologies
 - identification of products, materials and work processes appropriate for the work
 - interpretation of relevant safety information within requirements of duty of care

Sources of information / documents may include:

- Job specifications and procedures
- Equipment operating instructions and notes from previous work
- Information on characteristics of materials
- Manufacturer's instructions and specifications for products, plant and equipment
- Workplace operating procedures and policies
- Employer, supplier and/or client instructions
- Materials Safety Data Sheets, labels and other product safety information
- Building Code of Australia and relevant Australian Standards
- Communications technology equipment, oral, aural or signed communications
- Personal and work site work procedures and practices
- Conditions of service, legislation and employment agreement
- Occupational Health & Safety legislation, Codes of Practice and Regulations
- Applicable State, Territory, Commonwealth legislation and regulations which relate to:
 - Workplace Relations
 - Workers Compensation
 - License, Patent or copyright arrangements
 - Hazardous Substances and Dangerous Goods
 - Environment Protection
 - Equal Opportunity, Equal Employment Opportunity
 - Standards and certification requirements
 - Quality assurance procedures
 - Emergency procedures

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for the Training Package.

Critical aspects of evidence to be considered:

Assessment must confirm appropriate knowledge and skills to:

- select and use appropriate insulation materials and work methods to match customer order and manufacturers specified procedures
- operate from basic instruction without constant supervision
- execute work within agreed timeframes and standards
- interpret delivery documentation, work orders and locate relevant materials
- apply knowledge of industry products to identify:
 - matching Manufacturers' components/materials
 - relationships of R rating with BCA requirements, energy ratings of a property
 - construction of the materials in relation to the insulation properties of the product available
 - suitable materials for a wide range of applications
 - faults and report problems
- follow work instructions, operating procedures and inspection practices to:
 - prevent damage to goods, equipment or products
 - select and use appropriate personal protection equipment
 - work effectively with, and minimise the risk of injury to, self and other workers
 - modify work activities to cater for variations in worksite procedures, personnel, contexts and environment
 - maintain workplace records in relation to materials, plant and equipment use
 - use safe handling requirements, based on information provided, for equipment, products and materials

Interdependent assessment of units

This unit of competency may be assessed in conjunction with other units that form part of a job role. BCGCM1006A Work safely at heights is a co-requisite for this unit.

BCGPB3015A**Set up, move and dismantle scaffolding up to 4 metres****Unit Descriptor**

This unit applies to workers required to erect and dismantle and move scaffold up to 4m. in height

Unit Sector

Plasterboard

ELEMENT**PERFORMANCE CRITERIA**

1. Plan scaffold assembly	1.1 Scaffold drawings and manufacturers and suppliers instructions are checked to ensure that: 1.1.1 all components and necessary tools have been delivered 1.1.2 scaffold supplied has the required number of working platforms and adequate provision for manual handling for the work required 1.1.3 sequence described in the instructions for assembling and dismantling scaffold matches your employer's work method statement (where inconsistencies are noticed, appropriate approvals are sought) 1.2 Work sequence is appropriate for the personnel available, the surrounding work activities by other workers and equipment movement on site 1.3 Proposed scaffold location is checked for: 1.3.1 debris 1.3.2 appropriate integrity of supporting surfaces 1.3.3 obstructions to access and egress 1.3.4 overhead obstructions 1.3.5 proximity to floor edges and penetrations 1.3.6 proximity to power lines (horizontal 4.6m, vertical 5m.) 1.3.7 appropriate lighting
2. Check scaffold and work platform components	2.1 Scaffold components are checked for: 2.1.1 safe working load limit for the proposed purpose 2.1.2 condition and compatibility of components 2.1.3 appropriateness of sole plates and base plates 2.1.4 integrity and correct operation of couplers and accessories 2.1.5 integrity of ladders, tubes and planks 2.1.6 damage to components by corrosive substances 2.1.7 correct operation of castor wheel locks

- 3. Use approved work practices to erect and dismantle scaffold
 - 3.1 The employer approved safe method statement is used to erect the scaffold
 - 3.2 Work activities are conducted and checked to ensure that:
 - 3.2.1 ladder access to the scaffold will meet AS6001 99 or equivalent
 - 3.2.2 edge protection will conform with AS6001 99 or equivalent
 - 3.2.3 scaffold components are placed appropriately to allow access to work area or load materials
 - 3.2.4 scaffold location is appropriate for the work and protected from damage by passing traffic
 - 3.2.5 personal protection equipment including fall arrest equipment is used during erection and dismantling activities when required as identified in employers work risk assessment
 - 3.2.6 work activities are restricted to a forearm's length beyond the safety rail
 - 3.3 Work area is secured during activities ensuring:
 - 3.3.1 access to scaffold area is prevented during work by erecting appropriate barriers
 - 3.3.2 storage area for components is established before work commences
 - 3.3.3 appropriate signage is used
 - 3.4 Dismantling of scaffold is planned and conducted ensuring that:
 - 3.4.1 personnel, tools and equipment, materials or waste are removed from the structure before work begins
 - 3.4.2 components of the scaffold are secured from falling
 - 3.4.3 work location is clear of obstructions
 - 3.4.4 sufficient space exists to manoeuvre the scaffold components
 - 3.5 Required documentation is completed including checklists and records

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required knowledge and skills may include:

- identifying by name and function equipment, components and materials
- identifying and reading scaffold manufactures assembly procedures
- identifying potential for health and safety risks in relation to working on scaffold
- identifying and applying appropriate safety precautions to safely access and use equipment, shift and handle products and materials to and from the scaffold
- identifying faults in operation of equipment or materials quality
- identifying the purpose of tags and logs of use for equipment
- planning an appropriate sequence for assembly of the scaffold
- application of product and process knowledge to predict consequences and identify improvements

Language and literacy requirements

Reading (NRS 2.9)

- Interpret safety information on labels and tags
- Interpret manufacturers instructions in diagrams, photographs and written form for equipment and installation of plasterboard
- Use a street directory, handrawn maps and road maps
- Extract required information:
- Numbers from phone books
- Quantity and delivery locations from manifests
- Compare prices in catalogues

Writing (NRS 3.4)

- Complete forms that require factual data and individualised responses
- Take personal notes at technical sessions or meetings

Numeracy (NRS 2)

- Use calculator to add a number of items and check against estimated approximate sum
- Calculate time required to complete set task(s)

Oral Communication (NRS 3.2)

- Uses simple grammatical forms and vocabulary to give instructions appropriate for the listeners, give explanations, ask questions, express viewpoints

Resource implications:

Worksite, portable scaffold components, tools and equipment

Method of assessment:

- Assessment should be by direct observation of tasks and questioning on underpinning knowledge
- Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency
- Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts

Context for assessment:

Assessment may occur on the job or in a workplace simulated facility with relevant equipment, materials, work instructions and deadlines

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	2
Planning and organising activities	2
Working with others and in teams	2
Using mathematical ideas and techniques	2
Solving problems	2
Using technology	2

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the Performance Criteria, is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts.

Workplace context:

- This unit must be assessed with the relevant Australian Standard AS6001 1999 for domestic application
- Where the scaffolding set up is adjacent to the edge of a concrete slab or similar and the fall height exceeds 4 metres a certification of competency from a relevant OH&S authority may be required to erect, alter or dismantle the scaffold in some jurisdictions. Competency to achieve certification will include knowledge and compliance with the relevant code of practice AS/NZS 4576 Guidelines for Scaffolding.
- Work follows established procedures
- Plaster installation work is undertaken on domestic work sites within new construction, renovation/refurbishment and maintenance
- Information about installation processes, product requirements, customer requirements is used to inform planning of own work.
- Work generally performed under some supervision, within a team / group environment
- Environment includes movement of equipment, goods, materials and vehicular traffic
- Hazards may include:
 - construction activity involving other workers and contractors that may constitute personal risk
 - work at heights, manual handling and hazardous materials
 - dust / vapours, noise, light, energy sources, air temperature, moisture
 - electrical equipment, stationary and moving plant, equipment and materials

Plastering Trade Activity Requirements:

This unit covers work involving the installation of plaster products, maintaining personal safety and the safety of others within the context of required work deadlines and quality standards

- Work is governed by authorised site work procedures
- Consultative processes may involve:
 - other employees and supervisors
 - employer
 - employee OH&S representatives
 - principal contractor
 - industrial relations, Occupational Health and Safety specialists
 - other professional or technical staff
- Work activities require the application of relevant procedures including:
 - hazard policies and procedures
 - issue resolution procedures
 - job procedures and work instructions
 - guidelines relating to the safe use of machinery and equipment
 - quality assurance procedures (where existing)
 - sexual harassment and equal opportunity policies
 - security procedures
 - housekeeping processes
 - waste, pollution and recycling management processes
 - emergency procedures
 - reporting of accidents and incidents within regulatory requirements and following workplace procedures
 - relevant agreements, codes of practice and other legislative requirements
 - appropriate workplace language and communication technologies
 - identification of products, materials and work processes appropriate for the work
 - interpretation of relevant safety information within requirements of duty of care

Sources of information / documents may include:

- Job specifications and procedures
- Notes from previous work
- Equipment operating instructions
- Information on characteristics of materials
- Manufacturer's instructions and specifications for products, plant and equipment
- Workplace operating procedures and policies
- Employer, supplier and/or client instructions,
- Materials Safety Data Sheets, labels and other product safety information
- Building Code of Australia and relevant Australian Standards
- Communications technology equipment, oral, aural or signed communications
- Personal and work site work procedures and practices
- Conditions of service, legislation and employment agreement
- Applicable State, Territory, Commonwealth legislation and regulations which relate to:
 - Workplace Relations
 - Workers Compensation
 - License, Patent or copyright arrangements
 - Hazardous Substances and Dangerous Goods
 - Environment Protection
 - Equal Opportunity, Equal Employment Opportunity
 - Standards and certification requirements
 - Quality assurance procedures
 - Emergency procedures

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for the Training Package.

Critical aspects of evidence to be considered:

Assessment must confirm knowledge and skills to:

- select and use appropriate scaffold materials and work methods
- plan and execute work following supplier instructions for the scaffold within agreed timeframe
- explain approved methods to access scaffolds and shift materials and tools on to and from the scaffold
- apply a broad knowledge of industry products to identify:
 - matching Manufacturers' component for scaffold systems
 - inspection requirements for scaffold
- identify problems in relation to scaffold use and suggest appropriate alternative rectifications
- interpret work order and locate and apply relevant information from building plans and delivery documents
- follow work instructions, operating procedures and inspection practices to:
 - prevent damage to goods, equipment or products
 - select and use appropriate personal protection equipment
 - minimise the risk of injury to self or others
- work effectively with other workers on and off site
- modify work activities to cater for variations in worksite procedures, personnel, contexts and environment
- maintain workplace records in relation to materials, plant and equipment use
- follow safe handling requirements of equipment, products and materials

Interdependent assessment of units:

This unit of competency may be assessed in conjunction with other units that form part of a job role. BCGCM1006A Work safely at heights is a co-requisite for this unit.

BCGPB3016A**Unit Descriptor****Install and finish columns**

This unit applies to the installation of columns to comply with customer order, manufacturers instructions/contract/specifications and Australian Standards

Unit Sector

Plasterboard

ELEMENT**PERFORMANCE CRITERIA**

1. Identify work requirements	1.1 Contract/job specifications/work sheets are consulted to identify customer requirements for columns 1.2 Work site is inspected to confirm suitability for the installation of columns 1.3 Manual handling risks associated with the shifting and lifting of columns are identified and appropriate employer approved methods and equipment are identified 1.4 Manufacturers installation advice is used to identify required: 1.4.1 materials 1.4.2 processes for installing columns 1.4.3 work sequence 1.4.4 quality checks for columns 1.5 The relationship of Manufacturers Specifications and Australian Standards are identified
2. Select materials, processes and equipment	2.1 Specifications and work requirements are compared and any variations reported to supervisor 2.2 Equipment and processes are selected to match tasks including manual handling of columns and finishing activities 2.3 Fasteners, and compounds compatible with the column materials are selected from manufactures specifications
3. Fit column and collars	3.1 Work sequence is planned to: 3.1.1 implement manufacturers' requirements for column installation and employer approved manual handling techniques 3.1.2 facilitate finishing techniques appropriate to columns 3.1.3 minimise finishing problems 3.2 Columns are installed following the plan 3.3 Collars and finials are fitted appropriate to customer requirements
4. Stop and finish joins and edges	4.1 Stopping material to match the columns is used 4.2 Ends of columns and collars are finished using appropriate materials.

- 5. Check work and clean up work area
 - 5.1 Completed work is checked to confirm work will meet manufacturers specifications and Australian Standards
 - 5.2 Site area is cleaned up with:
 - 5.2.1 waste adhesives, sealer and fasteners disposed of in approved bins and
 - 5.2.2 reusable materials collected and stored for next job

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required knowledge and skills may include:

- names and architectural styles for different types of columns
- identifying by name and function equipment, components and materials appropriate for internal and external fixing and finishing of columns
- identifying and interpreting manufactures product installation procedures and nominated specifications for the work process
- identifying materials' type and purpose and potential for health and safety risks from workplace information and labels
- identifying and applying appropriate safety precautions to safely use equipment, shift and handle products and materials
- identifying faults in materials or structures where the column is to be fitted
- adjusting work activity to maintain quality standards
- requirements to plan own work
- application of product and process knowledge to predict consequences and identify improvements

Language and literacy requirements

Reading (NRS 2.9)

- Interpret safety information on labels and tags
- Interpret manufacturers instructions in diagrams, photographs and written form for equipment and installation of plasterboard
- Use a street directory, hand drawn maps and road maps
- Extract required information:
- Numbers from phone books
- Quantity and delivery locations from manifests
- Compare prices in catalogues

Writing (NRS 3.4)

- Complete forms that require factual data and individualised responses
- Take personal notes at technical sessions or meetings

Numeracy (NRS 2)

- Use calculator to add a number of items and check against estimated approximate sum
- Calculate time required to complete set task(s)

Oral Communication (NRS 3.2)

Uses simple grammatical forms and vocabulary to give instructions appropriate for the listeners, give explanations, ask questions, and express viewpoints

Resource implications:

Building framework, plaster sheet, tools and equipment

Method of assessment:

- Assessment should be by direct observation of tasks and questioning on underpinning knowledge
- Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency

- Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts

Context for assessment:

Assessment may occur on the job or in a workplace simulated facility with relevant equipment, materials, work instructions and deadlines

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	2
Planning and organising activities	2
Working with others and in teams	2
Using mathematical ideas and techniques	2
Solving problems	2
Using technology	2

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the Performance Criteria, is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs if the candidate, accessibility of the item, and local industry and regional contexts.

Workplace context:

- Work involves the installation of columns and collars
- Work follows established procedures
- Plaster installation work is undertaken on domestic work sites within new construction, renovation/refurbishment and maintenance
- Information about installation processes, product requirements, customer requirements is used to inform planning of own work.
- Work generally performed under some supervision, within a team / group environment
- Environment includes movement of equipment, goods, materials and vehicular traffic
- Hazards may include:
 - construction activity involving other workers and contractors that may constitute personal risk
 - work at heights, manual handling and hazardous materials
 - dust / vapours, noise, light, energy sources, air temperature, moisture
 - electrical equipment, stationary and moving plant, equipment and materials

Plastering Trade Activity Requirements:

This unit covers work involving the installation of plaster products, maintaining personal safety and the safety of others within the context of required work deadlines and quality standards

- Work is governed by authorised site work procedures
- Consultative processes may involve:
 - other employees and supervisors
 - employer
 - employee OH&S representatives
 - principal contractor
 - industrial relations, Occupational Health and Safety specialists
 - other professional or technical staff
- Work activities require the application of relevant procedures including:
 - hazard policies and procedures
 - issue resolution procedures
 - job procedures and work instructions guidelines relating to the safe use of machinery and equipment
 - quality assurance procedures (where existing)
 - sexual harassment and equal opportunity policies
 - security procedures
 - housekeeping processes
 - waste, pollution and recycling management processes
 - emergency procedures
 - reporting of accidents and incidents within regulatory requirements and following workplace procedures
 - relevant agreements, codes of practice and other legislative requirements
 - appropriate workplace language and communication technologies
 - identification of products, materials and work processes appropriate for the work
 - interpretation of relevant safety information within requirements of duty of care

Sources of information / documents may include:

- Job specifications and procedures
- Notes from previous work
- Equipment operating instructions
- Information on characteristics of materials
- Manufacturer's instructions and specifications for products, plant and equipment
- Workplace operating procedures and policies
- Employer, supplier and/or client instructions,
- Materials Safety Data Sheets, labels and other product safety information
- Building Code of Australia and relevant Australian Standards
- Communications technology equipment, oral, aural or signed communications
- Personal and work site work procedures and practices
- Conditions of service, legislation and employment agreement
- Applicable State, Territory, Commonwealth legislation and regulations which relate to:
 - Occupational Health and Safety legislation, Codes of Practice and Regulations
 - Workplace Relations
 - Workers Compensation
 - License, Patent or copyright arrangements
 - Hazardous Substances and Dangerous Goods
 - Environment Protection
 - Equal Opportunity, Equal Employment Opportunity
 - Standards and certification requirements
 - Quality assurance procedures
 - Emergency procedures

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for the Training Package.

Critical aspects of evidence to be considered:

Assessment must confirm knowledge and skills to:

- select and use appropriate materials and work methods to ensure safe shifting and fixing of the column(s)
- identify application of plaster and fibre cement columns in building applications
- plan and execute work within agreed timeframe and to a high standard under general supervision apply a broad knowledge of industry products to identify:
 - matching Manufacturers' components/materials for the system to be installed and the location of the column
 - warranty compliance issues
 - suitable materials for a wide range of applications
- identify problems to supervisor and suggest appropriate alternative rectifications
- interpret work order and locate and apply relevant information from building plans and delivery documents
- follow work instructions, operating procedures and inspection practices to:
 - prevent damage to goods, equipment or products
 - select and use appropriate personal protection equipment
 - minimise the risk of injury to self or others
- work effectively with other workers on and off site
- modify work activities to cater for variations in worksite procedures, personnel, contexts and environment
- maintain workplace records in relation to materials, plant and equipment use
- follow safe handling requirements of equipment, products and materials

Interdependent assessment of units:

This unit of competency may be assessed in conjunction with other units that form part of a job role. BCGCM1006A Work safely at heights is a co-requisite for this unit.

BCGPB3017A**Unit Descriptor****Unit Sector****Rectify faults in plaster applications**

This unit applies to the identification of faults, causes of faults and rectification of faults in plasterboard applications

Plasterboard

ELEMENT**PERFORMANCE CRITERIA**

1. Identify faults	1.1 Perceived faults in plaster work are identified from observation, customer or supervisor comments and photographs 1.2 Faults are described in terms found in the glossary of terminology 1.3 (any) appropriate measurements are taken to confirm observed faults
2. Determine causes of faults and recommend rectification	2.1 Investigation is conducted to establish causes of faults, including accessing substrate if necessary 2.2 Faults in structure or substrate are communicated to appropriate personnel 2.3 Plaster rectification is planned to achieve the desired level of finish and rectification of faults observed 2.4 Permission to proceed with planned rectification is sought and obtained
3. Rectify faults	3.1 Planned rectification process is followed to rectify faults 3.2 Completed rectifications are inspected to confirm perceived faults have been rectified 3.3 Sign off on completed rectification work is sought and obtained from appropriate personnel

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required knowledge and skills may include:

- customer liaison skills
- identifying fault types, causes and rectification methods
- identifying and reading manufactures product installation procedures and nominated specifications
- identifying and applying appropriate safety precautions to safely use equipment, shift and handle products and materials
- identifying faults in materials quality and installation/finishing work
- identifying the implications of contract requirements
- requirements for a systematic approach to planning own work
- application of product and process knowledge to predict consequences and identify improvements

Language and literacy requirements

Reading (NRS 2.9)

- Interpret safety information on labels and tags
- Interpret manufacturers instructions in diagrams, photographs and written form for equipment and installation and finishing of plasterboard
- Use a street directory, hand drawn maps and road maps
- Extract required information:
- Numbers from phone books
- Quantity and delivery locations from manifests
- Compare prices in catalogues

Writing (NRS 3.4)

- Complete forms that require factual data and individualised responses
- Take personal notes at technical sessions or meetings

Numeracy (NRS 2)

- Use calculator to add a number of items and check against estimated approximate sum
- Calculate time required to complete set task(s)

Oral Communication (NRS 3.2)

Uses simple grammatical forms and vocabulary to give instructions appropriate for the listeners, give explanations, ask questions, and express viewpoints

Resource implications:

Completed plasterwork with faults, materials, tools and equipment

Method of assessment:

- Assessment should be by direct observation of tasks and questioning on underpinning knowledge
- Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency
- Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts

Context for assessment:

Assessment may occur on the job or in a workplace simulated facility with relevant equipment, materials, work instructions and deadlines

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	2
Planning and organising activities	2
Working with others and in teams	2
Using mathematical ideas and techniques	2
Solving problems	2
Using technology	2

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the Performance Criteria, is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts.

Workplace context:

- Work involves the rectification of faults in plasterwork due to:
 - Poor workmanship
 - Materials or material selection faults
 - Inappropriate selection of work methods or level of finish
 - External causes
- Work follows established procedures
- Plaster installation work is undertaken on work sites within new construction, renovation/refurbishment and maintenance
- Information about installation processes, product requirements, customer requirements is used to inform planning of own work.
- Work generally performed under some supervision, within a team / group environment
- Environment includes movement of equipment, goods, materials and vehicular traffic
- Hazards may include:
 - construction activity involving other workers and contractors that may constitute personal risk
 - work at heights, manual handling and hazardous materials
 - dust / vapours, noise, light, energy sources, air temperature, moisture
 - electrical equipment, stationary and moving plant, equipment and materials
- Faults may include:
 - Bullnose
 - chisel edge end peel
 - hinge plasterboard
 - parrot beak
 - shoulders
 - wavy plasterboard
 - scuffing
 - joint tape bubbles
 - pinholes
 - board fracture
 - hollow joints
 - ink bleed through
 - damaged edges

Plastering Trade Activity Requirements:

This unit covers work involving the installation of plaster products, maintaining personal safety and the safety of others within the context of required work deadlines and quality standards

- Work is governed by authorised site work procedures
- Consultative processes may involve:
 - other employees and supervisors
 - employer
 - employee OH&S representatives
 - principal contractor
 - industrial relations, Occupational Health and Safety specialists
 - other professional or technical staff
- Work activities require the application of relevant procedures including:
 - hazard policies and procedures
 - issue resolution procedures
 - job procedures and work instructions
 - guidelines relating to the safe use of machinery and equipment
 - quality assurance procedures (where existing)
 - sexual harassment and equal opportunity policies
 - security procedures
 - housekeeping processes
 - waste, pollution and recycling management processes
 - emergency procedures
 - reporting of accidents and incidents within regulatory requirements and following workplace procedures
 - relevant agreements, codes of practice and other legislative requirements
 - appropriate workplace language and communication technologies
 - identification of products, materials and work processes appropriate for the work
 - interpretation of relevant safety information within requirements of duty of care

Sources of information / documents may include:

- Job specifications and procedures
- Notes from previous work
- Equipment operating instructions
- Information on characteristics of materials
- Manufacturer's instructions and specifications for products, plant and equipment
- Workplace operating procedures and policies
- Employer, supplier and/or client instructions,
- Materials Safety Data Sheets, labels and other product safety information
- Building Code of Australia and relevant Australian Standards
- Communications technology equipment, oral, aural or signed communications
- Personal and work site work procedures and practices
- Conditions of service, legislation and employment agreement
- Applicable State, Territory, Commonwealth legislation and regulations which relate to:
 - Occupational Health & Safety legislation, Codes of Practice and Regulations
 - Workplace Relations
 - Workers Compensation
 - License, Patent or copyright arrangements
 - Hazardous Substances and Dangerous Goods
 - Environment Protection
 - Equal Opportunity, Equal Employment Opportunity
 - Standards and certification requirements
 - Quality assurance procedures
 - Emergency procedures

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for the Training Package.

Critical aspects of evidence to be considered:

Assessment must confirm knowledge and skills to:

- interpret faults in plaster work from descriptions and observation
- apply a broad knowledge of industry products to identify:
 - matching Manufacturers' components/materials for finishing plaster products and completion of decorated surfaces to minimise effects of glancing light
 - contract/warranty compliance implications of faults
- suggest appropriate alternative rectification for identified problems
- follow work instructions, operating procedures and inspection practices to:
 - prevent damage to goods, equipment or products
 - meet required work output and product quality
 - select and use appropriate personal protection equipment
 - minimise the risk of injury to self or others
- work effectively with other workers on and off site
- modify work activities to cater for variations in worksite procedures, personnel, contexts and environment
- maintain workplace records in relation to contract with customers and other trades for disputed finishes
- follow safe handling requirements of equipment, products and materials

Interdependent assessment of units:

This unit of competency may be assessed in conjunction with other units that form part of a job role. BCGCM1006A Work safely at heights is a co-requisite for this unit.

BCGPB3018A**Use vacuum/electric sanding equipment to finish plaster work****Unit Descriptor**

This unit applies to employees machine sanding plaster joins in walls and ceilings

Unit Sector

Plasterboard

ELEMENT**PERFORMANCE CRITERIA**

1. Determine work requirements	1.1 Work area is inspected to determine: 1.1.1 joins to be hand sanded 1.1.2 grade of paper to be used 1.1.3 readiness of topcoat for sanding 1.1.4 method of accessing work site 1.1.5 power supply availability on the same level as the work 1.2 Level of finish as specified in the contract/job order is noted and any mismatches between quality of fixing and finishing recorded and reported to supervisor (or rectified as appropriate for contract)
2. Mechanically sand joins	1.3 Personal protection equipment suitable for the task is selected based on manufacturers recommended and employer approved specification
3. Inspect work and clean up work area	2.1 Worksite access is gained using approved workplace methods based on the risk assessment for the task/site/circumstance
	2.2 Sanding equipment, leads and any required dust protection or warning signs are set up for use
	2.3 An appropriate stance and posture is used to hold and manipulate the sanding equipment to minimise manual handling risks
	2.4 Sanding is completed to the required standard of finish
	3.1 Completed sanding work is inspected for compliance with workplace and customer requirements included contracted level of finish
	3.2 (any) sand-through areas are reported to appropriate personnel
	3.3 Sanded area is brushed down
	3.4 Equipment is cleaned after use using appropriate personal protective equipment
	3.5 Sanding dust is collected and contained for disposal in accordance with approved workplace procedures

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required knowledge and skills may include:

- the implications on work quality for instruction to be followed
- manufacturers product mixing and/or application procedures and nominated specifications for the work process
- manufacturers/suppliers instructions for plant and equipment
- identifying materials' type and purpose and potential for health and safety risks from workplace information and labels
- safely use equipment, shift and handle products and materials
- requirements to plan own work
- application of product and process knowledge to identify problems and predict consequences
- factors that influence level of finish
- the effects of glancing light on plasterboard joins when paint is applied

Language and literacy requirements

Reading (NRS 1.2):

- Recognises and interprets work related signs including road signs, safety logos, and warnings.
- Recognises and follows instructions on a safety signs, labels or tags
- Locates and matches pieces of information, dates and times, information on pay slips, invoices and work order

Writing (NRS 1.4)

- Write key words/phrases used everyday
- Copy names, addresses and details from job/work orders
- Write own personal details
- Write times, dates, quantities and locations
- Copy details of product names and prices on orders or notes

Numeracy (NRS 2)

- Identify digital and analogue time
- Identifies value of Australian notes and coins
- Uses simple fractions, proportions
- Read simple diagrams, measurements and weights
- Check length of product against known measurement
- Count and record quantities
- Compare counted quantities with delivery notes and orders

Oral Communication (NRS2.5)

- Asks questions to clarify instructions and work requirements
- Reports problems and work progress to supervisors

Resource implications:

Stopped plasterboard walls and ceilings, sanding materials and access methods

Method of assessment:

Assessment should be by direct observation of tasks and questioning on underpinning knowledge

Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts

Context for assessment

Assessment may occur on the job or in a workplace simulated facility with relevant equipment, materials, work instructions and deadlines

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	2
Planning and organising activities	2
Working with others and in teams	2
Using mathematical ideas and techniques	2
Solving problems	2
Using technology	-

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the Performance Criteria, is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs if the candidate, accessibility of the item, and local industry and regional contexts.

Workplace context:

- Work involves the sanding of stopped plaster joins and fixings using powered sanding machines
- Work follows established procedures
- Plaster work is undertaken on work sites within new construction, renovation/refurbishment and maintenance
- Information about installation processes, product requirements, customer requirements is used to inform planning of own work.
- Work generally performed under supervision, within a team / group environment
- Environment includes movement of equipment, goods, materials and vehicular traffic
- Hazards may include:
 - construction activity involving other workers and contractors
 - work at heights, manual handling, hazardous materials
 - dust / vapours, noise, light, energy sources, air temperature, moisture
 - electrical equipment, stationary and moving plant, equipment and materials

Plastering Trade Activity Requirements:

This unit covers work involving the installation of plaster products, maintaining personal safety and the safety of others within the context of required work deadlines and quality standards

- Work is governed by authorised site work procedures
- Consultative processes may involve:
 - other employees and supervisors
 - employer
 - employee OH&S representatives
 - principal contractor
 - industrial relations, Occupational Health and Safety specialists
 - other professional or technical staff
- Work activities require the application of relevant procedures including:
 - hazard policies and procedures
 - issue resolution procedures
 - job procedures and work instructions
 - guidelines relating to the safe use of machinery and equipment
 - quality assurance procedures (where existing)
 - sexual harassment and equal opportunity policies
 - housekeeping processes and security procedures
 - waste, pollution and recycling management processes
 - emergency procedures
 - reporting of accidents and incidents within regulatory requirements and following workplace procedures
 - relevant agreements, codes of practice and other legislative requirements
 - appropriate workplace language and communication technologies
 - identification of products, materials and work processes appropriate for the work
 - interpretation of relevant safety information within requirements of duty of care

Sources of information / documents may include:

- Job specifications and procedures
- Equipment operating instructions and notes from previous work
- Information on characteristics of materials
- Manufacturer's instructions and specifications for products, plant and equipment
- Workplace operating procedures and policies
- Employer, supplier and/or client instructions
- Materials Safety Data Sheets, labels and other product safety information
- Building Code of Australia and relevant Australian Standards
- Communications technology equipment, oral, aural or signed communications
- Personal and work site work procedures and practices
- Conditions of service, legislation and employment contract
- Occupational Health & Safety legislation, Codes of Practice and Regulations
- Applicable State, Territory, Commonwealth legislation and regulations which relate to:
 - Workplace Relations
 - Workers Compensation
 - License, Patent or copyright arrangements
 - Hazardous Substances and Dangerous Goods
 - Environment Protection
 - Equal Opportunity, Equal Employment Opportunity
 - Standards and certification requirements
 - Quality assurance procedures
 - Emergency procedures

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for the Training Package.

Critical aspects of evidence to be considered:

Assessment must confirm appropriate knowledge and skills to:

- select and use appropriate sanding materials and work methods
- ensure that electrical equipment is inspected prior to use and includes (any) required tags, logs, maintenance records prescribed by regulation
- operate from basic instruction without constant supervision
- identify requirements to achieve the specified level of finish
- identify faults in plasterboard fixing, joining and finishing
- execute work within agreed timeframes and standards
- interpret delivery documentation, work orders and locate relevant materials
- explain warranty/guarantee/liability requirements for plastering work
- apply knowledge of industry requirements to identify:
 - the condition and color of the top coat when set
 - matching Manufacturers' components/materials
 - contract compliance requirements
 - reasons for use of P1 or P2 mask and protective clothing when emptying and cleaning the equipment and disposing of dust
 - faults and report problems in materials and work
- follow work instructions, operating procedures and inspection practices to:
 - prevent damage to goods, equipment or products
 - maintain the equipment in good working condition and identify faults requiring repair by electrician
 - work effectively with, and minimise the risk of injury to, self and other workers
 - modify work activities to cater for variations in worksite procedures, contexts and environment
 - identify and use appropriate behaviour for interactions with other workers, supervisors, clients and members of the public

Interdependent assessment of units

This unit of competency may be assessed in conjunction with other units that form part of a job role. BCGCM1006A Work safely at heights is a co-requisite for this unit.

BCGPB3019A**Unit Descriptor****Install PartiWall plaster products**

This unit applies to the installation of Partiwall systems to comply with manufacturers instructions, job specifications and Australian Standards

Unit Sector

Plasterboard

ELEMENT**PERFORMANCE CRITERIA**

1. Identify work requirements	1.1 Job specifications/work sheets are consulted to identify customer requirements for Partiwall installation 1.2 Work site is inspected to confirm suitability of substrate for Partiwall 1.3 Manufacturers installation advice is used to identify required: 1.3.1 Partiwall materials 1.3.2 Processes for installing partiwall 1.3.3 Work sequence 1.3.4 Quality checks for partiwall installation 1.4 Relationship between Manufacturers Specifications and Australian Standards are identified
2. Select materials, processes and equipment	2.1 Specifications and work requirements are compared and any variations reported to supervisor 2.2 Equipment and processes are selected to match tasks 2.3 Metal framing and fasteners compatible with the system performance are selected from manufactures specifications
3. Set out and install metal components	3.1 Metal components are set out to match frame configuration and to meet manufacturers requirements 3.2 Components are installed using fasteners that meet manufacturers specifications
4. Fix Partiwall system panels	4.1 Work sequences and fixing requirements are planned to: 4.1.1 Implement manufacturers' requirements for partiwall 4.1.2 Cut sheets to minimise waste, maximise board use and minimise joints 4.2 Sheets are fixed following: 4.2.1 Manufacturers recommended methods and fasteners 4.2.2 Employer approved manual handling techniques 4.2.3 Board size appropriate to the work area dimensions
5. Check work and clean up work area	5.1 Completed work is checked to work will meet manufacturers specifications and Australian Standards 5.2 Site area is cleaned up with: 5.2.1 waste board collected for recycling, 5.2.2 waste metal and fasteners are disposed of in approved bins and 5.2.3 reusable materials collected and stored for next job

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required knowledge and skills may include:

- identifying by name and function equipment, components and materials
- identifying and reading manufactures product installation procedures and nominated specifications for the work process
- interpreting manufacturers/suppliers instructions for plant and equipment
- identifying materials' type and purpose and potential for health and safety risks from workplace information and labels
- identifying and applying appropriate safety precautions to safely use equipment, shift and handle products and materials
- identifying faults in operation of equipment or materials quality
- adjusting work activity to maintain quality standards
- identifying the purpose of tags and logs of use for equipment
- requirements for a systematic approach to planning own work
- application of product and process knowledge to predict consequences and identify improvements

Language and literacy requirements

Reading (NRS 2.9)

- Interpret safety information on labels and tags
- Interpret manufacturers instructions in diagrams, photographs and written form for equipment and installation of plasterboard
- Use a street directory, hand drawn maps and road maps
- Extract required information:
- Numbers from phone books
- Quantity and delivery locations from manifests
- Compare prices in catalogues

Writing (NRS 3.4)

- Complete forms that require factual data and individualised responses
- Take personal notes at technical sessions or meetings

Numeracy (NRS 2)

- Use calculator to add a number of items and check against estimated approximate sum
- Calculate time required to complete set task(s)
- Oral Communication (NRS 3.2)
- Uses simple grammatical forms and vocabulary to give instructions appropriate for the listeners, give explanations, ask questions, express viewpoints

Resource implications:

Access to building framework, Partiwall materials

Method of assessment:

- Assessment should be by direct observation of tasks and questioning on underpinning knowledge
- Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency
- Assessment methods must confirm consistency of performance over time and in a range

of workplace relevant contexts

Context for assessment:

Assessment may occur on the job or in a workplace simulated facility with relevant equipment, materials, work instructions and deadlines

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	2
Planning and organising activities	2
Working with others and in teams	2
Using mathematical ideas and techniques	2
Solving problems	2
Using technology	2

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the Performance Criteria, is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs if the candidate, accessibility of the item, and local industry and regional contexts.

Workplace context:

- This unit must be assessed with the relevant Australian Standard 4055 & 1530 part 4
- Work involves the installation of Partiwall plaster system
- Work follows established procedures
- Plaster installation work is undertaken on work sites within new construction, renovation/refurbishment and maintenance
- Information about installation processes, product requirements, customer requirements is used to inform planning of own work.
- Work generally performed under some supervision, within a team / group environment
- Environment includes movement of equipment, goods, materials and vehicular traffic
- Hazards may include:
 - construction activity involving other workers and contractors that may constitute personal risk
 - work at heights, manual handling and hazardous materials
 - dust / vapours, noise, light, energy sources, air temperature, moisture
 - electrical equipment, stationary and moving plant, equipment and materials

Plastering Trade Activity Requirements:

This unit covers work involving the installation of plaster products, maintaining personal safety and the safety of others within the context of required work deadlines and quality standards

- Work is governed by authorised site work procedures
- Consultative processes may involve:
 - other employees and supervisors
 - employer
 - employee OH&S representatives
 - principal contractor
 - industrial relations, Occupational Health and Safety specialists
 - other professional or technical staff
- Work activities require the application of relevant procedures including:
 - hazard policies and procedures
 - issue resolution procedures
 - job procedures and work instructions
 - guidelines relating to the safe use of machinery and equipment quality assurance procedures (where existing)
 - sexual harassment and equal opportunity policies
 - security procedures
 - housekeeping processes
 - waste, pollution and recycling management processes
 - emergency procedures
 - reporting of accidents and incidents within regulatory requirements and following workplace procedures
 - relevant agreements, codes of practice and other legislative requirements
 - appropriate workplace language and communication technologies
 - identification of products, materials and work processes appropriate for the work
 - interpretation of relevant safety information within requirements of duty of care

Sources of information / documents may include:

- Job specifications and procedures
- Notes from previous work
- Equipment operating instructions
- Information on characteristics of materials
- Manufacturer's instructions and specifications for products, plant and equipment
- Workplace operating procedures and policies
- Employer, supplier and/or client instructions,
- Materials Safety Data Sheets, labels and other product safety information
- Building Code of Australia and relevant Australian Standards
- Communications technology equipment, oral, aural or signed communications
- Personal and work site work procedures and practices
- Conditions of service, legislation and industrial agreements including:
 - certified agreements and awards
 - industry agreements
 - Occupational Health & Safety legislation, Codes of Practice and Regulations
- Applicable State, Territory, Commonwealth legislation and regulations which relate to:
 - Workplace Relations
 - Workers Compensation
 - License, Patent or copyright arrangements
 - Hazardous Substances and Dangerous Goods
 - Environment Protection
 - Equal Opportunity, Equal Employment Opportunity
 - Standards and certification requirements
 - Quality assurance procedures
 - Emergency procedures

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for the Training Package.

Critical aspects of evidence to be considered:

Assessment must confirm knowledge and skills to:

- select and use appropriate Partiwall materials and work methods
- plan and execute work within agreed timeframe and to a high standard under general supervision
- explain the fire rating classification of Partiwall systems
- explain the features of Partiwall that allow the system to achieve fire ratings
- apply a broad knowledge of industry products to identify:
 - matching Manufacturers' components/materials
 - warranty compliance issues
 - suitable materials for a wide range of applications
- identify problems to supervisor and suggest appropriate alternative rectifications
- interpret work order and locate and apply relevant information from building plans and delivery documents
- follow work instructions, operating procedures and inspection practices to:
 - prevent damage to goods, equipment or products
 - meet required work output and product quality
 - select and use appropriate personal protection equipment
 - minimise the risk of injury to self or others
- work effectively with other workers on and off site
- modify work activities to cater for variations in worksite procedures, personnel, contexts and environment
- maintain workplace records in relation to materials, plant and equipment use
- follow safe handling requirements of equipment, products and materials

Interdependent assessment of units:

This unit of competency may be assessed in conjunction with other units that form part of a job role. BCGCM1006A Work safely at heights is a co-requisite for this unit.

BCGPB3020A**Match, mitre and install cast ornamental cornice****Unit Descriptor**

This unit applies to employees required to measure, match, cut and fix cast ornamental cornice

Corequisite Unit(s)

BCGPB3012A Cut and fix paper faced cornice
 BCGPB3002A Fix standard plasterboard ceiling sheets
 BCGPB3001A Fix standard plasterboard wall sheets
 BCGCM1006A Work safely at heights

Unit Sector

Plasterboard

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and measure for cornice work	1.1 Work area is inspected to determine work requirements 1.2 Style and type of cornice to be fitted is determined from work instructions or supervisor 1.3 Cornice length for each work area are determined and noted 1.4 Cornice is handled following employer approved manual handling procedures 1.5 Requirements for safe work at heights are identified and planned for use
2. Cut cornice lengths	2.1 Matching points for ornamental cornice are determined and marked 2.2 Cornice is cut using workplace approved guides and cutting methods, minimising bending and kneeling with use of personal protective equipment where advised by manufacturer or required by employer 2.3 Pattern match is checked
3. Prepare cornice adhesive	3.1 Manufacturers instructions are consulted and applied to the preparation of the adhesive 3.2 Preparation is carried out using: 3.2.1 clean container 3.2.2 clean water 3.2.3 approved personal protective equipment 3.3 Adhesive powder is added to water until powder can absorb no more water 3.4 Consistency of mix is adjusted to suit hand or mechanical application of adhesive
4. Fix cornice	4.1 Means for safe access for work at heights is used where required 4.2 Methods of holding cornice temporarily in place are planned and used following workplace approved procedures 4.3 Appropriate amount of adhesive is applied to cornice 4.4 Cornice is fitted following workplace approved practices for access to work at heights and manual handling

- 5. Finish work
 - 5.1 Excess cornice adhesive is removed
 - 5.2 Joins, pattern matches and junctions are filled and smoothed
 - 5.3 (any) temporary fixings and supports are removed and holes filled
 - 5.4 Work area is cleaned and tidied, tools and equipment are cleaned
 - 5.5 Materials appropriate for re-use are set aside, waste is classified and disposed of following workplace approved worksite procedure

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required knowledge and skills may include:

- identifying materials used for hand and machine made cornice by name and general application
- identifying and reading manufactures product installation procedures and nominated specifications for mixing adhesives, fixing and cutting cornice
- identifying materials' type and purpose and potential for health and safety risks from workplace information and labels for cornice and adhesives
- identifying and applying appropriate safety precautions to safely use equipment, shift and handle products and materials
- identifying faults in materials and construction which may influence the match mitre process
- adjusting work activity to maintain quality standards
- requirements to safe lifting and temporary fixing of cornice and safe work at heights
- application of product and process knowledge to predict consequences and identify improvements

Language and literacy requirements

Reading (NRS 2.9)

- Interpret safety information on labels and tags
- Interpret manufacturers instructions in diagrams, photographs and written form for equipment and installation of plasterboard
- Use a street directory, hand drawn maps and road maps
- Extract required information:
- Numbers from phone books
- Quantity and delivery locations from manifests
- Compare prices in catalogues

Writing (NRS 3.4)

- Complete forms that require factual data and individualised responses
- Take personal notes at technical sessions or meetings

Numeracy (NRS 2)

- Use calculator to add a number of items and check against estimated approximate sum
- Calculate time required to complete set task(s)

Oral Communication (NRS 3.2)

Uses simple grammatical forms and vocabulary to give instructions appropriate for the listeners, give explanations, ask questions, and express viewpoints

Resource implications:

Building framework with plasterboard clad walls, cast cornice, materials, tools and equipment

Method of assessment:

- Assessment should be by direct observation of tasks and questioning on underpinning knowledge
- Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency

- Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts

Context for assessment:

Assessment may occur on the job or in a workplace simulated facility with relevant equipment, materials, work instructions and deadlines

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	2
Planning and organising activities	2
Working with others and in teams	2
Using mathematical ideas and techniques	2
Solving problems	2
Using technology	2

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the Performance Criteria, is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs if the candidate, accessibility of the item, and local industry and regional contexts.

Workplace context:

- Work involves the matching of patterns and cutting and fixing of cast ornamental cornice
- Work follows established procedures
- Plaster installation work is undertaken on work sites within new construction, renovation/refurbishment and maintenance
- Information about installation processes, product requirements, customer requirements is used to inform planning of own work.
- Work generally performed under some supervision, within a team / group environment
- Environment includes movement of equipment, goods, materials and vehicular traffic
- Hazards may include:
 - construction activity involving other workers and contractors that may constitute personal risk
 - work at heights, manual handling and hazardous materials
 - dust / vapours, noise, light, energy sources, air temperature, moisture
 - electrical equipment, stationary and moving plant, equipment and materials

Plastering Trade Activity Requirements:

This unit covers work involving the installation of plaster products, maintaining personal safety and the safety of others within the context of required work deadlines and quality standards

- Work is governed by authorised site work procedures
- Consultative processes may involve:
 - other employees and supervisors
 - employer
 - employee OH&S representatives
 - principal contractor
 - industrial relations, Occupational Health and Safety specialists
 - other professional or technical staff
- Work activities require the application of relevant procedures including:
 - hazard policies and procedures
 - issue resolution procedures
 - job procedures and work instructions
 - guidelines relating to the safe use of machinery and equipment
 - quality assurance procedures (where existing)
 - sexual harassment and equal opportunity policies
 - security procedures
 - housekeeping processes
 - waste, pollution and recycling management processes
 - emergency procedures
 - reporting of accidents and incidents within regulatory requirements and following workplace procedures
 - relevant agreements, codes of practice and other legislative requirements
 - appropriate workplace language and communication technologies
 - identification of products, materials and work processes appropriate for the work
 - interpretation of relevant safety information within requirements of duty of care

Sources of information / documents may include:

- Job specifications and procedures
- Notes from previous work
- Equipment operating instructions
- Information on characteristics of materials
- Manufacturer's instructions and specifications for products, plant and equipment
- Workplace operating procedures and policies
- Employer, supplier and/or client instructions,
- Materials Safety Data Sheets, labels and other product safety information
- Building Code of Australia and relevant Australian Standards
- Communications technology equipment, oral, aural or signed communications
- Personal and work site work procedures and practices
- Conditions of service, legislation and employment agreement
- Applicable State, Territory, Commonwealth legislation and regulations which relate to:
 - Occupational Health & Safety legislation, Codes of Practice and Regulations
 - Workplace Relations
 - Workers Compensation
 - License, Patent or copyright arrangements
 - Hazardous Substances and Dangerous Goods
 - Environment Protection
 - Equal Opportunity, Equal Employment Opportunity
 - Standards and certification requirements
 - Quality assurance procedures
 - Emergency procedures

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for the Training Package.

Critical aspects of evidence to be considered:

Assessment must confirm knowledge and skills to:

- identify work order or contract and delivery documentation and match to delivered cornice
- plan materials use and match mitres to minimise waste and maximise decorative effect
- select and use appropriate cornice materials and work methods
- plan and execute work within agreed timeframe and to a high standard under general supervision
- apply a broad knowledge of industry products to identify:
 - hand manufactured and machine made cornice
 - materials used in hand manufactured cornice and precautions for safe cutting
- identify problems in pattern matching and cornice fixing and suggest appropriate alternative rectifications
- interpret building plans and delivery documents to match cornice type to appropriate rooms
- follow work instructions, operating procedures and inspection practices to:
 - prevent damage to goods, equipment or products
 - meet required work output and product quality
 - select and use appropriate personal protection equipment
 - minimise the risk of injury to self or others
- work effectively with other workers on and off site
- modify work activities to cater for variations in worksite procedures, personnel, contexts and environment
- maintain workplace records in relation to materials, plant and equipment use
- follow safe handling requirements of equipment, products and materials

Interdependent assessment of units:

This unit of competency may be assessed in conjunction with other units that form part of a job role. The following units are co-requisites to this unit:

- BCGCM1006A - Work safely at heights;
- BCGPB3001A - Fix standard plasterboard wall sheets;
- BCGPB3002A - Fix standard plasterboard ceiling sheets;
- BCGPB3012A - Cut and fix paper faced cornice.

BCGPB3021A**Install and fix residential acoustic plaster products****Unit Descriptor**

This unit applies to the installation of acoustic systems under direction

Unit Sector

Plasterboard

ELEMENT**PERFORMANCE CRITERIA**

1. Identify work requirements	1.1 Work site is inspected with supervisor to confirm suitability of substrate for the acoustic system rating specified 1.2 Manufacturers installation advice is used to identify required: 1.2.1 acoustic materials 1.2.2 processes for installing acoustic system 1.2.3 work sequence 1.2.4 quality checks for acoustic system
2. Select materials, processes and equipment	2.1 Equipment and processes are selected to match tasks 2.2 Fasteners, sealers and penetration seals compatible with the system performance requirements are selected from manufactures specifications
3. Fix acoustic system	3.1 Work sequences and hanging requirements are undertaken to: 3.1.1 implement manufacturers' requirements for acoustic system installation and use of fasteners and penetration seals 3.1.2 cut and hang sheets to minimise waste, maximise board use and minimise joints 3.1.3 minimise finishing problems 3.2 Edges of board are caulked using appropriate materials
4. Check work and clean up work area	4.1 Completed work is checked to work will meet acoustic system rating specified, manufacturers specifications and Australian Standards 4.2 Site area is cleaned up with: 4.2.1 waste board collected for recycling, 4.2.2 adhesives and waste fasteners disposed of in approved bins and 4.2.3 reusable materials collected and stored for next job

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required knowledge and skills may include:

- identifying and interpreting manufactures product installation procedures and nominated specifications for the work process
- interpreting manufacturers/suppliers instructions for sound attenuation properties of materials
- identifying and applying appropriate safety precautions to safely use equipment, shift and handle products and materials
- requirements for a systematic approach to planning own work
- identifying faults in building construction that may influence the eventual sound rating
- application of product and process knowledge to predict consequences and identify improvements

Language and literacy requirements

Reading (NRS 2.9)

- Interpret safety information on labels and tags
- Interpret manufacturers instructions in diagrams, photographs and written form for equipment and installation of plasterboard
- Use a street directory, hand drawn maps and road maps
- Extract required information:
- Numbers from phone books
- Quantity and delivery locations from manifests
- Compare prices in catalogues

Writing (NRS 3.4)

- Complete forms that require factual data and individualised responses
- Take personal notes at technical sessions or meetings

Numeracy (NRS 2)

- Use calculator to add a number of items and check against estimated approximate sum
- Calculate time required to complete set task(s)

Oral Communication (NRS 3.2)

Uses simple grammatical forms and vocabulary to give instructions appropriate for the listeners, give explanations, ask questions, and express viewpoints

Resource implications:

Access to building framework, acoustic system materials, tools and equipment

Method of assessment:

- Assessment should be by direct observation of tasks and questioning on underpinning knowledge
- Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency
- Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts

Context for assessment:

Assessment may occur on the job or in a workplace simulated facility with relevant equipment, materials, work instructions and deadlines

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	2
Planning and organising activities	2
Working with others and in teams	2
Using mathematical ideas and techniques	2
Solving problems	2
Using technology	2

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the Performance Criteria, is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts.

Workplace context:

- This unit must be assessed with the relevant BCA and Australian Standard 2499 - 1981, 1530 parts 1 & 3 and provisions for the geographic location, local government or energy authority
- Work involves the installation of acoustic systems where no penetrations are present
- Work follows established procedures
- Plaster installation work is undertaken on work sites within new construction, renovation/refurbishment and maintenance
- Information about installation processes, product requirements, customer requirements is used to inform planning of own work.
- Work generally performed under some supervision, within a team / group environment
- Environment includes movement of equipment, goods, materials and vehicular traffic
- Hazards may include:
 - construction activity involving other workers and contractors that may constitute personal risk
 - work at heights, manual handling and hazardous materials
 - dust / vapours, noise, light, energy sources, air temperature, moisture
 - electrical equipment, stationary and moving plant, equipment and materials

Plastering Trade Activity Requirements:

This unit covers work involving the installation of plaster products, maintaining personal safety and the safety of others within the context of required work deadlines and quality standards

- Work is governed by authorised site work procedures
- Consultative processes may involve:
 - other employees and supervisors
 - employer
 - employee OH&S representatives
 - principal contractor
 - industrial relations, Occupational Health and Safety specialists
 - other professional or technical staff
- Work activities require the application of relevant procedures including:
 - hazard policies and procedures
 - issue resolution procedures
 - job procedures and work instructions
 - guidelines relating to the safe use of machinery and equipment
 - quality assurance procedures (where existing)
 - sexual harassment and equal opportunity policies
 - security procedures
 - housekeeping processes
 - waste, pollution and recycling management processes
 - emergency procedures
 - reporting of accidents and incidents within regulatory requirements and following workplace procedures
 - relevant agreements, codes of practice and other legislative requirements
 - appropriate workplace language and communication technologies
 - identification of products, materials and work processes appropriate for the work
 - interpretation of relevant safety information within requirements of duty of care

Sources of information / documents may include:

- Job specifications and procedures
- Notes from previous work
- Equipment operating instructions
- Information on characteristics of materials
- Manufacturer's instructions and specifications for products, plant and equipment
- Workplace operating procedures and policies
- Employer, supplier and/or client instructions,
- Materials Safety Data Sheets, labels and other product safety information
- Building Code of Australia and relevant Australian Standards
- Communications technology equipment, oral, aural or signed communications
- Personal and work site work procedures and practices
- Conditions of service, legislation and employment agreement
- Applicable State, Territory, Commonwealth legislation and regulations which relate to:
 - Occupational Health & Safety legislation, Codes of Practice and Regulations
 - Workplace Relations
 - Workers Compensation
 - License, Patent or copyright arrangements
 - Hazardous Substances and Dangerous Goods
 - Environment Protection
 - Equal Opportunity, Equal Employment Opportunity
 - Standards and certification requirements
 - Quality assurance procedures
 - Emergency procedures

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for the Training Package.

Critical aspects of evidence to be considered:

Assessment must confirm knowledge and skills to:

- assemble and use appropriate acoustic materials and work methods
- apply a broad knowledge of industry products to identify:
 - matching Manufacturers' components/materials to the requirements of the building and the contract
 - contract/warranty compliance issues for inappropriate selection and installation of acoustic system
 - suitable materials for a wide range of applications
- identify problems to supervisor and suggest appropriate alternative rectifications
- locate and apply relevant information from building plans to identify factors that may influence acoustic rating in different parts of the building structure
- follow work instructions, operating procedures and inspection practices to:
 - prevent damage to goods, equipment or products
 - meet required work output and product quality
 - select and use appropriate personal protection equipment
 - minimise the risk of injury to self or others
- work effectively with other workers on and off site
- modify work activities to cater for variations in worksite procedures, personnel, contexts and environment
- maintain workplace records in relation to materials, plant and equipment use
- follow safe handling requirements of equipment, products and materials

Interdependent assessment of units:

This unit of competency may be assessed in conjunction with other units that form part of a job role. BCGCM1006A Work safely at heights is a co-requisite for this unit.

BCGPB3022A**Use mechanical jointing equipment to finish joints****Unit Descriptor**

This unit applies to the use of mechanical taping and filling tools to finish joints

Unit Sector

Plasterboard

ELEMENT**PERFORMANCE CRITERIA**

1. Plan mechanical taping and filling tools use	1.1 Work area is identified and work requirements reviewed including: 1.1.1 length of runs 1.1.2 safe access for work 1.1.3 obstacles and barriers 1.1.4 penetrations 1.2 Penetrations and openings requiring barriers are identified 1.3 Amount of compound required is estimated 1.4 Length required for tool handle is measured
2. Prepare for work	2.1 Barriers are erected at identified points 2.2 Floor is cleared and cleaned 2.3 Compound is mixed to required consistency using appropriate personal protection equipment and safe work methods when mechanically mixing compound 2.4 Adjust tool handle to required length
3. Complete mechanical filling and taping operations	3.1 Filling is completed with minimum compound loaded for immediate use 3.2 Internal angles are reinforced with a smooth and even appearance 3.3 Flat joins are smooth and even, properly reinforced to form a seamless appearance 3.4 Proper posture is maintained during use 3.5 Tasks are rotated in accordance with worksite risk assessment
4. Complete mechanical finishing operations	4.1 Finishing is completed with minimum compound loaded for immediate use 4.2 Joins are finished to produce a smooth and even, seamless appearance 4.3 Proper posture is maintained during use 4.4 Tasks are rotated in accordance with worksite risk assessment
5. Clean up work area and equipment	5.1 (any) Spilt compound is cleaned from floor 5.2 Excess compound is returned to container for use or disposed of in accordance with worksite procedures 5.3 Mechanical taping and filling tools and ancillary equipment is cleaned and returned to storage

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required knowledge and skills may include:

- identifying by name and function equipment and materials used for mechanical taping
- interpreting manufacturers/suppliers safe use instructions for the equipment and materials
- identifying materials' type and purpose and potential for health and safety risks from workplace information and labels
- identifying and rectifying faults in operation of equipment or materials quality
- requirements for a systematic approach to planning own work
- application of product and process knowledge to predict consequences and identify improvements

Language and literacy requirements

Reading (NRS 2.9)

- Interpret safety information on labels and tags
- Interpret manufacturers instructions in diagrams, photographs and written form for equipment and installation of plasterboard
- Use a street directory, handdrawn maps and road maps
- Extract required information:
- Numbers from phone books
- Quantity and delivery locations from manifests
- Compare prices in catalogues

Writing (NRS 3.4)

- Complete forms that require factual data and individualised responses
- Take personal notes at technical sessions or meetings

Numeracy (NRS 2)

- Use calculator to add a number of items and check against estimated approximate sum
- Calculate time required to complete set task(s)

Oral Communication (NRS 3.2)

Uses simple grammatical forms and vocabulary to give instructions appropriate for the listeners, give explanations, ask questions, and express viewpoints

Resource implications:

Unfinished plasterboard wall and ceiling, tools, materials and equipment

Method of assessment:

- Assessment should be by direct observation of tasks and questioning on underpinning knowledge
- Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency
- Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts

Context for assessment:

Assessment may occur on the job or in a workplace simulated facility with relevant equipment, materials, work instructions and deadlines

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	2
Planning and organising activities	2
Working with others and in teams	2
Using mathematical ideas and techniques	2
Solving problems	2
Using technology	2

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the Performance Criteria, is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts.

Workplace context:

- Work involves the use of a mechanical taping and/or filling tools to finish plasterboard joints
- Work follows established procedures
- Plaster installation work is undertaken on work sites within new construction, renovation/refurbishment and maintenance
- Information about installation processes, product requirements, customer requirements is used to inform planning of own work.
- Work generally performed under some supervision, within a team / group environment
- Environment includes movement of equipment, goods, materials and vehicular traffic
- Hazards may include:
 - construction activity involving other workers and contractors that may constitute personal risk
 - work at heights, manual handling and hazardous materials
 - dust / vapours, noise, light, energy sources, air temperature, moisture
 - electrical equipment, stationary and moving plant, equipment and materials

Plastering Trade Activity Requirements:

This unit covers work involving the installation of plaster products, maintaining personal safety and the safety of others within the context of required work deadlines and quality standards

- Work is governed by authorised site work procedures
- Consultative processes may involve:
 - other employees and supervisors
 - employer
 - employee OH&S representatives
 - principal contractor
 - industrial relations, Occupational Health and Safety specialists
 - other professional or technical staff
- Work activities require the application of relevant procedures including:
 - hazard policies and procedures
 - issue resolution procedures
 - job procedures and work instructions
 - guidelines relating to the safe use of machinery and equipment
 - quality assurance procedures (where existing)
 - sexual harassment and equal opportunity policies
 - security procedures
 - housekeeping processes
 - waste, pollution and recycling management processes
 - emergency procedures
 - reporting of accidents and incidents within regulatory requirements and following workplace procedures
 - relevant agreements, codes of practice and other legislative requirements
 - appropriate workplace language and communication technologies
 - identification of products, materials and work processes appropriate for the work
 - interpretation of relevant safety information within requirements of duty of care

Sources of information / documents may include:

- Job specifications and procedures
- Notes from previous work
- Equipment operating instructions
- Information on characteristics of materials
- Manufacturer's instructions and specifications for products, plant and equipment
- Workplace operating procedures and policies
- Employer, supplier and/or client instructions,
- Materials Safety Data Sheets, labels and other product safety information
- Building Code of Australia and relevant Australian Standards
- Communications technology equipment, oral, aural or signed communications
- Personal and work site work procedures and practices
- Conditions of service, legislation and employment agreement
- Applicable State, Territory, Commonwealth legislation and regulations which relate to:
 - Occupational Health & Safety legislation, Codes of Practice and Regulations
 - Workplace Relations
 - Workers Compensation
 - License, Patent or copyright arrangements
 - Hazardous Substances and Dangerous Goods
 - Environment Protection
 - Equal Opportunity, Equal Employment Opportunity
 - Standards and certification requirements
 - Quality assurance procedures
 - Emergency procedures

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for the Training Package.

Critical aspects of evidence to be considered:

Assessment must confirm knowledge and skills to:

- Explain requirements for mechanically finished joins for:
 - flat joins
 - internal angles
 - external angles
 - ceiling joints
 - square set joins
- select and use appropriate materials and work methods
- plan and execute work within agreed timeframe and meet the contracted requirements under general supervision
- identify problems in mechanical taping and filling tool operations and suggest appropriate alternative rectifications
- interpret work order and locate and apply relevant information from building plans and delivery documents
- follow work instructions, operating procedures and inspection practices to:
 - prevent damage to goods, equipment or products
 - meet required work output and product quality
 - select and use appropriate personal protection equipment
 - minimise the risk of injury to self or others
- work effectively with other workers on and off site
- modify work activities to cater for variations in worksite procedures, personnel, contexts and environment
- follow workplace approved safe manual handling requirements for equipment, products and materials

Interdependent assessment of units

This unit of competency may be assessed in conjunction with other units that form part of a job role. BCGCM1006A Work safely at heights is a co-requisite for this unit.

BCGPB3023A**Load and unload plaster and plaster related products****Unit Descriptor**

This unit applies to employees required to identify critical characteristics of plaster loads and to safely load and unload plaster and plaster related products in accordance with workplace requirements and relevant government regulations

Unit Sector

This unit is adapted from unit TDTD497
Plasterboard

ELEMENT**PERFORMANCE CRITERIA**

1. Load and unload goods	1.1 Load characteristics including weight, volume, shape, balance and dimensions are identified and taken into account when determining appropriate loading and unloading procedures 1.2 Loading follows (any) loading regulations including road transport lengths and widths and workplace safety requirements 1.3 Lifting aids and appliances are selected and used to aid loading procedures following approved workplace procedures for manual handling 1.4 Unloading activities are conducted following approved work methods 1.5 Unloading is conducted efficiently, taking into account suitable locations, storage, safe use of equipment (where applicable) and the balance of the remaining load
2. Secure and protect load	2.1 Load is secured using the appropriate load restraints and protection equipment for different loads and carrying and storage conditions 2.2 The load is protected from weather and to ensure safety in transit 2.3 The distribution of the load is checked to ensure that it is even, legal and within the safe working load limits
3. Complete documentation	3.1 The load is inspected and checked for security to travel 3.2 All required documentation for the goods is completed following workplace and/or carrier requirements

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required knowledge and skills may include:

- the implications on personal health and quality of delivered product for instruction to be followed
- the names and functions of equipment, components and materials
- manufacturers/suppliers instructions for plant and equipment
- identifying materials' type and purpose and potential for health and safety risks from workplace information and labels
- safely use equipment, shift and handle products and materials
- identifying faults in operation of equipment or materials quality
- adjust work activity to maintain quality standards
- identifying the purpose of tags and logs of use for equipment
- requirements to plan own work
- application of product and process knowledge to identify problems and predict consequences

Language and Literacy requirements

Reading (NRS 1.2):

- Recognises and interprets work related signs including road signs, safety logos, and warnings.
- Recognises and follows instructions on a safety signs, labels or tags
- Locates and matches pieces of information, dates and times, information on pay slips, invoices and work order

Writing (NRS 1.4)

- Write key words/phrases used everyday
- Copy names, addresses and details from job/work orders
- Write own personal details
- Write times, dates, quantities and locations
- Copy details of product names and prices on orders or notes

Numeracy (NRS 3)

- Total weights of individual items to estimate overall load and compare with safe working load(s) for vehicles/scaffold/equipment/manual handling
- Identify shape, load and balance characteristics of products and equipment used
- Identify dimensions and mass of items to be shifted/transported and compare with vehicle/building
- Identify and match numbers/representations in regulations to own job requirements

Oral Communication (NRS2.5)

- Asks questions to clarify instructions and work requirements
- Reports problems and work progress to supervisors

Resource implications:

Products, load carrying vehicle, securing devices

Method of assessment:

Assessment should be by direct observation of tasks and questioning on underpinning knowledge

Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts

Context for assessment

Assessment may occur on the job or in a workplace simulated facility with relevant equipment, materials, work instructions and deadlines

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	2
Planning and organising activities	2
Working with others and in teams	2
Using mathematical ideas and techniques	2
Solving problems	2
Using technology	2

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the Performance Criteria, is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs if the candidate, accessibility of the item, and local industry and regional contexts.

Workplace context:

- Work involves the loading and unloading of plasterboard and plaster related products
- Work follows established procedures for delivery to domestic work sites within new construction, renovation/refurbishment or maintenance
- Information about customer requirements is used to inform planning of own work.
- Work generally performed under supervision, within a team / group environment
- Environment includes movement of equipment, goods, materials and vehicular traffic
- Hazards may include:
 - construction activity involving other workers and contractors
 - work at heights, manual handling, hazardous materials
 - dust / vapours, noise, light, energy sources, air temperature, moisture
 - electrical equipment, stationary and moving plant, equipment and materials

Plastering Trade Activity Requirements:

This unit covers work supporting the installation of plaster products, maintaining personal safety and the safety of others within the context of required work deadlines and quality standards

- Work is governed by authorised site work procedures
- Consultative processes may involve:
 - other employees and supervisors
 - employer
 - employee OH&S representatives
 - principal contractor
 - industrial relations, Occupational Health and Safety specialists
 - other professional or technical staff
- Work activities require the application of relevant procedures including:
 - hazard policies and procedures
 - issue resolution procedures
 - job procedures and work instructions
 - guidelines relating to the safe use of machinery and equipment
 - quality assurance procedures (where existing)
 - sexual harassment and equal opportunity policies
 - housekeeping processes and security procedures
 - waste, pollution and recycling management processes
 - emergency procedures
 - reporting of accidents and incidents within regulatory requirements and following workplace procedures
 - relevant agreements, codes of practice and other legislative requirements
 - appropriate workplace language and communication technologies
 - identification of products, materials and work processes appropriate for the work
 - interpretation of relevant safety information within requirements of duty of care

Sources of information / documents may include

- Job specifications and procedures
- Equipment operating instructions and notes from previous work
- Information on characteristics of materials
- Manufacturer's instructions and specifications for products, plant and equipment
- Workplace operating procedures and policies
- Employer, supplier and/or client instructions
- Materials Safety Data Sheets, labels and other product safety information
- Relevant Australian Standards
- Communications technology equipment, oral, aural or signed communications
- Personal and work site work procedures and practices
- Conditions of service, legislation and employment agreement
- Occupational Health & Safety legislation, Codes of Practice and Regulations
- Applicable State, Territory, Commonwealth legislation and regulations which relate to:
 - Workplace Relations
 - Workers Compensation
 - License, Patent or copyright arrangements
 - Hazardous Substances and Dangerous Goods
 - Environment Protection
 - Equal Opportunity, Equal Employment Opportunity
 - Standards and certification requirements
 - Quality assurance procedures
 - Emergency procedures

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for the Training Package.

Critical aspects of evidence to be considered:

Assessment must confirm appropriate knowledge and skills to:

- select and use appropriate loading and securing materials and work methods
- operate from basic instruction without constant supervision
- execute work within agreed timeframes and standards
- interpret delivery documentation, work orders and locate relevant materials
- explain warranty/guarantee/liability requirements for plastering work
- apply knowledge of industry products to identify:
 - manual handling risks
 - warranty compliance issues
 - faults and report problems
- follow work instructions, operating procedures and inspection practices to:
 - prevent damage to goods, equipment or products
 - meet required work output and quality
 - select and use appropriate personal protection equipment
 - work effectively with, and minimise the risk of injury to, self and other workers
 - modify work activities to cater for variations in worksite procedures, contexts and environment
 - identify and use appropriate behaviour for interactions with other workers, supervisors, clients and members of the public
 - maintain workplace records in relation to materials, plant and equipment use
 - use safe handling requirements, based on information provided, for equipment, products and materials

Interdependent assessment of units

This unit of competency may be assessed in conjunction with other units that form part of a job role.

BCGPB3024A**Use manual handling equipment to manoeuvre plaster products****Unit Descriptor**

This unit of competency applies to employees required to use mechanical aids in the shifting of loads

Unit Sector

This unit is adapted from unit TDTD297
Plasterboard

ELEMENT**PERFORMANCE CRITERIA**

1. Assess risks arising from the relocation of the load	1.1 Products, goods or materials to be relocated are identified 1.2 Characteristics of load in relation to weight, shape, balance and dimensions are identified 1.3 Environmental factors influencing the shift including wind, trip hazards, wet conditions and traffic (vehicular and personal) are assessed for effect on personal safety 1.4 Appropriate strategies for shifting load are selected based on workplace approved manual handling procedures 1.5 Location for storage is determined 1.6 Routes to be followed and potential risks are identified and strategies identified to minimise risks 1.7 Points of balance estimated 1.8 Procedures for safe use of (any) lifting equipment to minimise risks are identified
2. Plan load relocation	2.1 (Any) load shifting equipment selected and the S.W.L. (Safe Working Load) and / or WLL (Working Load Limit) are identified and compared to the load to be shifted 2.2 Process for relocating load proposed predicting and planning for potential difficulties 2.3 Proposed process checked against relevant Code of Practice and workplace procedures for compliance 2.4 Lifting equipment and accessories are checked for safe operation following manufactures instructions and workplace procedures
3. Relocate Load	3.1 Any unsafe equipment is reported to appropriate personnel 3.2 Planned process and route are followed using equipment within necessary range of limitations 3.3 Relocated materials are set down without damage to goods, personnel or equipment and checked for stability 3.4 Relocation is checked to see that it meets work requirements, any variations are reported 3.5 Equipment is returned to storage area

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required knowledge and skills may include:

- the implications on personal health and quality for product for instructions to be followed
- the names and functions of equipment, components and materials
- manufacturers/suppliers instructions for plant and equipment
- identifying materials' type and purpose and potential for health and safety risks from workplace information and labels
- safely use equipment, shift and handle products and materials
- identifying faults in operation of equipment or materials quality
- adjust work activity to maintain quality standards
- identifying the purpose of tags and logs of use for equipment
- requirements to plan own work
- application of product and process knowledge to identify problems and predict consequences

Language and Literacy requirements

Reading (NRS 1.2):

- Recognises and interprets work related signs including safety logos and warnings.
- Recognises and follows instructions on a safety signs, labels or tags
- Locates and matches pieces of information, dates and times, information on pay slips, invoices and work order

Writing (NRS 1.4)

- Write key words/phrases used everyday
- Copy names, addresses and details from job/work orders
- Write own personal details
- Write times, dates, quantities and locations
- Copy details of product names and prices on orders or notes

Numeracy (NRS 3)

- Total weights of individual items to estimate overall load and compare with safe working load(s) for vehicles/scaffold/equipment/manual handling
- Identify shape, load and balance characteristics of products and equipment used
- Identify dimensions and mass of items to be shifted/transported and compare with vehicle/building
- Identify and match numbers/representations in regulations to own job requirements

Oral Communication (NRS2.5)

- Asks questions to clarify instructions and work requirements
- Reports problems and work progress to supervisors

Resource implications:

Materials, mechanical handling equipment, worksite

Method of assessment:

Assessment should be by direct observation of tasks and questioning on underpinning knowledge

Assessment should be conducted over time and will generally be in conjunction with

assessment of other units of competency

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts

Context for assessment

Assessment may occur on the job or in a workplace simulated facility with relevant equipment, materials, work instructions and deadlines

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	2
Planning and organising activities	2
Working with others and in teams	2
Using mathematical ideas and techniques	2
Solving problems	2
Using technology	2

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the Performance Criteria, is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs if the candidate, accessibility of the item, and local industry and regional contexts.

Workplace context:

- Work involves the selection and use of mechanical manual handling equipment
- Work follows established procedures
- Information about customer requirements is used to inform planning of own work.
- Work generally performed under supervision, within a team / group environment
- Environment includes movement of equipment, goods, materials and vehicular traffic
- Hazards may include:
 - construction activity involving other workers and contractors
 - work at heights, manual handling, hazardous materials
 - dust / vapours, noise, light, energy sources, air temperature, moisture
 - electrical equipment, stationary and moving plant, equipment and materials

Plastering Trade Activity Requirements:

This unit covers work supporting the installation of plaster products, maintaining personal safety and the safety of others within the context of required work deadlines and quality standards

- Work is governed by authorised site work procedures
- Consultative processes may involve:
 - other employees and supervisors
 - employer
 - employee OH&S representatives
 - principal contractor
 - industrial relations, Occupational Health and Safety specialists
 - other professional or technical staff
- Work activities require the application of relevant procedures including:
 - hazard policies and procedures
 - issue resolution procedures
 - job procedures and work instructions
 - guidelines relating to the safe use of machinery and equipment
 - quality assurance procedures (where existing)
 - sexual harassment and equal opportunity policies
 - housekeeping processes and security procedures
 - waste, pollution and recycling management processes
 - emergency procedures
 - reporting of accidents and incidents within regulatory requirements and following workplace procedures
 - relevant agreements, codes of practice and other legislative requirements
 - appropriate workplace language and communication technologies
 - identification of products, materials and work processes appropriate for the work
 - interpretation of relevant safety information within requirements of duty of care

Sources of information / documents may include:

- Job specifications and procedures
- Equipment operating instructions and notes from previous work
- Information on characteristics of materials
- Manufacturer's instructions and specifications for products, plant and equipment
- Workplace operating procedures and policies
- Employer, supplier and/or client instructions
- Materials Safety Data Sheets, labels and other product safety information
- Building Code of Australia and relevant Australian Standards
- Communications technology equipment, oral, aural or signed communications
- Personal and work site work procedures and practices
- Conditions of service, legislation and employment agreement
- Occupational Health & Safety legislation, Codes of Practice and Regulations
- Applicable State, Territory, Commonwealth legislation and regulations which relate to:
 - Workplace Relations
 - Workers Compensation
 - License, Patent or copyright arrangements
 - Hazardous Substances and Dangerous Goods
 - Environment Protection
 - Equal Opportunity, Equal Employment Opportunity
 - Standards and certification requirements
 - Quality assurance procedures
 - Emergency procedures

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for the Training Package.

Critical aspects of evidence to be considered:

Assessment must confirm appropriate knowledge and skills to:

- select and use appropriate workplace approved manual handling equipment and work methods
- operate from basic instruction without constant supervision
- execute work within agreed timeframes and standards
- apply knowledge of industry products to identify:
 - manual handling risks
 - warranty compliance issues
 - faults and report problems in products being unloaded
- follow work instructions, operating procedures and inspection practices to:
 - prevent damage to goods, equipment or products
 - work effectively with, and minimise the risk of injury to, self and other workers
 - modify work activities to cater for variations in worksite procedures, contexts and environment
 - identify and use appropriate behaviour for interactions with other workers, supervisors, clients and members of the public
 - use safe handling requirements, based on information provided, for equipment, products and materials

Interdependent assessment of units

This unit of competency may be assessed in conjunction with other units that form part of a job role.

BCGPB3025A**Unit Descriptor****Unit Sector****Store plasterboard and related products**

This unit applies to personnel required to store plaster and plaster products. This unit will be designated for site or warehouse storage

Plasterboard

ELEMENT	PERFORMANCE CRITERIA
1. Identify products to be stored and appropriate stock records / inventory systems	1.1 Products to be stored are identified 1.2 Potential uses, frequency and order of use of the materials or frequency of dispatch to other parts of the job, or to fill orders (as appropriate) 1.3 Size, shape and special storage requirements of the storage space are determined 1.4 Requirements for safe storage are identified including: 1.4.1 Weather proof area 1.4.2 safe working loads for racks/floor 1.4.3 risks of product falling or being damaged 1.5 Stock / inventory systems requirements are identified 1.6 Relevant product information including instructions, care labels and product identification information are located
2. Prepare storage area	2.1 Storage area selected is checked to see it meets requirements for: 2.1.1 providing protection against moisture migration from below 2.1.2 storing product type and quantity 2.1.3 horizontal stacking where possible 2.2 Storage arrangements take into account potential damage to goods from: 2.2.1 other stored items 2.2.2 handling 2.2.3 moisture 2.2.4 other work activities on the site 2.3 Appropriate worksite clearances for use of storage area are obtained 2.4 Storage areas are cleared of waste and contaminants and any required safety equipment is installed 2.5 Storage areas are planned to safely and effectively store goods based on frequency and order of use, safe height, weight and size 2.6 Access and working space for safe use by appropriate manual handling equipment, scissor lifts, forklifts or safe lifting by personnel is ensured
3. Store materials and goods	3.1 Condition of materials and goods is observed on arrival and any product below specification is returned to source 3.2 Materials and goods are stored and where appropriate, stacked appropriately for safe working load, size and crushability of goods

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required knowledge and skills may include:

- the implications on product quality for instruction for storage to be followed
- the names and functions of equipment, components and materials
- manufacturers/suppliers instructions for safe use of plant, equipment and storage systems
- identifying potential for health and safety risks from inappropriate storage of plasterboard/plaster products
- safely use equipment, shift and handle products and materials
- identifying faults in operation of equipment or materials quality
- identifying the purpose of tags and logs of use for equipment
- requirements to plan own work
- application of product and process knowledge to identify problems and predict consequences

Language and Literacy requirements

Reading (NRS 1.2):

- Recognises and interprets work related signs including road signs, safety logos, and warnings.
- Recognises and follows instructions on a safety signs, labels or tags
- Locates and matches pieces of information, dates and times, information on pay slips, invoices and work order

Writing (NRS 1.4)

- Write key words/phrases used everyday
- Copy names, addresses and details from job/work orders
- Write own personal details
- Write times, dates, quantities and locations
- Copy details of product names and prices on orders or notes

Numeracy (NRS 3)

- Total weights of individual items to estimate overall load and compare with safe working load(s) for vehicles/scaffold/equipment/manual handling
- Identify shape, load and balance characteristics of products and equipment used
- Identify dimensions and mass of items to be shifted/transported and compare with vehicle/building
- Identify and match numbers/representations in regulations to own job requirements

Oral Communication (NRS2.5)

- Asks questions to clarify instructions and work requirements
- Reports problems and work progress to supervisors

Resource implications:

Worksite, materials and plasterboard

Method of assessment:

Assessment should be by direct observation of tasks and questioning on underpinning knowledge

Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts

Context for assessment

Assessment may occur on the job or in a workplace simulated facility with relevant equipment, materials, work instructions and deadlines

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	2
Planning and organising activities	2
Working with others and in teams	2
Using mathematical ideas and techniques	2
Solving problems	2
Using technology	2

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the Performance Criteria, is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs if the candidate, accessibility of the item, and local industry and regional contexts.

Workplace context:

- Work involves the storage of plasterboard and plaster products
- Work follows established procedures
- Information about customer requirements is used to inform planning of own work.
- Work generally performed under supervision, within a team / group environment
- Environment includes movement of equipment, goods, materials and vehicular traffic
- Hazards may include:
 - construction activity involving other workers and contractors
 - work at heights, manual handling, hazardous materials
 - dust / vapours, noise, light, energy sources, air temperature, moisture
 - electrical equipment, stationary and moving plant, equipment and materials

Plastering Trade Activity Requirements:

This unit covers work supporting the installation of plaster products, maintaining personal safety and the safety of others within the context of required work deadlines and quality standards

- Work is governed by authorised site work procedures
- Consultative processes may involve:
 - other employees and supervisors
 - employer
 - employee OH&S representatives
 - principal contractor
 - industrial relations, Occupational Health and Safety specialists
 - other professional or technical staff
- Work activities require the application of relevant procedures including:
 - hazard policies and procedures
 - issue resolution procedures
 - job procedures and work instructions
 - guidelines relating to the safe use of machinery and equipment
 - quality assurance procedures (where existing)
 - sexual harassment and equal opportunity policies
 - housekeeping processes and security procedures
 - waste, pollution and recycling management processes
 - emergency procedures
 - reporting of accidents and incidents within regulatory requirements and following workplace procedures
 - relevant agreements, codes of practice and other legislative requirements
 - appropriate workplace language and communication technologies
 - identification of products, materials and work processes appropriate for the work
 - interpretation of relevant safety information within requirements of duty of care

Sources of information / documents may include:

- Job specifications and procedures
- Equipment operating instructions and notes from previous work
- Information on characteristics of materials
- Manufacturer's instructions and specifications for products, plant and equipment
- Workplace operating procedures and policies
- Employer, supplier and/or client instructions
- Materials Safety Data Sheets, labels and other product safety information
- Building Code of Australia and relevant Australian Standards
- Communications technology equipment, oral, aural or signed communications
- Personal and work site work procedures and practices
- Conditions of service, legislation and employment agreement
- Occupational Health & Safety legislation, Codes of Practice and Regulations
- Applicable State, Territory, Commonwealth legislation and regulations which relate to:
 - Workplace Relations
 - Workers Compensation
 - License, Patent or copyright arrangements
 - Hazardous Substances and Dangerous Goods
 - Environment Protection
 - Equal Opportunity, Equal Employment Opportunity
 - Standards and certification requirements
 - Quality assurance procedures
 - Emergency procedures

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for the Training Package.

Critical aspects of evidence to be considered:

Assessment must confirm appropriate knowledge and skills to:

- explain reasons for providing moisture protection
- protect the board from weather and moisture from slabs
- select and use appropriate storage methods
- operate from basic instruction without constant supervision
- execute work within agreed timeframes and standards
- interpret delivery documentation, work orders and locate relevant materials
- explain warranty/guarantee/liability requirements for plastering work
- apply knowledge of industry products to identify:
 - warranty compliance issues that may arise from inappropriate storage
 - faults and report problems to plasterboard and plaster products
- follow work instructions, operating procedures and inspection practices to:
 - prevent damage to goods, equipment or products
 - work effectively with, and minimise the risk of injury to self and other workers
 - modify work activities to cater for variations in worksite procedures, contexts and environment
 - identify and use appropriate behaviour for interactions with other workers, supervisors, clients and members of the public
 - maintain workplace records in relation to materials, plant and equipment use
 - use safe handling requirements, based on information provided, for equipment, products and materials

Interdependent assessment of units

This unit of competency may be assessed in conjunction with other units that form part of a job role.

BCGPB3026A**Unit Descriptor****Erect and maintain trestle and plank systems**

This unit applies to employees required to erect and monitor trestle and plank work platforms

Unit Sector

Plasterboard

ELEMENT**PERFORMANCE CRITERIA**

1. Inspect work site	1.1 Work area is checked for type of trestle and plank system required 1.2 Work area is cleaned of any rubbish or materials 1.3 Risks to other workers, power supply and other services are assessed 1.4 Access to erected trestle and plank platform is planned 1.5 Establish how plaster products and tools can be accessed for use from the plank
2. Erect trestle and plank system	2.1 Plank and trestle system that meets the Australian Standard AS6001-1999 and the work requirements is selected 2.2 Trestle system components are collected and located at work site 2.3 Trestle and planks are inspected for serviceability as determined by the Australian Standards 2.4 Trestles are appropriately positioned for the work and the planks to be used 2.5 Planks are fitted to the trestles at the required height using procedures and within worksite or regulatory restrictions
3. Inspect system	3.1 Trestle and plank work platform is inspected before and during use for: 3.1.1 loose components 3.1.2 damage to trestles or planks 3.1.3 displacement of components 3.2 Any faults found are reported to supervisor and rectifications conducted or system labelled to prevent use pending repair

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required knowledge and skills may include:

- the names and functions of equipment, components and materials
- manufacturers/suppliers instructions for plant and equipment
- identifying potential for health and safety risks from workplace information and labels
- safely use equipment, shift and handle products and materials
- identifying faults in operation of equipment
- identifying the purpose of tags and logs of use for equipment
- requirements to plan own work

Language and literacy requirements

Reading (NRS 1.2):

- Recognises and interprets work related signs including safety logos, warnings.
- Recognises and follows instructions on a safety signs, labels or tags
- Locates and matches pieces of information, labels for safe working loads with load to be carried

Writing (NRS 1.4)

- Write key words/phrases used everyday
- Copy names, addresses and details from job/work orders
- Write own personal details
- Write times, dates, quantities and locations
- Copy details of product names and prices on orders or notes

Numeracy (NRS 2)

- Identify digital and analogue time
- Identifies value of Australian notes and coins
- Uses simple fractions, proportions
- Read simple diagrams, measurements and weights
- Check length of product against known measurement
- Count and record quantities
- Compare counted quantities with delivery notes and orders

Oral Communication (NRS2.5)

- Asks questions to clarify instructions and work requirements
- Reports problems and work progress to supervisors

Resource implications:

Work site, trestles, planks

Method of assessment:

Assessment should be by direct observation of tasks and questioning on underpinning knowledge

Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts

Context for assessment

Assessment may occur on the job or in a workplace simulated facility with relevant equipment, materials, work instructions and deadlines

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	2
Planning and organising activities	2
Working with others and in teams	2
Using mathematical ideas and techniques	2
Solving problems	2
Using technology	1

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the Performance Criteria, is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts.

Workplace context:

- This unit must be assessed with the relevant Australian Standard AS6001-1999
- Work involves the erection and monitoring of trestle and plank work platforms for domestic application
- OH&S authorities may constitute the trestle and plank system a scaffold in certain circumstances. Where the trestle and plank system set up is adjacent to the edge of a concrete slab or similar and the fall height exceeds 4 metres and is considered a scaffold a certification of competency from the OH&S authority may be required to erect, alter or dismantle the system in some jurisdictions. Competency to achieve certification will include knowledge and compliance with the relevant code of practice AS/NZS 4576 Guidelines for Scaffolding.
- Work follows established procedures
- Plaster work is undertaken on domestic work sites within new construction, renovation/refurbishment and maintenance
- Information about installation processes, product requirements, customer requirements is used to inform planning of own work.
- Work generally performed under supervision, within a team / group environment
- Environment includes movement of equipment, goods, materials and vehicular traffic
- Hazards may include:
 - construction activity involving other workers and contractors
 - work at heights, manual handling, hazardous materials
 - dust / vapours, noise, light, energy sources, air temperature, moisture
 - electrical equipment, stationary and moving plant, equipment and materials

Plastering Trade Activity Requirements:

This unit covers work to support the installation of plaster products, maintaining personal safety and the safety of others

- Work is governed by authorised site work procedures
- Consultative processes may involve:
 - other employees and supervisors
 - employer
 - employee OH&S representatives
 - principal contractor
 - industrial relations, Occupational Health and Safety specialists
 - other professional or technical staff
- Work activities require the application of relevant procedures including:
 - hazard policies and procedures
 - issue resolution procedures
 - job procedures and work instructions
 - guidelines relating to the safe use of machinery and equipment
 - quality assurance procedures (where existing)
 - sexual harassment and equal opportunity policies
 - housekeeping processes and security procedures
 - waste, pollution and recycling management processes
 - emergency procedures
 - reporting of accidents and incidents within regulatory requirements and following workplace procedures
 - relevant agreements, codes of practice and other legislative requirements
 - appropriate workplace language and communication technologies
 - identification of products, materials and work processes appropriate for the work
 - interpretation of relevant safety information within requirements of duty of care

Sources of information / documents may include:

- Job specifications and procedures
- Equipment operating instructions and notes from previous work
- Information on characteristics of materials
- Manufacturer's instructions and specifications for products, plant and equipment
- Workplace operating procedures and policies
- Employer, supplier and/or client instructions
- Materials Safety Data Sheets, labels and other product safety information
- Building Code of Australia and relevant Australian Standards
- Communications technology equipment, oral, aural or signed communications
- Personal and work site work procedures and practices
- Conditions of service, legislation and employment agreement
- Occupational Health & Safety legislation, Codes of Practice and Regulations
- Applicable State, Territory, Commonwealth legislation and regulations which relate to:
 - Workplace Relations
 - Workers Compensation
 - License, Patent or copyright arrangements
 - Hazardous Substances and Dangerous Goods
 - Environment Protection
 - Equal Opportunity, Equal Employment Opportunity
 - Standards and certification requirements
 - Quality assurance procedures
 - Emergency procedures

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for the Training Package.

Critical aspects of evidence to be considered:

Assessment must confirm appropriate knowledge and skills to:

- identify situations where the use of trestle and plank system is appropriate
- explain benefits of one trestle and plank system compared to another
- select and use appropriate trestles and planks and work methods
- operate from basic instruction without constant supervision
- identify faults in trestles and planks
- execute work within agreed timeframes and standards
- interpret manufacturers documentation
- apply knowledge of industry products to identify:
 - trestle and plank systems that meet the Australian Standard
 - faults and report problems in trestle and plank systems
- follow work instructions, operating procedures and inspection practices to:
 - prevent damage to goods, equipment or products
 - work effectively with, and minimise the risk of injury to, self and other workers
 - modify work activities to cater for variations in worksite procedures, contexts and environment
 - identify and use appropriate behaviour for interactions with other workers, supervisors, clients and members of the public
 - maintain workplace records in relation to materials, plant and equipment use
 - use safe handling requirements, based on information provided, for equipment, products and materials

Interdependent assessment of units

This unit of competency may be assessed in conjunction with other units that form part of a job role. BCGCM1006A Work safely at heights is a co-requisite for this unit.

BCGPB3027A**Unit Descriptor****Unit Sector****Inspect equipment for serviceability**

This unit relates to the duties of equipment users to inspect and report on the safety and operational effectiveness of equipment

Plasterboard

ELEMENT**PERFORMANCE CRITERIA**

1. Inspect equipment	1.1 Equipment is inspected prior to transport and/or set up in accordance with pre-operational functional safety check procedures and manufacturer's specifications for damage, leaks, worn requirements and obstructions that may limit operational capability
	1.2 Warning systems are all checked for operational effectiveness
2. Identify and assess impact faults on work requirements	2.1 Faults are identified and assessment made of the potential effect of the fault on the operation of the equipment for the required work
	2.2 Faults that may affect the safe operation of the equipment are reported to the appropriate personnel for rectification, equipment is tagged and set aside for repair
	2.3 Accurate reporting of the results of the inspection and testing is made in accordance with Statutory requirements and company policy
	2.4 Records are clear, unambiguous and concise with clear reference made to any items which may require replacement/repair in the future

REQUIRED SKILLS AND KNOWLEDGE

This describes the essential skills and knowledge and their level, required for this unit.

Required knowledge and skills may include:

- the implications for work output, safe operations and quality for instructions to be followed
- operating principles and working components of equipment used
- the names and functions of equipment, components and materials
- manufactures inspection procedures and specifications for the equipment
- identifying potential for health and safety risks from workplace information and labels
- safely use equipment, shift and handle products and materials
- identifying the purpose of tags and logs of use for equipment
- requirements to plan own work
- application of product and process knowledge to identify problems and predict consequences

Language and literacy requirements

Reading (NRS 1.2):

- Recognises and interprets work related signs including road signs, safety logos, and warnings.
- Recognises and follows instructions on a safety signs, labels or tags
- Locates and matches pieces of information, dates and times, information on pay slips, invoices and work order

Writing (NRS 1.4)

- Write key words/phrases used everyday
- Copy names, addresses and details from job/work orders
- Write own personal details
- Write times, dates, quantities and locations
- Copy details of equipment names and serial numbers

Numeracy (NRS 2)

- Identify digital and analogue time
- Identifies value of Australian notes and coins
- Uses simple fractions, proportions
- Read simple diagrams, measurements and weights
- Check length of product against known measurement
- Count and record quantities
- Compare counted quantities with delivery notes and orders

Oral Communication (NRS2.5)

- Asks questions to clarify instructions and work requirements

Reports problems and work progress to supervisors

Resource implications:

Equipment, specifications, maintenance records, tools

Method of assessment:

Assessment should be by direct observation of tasks and questioning on underpinning knowledge

Assessment should be conducted over time and will generally be in conjunction with assessment of other units of competency

Assessment methods must confirm consistency of performance over time and in a range of workplace relevant contexts

Context for assessment

Assessment may occur on the job or in a workplace simulated facility with relevant equipment, materials, work instructions and deadlines

KEY COMPETENCIES

Key Competency	Performance Level
Communicating ideas and information	2
Collecting analysing and organising information	2
Planning and organising activities	2
Working with others and in teams	2
Using mathematical ideas and techniques	2
Solving problems	2
Using technology	2

RANGE STATEMENT

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the Performance Criteria, is detailed below. Add any essential operating conditions that may be present with training and assessment depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts.

Workplace context:

- Work involves the inspection of equipment to assess operational capabilities
- Work follows established procedures
- Plaster work is undertaken on domestic work sites within new construction, renovation/refurbishment and maintenance
- Information about installation processes, product requirements, customer requirements is used to inform planning of own work.
- Work generally performed under supervision, within a team / group environment
- Environment includes movement of equipment, goods, materials and vehicular traffic
- Hazards may include:
 - construction activity involving other workers and contractors
 - work at heights, manual handling, hazardous materials
 - dust / vapours, noise, light, energy sources, air temperature, moisture
 - electrical equipment, stationary and moving plant, equipment and materials
- Equipment includes screw guns, drills, drop saws, sheet lifters, scaffold, ladders, trestles and planks

Plastering Trade Activity Requirements:

This unit covers work involving the installation of plaster products, maintaining personal safety and the safety of others within the context of required work deadlines and quality standards

- Work is governed by authorised site work procedures
- Consultative processes may involve:
 - other employees and supervisors
 - employer
 - employee OH&S representatives
 - principal contractor
 - industrial relations, Occupational Health and Safety specialists
 - other professional or technical staff
- Work activities require the application of relevant procedures including:
 - hazard policies and procedures
 - issue resolution procedures
 - job procedures and work instructions
 - guidelines relating to the safe use of machinery and equipment
 - quality assurance procedures (where existing)
 - sexual harassment and equal opportunity policies
 - housekeeping processes and security procedures
 - waste, pollution and recycling management processes
 - emergency procedures
 - reporting of accidents and incidents within regulatory requirements and following workplace procedures
 - relevant agreements, codes of practice and other legislative requirements
 - appropriate workplace language and communication technologies
 - identification of products, materials and work processes appropriate for the work
 - interpretation of relevant safety information within requirements of duty of care

Sources of information / documents may include:

- Job specifications and procedures
- Equipment operating instructions and notes from previous work
- Information on characteristics of materials
- Manufacturer's instructions and specifications for products, plant and equipment
- Workplace operating procedures and policies
- Employer, supplier and/or client instructions
- Materials Safety Data Sheets, labels and other product safety information
- Building Code of Australia and relevant Australian Standards
- Communications technology equipment, oral, aural or signed communications
- Personal and work site work procedures and practices
- Conditions of service, legislation and employment agreements
- Occupational Health & Safety legislation, Codes of Practice and Regulations
- Applicable State, Territory, Commonwealth legislation and regulations which relate to:
 - Workplace Relations
 - Workers Compensation
 - License, Patent or copyright arrangements
 - Hazardous Substances and Dangerous Goods
 - Environment Protection
 - Equal Opportunity, Equal Employment Opportunity
 - Standards and certification requirements
 - Quality assurance procedures
 - Emergency procedures

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the Performance Criteria, Required Skills and Knowledge, the Range Statement and the Assessment Guidelines for the Training Package.

Critical aspects of evidence to be considered:

Assessment must confirm appropriate knowledge and skills to:

- select and use appropriate equipment and work methods
- operate from basic instruction without constant supervision
- identify faults in equipment
- interpret delivery documentation, work orders and locate relevant materials
- apply knowledge of industry products to identify:
 - manufacturers instructions for equipment
 - wear which may require maintenance in the future
 - compatible components for running repairs
- follow work instructions, operating procedures and inspection practices to:
 - identify damage to goods, equipment or products
 - select and use appropriate personal protection equipment
 - work effectively with, and minimise the risk of injury to, self and other workers
 - maintain workplace records in relation to materials, plant and equipment use
 - use safe handling requirements, based on information provided, for equipment, products and materials

Interdependent assessment of units

This unit of competency may be assessed in conjunction with other units that form part of a job role.

BCGRT2001B**Unit Descriptor****Handle roof tiling materials**

This unit specifies the competency required to handle, store and apply environmental principles to roof tiling products.

The unit includes the preparation, handling, sorting, stacking, distribution and disposal of tiling products, materials and components in the application of the tiles to the roof.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Roof Tiling

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Plant, tools and equipment selected to carry out tasks that are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.5 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Receive, sort and distribute roof tiling materials	2.1 Roof tiling products, material and components are identified and checked for conformity to material schedule, plans and specifications on delivery to site 2.2 Handling characteristics of roof tiling material and components are identified and safe and effective handling techniques are applied in accordance with safe work method statements and workplace procedures 2.3 Fall safety devices are installed to roof perimeter and handled in accordance with regulatory and workplace requirements 2.4 Elevator is handled, assembled and erected at job location to manufacturers' specifications and workplace requirements 2.5 Roof surface sarking and batten materials are handled and loaded onto roof and positioned ready for installation in accordance with specified tile and job specifications 2.6 Roof tiling material and components are sorted to suit material type and size, stacked for ease of identification and retrieval for task sequence 2.7 Roof tiling material and components are transferred, loaded onto roof, supported and evenly distributed

- 3. Handle and remove surplus material from roof
 - 3.1 Materials are handled safely and effectively according to MSDS and regulatory authorities requirements
 - 3.2 Hazardous material is identified for separate handling by authorised personnel
 - 3.3 Surplus roof tiling material and components are loaded and transferred from roof to ground
 - 3.4 Materials are stored safely and effectively according to MSDS and requirements of regulatory authorities
 - 3.5 Roof, guttering and downpipes are cleared free of waste and surplus material
- 4. Clean up
 - 4.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification
 - 4.2 Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for handling roof tiling materials, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	1
Planning and organising activities	Conduct activities associated with handling roof tiling materials, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	2
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances and levels, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	1
Using technology	Use workplace technology related to handling roof tiling materials, including the use of calculators, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope

- This unit requires the receiving, handling, sorting and loading to the roof tiling products in support of a tiling job. It also requires the removal of surplus materials from the roof and disposal of waste materials
- Waste materials include, but are not limited to, banding straps, packing pieces, broken or damaged goods, cardboard, plastic, paper and surplus material
- Specifications may include tile colour, tile profile, type of bond, nailing sequence and wind category
- Tiles may be interlocking (terracotta) or non-interlocking (concrete) and conform to the requirements of AS 2094
- Pointing material may be flexible pointing material or its equivalent

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with power cables (including overhead service trays, cables and conduits), lighting, earth leakage boxes, trip hazards, working with dangerous materials, working in confined spaces, surrounding structures, restricted access barriers, traffic control, working at heights, working in proximity to others, worksite visitors, the public and working safely on roofs
- Emergency procedures related to this unit are to include but may not be limited to extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust, vibration and clean-up management

Quality Requirements	• Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified
Statutory/Regulatory Authorities	• Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice
Tools and equipment	• Tools and equipment are to include measuring tapes/rules, hammers, squares, nail bags, chisels, hand saws, tile cutters, power saws, power drills, power leads, pincers, ladders, trowels, concrete mixers, buckets, shovels, string lines, chalk lines, nail guns, air compressors and hoses, bedding frames, brooms, blowers, gutter protectors, calculators, elevators, safety rails, safety harness/static lines, eyelets, signage and barricades, chutes, hoppers and high pressure water cleaners • Tools and equipment may include scaffolds, slate reefers, guillotines, slater's hammers, rippers, blocks, breaks or cutting irons, slating knives, slate cutters, elevated work platforms, small petrol or diesel engines and small compressors
Materials	• Materials are to include timber and metal battens, sarking materials, mortar, concrete and terracotta tiles, flashings, adhesives, fixings, fastenings and other mechanical fixings • Materials may include lead, flexible pointing material, slate, shingles and other hand manufactured products
Communications	• Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals • On site meeting processes may include notification/ scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues

Information

- Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches
- Safe work procedures related to handling roof tiling materials
- Regulatory/legislative requirements pertaining to handling roof tiling materials
- Manufacturers' specifications and instructions where specified
- Organisation work specifications and requirements
- Instructions issued by authorised organisational or external personnel
- Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools, plant and equipment
- Communication and working effectively and safely with others
- As a minimum, transfer sufficient materials to sark, batten and tile 45 m² of roof from ground level to the roof working area, greater than 1.8m high; relocate the above materials from the work area to ground level, and position a bucket and dispose of waste material from a typical tiling task, ensuring:
 - correct identification of requirement and sorting and distributing roof tiling material
 - correct selection and use of appropriate processes, tools and equipment
 - completing all work to specification

Relationship to other units

Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - General Construction terminology
 - Plant, tools and equipment types, characteristics, uses and limitations
 - Roof tiling materials handling and disposal techniques and procedures
 - The characteristics and applications of roof tiling materials
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - Roof construction systems/structures and tiling considerations
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to handling roof tiling materials
 - hand and power tools, plant and equipment appropriate to handling roof tiling materials
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGRT2002B**Unit Descriptor****Use roof tiling tools and equipment**

This unit specifies the competency required to safely and effectively use hand and power tools used in roof tiling.

The unit includes the identification, selection and use of tools for specific applications and their storage.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Roof Tiling

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Select tools	2.1 Tools are selected consistent with the needs of the job 2.2 Tools, including leads and hoses, are checked for tags, serviceability and safety and any faults reported to supervisor in accordance with workplace requirements 2.3 Power tools guards, retaining bolts, couplings, gauges and controls are checked and maintained in accordance with manufacturers' recommendations 2.4 Equipment is selected to hold, position or support material for hand tools application where applicable 2.5 Pre-operational checks, including lubricants, hydraulic fluid and water, are completed in accordance with manufacturers' recommendations
3. Use tools	3.1 Power and/or compressed air supply is connected to work area 3.2 Start up and shut down procedures are performed in accordance with workplace procedures 3.3 Tools are safely and effectively used according to manufacturers' recommendations and workplace requirements 3.4 Tools are safely located when not in immediate use

4. Select plant and equipment	4.1 Functions and limitations of plant/equipment used in roof tiling are identified 4.2 Plant and equipment selected consistent with hazard minimization and needs of job 4.3 Method of operation of plant/equipment is identified 4.4 Plant and equipment is checked for safety, and faults reported to supervisor 4.5 Requirements for guarding, cut off switches, retaining bolts, couplings, gauges and controls are identified and checked 4.6 Requirements for operating and using plant and equipment are recognised and adhered to
5. Use plant and equipment	5.1 Material is located and held in position for application where applicable 5.2 Plant and equipment is safely and effectively used in accordance with workplace requirements 5.3 Plant and equipment is safely located/switched when not in immediate use 5.4 Plant and equipment inspected, maintained, tagged and faults reported in accordance with workplace procedures
6. Clean up	6.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification 6.2 Tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for the use of roof tiling tools and equipment, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	1
Planning and organising activities	Conduct activities associated with the use of roof tiling tools and equipment, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	1
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances and levels, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	1
Using technology	Use workplace technology related to the use of roof tiling tools and equipment, including the use of calculators, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope	• This unit requires the operation of hand and power tools and equipment in roof tiling applications. It involves their identification, their correct application and their effective operation and storage
Safety (OH&S)	• OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances • Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices • Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with power cables (including overhead service trays, cables and conduits), lighting, earth leakage boxes, trip hazards, working with dangerous materials, working in confined spaces, surrounding structures, working safely on roofs, restricted access barriers, traffic control, working at heights, working in proximity to others, worksite visitors and the public • Emergency procedures related to this unit are to include but may not be limited to extinguishing fires, organisational first aid requirements and evacuation
Environmental Requirements	• Environmental requirements are to include but are not limited to waste management, noise, dust, vibration and clean-up management
Quality Requirements	• Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified
Statutory/Regulatory Authorities	• Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice

Tools and equipment

- Tools and equipment are to include measuring tapes/rules, hammers, squares, nail bags, chisels, hand saws, tile cutters, power saws, power drills, power leads, pincers, ladders, trowels, concrete mixers, buckets, shovels, string and chalk lines, nail guns, bedding frames, brooms, blowers, gutter protectors, calculators, fall safety devices, elevators, high pressure water cleaners and embossing mallets
- Tools and equipment may include scaffolds, slate reefers, guillotines, slater's hammers, rippers, blocks, breaks or cutting irons, slating knives, slate cutters, small petrol or diesel engines and small compressors

Materials

- Materials are to include timber and metal battens, sarking materials, mortar, concrete and terracotta tiles, flashings, adhesives, fixings, fastenings and other mechanical fixings
- Materials may include lead, flexible pointing materials, slate, shingles and other hand manufactured products

Communications

- Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals
- On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues

Information

- Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches
- Safe work procedures related to the use of roof tiling tools and equipment
- Regulatory/legislative requirements pertaining to the use of roof tiling tools and equipment
- Manufacturers' specifications and instructions where specified
- Organisation work specifications and requirements
- Instructions issued by authorised organisational or external personnel
- Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools, plant and equipment
- Communication and working effectively and safely with others
- As a minimum, follow work instructions, operating procedures and inspection practices to use the listed roof tiling tools and equipment for their appropriate application, ensuring:
 - correct selection and use of appropriate processes, tools and equipment
 - there is no damage to materials, tools or equipment
 - completing all work to specification
 - compliance with regulations, standards and organisational quality procedures and processes

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - General Construction terminology
 - Plant, tools and equipment types, characteristics, uses and limitations
 - Techniques and procedures for using roof tiling tools and equipment
 - The characteristics and applications of roof tiling materials
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - Measuring and marking
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

**Specific resource
requirements for this unit**

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to the use of roof tiling tools and equipment
 - roof tiling hand and power tools, plant and equipment
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGRT3001B**Unit Descriptor****Tile a regular roof**

This unit specifies the competency required to install roof tiles to different but regular roof structures.

The unit includes the preparation, setting out, installing and fixing of the tiles to the roof.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Roof Tiling

ELEMENT**PERFORMANCE CRITERIA****1. Plan and prepare**

- 1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied
- 1.2 Safety requirements are followed in accordance with safety plans and policies
- 1.3 Signage/barricade requirements are identified and implemented
- 1.4 Plant, tools and equipment selected to carry out tasks that are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement
- 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications
- 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use
- 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied

2. Prepare roof face

- 2.1 Fall arrest system is installed to roof perimeter following regulations and workplace requirements
- 2.2 Elevator is assembled and operated in accordance with manufacturer's instructions and workplace procedures
- 2.3 Roof surface is set out, sarked and battened to manufacturer's recommendations for the specified tile and job specifications
- 2.4 Roof surface and structure is checked for stability and safe access to roof for tile installation
- 2.5 Tiles are loaded onto roof, supported and evenly distributed

3. Install tiles

- 3.1 Roof tiles are spread, cut, secured and installed to manufacturer's specifications
- 3.2 Roof tiles are bedded using correct mortar mix, maintaining alignment
- 3.3 Roof tiles are pointed with mortar to a flush, smooth finish in accordance with job specifications and installed to manufacturer's specifications

- 4. Clean up
 - 4.1 Roof, guttering and downpipes are cleared free of waste and surplus material
 - 4.2 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification
 - 4.3 Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for tiling a regular roof, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturer's instructions, material safety data sheets and equipment instructions	1
Planning and organising activities	Conduct activities associated with tiling a regular roof, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	2
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances and levels, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	1
Using technology	Use workplace technology related to tiling a regular roof, including the use of calculators, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope

- This unit requires the preparation of a regular roof for tiling by sarking and battens and the fixing and finishing of tiles, including their installation, bedding and pointing
- Regular roofs include gable, hip, hip and valley roofs, pitch roofs, skillion, Dutch gable and layback gable
- Specifications may include tile colour, tile profile, type of bond, nailing sequence and wind category
- Tiles may be interlocking or non-interlocking and conform to Australian Standards
- Types of terracotta tiles may include Marseille, Modern French, Swiss, Spanish and French
- Types of concrete tile may include Elebane, Villa, Centurian, Chateau and shingle (concrete)
- Pointing material may be mortar, flexible pointing material or its equivalent

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with power cables (including overhead service trays, cables and conduits), lighting, earth leakage boxes, trip hazards, working with dangerous materials, working in confined spaces, surrounding structures, restricted access, working at height, working safely on roofs, restricted access barriers, traffic control, working at heights, working in proximity to others, worksite visitors and the public
- Emergency procedures related to this unit are to include but may not be limited to extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust, vibration, stormwater management and clean-up management

Quality Requirements	Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified
Statutory/Regulatory Authorities	Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice
Tools and equipment	- Tools and equipment are to include measuring tape/rules, hammers, squares, nail bags, chisels, hand saws, tile cutters, power saws, power drills, power leads, pinchers, ladders, trowels, concrete mixers, buckets, shovels, string lines, chalk lines, nail guns, air compressors and hoses, bedding frames, brooms, blowers, gutter protectors, calculators, fall safety devices, elevators and high pressure water cleaners - Tools and equipment may include scaffolds, slate reefers, guillotines, slater's hammers, rippers, blocks, breaks or cutting irons, slating knives, slate cutters, small petrol or diesel engines, small compressors, tin snips, planes and knives
Materials	- Materials are to include timber and metal battens, sarking materials, mortar, concrete and terracotta tiles, flashings, adhesives, fixings, fastenings and other mechanical fixings - Materials may include lead, flexible pointing materials, slate, shingles and other hand manufactured products
Communications	- Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals - On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues

Information

- Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches
- Safe work procedures related to tiling a regular roof
- Regulatory/legislative requirements pertaining to tiling a regular roof
- Manufacturer's specifications and instructions where specified
- Organisation work specifications and requirements
- Instructions issued by authorised organisational or external personnel
- Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools, plant and equipment
- Communication and working effectively and safely with others
- As a minimum, tile 45 square meter of a roof frame, incorporating a 1.5m hip, a 1.5m valley, a 1.5m gable and a 1.5m top ridge, including the appropriate sarking, battens, tile cutting, bedding and pointing, ensuring:
 - correct identification of requirement and installation and finishing of the tiles
 - correct selection and use of appropriate processes, tools and equipment
 - completing all work to specification

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - General Construction terminology
 - Plant, tools and equipment types, characteristics, uses and limitations
 - Roof tiling techniques and procedures
 - The characteristics and applications of roof tiling materials
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - Roof construction systems/structures and tiling considerations
 - Measuring and marking
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

**Specific resource
requirements for this unit**

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to tiling a regular roof
 - hand and power tools, plant and equipment appropriate to tiling a regular roof
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGRT3002B**Unit Descriptor****Tile an irregular roof**

This unit specifies the competency required to install roof tiles to a roof incorporating irregular shapes or unequal pitches and incorporating a dormer window with tiled surrounds.

The unit includes the preparation, setting out, installing and fixing of the tiles to the roof.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Roof Tiling

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Plant, tools and equipment selected to carry out tasks that are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Prepare roof face	2.1 Fall arrest system is installed to roof perimeter following regulatory and workplace requirements 2.2 Elevator is assembled and operated in accordance with manufacturers' instructions and workplace procedures 2.3 Roof surface is set out, sarked and battened to manufacturers' recommendations for the specified tile and job specifications 2.4 Roof surface and structure is checked for stability and safe access to roof for tile installation 2.5 Tiles are loaded onto roof, supported and evenly distributed
3. Install tiles	3.1 Roof tiles are spread, cut, secured and installed to manufacturers' specifications 3.2 Hip and ridge tiles are bedded using correct mortar mix, maintaining alignment 3.3 Valley, hips, ridges, flexible point plus acrylic finishes and gables are pointed with like colour mortar to a flush, smooth finish in accordance with job specifications

- 4. Tile roof openings, lay back surfaces and/or facades
 - 4.1 Opening surrounds are checked for soakers and flashings, and prepared for tiles
 - 4.2 Surrounds and weatherproofing are tiled to job specifications
 - 4.3 Tiles are spread and secured to steep and vertical surfaces, by individual tile fixing to specifications
- 5. Clean up
 - 5.1 Roof, guttering and downpipes are cleared free of waste and surplus material
 - 5.2 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification
 - 5.3 Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for tiling an irregular roof, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	1
Planning and organising activities	Conduct activities associated with tiling an irregular roof, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	2
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances and levels, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	1
Using technology	Use workplace technology related to tiling an irregular roof, including the use of calculators, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope

- This unit requires the preparation for tiling an irregular roof by sarking and battens and the fixing and finishing of tiles, including their installation, bedding and pointing
- Irregular roofs are to include roofs constructed to irregular shaped plans where corners are not right angled and Dutch hip, turrets, spires, unequal pitch surfaces and Cape Cod, and may include Mansard, Bellcast, Pyramid, bed and point valleys and steel framed roof trusses
- Openings in irregular roofs include, but are not limited to, chimneys, roof ventilators, cupolas, dormer windows, two storey inserts, skylights and pipes and flues
- Specifications may include tile colour, tile profile, type of bond, nailing sequence and wind category
- Tiles may be interlocking (terracotta) or non-interlocking (concrete) and conform to the requirements of AS 2094
- Types of terracotta tiles may include Marseille, modern French, Swiss, Spanish, Roman and new French
- Types of concrete tile may include Elebane, Villa, Centurian, Chateau and shingle (concrete)
- Pointing material may be flexible pointing material or its equivalent

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with power cables (including overhead service trays, cables and conduits), lighting, earth leakage boxes, trip hazards, working with dangerous materials, working in confined spaces, surrounding structures, working safely on roofs, restricted access barriers, traffic control, working at heights, working in proximity to others, worksite visitors and the public
- Emergency procedures related to this unit are to include but may not be limited to extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements	• Environmental requirements are to include but are not limited to waste management, noise, dust, vibration, stormwater management and clean-up management
Quality Requirements	• Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified
Statutory/Regulatory Authorities	• Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice
Tools and equipment	• Tools and equipment are to include measuring tapes/rules, hammers, squares, nail bags, chisels, hand saws, tile cutters, power saws, power drills, power leads, pincers, ladders, trowels, concrete mixers, buckets, shovels, string lines, chalk lines, nail guns, air compressors and hoses, brooms, blowers, gutter protectors, calculators, fall safety devices, elevators and high pressure water cleaners • Tools and equipment may include scaffolds, slate reefers, guillotines, slater's hammers, rippers, blocks, breaks or cutting irons, slating knives, slate cutters, small petrol or diesel engines and small compressors
Materials	• Materials are to include timber and metal battens, sarking materials, mortar, concrete and terracotta tiles, flashings, adhesives, fixings, fastenings and other mechanical fixings • Materials may include lead, flexible pointing material, slate, shingles and other hand manufactured products
Communications	• Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals • On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues

Information

- Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches
- Safe work procedures related to tiling an irregular roof
- Regulatory/legislative requirements pertaining to tiling an irregular roof
- Manufacturers' specifications and instructions where specified
- Organisation work specifications and requirements
- Instructions issued by authorised organisational or external personnel
- Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools, plant and equipment
- Communication and working effectively and safely with others
- As a minimum, tile 45 square meter of an irregular roof frame of any type, incorporating a 1.5m hip, a 1.5m valley, a 1.5m gable and a 1.5m top ridge, including the appropriate sarking, battens, tile cutting, bedding and pointing, ensuring:
 - correct identification of requirement and installation and finishing of the tiles
 - correct selection and use of appropriate processes, tools and equipment
 - completing all work to specification

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - General Construction terminology
 - Plant, tools and equipment types, characteristics, uses and limitations
 - Roof tiling techniques and procedures
 - The characteristics and applications of roof tiling materials
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - Roof construction systems/structures, irregular roofs and tiling considerations
 - Measuring and marking
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

**Specific resource
requirements for this unit**

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to tiling an irregular roof
 - hand and power tools, plant and equipment appropriate to tiling an irregular roof
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGRT3003B**Repair and replace valleys, valley irons and flashings****Unit Descriptor**

This unit specifies the competency required to repair and replace valley roof sections and flashings to different types and styles of tiled roof structures.

The unit includes the preparation, set out, repair, replacement and pointing of tiles to valley sections of roof structures.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Roof Tiling

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Plant, tools and equipment selected to carry out tasks that are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Prepare valley section for repair	2.1 Damaged area is identified and located in accordance with plans and specifications 2.2 Fall arrest system is installed to roof perimeter in accordance with regulatory and workplace requirements 2.3 Tiles to be repaired/replaced are identified from a removed sample 2.4 Damaged tiles are removed to ensure minimum disturbance to remaining roof tiles 2.5 Pointing or mortar is removed ensuring no damage to roof tiles 2.6 Damaged area is left clean and free of loose waste 2.7 Roof structure valleys and flashing installations are checked for soundness and adequacy according to specifications and/or manufacturers' recommendations

3. Repair valley sections	3.1 Damaged structural components of valley section of roof are disassembled and repaired/replaced in accordance with job specifications and manufacturers' recommendations 3.2 Roof tie down fixings are installed/replaced to roof structure in accordance with job specifications and/or manufacturers' recommendations 3.3 Replacement valley flashings are fabricated and installed in accordance with job specifications and manufacturers' recommendations 3.4 Work area and material surface is cleaned free of debris and waste materials in accordance with workplace procedures 3.5 Replacement and recycled roof tiles are retained and sorted to ensure conformity to requirements in matching original roof tiles to specification 3.6 Loose mortar is removed from roof tile surface and mortar joints are struck to match existing/specified colour of roof tiles
4. Replace roof tiles	4.1 Roof tiles are examined individually to ensure conformity to requirements in matching original roof tiles 4.2 Mortar is mixed to required composition to match original specifications 4.3 Roof tiles are laid to maintain conformity to original gauge and alignment whilst maintaining bond to specifications 4.4 Roof tiles are laid to produce designed features in accordance with original design and specifications
5. Replace pointing material	5.1 Pointing material is prepared and distributed for use to design specifications 5.2 Pointing material is applied to ridge tile joints to specification 5.3 Joints are pointed to produce matching finish to existing surrounds and loose material is removed from roof tile surface
6. Clean up	6.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification 6.2 Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for repairing and replacing valleys, valley irons and flashings, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	2
Planning and organising activities	Conduct activities associated with repairing and replacing valleys, valley irons and flashings, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	2
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances and levels, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	1
Using technology	Use workplace technology related to repairing and replacing valleys, valley irons and flashings, including the use of calculators, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope	• This unit requires the repair and/or replacement of valley sections and valley irons, the replacement of tiles and the repointing of the repaired roof • Specifications may include tile colour, tile profile, type of bond, nailing sequence and wind category • Tiles may be interlocking (terracotta) or non-interlocking (concrete) and conform to standards • Pointing material may be flexible pointing material or its equivalent
Safety (OH&S)	• OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control, hazardous materials and substances, restricted access barriers, traffic control, working at heights, working in proximity to others, worksite visitors and the public • Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices • Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with power cables (including overhead service trays, cables and conduits), lighting, earth leakage boxes, trip hazards, working with dangerous materials, working in confined spaces, surrounding structures, restricted access, working at height and working safely on roofs • Emergency procedures related to this unit are to include but may not be limited to extinguishing fires, organisational first aid requirements and evacuation
Environmental Requirements	• Environmental requirements are to include but are not limited to waste management, noise, dust, vibration, stormwater management and clean-up management
Quality Requirements	• Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified

Statutory/Regulatory Authorities	• Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice
Tools and equipment	• Tools and equipment are to include measuring tape/rules, hammers, squares, nail bags, chisels, hand saws, tile cutters, power saws, power drills, power leads, pincers, ladders, trowels, concrete mixers, buckets, shovels, string lines, chalk lines, nail guns, air compressors and hoses, bedding frames, brooms, blowers, gutter protectors, calculators, fall safety devices, elevators and high pressure water cleaners • Tools and equipment may include scaffolds, slate reefers, guillotines, slater's hammers, rippers, blocks, breaks or cutting irons, slating knives, slate cutters, small petrol or diesel engines and small compressors
Materials	• Materials are to include timber and metal battens, sarking materials, mortar, concrete and terracotta tiles, flashings, adhesives, fixings, fastenings and other mechanical fixings • Materials may include lead, flexible pointing material, slate, shingles and other hand manufactured products
Communications	• Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals • On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues
Information	• Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches • Safe work procedures related to repairing and replacing valleys, valley irons and flashings • Regulatory/legislative requirements pertaining to repairing and replacing valleys, valley irons and flashings • Manufacturers' specifications and instructions where specified • Organisation work specifications and requirements • Instructions issued by authorised organisational or external personnel • Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools, plant and equipment
- Communication and working effectively and safely with others
- As a minimum, remove and replace 1.5 lineal metres of a tiled roof and damaged roof valley iron, ensuring:
- correct identification of requirement and completion of repairs and replacement
- correct selection and use of appropriate processes, tools and equipment
- completing all work to specification
- compliance with regulations, standards and organisational quality procedures and processes

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - General Construction terminology
 - Plant, tools and equipment types, characteristics, uses and limitations
 - Techniques and procedures for repairing tiled roof valleys, valley irons and flashings
 - The characteristics and applications of materials used in repairing tiled roof valleys, valley irons and flashings
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - Roof construction systems/structures and tiling considerations
 - Installation of roof battens, sarking and flashing
 - Measuring and marking
 - Working on roof structures
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to repairing and replacing valleys, valley irons and flashings
 - hand and power tools, plant and equipment appropriate to repairing and replacing valleys, valley irons and flashings
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGRT3004B**Unit Descriptor****Repair and/or renovate tile roofs**

This unit specifies the competency required to repair and/or renovate roof tiles to different roof structures.

The unit includes the preparation for and the replacement and fixing of tiles to the roof.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Roof Tiling

ELEMENT**PERFORMANCE CRITERIA****1. Plan and prepare**

- 1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied
- 1.2 Safety requirements are followed in accordance with safety plans and policies
- 1.3 Signage/barricade requirements are identified and implemented
- 1.4 Plant, tools and equipment selected to carry out tasks that are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement
- 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications
- 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use
- 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied

2. Prepare roof area

- 2.1 Damaged area is identified and located in accordance with job drawings and specifications
- 2.2 Fall arrest system is installed in accordance with regulatory and workplace procedures
- 2.3 Roofing materials and building component parts are safely and effectively handled using appropriate material handling techniques
- 2.4 Damaged tiles are removed to ensure minimum disturbance to remaining roof tiles
- 2.5 Pointing or mortar to be replaced is removed ensuring no damage to roof tiles
- 2.6 Area to be repaired is left clean and free of loose waste
- 2.7 Roof battens, sarking, boarding and flashing installations are checked for soundness and adequacy and replaced in accordance with job specifications

3. Replace roof tiles	3.1 Roof tiles are individually examined to ensure conformity to original roof tiles
	3.2 Mortar is mixed to required composition and job specifications
	3.3 Roof tiles are laid to maintain conformity to gauge, level alignment and plumb whilst maintaining bond to specifications
	3.4 Roof tiles are laid to produce design features in accordance with original design and specifications
	3.5 Mortar joints are struck to match existing colour and loose mortar is removed from roof tile surface
4. Replace pointing material	4.1 Pointing material is mixed to specifications
	4.2 Pointing material is applied to ridge tile joints to specification
	4.3 Joints are pointed to produce matching finish to existing surrounds and loose material is removed from roof tile surface
5. Clean up	5.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification
	5.2 Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required to repair/restore a tiled roof, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	1
Planning and organising activities	Conduct activities associated with the repair/restoration of a tiled roof, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	2
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances and levels, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	1
Using technology	Use workplace technology related to repair/restore a tiled roof, including the use of calculators, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope

- This unit requires the replacement of damaged tiles of a roof, including the preparation of the area, the matching, installation and pointing of the replacement tiles
- Specifications may include tile colour, tile profile, type of bond, nailing sequence and wind category
- Tiles may be interlocking or non-interlocking
- Types of terracotta tiles may include Marseille, Modern French, Swiss, Spanish and French
- Types of concrete tile may include Elebane, Villa, Centurian, Chateau and shingle (concrete)
- Pointing material may be flexible pointing material or its equivalent

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with power cables (including overhead service trays, cables and conduits), lighting, earth leakage boxes, trip hazards, working with dangerous materials, working in confined spaces, surrounding structures, working safely on roofs, restricted access barriers, traffic control, working at heights, working in proximity to others, worksite visitors and the public
- Emergency procedures related to this unit are to include but may not be limited to extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust, vibration, stormwater management and clean-up management

Quality Requirements	• Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified
Statutory/Regulatory Authorities	• Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice
Tools and equipment	• Tools and equipment are to include measuring tape/rules, hammers, squares, nail bags, chisels, hand saws, tile cutters, power saws, power drills, power leads, pincers, ladders, trowels, concrete mixers, buckets, shovels, string lines, chalk lines, nail guns, air compressors and hoses, bedding frames, brooms, blowers, gutter protectors, calculators, fall safety devices, elevators and high pressure water cleaners • Tools and equipment may include scaffolds, small petrol or diesel engines and small compressors
Materials	• Materials are to include timber and metal battens, sarking materials, mortar, concrete and terracotta tiles, flashings, adhesives, fixings, fastenings and other mechanical fixings
Communications	• Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals • On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues
Information	• Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches • Safe work procedures related to the repair and restoration of a tiled roof • Regulatory/legislative requirements pertaining to the repair/restoration of a tiled roof • Manufacturers' specifications and instructions where specified • Organisation work specifications and requirements • Instructions issued by authorised organisational or external personnel • Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools, plant and equipment
- Communication and working effectively and safely with others
- As a minimum, replace approximately 1square meter of damaged tiles in 5 square meter of a roof frame, including the appropriate tile cutting, bedding and pointing, ensuring:
 - correct identification of requirement and installation and finishing of the replacement tiles
 - correct selection and use of appropriate processes, tools and equipment
 - completing all work to specification

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - General Construction terminology
 - Plant, tools and equipment types, characteristics, uses and limitations
 - Roof tiling techniques and procedures and the process of repairing/renovating tiled roofs
 - The characteristics and applications of roof tiling materials
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - Roof construction systems/structures and tiling considerations
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to the repair/restoration of a tiled roof
 - hand and power tools, plant and equipment appropriate to the repair/restoration of a tiled roof
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGRT3005B**Unit Descriptor****Slate a roof**

This unit specifies the competency required to install slate to a conventional hip and valley roof.

The unit includes the preparation for, the setting out and the installing of the slate to the roof.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Roof Tiling

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Plant, tools and equipment selected to carry out tasks that are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Prepare roof surface	2.1 Fall arrest system is installed to roof perimeter by regulatory and workplace requirements 2.2 Elevator is assembled and used in accordance with manufacturers' instructions and workplace procedures 2.3 Roof surface is set out, sarked, boarded and battened as required by job specifications 2.4 Roof surface and structure is checked for stability and safe access to roof for tile installation 2.5 Tiles are loaded onto roof, supported and evenly distributed
3. Prepare slate	3.1 Slate is graded, marked and holed to alignment requirements 3.2 Slate is loaded on to roof, supported and evenly distributed

- 4. Lay and secure slate
 - 4.1 Slate is laid and secured to designed layout of gauge, bond and line
 - 4.2 Ridges and hips are finished in accordance with placement of slate to specifications
 - 4.3 Hip covering is installed, measured, prepared, fitted and secured to specifications
 - 4.4 Roof and guttering are cleared free of waste and surplus material
- 5. Clean up
 - 5.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification
 - 5.2 Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for slating a roof, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	1
Planning and organising activities	Conduct activities associated with slating a roof, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	2
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances and levels, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	1
Using technology	Use workplace technology related to slating a roof, including the use of calculators, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope

- This unit requires the preparation of a regular roof for slating by sarking, boarding and battens and the laying and securing of slate
- Preparation tasks of ridges and hips covering may include marking for length, cutting, folding and drilling holes for securing slate
- Safety hazards include but are not limited to steepness of roof, flatness of roof and adequacy of footholds
- Hip finishes to slate work may be mitred or covered
- Groundwork for slate may be battened and felted (sarked), boarded and felted (sarked), boarded, felted (sarked) and battened and boarded, felted (sarked), counter battened and battened

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with power cables (including overhead service trays, cables and conduits), lighting, earth leakage boxes, trip hazards, working with dangerous materials, working in confined spaces, surrounding structures, working safely on roofs, restricted access barriers, traffic control, working at heights, working in proximity to others, worksite visitors and the public
- Emergency procedures related to this unit are to include but may not be limited to extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust, vibration, stormwater management and clean-up management

Quality Requirements	Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified
Statutory/Regulatory Authorities	Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice
Tools and equipment	- Tools and equipment are to include slate reefers, guillotines, slater's hammers, rippers, blocks, breaks or cutting irons, slating knives, slate cutters, measuring tape/rules, hammers, squares, nail bags, chisels, hand saws, power saws, power drills, power leads, pincers, ladders, surface ladders, trowels, concrete mixers, buckets, shovels, string lines, chalk lines, nail guns, air compressors and hoses, brooms, blowers, gutter protectors, calculators, safety devices, elevators and high pressure water cleaners - Tools and equipment may include scaffolds, small petrol or diesel engines and small compressors
Materials	Materials are to include slate, metal ridging, terracotta/concrete ridging, finials and saddles, cats eyes/picket ridge, timber and metal battens, sarking materials, flashings, mortar, adhesives, fixings, fastenings and other mechanical fixings
Communications	- Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals - On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues

Information

- Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches
- Safe work procedures related to slating a roof
- Regulatory/legislative requirements pertaining to slating a roof
- Manufacturers' specifications and instructions where specified
- Organisation work specifications and requirements
- Instructions issued by authorised organisational or external personnel
- Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools, plant and equipment
- Communication and working effectively and safely with others
- As a minimum, slate 45 square meter of a roof frame, incorporating a 1.5m hip, a 1.5m valley, a 1.5m gable and a 1.5m top ridge, including the appropriate sarking, boarding, battening, bedding and pointing, ensuring:
 - correct identification of requirement and installation and finishing of the slate
 - correct selection and use of appropriate processes, tools and equipment
 - completing all work to specification

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - General Construction terminology
 - Plant, tools and equipment types, characteristics, uses and limitations
 - Slating techniques and procedures
 - The characteristics and applications of slate and slating materials
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - Roof construction systems/structures and slating considerations
 - Measuring and marking
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to slating a roof
 - hand and power tools, plant and equipment appropriate to slating a roof
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGRT3006B**Unit Descriptor****Fix shingles to roofs and facades**

This unit specifies the competency required to fix timber shingles or shakes to provide a waterproof covering to roofs, walls and facades.

The unit includes the preparation for, the installation and finishing of the covered surface.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Roof Tiling

ELEMENT**PERFORMANCE CRITERIA****1. Plan and prepare**

- 1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied
- 1.2 Safety requirements are followed in accordance with safety plans and policies
- 1.3 Signage/barricade requirements are identified and implemented
- 1.4 Plant, tools and equipment selected to carry out tasks that are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement
- 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications
- 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use
- 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied

2. Prepare roof face

- 2.1 Run off devices are installed and maintained as appropriate to the task
- 2.2 Fall arrest system is installed to roof perimeter by regulatory and workplace requirements
- 2.3 Elevator is assembled and operated in accordance with manufacturers' instructions and workplace procedures
- 2.4 Roof surface is set out, sarked and boarded where required to job specifications
- 2.5 Battens are cut, fitted and fixed to line and spacing to shingle manufacturers' and job specifications
- 2.6 Metal valley sheets are laid and fixed into place by nailing on edge extremities
- 2.7 Protrusions for installation of flashing are prepared with covered roof surface

- 3. Install shingles/shakes
 - 3.1 Shingles/shakes are loaded, supported and evenly distributed on roof
 - 3.2 Sarking is laid below initial course of shingles, to job specifications
 - 3.3 Shingles/shakes are fixed in line, with spacing between and guttering overhang to standards and job specifications
 - 3.4 Subsequent courses are laid with sarking and shingles fixed to standards and job specifications
 - 3.5 Staggered joints are maintained with overlapping shingles/shakes to job specifications
 - 3.6 Shingles/shakes are split and cut to form junctions with walls or roof surfaces
 - 3.7 Valleys are finished to specifications
 - 3.8 Gable ends are finished to line and specified overhang
- 4. Finish hips and ridges
 - 4.1 Same size shingles/shakes are selected for hips and ridges
 - 4.2 Edges of shingles/shakes are bevel cut to provide butt joints in capping sections
 - 4.3 Hips and ridges are covered, fixed and finished to line
- 5. Clad walls and facades
 - 5.1 Method of finishing shingles/shakes on wall/facade is identified from specifications
 - 5.2 Sheathed surfaces are sheeted and fixed to framework
 - 5.3 Wall/facade is set out to spacing for battens and exposure of shingles/shakes specified
 - 5.4 Sarking and shingles/shakes are fitted to specified method for fixing
 - 5.5 Junctions are constructed at corners to specified finishes
 - 5.6 Flashings are finished to job specifications
- 6. Clean up
 - 6.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification
 - 6.2 Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for fixing shingles to roofs and facades, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	2
Planning and organising activities	Conduct activities associated with fixing shingles to roofs and facades, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	2
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances and levels, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	2
Using technology	Use workplace technology related to fixing shingles to roofs and facades, including the use of calculators, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope

- This unit requires the preparation of a roof and a wall for the fitting with shingles/shakes by sarking and battens and the fixing and finishing of shingles/shakes
- Shingles/shakes may be terracotta or timber
- Timber shingles/shakes may be straight split, taper split or hand split and resawn
- Groundwork for shingles/shakes on roof surfaces may be battened and sarked, board and sarked and board, battened and sarked
- Types of roof protrusions may include chimneys, dormer windows, two storey insert, skylights, pipes and flues, roof ventilators and cupolas
- Wall/facade covering method may be single coursing or double coursing
- Joining at wall corners may include butted against boards and laced for external, laced with flashing behind for internal and butted against timber stop for both external and internal

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with power cables (including overhead service trays, cables and conduits), lighting, earth leakage boxes, trip hazards, working with dangerous materials, working in confined spaces, surrounding structures, working safely on roofs, restricted access barriers, traffic control, working at heights, working in proximity to others, worksite visitors and the public
- Emergency procedures related to this unit are to include but may not be limited to extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements	• Environmental requirements are to include but are not limited to waste management, noise, dust, vibration, stormwater management and clean-up management
Quality Requirements	• Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified
Statutory/Regulatory Authorities	• Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice
Tools and equipment	• Tools and equipment are to include measuring tape/rules, hammers, squares, nail bags, chisels, hand saws, power saws, power drills, power planers, cutting blades, power leads, pincers, spirit levels, saw stools, ladders, trowels, concrete mixers, buckets, shovels, string lines, chalk lines, nail guns, air compressors and hoses, brooms, blowers, gutter protectors, calculators, fall safety devices, elevators and high pressure water cleaners • Tools and equipment may include scaffolds, small petrol or diesel engines and small compressors
Materials	• Materials are to include shingles/shakes, timber and metal battens, sarking materials, mortar, fixings, flashings, fastenings and other mechanical fixings
Communications	• Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals • On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues

Information

- Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches
- Safe work procedures related to fixing shingles to roofs and facades
- Regulatory/legislative requirements pertaining to the fixing of shingles to roofs and facades
- Manufacturers' specifications and instructions where specified
- Organisation work specifications and requirements
- Instructions issued by authorised organisational or external personnel
- Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools, plant and equipment
- Communication and working effectively and safely with others
- As a minimum, fix shingles/shakes to 8 square meter of a roof frame, incorporating a 1.5m hip, a 1.5m valley, a 1.5m gable and a 1.5m top ridge, including the appropriate sarking, battens and finishing and fix shingles/shakes to an external wall of 8square meter, incorporating an internal corner, including the appropriate sarking, battens and finishing, ensuring:
 - correct identification of requirement and installation and finishing of the shingles
 - correct selection and use of appropriate processes, tools and equipment
 - completing all work to specification

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - General Construction terminology
 - Plant, tools and equipment types, characteristics, uses and limitations
 - Roof and facade shingling techniques and procedures
 - The characteristics and applications of shingles/shakes materials
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - Roof and facade construction systems/structures and shingling considerations
 - Measuring and marking
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to fixing shingles to roofs and facades
 - hand and power tools, plant and equipment appropriate to fixing shingles to roofs and facades
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGSP2001B**Unit Descriptor****Handle solid plastering materials**

This unit specifies the competency required to handle, sort and store solid plastering materials.

The unit includes the identification of a range of commonly used materials, the planning and preparation for work, the safe and effective handling, sorting and storage of materials including both during installation and removal and the cleaning and maintenance of the work area.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Solid Plastering

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Tools and equipment selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.5 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Handle, sort and store solid plaster material and components	2.1 Solid plastering material and components are identified on delivery to site and checked for conformity to material schedule, plans and specifications 2.2 Handling characteristics of solid plastering material and components are identified and safe handling techniques are selected and applied in accordance with workplace requirements 2.3 Solid plastering material and components are sorted to suit material type and size, stacked for ease of identification, retrieval for task sequence, and job location in accordance with work specifications 2.4 Solid plastering material and components are protected against physical and water damage and stored clear of traffic ways 2.5 Signage and/or barricades are erected to isolate stored materials from workplace traffic or unauthorised access
3. Handle and position solid plastering material and components in preparation for installation	3.1 Solid plastering material and components are identified from stack and safely handled and distributed to required job location 3.2 Solid plastering materials and components are positioned ready for fixing in accordance with manufacturers' recommendations and job requirements

- 4. Handle and remove solid plastering material and components on completion
 - 4.1 Materials are handled safely and effectively according to MSDS and requirements of regulatory authorities
 - 4.2 Hazardous material is identified for separate handling by authorised personnel
 - 4.3 Dust suppression procedures are used to minimise health risk to self and others
 - 4.4 Protection of materials is provided in accordance with specific material needs
 - 4.5 Materials are stored safely and effectively according to material safety data sheets and requirements of regulatory authorities
- 5. Clean up
 - 5.1 Unused materials are sealed and stored/stacked in accordance with standard material handling practices and techniques and company requirements
 - 5.2 Tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices
 - 5.3 Stormwater system is protected during clean up process in accordance with sound work practices compliant with EPA
 - 5.4 Waste and unwanted materials are removed and placed into job waste bins or rubbish stockpile in a safe and effective manner in accordance with sound work practices compliant with EPA

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for the handling of solid plastering materials including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	1
Planning and organising activities	Conduct activities associated with the handling of solid plastering materials, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	1
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	1
Using technology	Use workplace technology related to the handling of solid plastering materials, including the use of calculators, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope

- Solid plastering materials and components are to include corner beads, casing beads, render and setting coats mix composition (including additives, like plasticisers, colour and waterproofing agents), timber or metal lathing, fasteners, sand, lime, lime putty, plaster compounds and finish coats
- Protection of stacked/stored materials from moisture or damage may include isolation/separation, covering, tying or banding, barricades, signs, locking away (hazardous materials)
- Waste material and debris include but are not limited to banding straps, packing pieces, broken or damaged goods, cardboard, plastic, paper, excess plaster/render material
- Dust suppression procedures may include spraying with water, covering or use of a vacuum cleaner

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with manual handling, lighting, trip hazards, working with hazardous materials, traffic control, working in proximity to others, worksite visitors and the public
- Emergency procedures related to this unit are to include extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust, vibration, stormwater protection and clean-up management

Quality Requirements	• Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified
Statutory/Regulatory Authorities	• Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice
Tools and equipment	• Tools and equipment are to include but not be limited to straight edges, mortar boards and stands, shovels, wheelbarrows and sieves
Communications	• Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals • On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues
Information	• Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches • Safe work procedures related to the handling and storage of solid plastering materials and components • Regulatory/legislative requirements pertaining to solid plastering materials • Manufacturers' specifications and instructions where specified • Organisation work specifications and requirements • Instructions issued by authorised organisational or external personnel • Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools and equipment
- Communication and working effectively and safely with others
- Handle and store the mandatory solid plastering materials and components listed in the range statement
- Dispose of waste/excess materials

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements including common manual handling injuries and handling techniques
 - Quality requirements
 - Plastering terminology
 - Plastering tools and equipment types, characteristics, uses and limitations
 - The types, characteristics, uses and limitations of solid plastering materials and components
 - Systems and techniques for safe handling of materials
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to the handling and storage of solid plastering
 - hand and power tools and equipment appropriate to the handling and storage of solid plastering
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGSP2002B**Unit Descriptor****Use solid plastering tools and equipment**

This unit specifies the competency required to use solid plastering tools, plant and equipment.

The unit includes the identification, selection and safe use of a range of commonly used solid plastering tools, plant and equipment and the storage and user maintenance of these.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Solid Plastering

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Material quantity requirements are calculated in accordance with plans and/or specifications 1.5 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use 1.6 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Identify hand and power tools	2.1 Hand and power tools, their functions, operations and limitations are identified 2.2 OH&S requirements for using hand tools are recognised and adhered to 2.3 OH&S requirements for using power tools are recognised and adhered to
3. Select tools for project	3.1 Tools are selected consistent with job requirements 3.2 Tools, including leads and hoses, are checked for tags, serviceability and safety and any faults rectified or reported 3.3 Power tools guards, retaining bolts, couplings, gauges and controls are checked and maintained in accordance with manufacturers' recommendations 3.4 Equipment to hold or support material during operation is selected 3.5 Pre-operational checks including lubricants, hydraulic fluid and water are completed according to manufacturers' recommendations

4. Use tools	4.1 Power and/or compressed air supply is connected to work area
	4.2 Start up and shut down procedures are followed
	4.3 Tools are safely and effectively used according to manufacturers' recommendations and OH&S requirements
	4.4 Tools are safely located when not in immediate use
5. Select plant and equipment	5.1 Function and limitations of plant/equipment used in solid plastering are identified
	5.2 Plant and equipment are selected consistent with hazard minimization and needs of job
	5.3 Method of operation of plant/equipment is identified
	5.4 OH&S requirements for operating and using plant and equipment are recognised and adhered to
	5.5 Plant and equipment are checked for safety and faults are rectified or reported
6. Use plant and equipment	6.1 Plant and equipment are safely and effectively used
	6.2 Plant and equipment are safely located when not in immediate use
	6.3 Plant and equipment are cleaned, maintained and stored after use
7. Clean up	7.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification
	7.2 Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for the use of solid plastering tools and equipment including work instructions, plans/sketches/ diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	1
Planning and organising activities	Conduct activities associated with the handling of solid plastering tools and equipment to avoid backtracking and rework	1
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	1
Using technology	Use workplace technology related to the handling of solid plastering materials, including the use of plant items, calculators, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope

- Tools and equipment are to include measuring tape/rules, trowels, brushes, screed boards, hammers and may include scaffolding/work platforms
- Power tools are to include, but are not limited to, power saws, power grinders and power mixers
- Plant is to include, but is not limited to small petrol or diesel engine driven generators, small compressors air operated, power actuated fasteners and may include earth leakage protection, lighting sets and power routers
- Levelling devices are to include but are not limited to straight edge, line level, string line, spirit level, water level and laser
- Hand tool processes are to include, but are not limited to setting out, marking and levelling; cutting, planing, boring and shaping of material; placing and finishing concrete and mortar products; and material shifting and holding

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with working with cutting edges, power equipment, power leads and sources, lighting, trip hazards, manual handling, working in proximity to others, noise, dust and ventilation
- Emergency procedures related to this unit are to include but may not be limited to emergency shutdown and stopping, extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust, vibration, stormwater protection and clean-up management

Quality Requirements	• Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified
Statutory/Regulatory Authorities	• Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice
Materials	• Materials may include corner beads, casing beads, render and setting coats mix composition (including additives, like plasticisers, colour and waterproofing agents), timber or metal lathing, fasteners, sand, lime, lime putty, plaster compounds and finish coats
Communications	• Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals • On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues
Information	• Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches • Safe work procedures related to the use of solid plastering tools and equipment • Regulatory/legislative requirements pertaining to solid plastering tools and equipment • Manufacturers' specifications and instructions where specified • Organisation work specifications and requirements • Instructions issued by authorised organisational or external personnel • Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Communication and working effectively and safely with others
- The selection, use and maintenance of the tools and equipment listed in the range statement
- The selection, use and operator maintenance of the plant listed as mandatory in the range statement

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - Wall and ceiling industry terminology
 - Types, characteristics, uses and limitations of solid plastering hand tools
 - Types, characteristics, uses and limitations of solid plastering power tools
 - Types, characteristics, uses and limitations of solid plastering plant items
 - Systems and techniques for safe handling of materials
 - Types, characteristics, uses and limitations of solid plastering materials
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - hand and power tools, plant and equipment appropriate to the solid plastering tools and equipment
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGSP2003B**Unit Descriptor****Prepare surfaces for plastering**

This unit specifies the competency required to prepare surfaces to accept a new skin of lining materials.

The unit includes the planning and preparation for work, the production of a level and plumb surface through sanding/grinding, patching, levelling, packing, filling and finishing, and the post work clean-up.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Solid Plastering

ELEMENT**PERFORMANCE CRITERIA****1. Plan and prepare**

- 1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied
- 1.2 Safety requirements are followed in accordance with safety plans and policies
- 1.3 Signage/barricade requirements are identified and implemented
- 1.4 Tools and equipment selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement
- 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications
- 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use
- 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied

2. Prepare surface

- 2.1 Preparation requirements are identified from site inspection and plans/specifications
- 2.2 Hazards, obstructions and attachments are removed, or arrangements made for their removal
- 2.3 Surface preparation tools are selected and set up in accordance with surface condition and job requirements
- 2.4 Tools are used to prepare surface in accordance with manufacturers' specifications and job requirements
- 2.5 All loose or protruding material is removed by sander/grinder and brush so that surface is prepared to specification

- 3. Patch and fill holes and depressions
 - 3.1 Patching method of hole is determined from type of material surface, size of hole, compatibility of materials and planned finish
 - 3.2 Patching materials are selected to suit material surface and mixed to manufacturers' specifications
 - 3.3 Material is applied to manufacturers' specifications using appropriate application method
 - 3.4 Surface is brushed/washed/scraped clean of surplus material in accordance with type of patching material and material surface
 - 3.5 Patched areas are sealed by application of prime or sealing coat, to suit requirements of specified finishes
- 4. Clean up
 - 4.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification
 - 4.2 Tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for the preparation of surfaces for plastering, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	1
Planning and organising activities	Conduct activities associated with the preparation of surfaces for plastering, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	1
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances and levels, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	1
Using technology	Use workplace technology related to the preparation of surfaces for plastering, including the use of calculators, tools and equipment, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope	• Surface preparations are to include preparation for solid plastering and sheet plastering or lining material and may include pre-cast cladding • Surfaces may include timber, plasterboard/plasterglass, masonry, brick, metal (ferrous and non-ferrous), concrete and solid plaster
Safety (OH&S)	• OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances • Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices • Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with working with cutting edges, power equipment, hazardous substances, power leads and sources, lighting, trip hazards, manual handling, noise, dust, ventilation, , traffic control, working at heights, working in proximity to others, worksite visitors and the public • Emergency procedures related to this unit are to include but may not be limited to emergency stopping, extinguishing fires, organisational first aid requirements and evacuation
Environmental Requirements	• Environmental requirements are to include but are not limited to waste management, noise, dust, vibration, stormwater protection and clean-up management
Quality Requirements	• Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified
Statutory/Regulatory Authorities	• Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice

Tools and equipment	• Tools are to include, but are not limited to, scrapers, brushes, brooms, sponges, buckets, sanding blocks, shovels, power sanders, power grinders, filling blades, chisels, hammers and trowels • Equipment may include, but is not limited to, elevated work platforms, trestles, planks, ladders, hoses and water sprayers
Materials	• Patching materials are to include, but are not limited to, cellulose/plaster proprietary fillers, plaster, sand and cement, lime putty, caulking compounds and sheet material
Communications	• Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals • On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues
Information	• Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches • Safe work procedures related to the preparation of surfaces for plastering • Regulatory/legislative requirements pertaining to the preparation of surfaces for plastering • Manufacturers' specifications and instructions where specified • Organisation work specifications and requirements • Instructions issued by authorised organisational or external personnel • Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools and equipment
- Communication and working effectively and safely with others
- The preparation of surfaces for plastering, either solid plastering (masonry or concrete) or sheet plastering (timber, steel or masonry) including:
 - both wall and ceiling surfaces to a level and plumb surface finish, and
 - the patching or filling of holes and depressions

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - Plastering and wall and ceiling terminology
 - Surface preparation tools and equipment types, characteristics, uses and limitations
 - Surface preparation techniques including sanding, planing, levelling, packing, patching and filling
 - Types, uses and limitations of surface preparation materials
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to the preparation of surfaces for plastering
 - hand and power tools and equipment appropriate to the preparation of surfaces for plastering
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGSP3001B**Apply float and render to straight and curved surfaces****Unit Descriptor**

This unit specifies the competency required to float, render and finish flat and curved solid plastering work.

The unit includes the planning and preparation for the work, the preparation of templates, the preparation of the background surface, the application of floating and rendering to flat and curved surfaces and to piers, the finishing of the rendering coats and the post work clean-up activities.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Solid Plastering

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Tools and equipment selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Prepare templates for curved work or circular columns	2.1 Material is selected to manufacture templates 2.2 Radiuses and shapes are established for curves and columns to plans/specifications 2.3 Templates are manufactured and formed to suit job requirements
3. Prepare background surface	3.1 Background surface is identified and wire-brushed if required 3.2 Dash coat is mixed and applied liberally to wetted surface 3.3 Bonding coats, using patent products, are applied to specifications 3.4 Metal beads are selected for external or squint arises 3.5 Metal beads are fixed to arises and checked for accuracy

4. Apply floating and rendering to flat and curved surfaces	4.1 Screeding lines or guides are established to specified tolerances 4.2 Float is used and applied to Australian Standards and plans/specifications 4.3 Floating coat is applied and ruled off to screed 4.4 Surface is finished plumb and levelled to specified alignment tolerance 4.5 Heads, reveals and sills are finished square off to wall face and back into opening 4.6 All internal angles, ceiling and floor lines are accurately cut
5. Apply floating and rendering coats to piers	5.1 Floating coat is applied using floating profiles/rules, dutch pins or hooks so that face of pier is plumb and ruled off 5.2 Face is squared off to form returns and reveals, rules removed and arises left square or radiused as required
6. Apply floating coat within metal beading	6.1 Metal beading is fixed to base surface to form a panel with expansion joint so that panel is plumb and square to specified position 6.2 Panels are finished to true, flat surfaces, suitable for applying plaster and lime setting
7. Finish rendering coats on flat walls and piers and curved work	7.1 Walls are hand floated to fill slacks and voids 7.2 Walls are scoured and fined using water and hand float systems
8. Clean up	8.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification 8.2 Tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for the application of float and render, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	2
Planning and organising activities	Conduct activities associated with the application of float and render, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	2
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate measurements, estimate distances, establish levels, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	1
Using technology	Use workplace technology related to the application of float and render, including the use of calculators, the use of levelling devices, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope

- Floating, rendering and finishing are to include horizontal, vertical and curved surfaces which may include walls, reveals, sills, piers and columns
- Templates are to include those for curved work and circular columns
- Background surfaces may include concrete, concrete blockwork, brickwork, stonework, timber or metal lathing
- Cleaning and preparation of background surfaces are to include wire brushing, grinding and washing down and may include chipping and blast cleaning
- Wash coating may be applied using trowel, brush or nozzle spray
- Bond coating may be applied using nozzle spray, roller or brush

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with manual handling, lighting, trip hazards, working with hazardous materials, traffic control, working at heights, working in proximity to others, worksite visitors and the public
- Emergency procedures related to this unit are to include extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust, stormwater protection and clean-up management

Quality Requirements

- Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified

Statutory/Regulatory Authorities	• Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice
Tools and equipment	• Tools and equipment are to include measuring tapes/rules, spirit levels, squares, trowels, floats, brushes, screed boards, straight edges, mortar boards and stands, shovels, wheelbarrows, hawks, joint rules, small tools, plumb bobs and mason's squares, buckets, sieves, power leads, hammers, tin snips, and may include grinders, wood saws, metal files, concrete mixers and scaffolding
Materials	• Solid plastering materials and components are to include corner beads, casing beads, render and setting coats mix composition (including additives, like plasticisers, colour and waterproofing agents), sand, lime, lime putty, plaster compounds and finish coats • Other materials may include flat sheet PGI, flat marine ply, timber as selected and nails as selected
Communications	• Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals • On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues
Information	• Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches • Safe work procedures related to the application of float and render • Regulatory/legislative requirements pertaining to the application of float and render • Manufacturers' specifications and instructions where specified • Organisation work specifications and requirements • Instructions issued by authorised organisational or external personnel • Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools and equipment
- Communication and working effectively and safely with others
- The floating, rendering and finishing to specification of a minimum of three surfaces including:
 - a curved wall
 - a ceiling, and
 - a column

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - Solid plastering terminology
 - Plastering tools and equipment types, characteristics, uses and limitations
 - Flat and curved surface plastering floating, rendering and finishing techniques
 - The types, characteristics, uses and limitations of solid plastering materials and components
 - Systems and techniques for safe handling of materials
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to the application of float and render
 - hand and power tools and equipment appropriate to the application of float and render
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGSP3002B**Unit Descriptor****Apply set coats**

This unit specifies the competency required to mix and apply plaster setting to flat and curved solid plaster backgrounds.

The unit includes the planning and preparation for the work, the preparation of the backgrounds, the mixing of the setting, the application and finishing of the set and the completion of clean-up activities.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Solid Plastering

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Tools and equipment selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Prepare backgrounds for set coat application	2.1 Background surface is identified and surface preparation process is selected in accordance with requirements of the setting coat to be applied 2.2 Surface is cleaned in preparation for application 2.3 Surface is wet down to provide an even suction appropriate to the setting rate for the setting coat being applied 2.4 Surface is checked for appropriate level of suction appropriate to the setting rate of the setting coat being applied
3. Mix plaster and lime setting	3.1 Mix ratios of plaster and lime are selected for appropriate backgrounds, or to architect's specifications 3.2 Products are mixed to standard requirements and manufacturers' specifications
4. Apply plaster and lime set coat	4.1 Application of set coats are in accordance with relevant standards and architect's requirements 4.2 Surface is trowelled until a hard, smooth finish is achieved to specified tolerances or levels of finish

- 5. Clean up
 - 5.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification
 - 5.2 Tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for the application of set coats, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	2
Planning and organising activities	Conduct activities associated with the application of set coats, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	2
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate measurements, estimate distances, establish levels, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	1
Using technology	Use workplace technology related to the application of set coats, including the use of calculators, the use of levelling devices, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope

- The application of set coats is to cover horizontal, vertical, flat and curved surfaces which may include walls, heads, arises, soffits, reveals and radiussed angles
- Set mix is to be in accordance with the relevant Australian Standard
- Setting coats may incorporate synthetic proprietary products
- Background surfaces may include cement, sand plastered walls; cement, lime, sand plastered walls; sand, plaster and lime walls; and smooth concrete surfaces
- Cleaning of background surfaces are to include wire brushing, grinding, washing down and scraping and wetting and may include chipping and blast cleaning

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with manual handling, lighting, trip hazards, working with hazardous materials, traffic control, working at heights, working in proximity to others, worksite visitors and the public
- Emergency procedures related to this unit are to include extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust, stormwater protection and clean-up management

Quality Requirements

- Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified

Statutory/Regulatory Authorities	• Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice
Tools and equipment	• Tools and equipment may include but are not limited to measuring tapes/rules, spirit levels, squares, trowels, floats, brushes, screed boards, scaffolding, straight edges, grinders, concrete mixers, mortar boards and stands, shovels, wheelbarrows, hawks, joint rules, small tools, plumb bobs and mason's squares
Materials	• Solid plastering materials and components are to include corner beads, casing beads, render and setting coats mix composition (including additives, like plasticisers, colour and waterproofing agents), sand, lime, lime putty, plaster compounds and finish coats
Communications	• Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals • On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues
Information	• Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches • Safe work procedures related to the application of set coats • Regulatory/legislative requirements pertaining to the application of set coats • Manufacturers' specifications and instructions where specified • Organisation work specifications and requirements • Instructions issued by authorised organisational or external personnel • Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools and equipment
- Communication and working effectively and safely with others
- The application of set coats to specification on a minimum of three surfaces which are to include:
 - one vertical
 - one horizontal, and
 - one curved

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - Solid plastering terminology
 - Plastering tools and equipment types, characteristics, uses and limitations
 - Set coat mixing and application techniques
 - The types, characteristics, uses and limitations of solid plastering materials and components
 - Systems and techniques for safe handling of materials
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to the application of set coats
 - hand and power tools and equipment appropriate to the application of set coats
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGSP3003B**Unit Descriptor****Apply trowelled texture coat finishes**

This unit specifies the competency required to mix and apply trowelled texture coat finishes.

The unit includes the planning and preparation for the work, the preparation of the background surface, the mixing, application and finishing of the texture coats and the completion of clean-up activities.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Solid Plastering

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Tools and equipment selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Prepare surface area	2.1 Materials and substrate surfaces are prepared for the specified trowelled texture coat finish in accordance with manufacturers' recommendations 2.2 Dash coat is mixed and applied liberally to wetted surface in accordance with manufacturers' recommendations and specifications
3. Mix and apply materials	3.1 Texture coating materials are mixed to designed proportion and consistency in accordance with manufacturers' recommendations and job specifications 3.2 Texture coat is applied to specified surfaces with trowel and to correct thickness 3.3 Texture coat is applied in accordance with manufacturers' recommendations and job specifications
4. Finish and cure the texture coat	4.1 Texture coat is surface finished plumb/level in accordance with manufacturers' recommendations and job specifications 4.2 Finished texture coat surface is cured in accordance with manufacturers' recommendations and job specifications

- 5. Clean up
 - 5.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification
 - 5.2 Tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for the application of trowelled texture coat finishes, including work instructions, plans/ sketches/ diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	1
Planning and organising activities	Conduct activities associated with the application of trowelled texture coat finishes, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	1
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate measurements, estimate distances, establish levels, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	1
Using technology	Use workplace technology related to the application of trowelled texture coat finishes, including the use of calculators, the use of levelling devices, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope

- The application of trowelled texture coat finishes is to include but not be limited to application to horizontal or vertical surfaces to a maximum thickness of 8 mm
- The trowelled texture coat finishes may include but not be limited to high build (acrylic or styrene/acrylate) coatings, proprietary products or lines of trowelled texture coat finishes and cement render
- The surfaces used for application of trowelled texture coat finishes may include but not be limited to concrete, concrete blockwork, brickwork, stonework, timber or metal lathing, off form concrete, fibre cement sheeting and tilt up concrete slabs and other brick and masonry surfaces
- Cleaning of surfaces is to include wire brushing, grinding, shipping and washing down
- Dash coat may be applied using trowel, brush or nozzle spray

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with manual handling, lighting, trip hazards, working with hazardous materials, traffic control, working at heights, working in proximity to others, worksite visitors and the public
- Emergency procedures related to this unit are to include but may not be limited to extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust, stormwater protection and clean-up management

Quality Requirements	Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified
Statutory/Regulatory Authorities	Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice
Tools and equipment	Tools and equipment may include but are not limited to measuring tapes/rules, spirit levels, squares, trowels, floats, brushes, screed boards, scaffolding, straight edges, grinders, concrete mixers, mortar boards and stands, shovels, wheelbarrows, hawks, joint rules, small tools, plumb bobs and mason's squares
Materials	Materials may include acrylic or styrene/acrylate coatings, cement render or other proprietary texture coat finish products
Communications	- Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals - On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues
Information	- Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams and sketches - Safe work procedures related to the application of trowelled texture coat finishes - Regulatory/legislative requirements pertaining to the application of trowelled texture coat finishes - Manufacturers' specifications and instructions where specified - Organisation work specifications and requirements - Instructions issued by authorised organisational or external personnel - Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools and equipment
- Communication and working effectively and safely with others
- The preparation for and application to specification of a minimum of two different types of texture coat finishes

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - Solid plastering terminology
 - Plastering tools and equipment types, characteristics, uses and limitations
 - Trowelled texture coat finish application techniques
 - The types, characteristics, uses and limitations of solid plastering materials and components
 - Systems and techniques for safe handling of materials
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to the application of trowelled texture coat finishes,
 - hand and power tools and equipment appropriate to the application of trowelled texture coat finishes,
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGSP3004B**Unit Descriptor****Restore and renovate solid plasterwork**

This unit specifies the competency required to repair damage in lime mortar cement render and solid plastered surfaces.

The unit includes the planning and preparation for the work, the selection of the repair processes and techniques, the restoration of plasterwork, the renovation of lettering and the completion of post-work clean up activities.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Solid Plastering

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Tools and equipment selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.5 Run off devices are installed and maintenance processes applied if appropriate to the task 1.6 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Select restoration or renovation method	2.1 Extent and type of restoration or renovation required are identified by site examination and from plans and specifications 2.2 Drawing and/or template of damaged area are prepared to profile/moulding shape of existing work
3. Restore plasterwork	3.1 Materials are mixed and prepared for use 3.2 Damaged plasterwork is restored to original condition or specifications in accordance with plans and specifications 3.3 Damaged cement or plaster mould work is restored to original condition in accordance with plans and specifications 3.4 Textured finishes are applied to match original surfaces, details and alignment
4. Renovate lettering and monograms	4.1 Surface for renovation is prepared to architect's specifications 4.2 Monograms and lettering panels are constructed in sand and cement mortar to match detail for restorations 4.3 Materials are applied to fine finish, with sharp arises, square returns and plumb/level to requirements or job drawings

- 5. Clean up
 - 5.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification
 - 5.2 Tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for the restoration and renovation of solid plasterwork, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	2
Planning and organising activities	Select the most appropriate available rectification process and plan and organise its implementation including the co-ordination and use of equipment, materials and tools to avoid backtracking and rework	2
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate measurements, establish levels, calculate material requirements, complete feasibility assessments and establish quality checks	2
Solving problems	Establish safe and technically achievable work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	2
Using technology	Use workplace technology related to the restoration and renovation of solid plasterwork, including the matching of materials, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope	• Restoration may be to lime mortar or cement render surface and may include but is not limited to straight or curved walls, straight or curved ceilings, chimneys and archways • Renovation is to include lettering and may include monograms
Safety (OH&S)	• OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances • Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices • Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with manual handling, lighting, trip hazards, working with hazardous materials, traffic control, working at heights, working in proximity to others, worksite visitors and the public • Emergency procedures related to this unit are to include extinguishing fires, organisational first aid requirements and evacuation
Environmental Requirements	• Environmental requirements are to include but are not limited to waste management, noise, dust, stormwater protection and clean-up management
Quality Requirements	• Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified
Statutory/Regulatory Authorities	• Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice

Tools and equipment	• Tools and equipment are to include measuring tapes/rules, spirit levels, squares, trowels, floats, brushes, screed boards, straight edges, grinders, mortar boards and stands, shovels, wheelbarrows, hawks, joint rules, small tools, plumb bobs and mason's squares, buckets, sieves, power leads, hammers, tin snips, and may include wood saws, metal files, concrete mixers and scaffolding
Materials	• Solid plastering materials and components are to include corner beads, casing beads, render and setting coats mix composition (including additives, like plasticisers, colour and waterproofing agents), sand, lime, lime putty, plaster compounds and finish coats
Communications	• Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals • On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues
Information	• Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches • Safe work procedures related to the restoration and renovation of solid plasterwork • Regulatory/legislative requirements pertaining to the restoration and renovation of solid plasterwork • Manufacturers' specifications and instructions where specified • Organisation work specifications and requirements • Instructions issued by authorised organisational or external personnel • Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools and equipment
- Communication and working effectively and safely with others
- Restore solid plasterwork to specification on a minimum of three tasks including:
 - one curved surface
 - one ceiling, and
 - one archway or column
- Renovate lettering to specification where the task requires the preparation and use of significant moulds

Relationship to other units

Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - Solid plastering terminology
 - Plastering tools and equipment types, characteristics, uses and limitations
 - Solid plastering, restoration and renovation techniques
 - The types, characteristics, uses and limitations of solid plastering materials and components
 - Systems and techniques for safe handling of materials
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to the restoration and renovation of solid plasterwork
 - hand and power tools and equipment appropriate to the restoration and renovation of solid plasterwork
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGSP3005B**Unit Descriptor****Install pre-cast decorative mouldings**

This unit specifies the competency required to install pre-cast decorative mouldings to masonry, plasterboard and fibre cement sheets.

The unit includes the planning and preparation for work, the preparation of the work area, the measuring, cutting and fixing of cast plaster, the finishing of junctions for painting and the completion of post work clean up activities.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Solid Plastering

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Tools and equipment selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Prepare work area for application processes	2.1 Work area and substrate are prepared for installation of pre-cast mouldings to plans/specifications 2.2 Substrate is checked for conformance in accordance with the relevant Australian Standard
3. Fix and stop pre-cast moulded archways	3.1 Plasterboard wall sheets are confirmed to be in accordance with plans/specifications 3.2 Archway profile is set out and cut to architect's drawings and specifications 3.3 Timber arch soffit templates are cut and fixed to position 3.4 Infill moulding is fixed to arch soffit and reveals of opening 3.5 Arch is stopped in accordance with job specifications and required level of finish

4. Fix and stop plaster panelled ceiling	4.1 Ceiling battens are positioned and spaced for cornice margins and flush mounted panels 4.2 Panels are located on ceiling, levelled, lined up and fastened into position in accordance with the approved specification 4.3 Jointing is finished to specification
5. Fix ornamental mouldings	5.1 Ornamental mouldings are measured and cut to specification 5.2 Ornamental mouldings are fixed by fastening or bonding with adhesive, straight and level to architect's specifications 5.3 Mouldings are finished including straight stoppings and finishing mitres to specification
6. Clean up	6.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification 6.2 Tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for the installation of pre-cast decorative mouldings, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	2
Planning and organising activities	Conduct activities associated with the installation of pre-cast decorative mouldings, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	2
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, complete measurements, establish levels, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	1
Using technology	Use workplace technology related to the installation of pre-cast decorative mouldings, including the use of calculators, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope

- Decorative mouldings are to include any three of panels, arches, corbels, belection moulds, roses and motifs
- Substrates may include timber and steel framing, concrete walls and ceilings, masonry walls and plaster/board surfaces
- Material applications are to be in accordance with the relevant Australian Standard (for plasterboard) and fibre cement to manufacturers' instructions

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with manual handling, trip hazards, lighting, power sources and leads, the use of cutting tools, power tools, traffic control, working at heights, working in proximity to others, worksite visitors and the public
- Emergency procedures related to this unit are to include but may not be limited to extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust, vibration, stormwater protection and clean-up management

Quality Requirements

- Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified

Statutory/Regulatory Authorities

- Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice

Tools and equipment	• Tools and equipment are to include measuring tape/rules, spirit levels, squares, joint rules, nail bags, hammers, broad knives, small tools, mitre boxes, hand saws, keyhole saws, sanding floats, T-squares, electric screw guns, power leads, paint brushes/sponges, plasterer's trowels and may include curved trowels • Tools and equipment may also include internal angle finishing tools, cement mixers and power drills, trestles and scaffold planks
Fixing methods	• Fixing methods may include screws, clouts, nails, threaded nails and adhesives
Materials	• Materials may include moulded panels, corner beads, adhesives, cornice cements and casting plaster
Communications	• Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals • On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues
Information	• Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches • Safe work procedures related to the installation of pre-cast decorative mouldings • Regulatory/legislative requirements pertaining to the installation of pre-cast decorative mouldings • Manufacturers' specifications and instructions where specified • Organisation work specifications and requirements • Instructions issued by authorised organisational or external personnel • Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools and equipment
- Communication and working effectively and safely with others
- Completion of the installation and finishing of three different pre-cast decorative mouldings with at least one being installed on a ceiling

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - Plastering and wall and ceiling terminology
 - The type, characteristics, uses and limitation of pre-cast decorative moulding installation materials
 - Pre-cast decorative moulding installation tools and equipment types, characteristics, uses and limitations
 - Pre-cast decorative moulding measuring, cutting, placement, stopping and finishing techniques
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to the installation of pre-cast decorative mouldings
 - hand and power tools and equipment appropriate to the installation of pre-cast decorative mouldings
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGSP3006B**Unit Descriptor****Install cast plaster blockwork**

This unit specifies the competency required to install cast plaster blockwork by laying cast plaster blocks to construct a straight and plumb wall with others.

The unit includes the planning and preparation for work, the setting out and preparation of the base, the laying of blockwork and the completion of post work clean up activities.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Solid Plastering

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Tools and equipment selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Set out and prepare base	2.1 Blockwork is set out to position in accordance with plans and specifications 2.2 Base is prepared so that the surface is dry, horizontal, clean and flat to specifications
3. Lay plaster blockwork	3.1 Plaster adhesive is prepared in accordance with quantity requirements and block manufacturers' recommendations 3.2 Plaster blocks are laid to set out line, level and plumb in accordance with plans and specifications 3.3 Vertical abutments with other walls are made plumb and alignment to specification 3.4 Surplus adhesive is removed from joints to specification requirements
4. Clean up	4.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification 4.2 Tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for the installation of cast plaster blockwork, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	1
Planning and organising activities	Conduct activities associated with the installation of cast plaster blockwork, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	1
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, complete measurements, establish levels, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	1
Using technology	Use workplace technology related to the installation of cast plaster blockwork, including the use of calculators, the use of levelling equipment, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope	This unit covers the installation of all pre-cast gypsum plaster blockwork which may be single or multi-thickness wall construction
Safety (OH&S)	- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances - Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices - Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with manual handling, trip hazards, lighting, power sources and leads, the use of cutting tools, power tools, traffic control, working at heights, working in proximity to others, worksite visitors and the public - Emergency procedures related to this unit are to include but may not be limited to extinguishing fires, organisational first aid requirements and evacuation
Environmental Requirements	Environmental requirements are to include but are not limited to waste management, noise, dust, vibration, stormwater protection and clean-up management
Quality Requirements	Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified
Statutory/Regulatory Authorities	Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice

Tools and equipment

- Tools and equipment may include but not be limited to measuring tapes/rules, hammers, spirit levels, levelling equipment, trowels, caulking guns, shovels, mortar boards, builder's lines, line pins, brick saws, scaffolding, planks, concrete mixers and power leads

Communications

- Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals
- On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues

Information

- Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches
- Safe work procedures related to the installation of cast plaster blockwork
- Regulatory/legislative requirements pertaining to the installation of cast plaster blockwork
- Manufacturers' specifications and instructions where specified
- Organisation work specifications and requirements
- Instructions issued by authorised organisational or external personnel
- Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools and equipment
- Communication and working effectively and safely with others
- The installation of a pre-cast gypsum plaster blockwork wall which meets specifications and which is plumb with other walls

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - Plasterwork and wall and ceiling terminology
 - Cast plaster blockwork tools and equipment types, characteristics, uses and limitations
 - Cast plaster blockwork installation techniques
 - Cast plaster blockwork installation materials
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to the installation of cast plaster blockwork
 - hand and power tools and equipment appropriate to the installation of cast plaster blockwork
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGSP3007B**Unit Descriptor****Apply plaster by projection machine**

This unit specifies the competency required to apply pre-blended plasters and cement render materials on various background surfaces using a projection plastering system. The unit does not include swimming pool or pond application.

The unit includes the planning and preparation for the work, the selection and preparation of materials, the preparation of the work area, the application of plaster and cement render and the completion of post work clean up activities.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Solid Plastering

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Plant, tools and equipment selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.4 Material quantity requirements are calculated in accordance with plans and/or specifications 1.5 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use 1.6 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Prepare the work area	2.1 Area to receive pre-blended plasters and cement render materials is determined from plans and specifications 2.2 Area is masked up and protection for surrounding areas is applied 2.3 Mixing pump is set up and positioned to suit job requirements 2.4 Application area is cleared for projection plastering application 2.5 Barricades/signage is placed to minimise disruption to application process
3. Apply pre-blended plasters and render materials	3.1 Mixing pump is operated to manufacturers' recommendations and job requirements 3.2 Material is screeded to correct thickness in accordance with specifications 3.3 Material is applied using projection plastering techniques to specifications 3.4 Required finish is produced on material to job finishes schedule

- 4. Clean up
 - 4.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification
 - 4.2 Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for the application of plaster/render by projection machine, including work instructions, plans/sketches/ diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	1
Planning and organising activities	Conduct activities associated with the application of plaster/render by projection machine, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	1
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, complete measurements, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	1
Using technology	Use workplace technology related to the application of plaster/render by projection machine, including the use of calculators, the use of projection equipment, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope	• Applications are to include walls, ceilings and inclined surfaces and may include sills and arches • Substrates for application may include blockwork, concrete, stonework and cement sheet
Safety (OH&S)	• OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances • Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices • Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with manual handling, lighting, power sources and cables, trip hazards, working in confined areas, traffic control, working at heights, working in proximity to others, worksite visitors and the public • Emergency procedures related to this unit are to include but may not be limited to emergency stopping of equipment, extinguishing fires, organisational first aid requirements and evacuation
Environmental Requirements	• Environmental requirements are to include but are not limited to waste management, noise, dust, vibration, stormwater protection and clean-up management
Quality Requirements	• Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified
Statutory/Regulatory Authorities	• Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice

Tools and equipment	• Tools and equipment are to include projection machine and support equipments/tools, measuring tape/rule, spirit levels, squares, trowels, brushes, straight edges, scaffolding or working platforms, joint rules, small tools, plumb bobs and power leads
Materials	• Materials are to include plaster, cement render and cleaning materials
Communications	• Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals • On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues
Information	• Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches • Safe work procedures related to the application of plaster by projection machine • Regulatory/legislative requirements pertaining to the application of plaster by projection machine • Manufacturers' specifications and instructions where specified • Organisation work specifications and requirements • Instructions issued by authorised organisational or external personnel • Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools, plant and equipment
- Communication and working effectively and safely with others
- Mix, blend and apply plaster by projection machine to walls and ceilings to a specified finish
- Mix, blend and apply cement render by projection machine to walls and ceilings to a specified finish

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - Plastering terminology
 - Projection machine equipment types, characteristics, uses and limitations
 - Projection machine application techniques
 - Properties, characteristics and limitations of plastering and cement rendering materials for use with projection machines
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to the application of plaster/render
 - hand and power tools, plant and equipment appropriate to the application of plaster/render
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGWC2001B**Unit Descriptor****Handle wall and ceiling lining materials**

This unit specifies the competency required to handle, sort and store wall and ceiling lining materials.

The unit includes the identification of a range of commonly used materials, the planning and preparation for work, the safe and effective handling, sorting and storage of materials, including both during installation and removal, and the cleaning and maintenance of the work area.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Wall and Ceiling

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Tools and equipment selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.5 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Handle, sort and store wall and ceiling lining material and components	2.1 Wall and ceiling lining material and components are identified on delivery to site and checked for conformity to material schedule, plans and specifications 2.2 Handling characteristics of wall and ceiling lining material and components are identified and safe handling techniques are selected and applied in accordance with workplace requirements 2.3 Wall and ceiling lining material and components are sorted to suit material type and size, stacked for ease of identification, retrieval for task sequence, and job location in accordance with work specifications 2.4 Wall and ceiling lining material and components are protected against physical and water damage and stored clear of traffic ways 2.5 Signage and/or barricades are erected to isolate stored materials from workplace traffic or unauthorised access

3. Handle and position wall and ceiling lining material and components in preparation for installation	3.1 Wall and ceiling lining material and components are identified from stack and safely handled and distributed to required job location 3.2 Cut sheet material is distributed and stacked to suit job location and task sequence 3.3 Wall and ceiling lining materials and components are positioned ready for fixing in accordance with manufacturers' recommendations and job requirements 3.4 Materials for adhesives are handled, proportioned, mixed and stored in preparation for application in accordance with manufacturers' recommendations
4. Handle and remove material and components on completion	4.1 Materials are handled safely and effectively according to MSDS and requirements of regulatory authorities 4.2 Hazardous material is identified for separate handling by authorised personnel 4.3 Non-toxic lining materials and components are safely removed using correct procedures, according to MSDS and requirements of regulatory authorities 4.4 Protection of materials is provided in accordance with specific material needs 4.5 Materials are stored safely and effectively according to material safety data sheets and requirements of regulatory authorities
5. Clean up	5.1 Unused materials are stored/stacked in accordance with standard material handling practices and techniques and company requirements 5.2 Tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices 5.3 Stormwater system is protected during clean up process in accordance with sound work practices compliant with EPA 5.4 Waste and unwanted materials are removed and placed into job waste bins or rubbish stockpile in a safe and effective manner in accordance with sound work practices compliant with EPA

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for the handling of wall and ceiling lining materials including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	1
Planning and organising activities	Conduct activities associated with the handling of wall and ceiling lining materials, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	1
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	1
Using technology	Use workplace technology related to the handling of wall and ceiling lining materials, including the use of calculators, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope

- Wall and ceiling lining materials include anything delivered to, or manufactured, on site and are to include plasterboard, fibre cement sheets, water resistant plasterboard, plasterboard cornices, plaster moulded cornices, compounds and may include platerglass sheets
- Wall and ceiling lining components include anything delivered to, or manufactured, on site and are to include corner beads, casing beads, adhesives, perforated paper tape, caulking, sealants, steel furring channels and fasteners
- Waste material and debris include but are not limited to banding straps, packing pieces, broken or damaged goods, cardboard, plastic, paper, excess plaster/render material

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with manual handling, lighting, trip hazards, working with hazardous materials, traffic control, working at heights, working in proximity to others, worksite visitors and the public
- Emergency procedures related to this unit are to include extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust, vibration, stormwater protection and clean-up management

Quality Requirements	• Quality requirements are to include but not be limited to relevant regulations including relevant Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified
Statutory/Regulatory Authorities	• Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice
Tools and equipment	• Tools and equipment are to include but not be limited to brooms, measuring tape/rule, hammers, shovels and wheelbarrows
Communications	• Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals • On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues
Information	• Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches • Safe work procedures related to the handling and storage of wall and ceiling lining materials • Regulatory/legislative requirements pertaining to wall and ceiling lining materials • Manufacturers' specifications and instructions where specified • Organisation work specifications and requirements • Instructions issued by authorised organisational or external personnel • Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools and equipment
- Communication and working effectively and safely with others
- Handle and store the mandatory wall and ceiling lining materials and components listed in the range statement
- Dispose of waste/excess materials

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements including common manual handling injuries and handling techniques
 - Quality requirements
 - Wall and ceiling terminology
 - Wall and ceiling tools and equipment types, characteristics, uses and limitations
 - The types, characteristics, uses and limitations of wall and ceiling materials and components
 - Wall and ceiling lining techniques
 - Systems and techniques for safe handling of materials
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to the handling and storage of wall and ceiling lining
 - hand and power tools and equipment appropriate to the handling and storage of wall and ceiling lining
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGWC2002B**Use wall and ceiling lining tools and equipment****Unit Descriptor**

This unit specifies the competency required to use wall and ceiling lining tools, plant and equipment.

The unit includes the identification, selection and safe use of a range of commonly used wall and ceiling lining tools, plant and equipment and the storage and user maintenance of these.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Wall and Ceiling

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Material quantity requirements are calculated in accordance with plans and/or specifications 1.5 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use 1.6 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Identify hand and power tools	2.1 Hand and power tools, their functions, operations and limitations are identified 2.2 OH&S requirements for using hand tools are recognised and adhered to 2.3 OH&S requirements for using power tools are recognised and adhered to
3. Select tools for project	3.1 Tools are selected consistent with job requirements 3.2 Tools, including leads and hoses, are checked for tags, serviceability and safety and any faults rectified or reported 3.3 Power tools guards, retaining bolts, couplings, gauges and controls are checked and maintained in accordance with manufacturers' recommendations 3.4 Equipment to hold or support material during operation is selected 3.5 Pre-operational checks, including lubricants, hydraulic fluid and water are completed according to manufacturers' recommendations

4. Use tools	4.1 Power and/or compressed air supply is connected to the work area
	4.2 Start up and shut down procedures are followed
	4.3 Tools are safely and effectively used according to manufacturers' recommendations and OH&S requirements
	4.4 Tools are safely located when not in immediate use
5. Select plant and equipment	5.1 Function and limitations of plant/equipment used in wall and ceiling lining are identified
	5.2 Plant and equipment are selected consistent with hazard minimization and needs of job
	5.3 Method of operation of plant/equipment is identified
	5.4 OH&S requirements for operating and using plant and equipment are recognised and adhered to
	5.5 Plant and equipment are checked for safety and faults are rectified or reported
6. Use plant and equipment	6.1 Plant and equipment are safely and effectively used
	6.2 Plant and equipment are safely located when not in immediate use
	6.3 Plant and equipment are cleaned, maintained and stored after use
7. Clean up	7.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification
	7.2 Tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for the use of wall and ceiling lining tools and equipment including work instructions, plans/sketches/ diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	1
Planning and organising activities	Conduct activities associated with the use of wall and ceiling lining tools and equipment to avoid backtracking and rework	1
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	1
Using technology	Use workplace technology related to the use of wall and ceiling lining materials, including the use of plant items, calculators, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope

- Tools and equipment are to include but are not limited to measuring tape/rule, plasterer's hawk, hatchet type hammers, broad knives, plasterer's trowels, taping knives, internal angle taping tools, mechanical finishing tools, electric screw guns, T squares, mixers (jointing cement), key hole saws, mitre boxes, hand saws, brooms, shovels, wheelbarrows, trestles, scaffold planks and paint brushes
- Plant and equipment is to include small petrol or diesel engine driven generators, small compressor air operated, power activated fasteners, power routers and may include earth leakage protection, power saws, panel lifters and lighting sets
- Levelling devices are to include but are not limited to straight edge, line level, string line, spirit level, water level and laser

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with working with cutting edges, power equipment, leads and power sources, lighting, trip hazards, manual handling, noise, dust, ventilation, traffic control, working at heights, working in proximity to others, worksite visitors and the public
- Emergency procedures related to this unit are to include but may not be limited to emergency shutdown and stopping, extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust, vibration and clean-up management

Quality Requirements	• Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified
Statutory/Regulatory Authorities	• Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice
Materials	• Materials may include plasterboard, plasterglass sheets, fibre cement sheets, water resistant plasterboard, plasterboard cornices, plaster moulded cornices, compounds, corner beads, casing beads, adhesives, perforated paper tape and base and finishing materials
Communications	• Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals • On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues
Information	• Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches • Safe work procedures related to the use of wall and ceiling lining tools and equipment • Regulatory/legislative requirements pertaining to wall and ceiling lining tools and equipment • Manufacturers' specifications and instructions where specified • Organisation work specifications and requirements • Instructions issued by authorised organisational or external personnel • Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Communication and working effectively and safely with others
- The selection, use and maintenance of the tools and equipment listed in the range statement
- The selection, use and operator maintenance of the plant listed as mandatory in the range statement

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - Wall and ceiling industry terminology
 - Types, characteristics, uses and limitations of wall and ceiling lining hand tools
 - Types, characteristics, uses and limitations of wall and ceiling lining power tools
 - Types, characteristics, uses and limitations of wall and ceiling lining plant items
 - Systems and techniques for safe handling of materials
 - Types, characteristics, uses and limitations of wall and ceiling lining materials
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - hand and power tools, plant and equipment appropriate to the wall and ceiling lining tools and equipment
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGWC2003B**Install and finish plasterboard and fibre cement sheeting to flat walls and ceilings****Unit Descriptor**

This unit specifies the competency required to fix and finish flat plasterboard and fibre cement sheeting to steel and timber framed walls and ceilings.

The unit includes the planning and preparation for the work, the preparation of the work area for the installation process, the measuring and cutting of the material, the fixing of the material, the jointing and finishing and the completion of post work clean-up.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Wall and Ceiling

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Tools and equipment selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications 1.6 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Prepare work area for installation processes	2.1 Work area and substrate are prepared for application of sheeting 2.2 Timber/steel wall framing is checked for straightness and plumb and any faults are rectified or reported 2.3 Equipment and materials are checked against work order or manufacturers' specification and positioned in preparation for the work 2.4 Thermal and acoustic batt insulation for walls and ceilings are selected to manufacturers' specifications (RW rating)
3. Install batt insulation	3.1 Insulation batts are installed firmly between framing member and against lining material in accordance with manufacturers' specifications 3.2 Batts are abutted with closed joints and end of run completed with batt cut to size and fitted 3.3 Insulation batts are installed firmly in the wall framing ensuring clearance of framing to fix plaster sheeting 3.4 Batts are installed to ceiling framing to a tight fit ensuring full coverage between joists

4. Fix plasterboard and fibre cement products to walls and ceilings	4.1 Materials are measured and marked to ensure compliance with work requirements and minimal wastage 4.2 Wall and ceiling sheets are cut to fit specified locations with clearance to manufacturers' specifications 4.3 Wall and ceiling sheets are fixed to specified locations with mechanical fastenings or combined adhesive/fasteners to manufacturers' specifications and relevant standards 4.4 All work is carried out to manufacturers' specifications and relevant Australian Standards
5. Joint and finish materials	5.1 Compounds for backblocking and jointing are prepared to manufacturers' specifications 5.2 Backblocks are applied to specification 5.3 Additional design details and features are identified 5.4 Beading is installed to design requirements 5.5 Jointing and finishing of plasterboard and fibre cement sheeting is completed in accordance with manufacturers' specifications
6. Clean up	6.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification 6.2 Tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for the installation and finishing operations, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	1
Planning and organising activities	Conduct activities associated with installation and finishing operations, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	1
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances and levels, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	1
Using technology	Use workplace technology related to installation and finishing operations, including the use of calculators, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope

- Materials are to include plasterboard, fibre cement sheets, insulation batts, corner beads, casing beads, arch beads, shadowline beads, adhesives, perforated paper tape, base and finishing materials
- Material applications are to be in accordance with the relevant Australian Standard (for plasterboard) and manufacturers' specifications for fibre cement sheeting
- Finishing is to achieve a smooth, flat, scratch and blemish free surface
- Substrates may include timber framing, timber or steel battens, steel framing, steel furring channels and battened masonry surfaces

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with manual handling, lighting, power sources and cables, trip hazards, working in confined areas, traffic control, working at heights, working in proximity to others, worksite visitors and the public
- Emergency procedures related to this unit are to include but may not be limited to extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust and clean-up management

Quality Requirements

- Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified

Statutory/Regulatory Authorities	• Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice
Tools and equipment	• Tools and equipment are to include measuring tape/rule, plasterboard hammers, broad knives, plasterer's trowels, taping knives, internal angle taping tools, hand sanding floats, electric screw guns, cement sheet cutters (electric and hand), T-squares, mixers (electric and hand), key hole saws (electric and hand), hand saws, paint brushes and may include mechanical finishing tools, electric sanding floats, trestles and scaffold planks
Communications	• Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals • On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues
Information	• Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches • Safe work procedures related to the installation and finishing of plasterboard and fibre cement sheeting • Regulatory/legislative requirements pertaining to the installation and finishing of plasterboard and fibre cement sheeting • Manufacturers' specifications and instructions where specified • Organisation work specifications and requirements • Instructions issued by authorised organisational or external personnel • Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools and equipment
- Communication and working effectively and safely with others
- The installation and finishing (to a level 4 finish) of plasterboard to walls and ceilings including:
 - both recess and butt joints
 - both mechanical and adhesive fixing systems
 - wall and corner junctions
 - wall with minimum of two sheets
- The installation and finishing (to a level 4 finish) of fibre cement sheeting to:
 - both recess and butt joints
 - both mechanical and adhesive fixing systems
 - wall and corner junctions
 - wall with minimum of two sheets

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - Wall and ceiling terminology
 - Wall and ceiling tools and equipment types, characteristics, uses and limitations
 - The types, uses and limitations of materials used in installation and fixing tasks
 - Insulation and authorised ratings
 - Techniques for fixing materials to steel and timber frames
 - Techniques for the handling and mixing plaster bag material
 - Techniques for the application and sanding of topping compound
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to installation and finishing operations
 - hand and power tools and equipment appropriate to installation and finishing operations
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGWC2004B**Unit Descriptor****Complete penetrations and flashings**

This unit specifies the competency required to complete the penetrations and flashings associated with wall and ceiling lining. It does not cover the technical aspects of passive fire systems.

The unit includes planning and preparation for work, the selection and safe use of tools and equipment to complete the penetrations and flashings, the restoration of the integrity of the wall or ceiling and the completion of post work clean-up activities.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Wall and Ceiling

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Tools and equipment selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.5 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use 1.6 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Confirm the penetration and flashing requirement	2.1 The type of penetration and flashing is selected to match the particular need and the host materials 2.2 The location of the penetration is identified, set out and confirmed 2.3 Tools and equipment selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement
3. Complete the penetrations and flashings	3.1 Penetrations are completed safely and with minimal modification or damage to the host materials 3.2 Flashings are completed safely and with minimal modification or damage to the host materials 3.3 Casings, housings or other terminating points are installed and connections made in accordance with State and Territory requirements 3.4 Proprietary sealants or caulking compounds are applied to restore the integrity of the wall/ceiling system 3.5 Surfaces are prepared for finishing

- 4. Clean up
 - 4.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification
 - 4.2 Tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for completing penetrations and flashings including work instructions, plans/sketches/ diagrams, safety instructions, signage, quality procedures and manufacturers' instructions	1
Planning and organising activities	Conduct activities associated with the completing penetrations and flashings to avoid backtracking and rework	1
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	1
Using technology	Use workplace technology related to the handling of wall and ceiling lining materials, including the use of plant items, calculators, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope

- Penetration and flashings are to include those required for electrical power, communications and plumbing and may include those for control joints
- Tools and equipment may include but are not limited to measuring tapes/rules, plasterboard hammers, broad knives, plasterer's trowels, taping knives, electric screw guns, T squares, key hole saws, hand saws, hand and power drills, brooms, trestles, scaffold planks and paint brushes
- Plant and equipment may include small petrol or diesel engine driven generators, small compressor air operated, power activated fasteners, earth leakage protection, power saws, power routers and lighting sets

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with working with cutting edges, power equipment, leads and power sources, lighting, trip hazards, manual handling, noise, dust, ventilation, traffic control, working at heights, working in proximity to others, worksite visitors and the public
- Emergency procedures related to this unit are to include but may not be limited to extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust, vibration and clean-up management

Quality Requirements

- Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified

Statutory/Regulatory Authorities	• Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice
Materials	• Materials may include plasterboard, plasterglass sheets, fibre cement sheets, water resistant plasterboard, plaster compounds, cement render, beads and finishing materials
Communications	• Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals • On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues
Information	• Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, diagrams or sketches • Safe work procedures related to the completion of penetrations and flashings • Regulatory/legislative requirements pertaining to completion of penetrations and flashings • Manufacturers' specifications and instructions where specified • Organisation work specifications and requirements • Instructions issued by authorised organisational or external personnel • Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Communication and working effectively and safely with others
- Completion of a minimum of three penetration and flashing tasks including:
 - One for electrical services, and
 - One for communication services

Relationship to other units

- Pre- requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - Wall and ceiling industry terminology
 - Types, characteristics, uses and limitations of wall and ceiling lining materials
 - Types of services/purposes for which penetrations and flashings are required
 - Services locating techniques
 - Penetration and flashing techniques
 - Types, characteristics, uses and limitations of wall and ceiling lining hand and power tools
 - Systems and techniques for safe handling of materials
 - Processes for the calculation of material requirements
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - hand and power tools and equipment appropriate to the completion of penetrations and flashings
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGWC3001B**Unit Descriptor****Install wet area lining systems**

This unit specifies the competency required to set out and install a wet area lining system not including the membrane and tanking system.

The unit includes the planning and preparation for work, the construction of the wet area system using fibre cement sheet material or designated plasterboard product and the post work clean up activities.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Wall and Ceiling

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Tools and equipment selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Construct wet area system using fibre cement sheet material	2.1 Nogging and stud spacing are inspected and checked to support fibre cement sheet material and inconsistencies rectified or referred for decision 2.2 Approved angle is fixed to the substrate in accordance with plans and specifications 2.3 Screws or nails are spaced in accordance with manufacturers' specifications 2.4 Material is installed/fixed to timber and/or metal framing according to plans and specifications 2.5 Sealant is applied in accordance with manufacturers' specifications to ensure waterproofing of penetrations are not compromised 2.6 Jointing of fibre cement sheet material is completed to manufacturers' specifications 2.7 Joints are prepared for painting and/or tiling

- 3. Construct wet area system using designated plasterboard product
 - 3.1 Nogging and stud spacing are inspected and checked to support fibre cement sheet material and inconsistencies rectified or referred for decision
 - 3.2 Approved angle is fixed to the substrate in accordance with plans and specifications
 - 3.3 Screws or nails are spaced in accordance with manufacturers' specifications
 - 3.4 Material is installed/fixed to timber and/or metal framing according to plans and specifications
 - 3.5 Sealant is applied to penetration in accordance with manufacturers' specifications
 - 3.6 Jointing of fibre cement sheet material is completed to manufacturers' specifications
 - 3.7 Joints are prepared for painting and/or tiling
 - 3.8 Category 1 area (or equivalent) is protected in accordance with manufacturers' specifications
- 4. Clean up
 - 4.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification
 - 4.2 Tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for the installation of wet area systems, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	2
Planning and organising activities	Conduct activities associated with the installation of wet area systems, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	2
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, calculate distances and establish levels, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	1
Using technology	Use workplace technology related to the installation of wet area systems, including the use of calculators, the use of tools and equipment, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope

- Installation of wet area systems are to include fibre cement sheeting, plasterboard sheeting, installation to timber and metal framing and may include construction in wet areas, i.e. bathrooms, kitchens, laundries
- Materials for wet area systems may include fibre cement sheeting, water resistant plasterboard sheeting and specified flashings and accessories

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with manual handling, lighting, power sources, trip hazards, use of cutting tools, power tools and fasteners, working in confined areas, traffic control, working at heights, working in proximity to others, worksite visitors and the public
- Emergency procedures related to this unit are to include but may not be limited to extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust, vibration, stormwater protection and clean-up management

Quality Requirements

- Quality requirements are to include but not be limited to relevant regulations including relevant Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified

Statutory/Regulatory Authorities

- Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice

Tools and equipment

- Tools and equipment are to include measuring tape/rule, hammers, tin snips, power drills, squares, screw guns, power leads, caulking guns, broad knives and trowels
- Tools and equipment may also include docking saws/drop saws, saw stools, C clamps, pop riveters, crimping tools and masonry drills
- Fasteners for installation of wet area systems may include screws(S or W types), drill point screws, self embedded screws, pop rivets, cloungts and plasterboard nails

Communications

- Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals
- On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues

Information

- Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches
- Safe work procedures related to the installation of wet area lining systems
- Regulatory/legislative requirements pertaining to the installation of wet area lining systems
- Manufacturers' specifications and instructions where specified
- Organisation work specifications and requirements
- Instructions issued by authorised organisational or external personnel
- Relevant Australian Standards including that covering waterproofing of wet areas within residential buildings

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools, plant and equipment
- Communication and working effectively and safely with others
- Set out and install a fibre cement sheet category 1 wet area lining system to specification
- Set out and install a plasterboard category 1 wet area lining system to specification

Relationship to other units

- Pre- requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - Plastering and wall and ceiling industry terminology
 - Category 1 (or equivalent) wet area installation criteria
 - Wet area installation techniques
 - Installation tools and equipment types, characteristics, uses and limitations
 - The types, properties, uses and limitations of wet area installation materials
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to the installation of wet area systems
 - hand and power tools and equipment appropriate to the installation of wet area systems
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGWC3002B**Install and finish plasterboard and fibre cement sheeting to curved walls and ceilings****Unit Descriptor**

This unit specifies the competency required to fix and finish plasterboard and fibre cement sheeting to steel and timber framed curved walls and curved ceilings.

The unit includes the planning and preparation for the work, the preparation of the work area for the installation process, the measuring and cutting of the material, the fixing of the material, the jointing and finishing and the completion of post work clean-up.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Wall and Ceiling

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Tools and equipment selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications 1.6 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Prepare work area for installation processes	2.1 Work area and substrate are prepared for application of sheeting 2.2 Timber/steel wall and ceiling framing is checked for consistency of curve and any faults are rectified or reported 2.3 Equipment and materials are checked against work order or manufacturers' specification and positioned in preparation for the work 2.4 Thermal and acoustic batt insulation for walls and ceilings are selected to manufacturers' specifications (Rw rating)
3. Install batt insulation	3.1 Insulation batts are installed firmly between framing member and against lining material in accordance with manufacturers' specifications 3.2 Batts are abutted with closed joints and end of run completed with batt cut to size and fitted 3.3 Insulation batts are installed firmly in the wall framing ensuring clearance of framing to fix plaster sheeting 3.4 Batts are installed to ceiling framing to a tight fit ensuring full coverage between joists

4. Fix plasterboard and fibre cement products to walls and ceilings	4.1 Materials are pre-conditioned for the application in accordance with the manufacturers' specifications 4.2 Materials are measured and marked to ensure compliance with work requirements and minimal wastage 4.3 Wall and ceiling sheets are cut to fit specified locations with clearance to manufacturers' specifications 4.4 Wall and ceiling sheets are fixed to specified locations with mechanical fastenings or combined adhesive/fasteners to manufacturers' specifications and relevant standards 4.5 All work is carried out to manufacturers' specifications and relevant Australian Standards
5. Joint and finish materials	5.1 Compounds for backblocking and jointing are prepared to manufacturers' specifications 5.2 Backblocks are applied to specification 5.3 Additional design details and features are identified 5.4 Beading is installed to design requirements 5.5 Jointing and finishing of plasterboard and fibre cement sheeting is completed in accordance with manufacturers' specifications
6. Clean up	6.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification 6.2 Tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for the installation and finishing operations, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	1
Planning and organising activities	Conduct activities associated with installation and finishing operations, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	2
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances and levels, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	2
Using technology	Use workplace technology related to installation and finishing operations, including the use of calculators, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope

- Curved ceilings are vaulted ceilings which may be cambered, elliptical, undulating or pitched
- Curved surfaces are to include bulkheads
- Materials are to include plasterboard, fibre cement sheets, insulation batts, corner beads, casing beads, arch beads, shadowline beads, adhesives, perforated paper tape, base and finishing materials
- Material applications are to be in accordance with the relevant Australian Standard (for plasterboard) and manufacturers' specifications for fibre cement sheeting
- Finishing is to achieve a smooth, flat, scratch and blemish free surface
- Substrates may include timber framing, timber or steel battens, steel framing, steel furring channels and battened masonry surfaces

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with manual handling, lighting, power sources and cables, trip hazards, working in confined areas, traffic control, working at heights, working in proximity to others, worksite visitors and the public
- Emergency procedures related to this unit are to include but may not be limited to extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust and clean-up management

Quality Requirements	• Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified
Statutory/Regulatory Authorities	• Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice
Tools and equipment	• Tools and equipment are to include measuring tape/rule, plasterboard hammers, broad knives, plasterer's trowels, taping knives, internal angle taping tools, hand sanding floats, electric screw guns, cement sheet cutters (electric and hand), T-squares, mixers (electric and hand), key hole saws (electric and hand), hand saws, paint brushes and may include mechanical finishing tools, electric sanding floats, trestles and scaffold planks
Communications	• Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals • On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues
Information	• Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches • Safe work procedures related to the installation and finishing of plasterboard and fibre cement sheeting • Regulatory/legislative requirements pertaining to the installation and finishing of plasterboard and fibre cement sheeting • Manufacturers' specifications and instructions where specified • Organisation work specifications and requirements • Instructions issued by authorised organisational or external personnel • Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools and equipment
- Communication and working effectively and safely with others
- The installation and finishing of plasterboard or fibre cement sheeting to a curved substrate including:
 - a minimum of two sheets, and
 - either mechanical or adhesive fixing systems

Relationship to other units

- Pre- requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
- Workplace and equipment safety requirements
- Quality requirements
- Wall and ceiling terminology
- Wall and ceiling tools and equipment types, characteristics, uses and limitations
- Materials preparation and testing techniques
- The types, uses and limitations of materials used in installation and fixing tasks
- Insulation and authorised ratings
- Techniques for fixing materials to steel and timber frames
- Techniques for the handling and mixing plaster bag material
- Techniques for the application and sanding of topping compound
- Processes for the calculation of material requirements
- Material Safety Data Sheets
- Plans, drawings and specifications
- Materials handling, storage and environmentally friendly waste management
- JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to installation and finishing operations
 - hand and power tools and equipment appropriate to installation and finishing operations
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGWC3003B**Install and finish plasterboard and fibre cement sheeting to arches****Unit Descriptor**

This unit specifies the competency required to fix and finish plasterboard and fibre cement sheeting to arches.

The unit includes the planning and preparation for the work, the preparation of the work area for the installation process, the measuring and cutting of the material, the fixing of the material, the jointing and finishing and the completion of post work clean-up.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Wall and Ceiling

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Tools and equipment selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications 1.6 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Prepare work area for installation processes	2.1 Work area and substrate are prepared for application of sheeting 2.2 Timber/steel wall framing is checked for straightness and plumb and any faults are rectified or reported 2.3 Equipment and materials are checked against work order or manufacturers' specification and positioned in preparation for the work 2.4 Thermal and acoustic batt insulation for walls and ceilings are selected to manufacturers' specifications (Rw rating)
3. Install batt insulation	3.1 Insulation batts are installed firmly between framing member and against lining material in accordance with manufacturers' specifications 3.2 Batts are abutted with closed joints and end of run completed with batt cut to size and fitted 3.3 Insulation batts are installed firmly in the wall framing ensuring clearance of framing to fix plaster sheeting 3.4 Batts are installed to ceiling framing to a tight fit ensuring full coverage between joists

4. Fix plasterboard and fibre cement products to arches	4.1 Materials are pre-conditioned for the application in accordance with the manufacturers' specifications 4.2 Materials are measured and marked to ensure compliance with work requirements and minimal wastage 4.3 Sheets are cut to fit specified locations with clearance to manufacturers' specifications 4.4 Sheets are fixed to specified locations with mechanical fastenings or combined adhesive/ fasteners to manufacturers' specifications and relevant standards 4.5 All work is carried out to manufacturers' specifications and relevant Australian Standards
5. Joint and finish materials	5.1 Compounds for backblocking and jointing are prepared to manufacturers' specifications 5.2 Backblocks are applied to specification 5.3 Additional design details and features are identified 5.4 Beading is installed to design requirements 5.5 Jointing and finishing of plasterboard and fibre cement sheeting is completed in accordance with manufacturers' specifications
6. Clean up	6.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification 6.2 Tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for the installation and finishing operations, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	2
Planning and organising activities	Conduct activities associated with installation and finishing operations, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	2
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances and levels, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	2
Using technology	Use workplace technology related to installation and finishing operations, including the use of calculators, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope

- Arches are to include semi-circular and segmental, and may include gothic, ogees, three-centred and elliptical
- Materials are to include plasterboard, fibre cement sheets, insulation batts, corner beads, casing beads, arch beads, shadowline beads, adhesives, perforated paper tape, base and finishing materials
- Material applications are to be in accordance with the relevant Australian Standard (for plasterboard) and manufacturers' specifications for fibre cement sheeting
- Finishing is to achieve a smooth, flat, scratch and blemish free surface
- Frames may include timber framing, timber or steel battens, steel framing, steel furring channels and battened masonry surfaces

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with manual handling, lighting, power sources and cables, trip hazards, working in confined areas, traffic control, working at heights, working in proximity to others, worksite visitors and the public
- Emergency procedures related to this unit are to include but may not be limited to extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust and clean-up management

Quality Requirements

- Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified

Statutory/Regulatory Authorities	• Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice
Tools and equipment	• Tools and equipment are to include measuring tape/rule, plasterboard hammers, broad knives, plasterer's trowels, taping knives, internal angle taping tools, mechanical finishing tools, sanding floats (electric and hand), electric screw guns, cement sheet cutters (electric and hand), T-squares, mixers (electric and hand), key hole saws (electric and hand), hand saws, paint brushes and may include trestles and scaffold planks
Communications	• Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals • On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues
Information	• Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches • Safe work procedures related to the installation and finishing of plasterboard and fibre cement sheeting • Regulatory/legislative requirements pertaining to the installation and finishing of plasterboard and fibre cement sheeting • Manufacturers' specifications and instructions where specified • Organisation work specifications and requirements • Instructions issued by authorised organisational or external personnel • Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools and equipment
- Communication and working effectively and safely with others
- The installation and finishing to specification of one plasterboard arch including:
 - a minimum of two sheets
 - wall and corner junctions
 - application of arch beads, and
 - either mechanical or adhesive fixing systems
- The setting out to specification of a minimum of one each of segmental, gothic, elliptical, tudor and ogee arches

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - Wall and ceiling terminology
 - Wall and ceiling tools and equipment types, characteristics, uses and limitations
 - Arch types, options, uses and limitations
 - The types, uses and limitations of materials used in installation and fixing tasks
 - Techniques for fixing materials to steel and timber frames
 - Techniques for the handling and mixing plaster bag material
 - Techniques for the application and sanding of topping compound
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to installation and finishing operations
 - hand and power tools and equipment appropriate to installation and finishing operations
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGWC3004B**Unit Descriptor****Install cast plaster and paper faced cornices**

This unit specifies the competency required to install cast plaster and paper faced cornices to masonry, plasterboard and fibre cement sheets.

The unit includes the planning and preparation for work, the preparation of the work area, the measuring, cutting and fixing of cast plaster and paper faced cornices, the finishing of junctions for painting and the completion of post work clean up activities.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Wall and Ceiling

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Tools and equipment selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Prepare work area for application processes	2.1 Work area and substrate are prepared for installation of cornices to plans/specifications 2.2 Substrate is checked for conformance in accordance with the relevant Australian Standard.
3. Fix cornices to wall and ceiling junctions	3.1 Wall length and centre position are measured making allowance for tolerance, enrichment centres and internal and external mitres 3.2 Cornice depth and projections are established and the wall is marked in accordance with manufacturers' recommendations 3.3 Internal and external cornice mitres are measured and cut 3.4 Cornice adhesives are applied to the cornice ceiling/wallmembers 3.5 Cornice is positioned or placed to required area ready for straight stopping 3.6 Straight stopping, mitres and joins are finished for painting

- 4. Clean up
 - 4.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification
 - 4.2 Tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for the installation of cornices, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	2
Planning and organising activities	Conduct activities associated with the installation of cornices, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	2
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, complete measurements, establish levels, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	1
Using technology	Use workplace technology related to the installation of cornices, including the use of calculators, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope	• Cornices are to include cast plaster and paper faced • Materials are to include but are not limited to plasterboard cornice, plaster moulded cornice, paper faced cornices, adhesives and cornice cements • Material applications are to be in accordance with the relevant Australian Standard (for plasterboard) and manufacturers' instructions
Safety (OH&S)	• OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances • Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices • Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with manual handling, trip hazards, lighting, power sources and leads, the use of cutting tools, power tools, traffic control, working at heights, working in proximity to others, worksite visitors and the public • Emergency procedures related to this unit are to include but may not be limited to extinguishing fires, organisational first aid requirements and evacuation
Environmental Requirements	• Environmental requirements are to include but are not limited to waste management, noise, dust, vibration and clean-up management
Quality Requirements	• Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified
Statutory/Regulatory Authorities	• Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice

Tools and equipment

- Tools and equipment are to include but are not limited to measuring tape/rule, hatchet type hammers, broad knives, small tools, mitre boxes, hand saws, paint brushes/sponges, and may include plasterer's trowels, trestles and scaffold planks

Communications

- Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals
- On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues

Information

- Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches
- Safe work procedures related to the installation of cornices
- Regulatory/legislative requirements pertaining to the installation of cornices
- Manufacturers' specifications and instructions where specified
- Organisation work specifications and requirements
- Instructions issued by authorised organisational or external personnel
- Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools, plant and equipment
- Communication and working effectively and safely with others
- Measure, cut, place, straight stop and finish paper faced cornices including internal mitre, external mitre and butt join
- Measure, cut, place, straight stop and finish cast plaster decorative cornices including internal mitre, external mitre and butt join

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - Plastering and wall and ceiling terminology
 - Cornice installation tools and equipment types, characteristics, uses and limitations
 - The type, characteristics, uses and limitation of cornices and cornice installation materials
 - Cornice measuring, cutting, placement, stopping and finishing techniques
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to the installation of cornices
 - hand and power tools and equipment appropriate to the installation of cornices
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGWC3005B**Unit Descriptor****Install dry wall passive fire-rated systems**

This unit specifies the competency required to select and install dry wall fire-rated systems to walls and ceilings.

The unit includes the planning and preparation for installation, the installation of approved systems for timber stud walls, steel stud partitions, shaft walls, timber-joist and suspended ceilings and the completion of post installation activities.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Wall and Ceiling

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Tools and equipment selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Line a timber stud wall using a fire-rated system	2.1 Structure of the timber wall for load or non-load bearing is established 2.2 Fire-rating design is selected for the timber stud wall 2.3 Materials is set out to manufacturers' fire-rated test 2.4 Fixings (nails, screws) are spaced in accordance with manufacturers' specifications 2.5 Material is fixed using correct procedures and fixing 2.6 Penetrations are completed safely and in accordance with manufacturers' design and job specifications 2.7 Joints are finished to exposed face layers of sheeting using recommended materials and procedures

3. Construct steel stud fire-rated partition system	3.1 Fire-rating design is selected for the steel stud wall 3.2 Correct fixing requirements are established for the steel stud wall as designated by the manufacturer and in accordance with the relevant fire test criteria 3.3 Deflection heads are secured and sealant applied in accordance with the fire rated system design 3.4 Material is set out in accordance with manufacturers' fire-rated test 3.5 Fixings (screws) are spaced in accordance with manufacturers' specifications 3.6 Material is fixed using correct procedures and fixings 3.7 Penetrations are completed safely and in accordance with manufacturers' design and job specifications 3.8 Joints are finished to exposed face sheet layers using recommended materials and procedures
4. Construct a fire-rated shaft wall system	4.1 Material is selected in accordance with manufacturers' specifications 4.2 Components are fixed to exact clearances to manufacturers' specifications 4.3 Materials is set out in accordance with manufacturers' design and job specifications 4.4 Penetrations are completed safely and in accordance with specifications 4.5 Joints are finished to exposed face sheet layers using recommended materials and procedures
5. Line a timber joist ceiling using fire-rated system	5.1 Ceiling joist substrate is prepared to be flat and straight to accommodate lining of the required fire-rated system 5.2 Fixings are selected in accordance with the manufacturers' design 5.3 Lining is applied in accordance with manufacturers design 5.4 Fixings are spaced at correct intervals 5.5 Penetrations are completed safely and in accordance with job specifications
6. Construct a suspended ceiling with a fire-rating system	6.1 Materials are selected for the required fire-rated ceiling according to manufacturers' specifications 6.2 Fixings are chosen in accordance with the manufacturers' design 6.3 Ceiling is constructed to be flat, true, level and structurally sound 6.4 Joints are finished to exposed face sheet layers using recommended materials and procedures 6.5 Penetrations are completed safely and in accordance with specifications
7. Clean up	7.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification 7.2 Tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for the installation of dry wall passive fire-rated systems, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	2
Planning and organising activities	Conduct activities associated with the installation of dry wall passive fire-rated systems, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	2
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, complete measurements, check levels, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	1
Using technology	Use workplace technology related to the installation of dry wall passive fire-rated systems, including the use of calculators, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope

- Dry wall passive fire-rated systems are to include a steel stud two hour system and columns/beams and may include timber stud walls, shaft walls, timber joist ceilings and suspended ceilings
- Dry wall passive fire-rated systems are to comply with relevant Australian Standards and Codes
- Penetrations are to include those related to electrical power, communications, control joints and authorised piping

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with manual handling, trip hazards, lighting, power sources and leads, the use of cutting tools, power tools, traffic control, working at heights, working in proximity to others, worksite visitors and the public
- Emergency procedures related to this unit are to include but may not be limited to extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust, vibration and clean-up management

Quality Requirements

- Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified

Statutory/Regulatory Authorities	• Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice
Tools and equipment	• Tools and equipment are to include measuring tape/rule, hammers, tin snips, power drills, squares, screwguns, power leads, broad knives, caulking guns, trowels, and may include docking saw/drop saws, saw stools, setting boxes, 'C' clamps and masonry drills
Fasteners	• Fasteners for installation of fire-rated systems may include but are not limited to 30 mm 'S' type screws, 30 mm and 45 mm 'W' type screws, 30 mm and 40 mm 'L' type screws, 30 mm, 40 mm, 50 mm, 60 mm plasterboard nails, wafer head screws and metal masonry anchors
Materials	• Materials for fire-rated systems may include fire grade plasterboard sheeting, fire grade metal studs and track, fire sealants, vermiculite or equivalent product, base compound coats, finishing coats and perforated paper tapes
Communications	• Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals • On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues
Information	• Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches • Safe work procedures related to the installation of dry wall passive fire-rated systems • Regulatory/legislative requirements pertaining to the installation of dry wall passive fire-rated systems • Manufacturers' specifications and instructions where specified • Organisation work specifications and requirements • Instructions issued by authorised organisational or external personnel • Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools and equipment
- Communication and working effectively and safely with others
- The installation to specification of a minimum of three dry wall passive fire-rated systems with one for a steel stud wall, one covering columns/beams with at least one comprising a multiple layer system

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - Wall and ceiling terminology
 - Regulations and building codes related to dry wall passive fire-rated systems
 - Basic combustion theory
 - The types and specifications for dry wall passive fire-rated systems related to steel stud and timber stud walls, shaft walls, timber joists and suspended ceilings
 - Tools and equipment used in the installation of dry wall passive fire-rated systems
 - Dry wall passive fire-rated T-systems installation techniques and processes
 - A range of the materials commonly used in the installation of dry wall passive fire-rated systems
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to the installation of dry wall passive fire-rated systems
 - hand and power tools and equipment appropriate to the installation of dry wall passive fire-rated systems
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGWC3006B**Install acoustic and thermal environmental protection systems****Unit Descriptor**

This unit specifies the competency required to install wall and ceiling systems which satisfy environmental requirements in terms of acoustic ratings and energy efficiency ratings in accordance with sustainable building practices.

The unit includes the planning and preparation for work, the installation of insulation to wall cavities/ plenum, the installation of acoustic systems and the completion of post work clean up activities.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Wall and Ceiling

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Tools and equipment selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Install blanket insulation to walls	2.1 Stud configuration is identified for installation processes 2.2 Safety wire mesh is installed to plans/specifications 2.3 Insulating blanket is installed in full length runs where practicable or, if joined, joints are made at centre of frame member, to plans/specifications 2.4 Adjacent runs of blanket insulation is abutted with closed joints
3. Install acoustic systems	3.1 Acoustic materials are selected to manufacturers' specifications for the walls and ceiling 3.2 Sheeting or ceiling tile material is selected for use in buildings requiring acoustic properties in accordance with manufacturers' RW ratings 3.3 Plaster sheeting and acoustic tile materials are fixed to walls and ceiling in accordance with specifications 3.4 Sealant is selected and used to manufacturers' specifications

- 4. Clean up
 - 4.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification
 - 4.2 Tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for the installation of acoustic and thermal protection systems, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	2
Planning and organising activities	Conduct activities associated with the installation of acoustic and thermal protection systems, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	2
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, complete measurements, interpret ratings, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	1
Using technology	Use workplace technology related to the installation of acoustic and thermal protection systems, including the use of calculators, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope

- Acoustic and thermal environment protection systems are those prescribed in EPA regulatory requirements and in codes which may support or explain these
- Support structures may include timber floors, walls, ceiling and roof framing
- Installation of materials for acoustic and thermal purposes may include the fixing of plasterboard, acoustic ceiling tiles/sheets, acoustic and energy insulation materials, fibre cement sheeting, plaster products and metal pan type ceiling cladding

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with manual handling, trip hazards, lighting, power sources and leads, the use of cutting tools, power tools, traffic control, working at heights, working in proximity to others, worksite visitors and the public
- Emergency procedures related to this unit are to include but may not be limited to extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to noise, energy efficiency, dust, vibration and clean up management

Quality Requirements

- Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified

Statutory/Regulatory Authorities	• Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice
Tools and equipment	• Tools and equipment are to include measuring tape/rule, hammers, tin snips, power drills, squares, spirit levels, screwguns, power leads, broad knives, caulking guns, trowels, setting boxes, spanners, nail bags, power saws, electric screw guns, manual levelling devices, trestles and may include docking saw/drop saws, laser levelling devices, nail guns, pop riveters, air compressors and hoses, system scaffolding and planks, saw stools, 'C' clamps and masonry drills
Materials	• Materials may include but not be limited to steel safety mesh, insulation blankets, loose fill insulation, rigid sheet insulation, polystyrene sheets, plasterboard, fibrous plaster, acoustic ceiling products, metal/aluminium type products, sealants, screws, nails, staples, adhesive and jointing tape
Communications	• Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals • On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues
Information	• Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches • Safe work procedures related to both acoustic and thermal environmental protection systems • Regulatory/legislative requirements pertaining to both acoustic and thermal environmental protection systems • Manufacturers' specifications and instructions where specified • Organisation work specifications and requirements • Instructions issued by authorised organisational or external personnel • Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools and equipment
- Communication and working effectively and safely with others
- Complete not less than three (3) installation tasks which cover acoustic and thermal protection systems in accordance with regulatory requirements and related specifications

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit should be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - Acoustic and thermal protection systems terminology
 - Regulation and building codes related to acoustic and thermal protection requirements and systems
 - Basic acoustic theory
 - Thermal theory related to heat loss
 - The types of thermal protection systems available for wall and ceiling application and their characteristics, strengths and limitations
 - The types of acoustic protection systems available for wall and ceiling application and their characteristics, strengths and limitations
 - Installation tools and equipment types, characteristics, uses and limitations
 - Acoustic systems installation techniques
 - Thermal systems installation techniques
 - Acoustic and thermal protection systems materials
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards
- Installation of materials for acoustic and thermal purposes may include the fixing of plasterboard, acoustic ceiling tiles/sheets, acoustic and energy insulation materials, fibre cement sheeting, plaster products and metal pan type ceiling cladding

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to the installation of acoustic and thermal protection systems
 - hand and power tools and equipment appropriate to the installation of acoustic and thermal protection systems
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGWC3007B**Unit Descriptor****Install suspended ceilings**

This unit specifies the competency required to install exposed and concealed suspended ceilings.

The unit includes the planning and preparation for work, the set-out, the installation of the ceiling suspension system, the installation of lining material and the completion of clean up activities.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Wall and Ceiling

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Tools and equipment selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Set out	2.1 Ceiling grid is set out to job drawings and in accordance with manufacturers' specifications 2.2 Alignment levels for ceiling are set out as shown on job drawings
3. Install suspension system	3.1 Suspension rods are fixed to underside of soffit/ structural members with masonry anchors/bolts/screws at prescribed centres, to manufacturers' instructions 3.2 Suspended framework is assembled and connected to suspension rods in accordance with specifications and manufacturers' instructions 3.3 Suspension system is fastened and checked for looseness and rattles 3.4 Bridging framework is fixed to both sides of service ducts to support suspension system

- 4. Install lining materials
 - 4.1 Lining materials are installed according to design pattern set out on job drawings, and to specifications
 - 4.2 Lining materials edges are cut, concealed or finished to match pre-finished edges
 - 4.3 Openings and penetrations for lighting, diffuser, hatches and sprinkler heads are provided as shown on the job drawings
 - 4.4 Trims and beads are fixed at junctions with other building elements and surfaces as shown on job drawings
- 5. Clean up
 - 5.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification
 - 5.2 Tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for the installation of suspended ceilings, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	2
Planning and organising activities	Conduct activities associated with the installation of suspended ceilings, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	2
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, complete measurements, establish levels, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	2
Using technology	Use workplace technology related to the installation of suspended ceilings, including the use of calculators, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope	• Suspended systems are to include both concealed and exposed • Components of suspended systems may include anchors/bolts, droppers/suspension rods, main beams/rails/runners, cross beams/rails/runners, furring channels and spacer bars • Installation is to comply with manufacturers' design and installation guidelines and relevant regulatory requirements • Support structures may include but are not limited to timber/steel floor/ceiling/rod framing and reinforced concrete ceiling/floor slabs
Safety (OH&S)	• OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances • Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices • Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with manual handling, lighting, power sources and cables, trip hazards, working in confined areas, traffic control, working at heights, working in proximity to others, worksite visitors and the public • Emergency procedures related to this unit are to include but may not be limited to extinguishing fires, organisational first aid requirements and evacuation
Environmental Requirements	• Environmental requirements are to include but are not limited to waste management, noise, dust, vibration and clean-up management
Quality Requirements	• Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified

Statutory/Regulatory Authorities	• Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice
Tools and equipment	• Tools and equipment are to include measuring tapes/ rules, hammers, spirit levels, squares, spanners, nail bags, power saws, power drills, electric screw guns, manual levelling devices, power leads, trestles and may include laser levelling devices, nail guns, pop riveters, air compressors and hoses, system scaffolding and planks
Materials	• Materials may include but are not limited to suspended ceiling components, plasterboard, infill panels/various surfaces, insulation materials, fibre cement sheeting, base coats and finishing coats
Communications	• Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals • On site meeting processes may include notification/ scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues
Information	• Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches • Safe work procedures related to the installation of suspended ceilings • Regulatory/legislative requirements pertaining to the installation of suspended ceilings • Manufacturers' specifications and instructions where specified • Organisation work specifications and requirements • Instructions issued by authorised organisational or external personnel • Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools, plant and equipment
- Communication and working effectively and safely with others
- Install a minimum of two suspended ceilings including one exposed and one concealed type to specification

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - Wall and ceiling terminology
 - Suspended ceiling materials and their preparation and applications
 - Suspended ceiling installation, tools and equipment types, uses and limitations
 - Suspended ceiling installation techniques and processes including levelling
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to the installation of suspended ceilings
 - hand and power tools and equipment appropriate to the installation of suspended ceilings
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGWF2001B**Unit Descriptor****Handle wall and floor tiling materials**

This unit specifies the competency required to handle, store and apply environmental principles to wall and floor tiling products, materials and components.

This unit includes the preparation, handling, sorting stacking, distribution and disposal of wall and floor tiling products, materials and components in the application of the tiles to walls and floors.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Wall and Floor Tiling

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare

- 1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied
- 1.2 Safety requirements are followed in accordance with safety plans and policies
- 1.3 Signage/barricade requirements are identified and implemented
- 1.4 Plant, tools and equipment selected to carry out tasks that are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement
- 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications
- 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use
- 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied

2. Receive, sort and distribute wall and floor tiling materials	2.1 Wall and floor tiling products, material and components, on delivery to site, are identified and checked for conformity to material schedule, plans and specifications 2.2 Handling characteristics of wall and floor tiling material and components are identified and safe and effective handling techniques applied in accordance with safe work method statements and OH&S workplace operations 2.3 Wall and floor tiling adhesives are handled, proportioned, mixed and stored in preparation for application in accordance with supervisor's instructions and/or manufacturers' recommendations 2.4 Wall and floor tiling bedding mortar material is handled, proportioned, mixed and stored in preparation for application in accordance with supervisor's instructions and/or specifications 2.5 Wall and floor tiling material and components are sorted to suit material type and size, stacked for ease of identification and retrieval for task sequence 2.6 Wall and floor tiling material and components are distributed to job location
3. Handle and remove surplus wall and floor tiling material	3.1 Materials are handled according to MSDS and requirements of regulatory authorities 3.2 Hazardous material is identified for separate handling by authorised personnel 3.3 Wall and floor tiling material and components are handled, recovered and transferred from job location and stored in designated storage area according to MSDS and workplace requirements
4. Clean up	4.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification 4.2 Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for handling wall and floor tiling materials, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	1
Planning and organising activities	Conduct activities associated with handling wall and floor tiling materials, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	1
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances and levels, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	1
Using technology	Use workplace technology related to handling wall and floor tiling materials, including the use of calculators, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope

- The unit requires the receiving, handling, sorting and distribution of the wall and floor tiling products for a tiling job and the environmental disposal of waste
- Waste materials include, but are not limited to, banding straps, packing pieces, broken or damaged goods, cardboard, plastic, paper and excess materials
- Types of tiles may include, but not be limited to, ceramic, marble, stone, granite, terracotta, glass and porcelain
- Tiles may be fixed by adhesives, cement mortar and cement mortar with adhesive additive

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with lighting, concealed services (water, power and gas) trip hazards, working with dangerous/hazardous materials, working in confined spaces, restricted access barriers, traffic control, working at heights, working in proximity to others, worksite visitors and the public
- Emergency procedures related to this unit are to include but may not be limited to extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust, vibration and clean-up management

Quality Requirements

- Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified

Statutory/Regulatory Authorities	• Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice
Tools and equipment	• Tools and equipment are to include scissors, cutting blades, wheelbarrows, ladders, elevated work platforms, brooms, forklifts, pallet jacks and buckets • Tools and equipment may include scaffolds, concrete mixers and adhesive mixers
Materials	• Materials are to include tiles, adhesives, cement mortar (with and without additives), caulking compound and grout
Communications	• Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals • On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues
Information	• Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches • Safe work procedures related to handling wall and floor tiling materials • Regulatory/legislative requirements pertaining to handling wall and floor tiling materials • Manufacturers' specifications and instructions where specified • Organisation work specifications and requirements • Instructions issued by authorised organisational or external personnel • Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools, plant and equipment
- Communication and working effectively and safely with others
- As a minimum, gGiven the plans and specifications for a bathroom wall and floor to be tiled, receive, confirm quantity and quality compliance, handle, sort, stack and distribute the tiles, materials and components to support the performance of the task; prepare and mix the required adhesives and/or mortar, grouting and finishes required for the job; and clean up and store/dispose of excess/waste materials on the completion of the job, ensuring:
 - correct identification of tiling requirement
 - correct selection and use of appropriate processes, tools and equipment
 - completing all work to specification
 - compliance with regulations, standards and organisational quality procedures and processes

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - General Construction terminology
 - Plant, tools and equipment types, characteristics, uses and limitations
 - Handling wall and floor tiling materials techniques
 - Wall and floor tiling materials, their qualities and applications
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets and hazards associated with solvents, adhesives and cement/epoxy based grouts
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - Wall and floor tiling processes and sequences
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to handling wall and floor tiling materials
 - hand and power tools, plant and equipment appropriate to handling wall and floor tiling materials
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGWF2002B Unit Descriptor

Use wall and floor tiling tools and equipment

This unit specifies the competency required safely and effectively use tools and equipment specific to ceramic wall and floor tiling work.

This unit includes the identification, selection and use of tools for specific applications.

Prerequisite Unit(s) Unit Sector

BCGCM1001B Follow OH&S policies and procedures
Wall and Floor Tiling

ELEMENT

PERFORMANCE CRITERIA

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Identify hand and power tools	2.1 Hand and power tools, their functions, operations and limitations are identified 2.2 OH&S requirements for using hand tools are recognised and adhered to 2.3 OH&S requirements for using power tools are recognised and adhered to
3. Select tools for project	3.1 Tools are selected consistent with job requirements 3.2 Tools, including leads and hoses, are checked for current tags, serviceability and safety and any faults reported in accordance with workplace procedures 3.3 Power tools guards, couplings, gauges and controls are checked and maintained in accordance with manufacturers' recommendations and workplace procedures 3.4 Equipment to hold or support material during operation is selected 3.5 Pre-operational checks, including lubricants, hydraulic fluid and water, are completed in accordance with manufacturers' recommendations
4. Use tools	4.1 Power and/or compressed air supply is connected to work area 4.2 Start up and shut down procedures are performed in accordance with workplace procedures 4.3 Tools are safely and effectively used according to manufacturers' recommendations and regulatory and workplace requirements 4.4 Tools are safely located and switched when not in immediate use

5. Select plant and equipment	5.1 Functions and limitations of plant/equipment used in wall and floor tiling are identified 5.2 Method of operation of plant/equipment is identified 5.3 Plant and equipment is checked for safety, and faults reported to supervisor in accordance with workplace procedures 5.4 Plant and equipment requirements for guarding, cut off switches, couplings, gauges and controls checked in accordance with workplace procedures 5.5 Plant and equipment is selected consistent with hazard minimization and needs of job 5.6 Requirements for operating and using plant and equipment recognised and adhered to in accordance with workplace procedures
6. Use plant and equipment	6.1 Plant and equipment is safely and effectively used 6.2 Plant and equipment is safely located and switched off when not in immediate use 6.3 Tools and equipment is inspected, maintained, tagged and faults reported in accordance with workplace procedures
7. Clean up	7.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification 7.2 Tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for using wall and floor tiling tools and equipment, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	1
Planning and organising activities	Conduct activities associated with using wall and floor tiling tools and equipment, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	1
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances and levels, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	1
Using technology	Use workplace technology related to using wall and floor tiling tools and equipment, including the use of calculators, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope	• The unit requires the selection and operation of hand and power tools and equipment in wall and floor tiling applications. It involves their identification, their correct application and their effective operation
Safety (OH&S)	• OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances • Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices • Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with lighting, concealed services (water, power and gas) trip hazards, working with dangerous/hazardous materials, working in confined spaces, restricted access barriers, traffic control, working at heights, working in proximity to others, worksite visitors and the public • Emergency procedures related to this unit are to include but may not be limited to extinguishing fires, organisational first aid requirements and evacuation
Environmental Requirements	• Environmental requirements are to include but are not limited to waste management, noise, dust, vibration and clean-up management
Quality Requirements	• Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified
Statutory/Regulatory Authorities	• Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice

Tools and equipment

- Tools and equipment are to include tile cutters and scribes, measuring tapes/rules, straight edges, levelling equipment (including straight edges, line levels, string lines, spirit levels and water levels), wet and dry diamond saws, scrapers, shovels, wooden floats, trowels, spacers/wedges, squares, buckets, sponges, rags, rubber mallets, lump hammers, caulking guns, nippers, squeegees and pointed grouters
- Tools and equipment may include adhesive mixers, screeding machines, grouting machines, beating machines, concrete mixers and masonry drill bits
- Power tools are to include power drills and power leads
- Plant and equipment may include small petrol/diesel engines, small compressors and small generators

Materials

- Materials are to include tiles, ceramic, slate, marble and granite, adhesives, cement mortar (with and without additives), caulking compound and grout

Communications

- Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals
- On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues

Information

- Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches
- Safe work procedures related to using wall and floor tiling tools and equipment
- Regulatory/legislative requirements pertaining to using wall and floor tiling tools and equipment
- Manufacturers' specifications and instructions where specified
- Organisation work specifications and requirements
- Instructions issued by authorised organisational or external personnel
- Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools, plant and equipment
- Communication and working effectively and safely with others
- As a minimum, follow work instructions, operating procedures and inspection practices to use the listed wall and floor tiling tools and equipment for their appropriate application, ensuring:
 - correct identification, selection and use of appropriate processes, tools and equipment
 - correct selection and use of appropriate processes, tools and equipment
 - completing all work to specification
 - compliance with regulations, standards and organisational quality procedures and processes

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - General Construction terminology
 - Plant, tools and equipment types, characteristics, uses and limitations
 - Techniques and procedures for using wall and floor tiling tools and equipment
 - Characteristics and applications of wall and floor tiling tools and equipment
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - Measuring and marking
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

**Specific resource
requirements for this unit**

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to using wall and floor tiling tools and equipment
 - hand and power tools, plant and equipment appropriate to using wall and floor tiling tools and equipment
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGWF3001B**Unit Descriptor****Prepare surfaces for tiling application**

This unit specifies the competency required to repair and prepare different substrates for wall and floor tiling applications.

This unit includes the preparation of materials and substrates for the tiling process.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Wall and Floor Tiling

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Plant, tools and equipment selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Prepare materials for tiling application	2.1 Floor and wall tiling materials are checked for product suitability, conformity to specification and compatibility with surface material, preparation and installation technique 2.2 Activities for material preparation are identified from specifications, manufacturers' or supervisor's instructions 2.3 Material preparation is carried out to satisfy the requirements of the application process
3. Prepare underlay and sheeting substrate	3.1 Assistance with underlay preparation is provided under instructions and supervision 3.2 Substrate surface is finished to approved surface standards with joints flush and sealed

- 4. Prepare render substrate surface
 - 4.1 Surface mounted construction units and attachments are safely detached, removed or arranged for removal from area and stored
 - 4.2 Substrate structure is identified and surfaces are cleaned to remove all contaminants and loose material in accordance with supervisor's instructions
 - 4.3 Materials for splash coat are proportioned and mixed to instructions ready for application to wet surface
 - 4.4 Horizontal/vertical surrounds are prepared for tiling process in accordance with type of tile and specified finish
 - 4.5 Materials for render coat are proportioned and mixed to instructions ready for application
 - 4.6 Surface is scratched, rendered, cured and dried to instructions in accordance with specifications for tile application
- 5. Clean up
 - 5.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification
 - 5.2 Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for preparing surfaces for tiling, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	1
Planning and organising activities	Conduct activities associated with preparing surfaces for tiling, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	2
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances and levels, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	2
Using technology	Use workplace technology related to preparing surfaces for tiling, including the use of calculators, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope

- The unit requires the preparation of materials and substrate surfaces for the application of wall and floor tiles
- Substrate preparation may include use of underlay material, rendering to provide a flat surface and both chemical and mechanical preparation of surfaces
- Underlay material may be acoustic, in sheet or liquid form and provide for crack suppression (in membrane form)
- Surfaces may include fibre cement sheet, brickwork, blockwork, concrete walls, timber, rendered surfaces, ceramic or fibro cement underlay and other approved waterproof surfaces
- Substrate surface materials include, but are not limited to, wall and floor tiles, terrazzo, pre-cast cladding, painted surfaces, solid plaster, fibre cement sheets or other lining material or cladding of a similar nature, stone, concrete, timber, waterproof plasterboard, masonry and brick/block
- Tiles may be fixed by adhesives, cement mortar and cement mortar with adhesive additive
- Types of tiles may include, but not be limited to, ceramic, marble, stone, granite, terracotta, glass and porcelain
- Surface mounted construction units and attachments abutted, connected or attached to surfaces may include, but are not limited to, curtain walling fixing, fitment units, brick or block walls or abutments, timber partition walls, light steel partition walls, formwork/falsework construction, stair installations, attachment of steel brackets or fabricated units and aluminium framework fixing
- Release agents on concrete tilt-up slabs are to be removed prior to tiling

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with lighting, concealed services (water, power and gas), trip hazards, working with dangerous/hazardous materials, working in confined spaces, restricted access barriers, traffic control, working at heights, working in proximity to others, worksite visitors and the public
- Emergency procedures related to this unit are to include but may not be limited to extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust, vibration, sedimentation control and clean-up management

Quality Requirements

- Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified

Statutory/Regulatory Authorities

- Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice

Tools and equipment

- Tools and equipment are to include hammers, saws, wet and dry diamond saws, power drills and screwdrivers, measuring tapes/rules, cement sheet cutters, straight edges, levelling equipment, concrete mixers, mortar boards, string lines, scrapers, brushes, wire brushes, brooms, sanding blocks, spatulas, wheelbarrows, shovels, wooden floats, trowels, spacers/wedges, squares, buckets, power sanders, power grinders, electrical leads, ladders, work platforms, hose and water sprays, sponges, rags, rubber mallets, lump hammers, caulking guns, nippers, squeegees and pointed grouters

Materials

- Materials are to include adhesives, cement mortar (with and without additives), fixings and fasteners (plasterboard nails, clouts, soft sheet nails, self tapping screws, wall board adhesive) and patching materials (sand and cement, cornice adhesive, fillers - pre-mixed and mixed and caulking compound)
- Materials may include acoustic underlay material and crack suppression membrane

Communications

- Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals
- On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues

Information

- Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches
- Safe work procedures related to preparing surfaces for tiling
- Regulatory/legislative requirements pertaining to preparing surfaces for tiling
- Manufacturers' specifications and instructions where specified
- Organisation work specifications and requirements
- Instructions issued by authorised organisational or external personnel
- Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools, plant and equipment
- Communication and working effectively and safely with others
- As a minimum (using a combination of underlay, render and mechanical and chemical techniques), prepare a bathroom work area for wall and floor tiling; prepare a timber bathroom floor and pointed fibre cement sheet wall for tiling; and prepare a concrete bathroom floor and pointed fibre cement sheet wall for tiling, ensuring:
 - correct identification of requirement and completion of the preparation
 - correct selection and use of appropriate processes, tools and equipment
 - completing all work to specification
 - compliance with regulations, standards and organisational quality procedures and processes

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - General Construction terminology
 - Plant, tools and equipment types, characteristics, uses and limitations
 - Surface preparation techniques
 - Surface preparation materials
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

**Specific resource
requirements for this unit**

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to preparing surfaces for tiling
 - hand and power tools, plant and equipment appropriate to preparing surfaces for tiling
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGWF3002B**Unit Descriptor****Fix floor tiles**

This unit specifies the competency required to fix floor tiles to different substrates using mortar or adhesive.

This unit includes the preparation, cutting, fixing and grouting of tiles for floors, including steps/stairs and thresholds.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Wall and Floor Tiling

ELEMENT**PERFORMANCE CRITERIA****1. Plan and prepare**

- 1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied
- 1.2 Safety requirements are followed in accordance with safety plans and policies
- 1.3 Signage/barricade requirements are identified and implemented
- 1.4 Plant, tools and equipment selected to carry out tasks that are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement
- 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications
- 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use
- 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied

2. Set out tiling job

- 2.1 Area to be tiled is prepared to requirements of job specification in accordance with workplace procedures
- 2.2 Tiles are checked for conformity to size, patterns, colours and characteristics in accordance with plans and specifications
- 2.3 Tile work is set out to be symmetrical, balanced and produce minimal waste in accordance with specifications and standards
- 2.4 Waterproof membrane is fitted and laid in wet areas to conform to manufacturers' specifications and regulatory requirements

3. Cut tiles as required

- 3.1 Tiles are cut without jagged, flaired edges or damage to tile surfaces or finish in accordance with workplace procedures and manufacturers' recommendations
- 3.2 Recess hole or curve is cut by hand or machine to shape and size to specified tolerance
- 3.3 Tile jolly is edged to form a mitre so that biscuit is not exposed at the joint in accordance with workplace procedures and manufacturers' recommendations

4. Lay floor tiles	4.1 Floor is checked for level/falls and square and membranes/underlay are installed in accordance with workplace procedures and manufacturers' recommendations 4.2 Substrate surface is prepared free from contaminants and residues to receive adhesive/screeded mortar in accordance with plans and specifications 4.3 Tiles are checked for conformity to size, patterns, colours and characteristics in accordance with plans and specifications 4.4 Adhesive is matched with tile and substrate material and mixed according to usage, climatic conditions and manufacturers' specifications 4.5 Cement mortar is prepared to appropriate consistency and floor slurried and screeded to specifications 4.6 Tiles are laid in conformance to standards and specifications, maintaining bond with joints, uniform in size and surface flat and smooth or to fulls 4.7 Control joints are inserted in accordance with manufacturers' specifications
5. Tile treads, risers, steps and thresholds	5.1 Step rises and goings are determined from formed concrete steps/stairs 5.2 Steps are set out for uniform rise and make even cut on both sides of steps 5.3 Step riser packing or render support is fixed where applicable and riser tiles are fixed to true alignment and uniform set out 5.4 Treads infill and thresholds are fixed in line with the top edge of risers within specified tolerances
6. Grout and seal tiles	6.1 All joints are cleaned and prepared to receive grout according to manufacturers' specifications 6.2 Grout is mixed and applied in accordance with workplace and manufacturers' specifications and to meet job requirements 6.3 Tiles are cleaned and polished with dry cloth to specifications, removing all dust from surface and joints 6.4 Tiles are sealed and protected in accordance with manufacturers' instructions and job specifications
7. Clean up	7.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification 7.2 Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for fixing floor tiles, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	2
Planning and organising activities	Conduct activities associated with fixing floor tiles, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	2
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances and levels, calculate material requirements and establish quality checks	2
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	2
Using technology	Use workplace technology related to fixing floor tiles, including the use of calculators, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope

- The unit requires the setting out, cutting, fixing and grouting of tiles to a floor, using either adhesive or mortar, including steps/stairs and thresholds
- Types of tiles may include, but not be limited to, ceramic, marble, stone, granite, terracotta, glass and porcelain
- Floor substrates may include fibre cement underlay, compressed FC sheeting, concrete, timber, rendered concrete and approved waterproof substrates
- Tiles may be fixed by adhesives, cement mortar and cement mortar with adhesive additive
- Release agents on concrete tilt-up slabs are to be removed prior to tiling
- Fixings and fasteners may include, but not limited to, plasterboard nails, clouts, soft sheet nails, self tapping screws and wall board adhesive
- Grout may be cementitious or epoxy

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with lighting, concealed services (water, power and gas) trip hazards, working with dangerous/hazardous materials, working in confined spaces, restricted access barriers, traffic control, working at heights, working in proximity to others, worksite visitors and the public
- Emergency procedures related to this unit are to include but may not be limited to extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust, vibration and clean-up management

Quality Requirements	• Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified
Statutory/Regulatory Authorities	• Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice
Tools and equipment	• Tools and equipment are to include tile cutters and scribes, hammers, saws, wet and dry diamond saws, power drills, power leads, cement sheet cutters, measuring tapes/rules, straight edges, levelling equipment, string lines, brushes, wire brushes, brooms, sanding blocks, scrapers, shovels, wooden floats, trowels, spatulas, shovels, wheelbarrows, spacers/wedges, squares, buckets, mortar boards, sponges, rags, rubber mallets, lump hammers, ladders, hose and water sprays, caulking guns, nippers, squeegees and pointed grouters • Tools and equipment may include concrete mixers, power sanders, power grinders and masonry drill bits
Materials	• Materials are to include tiles, adhesives, cement mortar (with and without additives), caulking compounds, sealers and grout
Communications	• Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals • On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues

Information

- Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches
- Safe work procedures related to fixing floor tiles
- Regulatory/legislative requirements pertaining to fixing wall tiles
- Manufacturers' specifications and instructions where specified
- Organisation work specifications and requirements
- Instructions issued by authorised organisational or external personnel
- Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools, plant and equipment
- Communication and working effectively and safely with others
- As a minimum:
 - tile 4 square meter of a concrete bathroom floor using a sand and cement mortar mix;
 - tile 4 square meter of a timber floor, laid on the diagonal with a half tile border, using adhesive; and
 - tile 4 square meter of a concrete floor with marble tiles, using adhesive; and tile a minimum of three steps of 900mm width and 115mm risers and treads including an expansion joint
- ensuring:
 - correct identification of requirement and completion of the tiling
 - correct selection and use of appropriate processes, tools and equipment
 - completing all work to specification
 - compliance with regulations, standards and organisational quality procedures and processes

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - General Construction terminology
 - Plant, tools and equipment types, characteristics, uses and limitations
 - Techniques in fixing tiles to floors and step/stairs including preparation of substrates
 - Tiling materials (including tiles, adhesives, mortar, grouting and substrates, their qualities, characteristics, preparation, techniques, applications, limitations and finishing)
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets and hazards associated with solvents, adhesives and cement/epoxy based grouts
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - Control joints
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to fixing floor tiles
 - hand and power tools, plant and equipment appropriate to fixing floor tiles
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGWF3003B**Unit Descriptor****Fix wall tiles**

This unit specifies the competency required to fix wall tiles to differing substrates, using mortar or adhesive.

This unit includes the preparation, cutting, fixing and grouting of tiles for walls, including internal and external wall junctions and between wall and floor junctions.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Wall and Floor Tiling

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Plant, tools and equipment selected to carry out tasks that are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Set out tiling job	2.1 Area to be tiled is prepared to requirements of job specification in accordance with workplace procedures 2.2 Tiles are checked for conformity to size, patterns, colours and characteristics in accordance with plans and specifications 2.3 Tile work grid patterns are determined and set out to be symmetrical, balanced and produce minimal waste in accordance with specifications and standards 2.4 Waterproof membrane is fitted and laid in wet areas to conform to manufacturers' specifications and regulatory requirements
3. Cut tiles as required	3.1 Tiles are cut without jagged, flaid edges or damage to tile surfaces or finish in accordance with workplace procedures and manufacturers' recommendations 3.2 Recess hole or curve is cut by hand or machine to shape and size to specified tolerance 3.3 Tile jolly is edged to form a mitre so that biscuit is not exposed at the joint in accordance with workplace procedures and manufacturers' recommendations

- 4. Fix wall tiles
 - 4.1 Mortar and/or adhesive is prepared and applied to tile surface in accordance with manufacturers' recommendations
 - 4.2 Tiles are prepared and fixed with pad tiles set to level alignment
 - 4.3 Horizontal joint is checked for straightness and tile edges and surface alignment are checked for conformity
 - 4.4 Tiles are fixed to alignment maintaining designed pattern to specification
 - 4.5 Even margins are shown around openings, frames and fittings to specification
 - 4.6 Bottom course is cut and fixed to create a rake or square corner in accordance with drawings and specifications
 - 4.7 Splayed, manufactured, formed coves are fixed in accordance with drawings and specifications
 - 4.8 All vertical tiles are finished plumb and true to square corners
 - 4.9 All joints are maintained straight and uniform in width with due allowance for tolerance of tile sizes
 - 4.10 Control joints are built in, in accordance with specifications and manufacturers' recommendations
 - 4.11 Mitre joints are made, maintaining glazing on mitre without damage to tile surfaces or finish and maintaining uniformity of mitre in accordance with company procedures and manufacturers' recommendations
- 5. Tile external corners
 - 5.1 Setting out for plumb, level and square, is checked to be within specified tolerance
 - 5.2 External corners are checked to ensure surface intersections are straight
 - 5.3 Curved bead angle trim or tiles are fixed so that external return and bead is square and measurements are accurate to junction with tiles and set out, where applicable
 - 5.4 Tiles are fixed with minimum voids in tile bed and maintain fully bedded alignment to specifications
 - 5.5 Corner is kept square within specified tolerance and finish to specifications

6. Tile internal corners	6.1 Internal corner is checked to ensure surfaces are flat and intersection is straight 6.2 Tiles are cut where required and fixed to one wall to maintain alignment in accordance with set out and specifications 6.3 Tiles are cut where required and fixed abutting adjacent wall tiles to line, set out and specifications 6.4 Joints for abutting tiles are made in accordance with designed margin for grouting or for expansion joint, where applicable, to specifications 6.5 Coved tile or coved trim is installed to coved internal wall or wall and floor junctions 6.6 Coved tiles or trim are installed so that line is straight and, where applicable, aligned with set out 6.7 Tiles are fixed to cove tiles or trim and finish to alignment and specifications
7. Grout wall tile face	7.1 All joints are cleaned and prepared to receive grout according to manufacturers' specifications 7.2 Grout is mixed and applied in accordance with workplace and manufacturers' specifications and to meet job requirements 7.3 Tiles are cleaned and polished with dry cloth to specifications, removing all dust from surface and joints
8. Clean up	8.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/ codes of practice and job specification 8.2 Machinery, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for fixing wall tiles, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	2
Planning and organising activities	Conduct activities associated with fixing wall tiles, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	2
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances and levels, calculate material requirements and establish quality checks	2
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	2
Using technology	Use workplace technology related to fixing wall tiles, including the use of calculators, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables may be present for this particular unit:

Unit scope

- The unit requires the setting out, cutting, fixing and grouting of tiles to a wall, using either adhesive or mortar, including internal and external corners
- Types of tiles may include, but not be limited to, ceramic, marble, stone, granite, terracotta, glass and porcelain
- Wall substrate may include fibre cement sheet, brickwork, blockwork, concrete, timber, rendered surfaces and approved waterproof substrates
- Tiles may be fixed by adhesives, cement mortar and cement mortar with adhesive additive
- Release agents on concrete tilt-up slabs are to be removed prior to tiling
- Fixings and fasteners may include, but not limited to, plasterboard nails, clouts, soft sheet nails, self tapping screws and wall board adhesive
- Grout may be cementitious or epoxy

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with lighting, concealed services (water, power and gas) trip hazards, working with dangerous/hazardous materials, working in confined spaces, restricted access barriers, traffic control, working at heights, working in proximity to others, worksite visitors and the public
- Emergency procedures related to this unit are to include but may not be limited to extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust, vibration and clean-up management

Quality Requirements	• Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified
Statutory/Regulatory Authorities	• Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice
Tools and equipment	• Tools and equipment are to include tile cutters and scribes, hammers, saws, wet and dry diamond saws, power drills, power leads, cement sheet cutters, measuring tapes/rules, straight edges, levelling equipment, string lines, brushes, wire brushes, brooms, sanding blocks, scrapers, shovels, wooden floats, trowels, spatulas, shovels, wheelbarrows, spacers/wedges, squares, buckets, mortar boards, sponges, rags, rubber mallets, lump hammers, ladders, hose and water sprays, caulking guns, nippers, squeegees and pointed grouters • Tools and equipment may include concrete mixers, power sanders, power grinders and masonry drill bits
Materials	• Materials are to include tiles, adhesives, cement mortar (with and without additives), caulking compound and grout
Communications	• Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals • On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues

Information

- Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches
- Safe work procedures related to fixing wall tiles
- Regulatory/legislative requirements pertaining to fixing wall tiles
- Manufacturers' specifications and instructions where specified
- Organisation work specifications and requirements
- Instructions issued by authorised organisational or external personnel
- Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools, plant and equipment
- Communication and working effectively and safely with others
- As a minimum:
 - Tile the front and return of a standard 1500mm timber framed bath, including a straight hob between the bath and wall, using adhesive to fix the tiles. Tiles are not to be proud of the bath and coving to floor is to allow for control joints, as required; and
 - Tile the front and return of a standard 1500mm bricked bath, including a straight hob between the bath and wall, using mortar to fix the tiles. Tiles are not to be proud of the bath and coving to floor is to allow for control joints, as required. Work to be completed
- ensuring:
 - correct identification of requirement and completion of the tiling
 - correct selection and use of appropriate processes, tools and equipment
 - completing all work to specification
 - compliance with regulations, standards and organisational quality procedures and processes

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - General Construction terminology
 - Plant, tools and equipment types, characteristics, uses and limitations
 - Techniques in fixing tiles to walls and corners including preparation of substrates
 - Tiling materials (including tiles, adhesives, mortar, grouting and substrates, their qualities, characteristics, preparation, techniques, applications, limitations and finishing)
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets and hazards associated with solvents, adhesives and cement/epoxy based grouts
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - Control joints
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to fixing wall tiles
 - hand and power tools, plant and equipment appropriate to fixing wall tiles
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGWF3004B**Unit Descriptor****Repair wall and floor tiles**

This unit specifies the competency required to repair wall and floor, using mortar or adhesive.

This unit includes the preparation, removing and replacing wall and floor tiles.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Wall and Floor Tiling

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Plant, tools and equipment selected to carry out tasks that are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Repair damaged tilework	2.1 Damaged tiles/s are removed avoiding damage to surrounding tiles 2.2 Old bedding is cleaned and cleared to allow placement of replacement tile 2.3 Replacement tiles are selected and cut where applicable to match existing face, size, colour and pattern 2.4 Tiles are fitted and fixed to maintain alignment with joints to uniform spacing 2.5 Grouting is carried out and tile face cleaned to specified finish
3. Clean up	3.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification 3.2 Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for repairing floor and wall tiles, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	1
Planning and organising activities	Conduct activities associated with repairing floor and wall tiles, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	1
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances and levels, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	1
Using technology	Use workplace technology related to repairing floor and wall tiles, including the use of calculators, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope

- The unit requires the removal and replacement of damaged tiles from tiled walls and floors
- Types of tiles may include, but not be limited to, ceramic, marble, stone, granite, terracotta, glass and porcelain
- Defects may include, but not limited to, holes, missing, cracked or damaged substrate or tiles, cracks, splits, surface depressions or dents, material drumming, rough imperfect surfaces, loose and flaked surface materials and chips or dents
- Patching materials include, but are not limited to, sand and cement and fillers (pre-mixed and mixed)
- Wall surfaces may include fibre cement sheet, brickwork, blockwork, concrete, timber, rendered surfaces and other waterproof surfaces
- Tiles may be fixed by adhesives, cement mortar and cement mortar with adhesive additive

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with lighting, concealed services (water, power and gas) trip hazards, working with dangerous/hazardous materials, working in confined spaces, restricted access barriers, traffic control, working at heights, working in proximity to others, worksite visitors and the public
- Emergency procedures related to this unit are to include but may not be limited to extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust, vibration and clean-up management

Quality Requirements	• Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified
Statutory/Regulatory Authorities	• Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice
Tools and equipment	• Tools and equipment are to include tile cutters and scribes, hammers, saws, wet and dry diamond saws, power drills, power leads, cement sheet cutters, measuring tapes/rules, straight edges, levelling equipment, string lines, brushes, wire brushes, brooms, sanding blocks, scrapers, shovels, wooden floats, trowels, spatulas, shovels, wheelbarrows, spacers/wedges, squares, buckets, mortar boards, sponges, rags, rubber mallets, lump hammers, ladders, hose and water sprays, caulking guns, nippers, squeegees and pointed grouters • Tools and equipment may include concrete mixers, power sanders, power grinders and masonry drill bits
Materials	• Materials are to include tiles, adhesives, cement mortar (with and without additives), caulking compound and grout
Communications	• Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals • On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues

Information

- Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches
- Safe work procedures related to repairing wall and floor tiles
- Regulatory/legislative requirements pertaining to repairing wall and floor tiles
- Manufacturers' specifications and instructions where specified
- Organisation work specifications and requirements
- Instructions issued by authorised organisational or external personnel
- Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools, plant and equipment
- Communication and working effectively and safely with others
- As a minimum remove and replace a quantity of damaged wall tiles, which are fixed with adhesive bedding; and remove and replace a quantity of damaged floor tiles, which are fixed with mortar bedding, ensuring:
 - correct identification of requirement and replacement of the tiles
 - correct selection and use of appropriate processes, tools and equipment
 - completing all work to specification
 - compliance with regulations, standards and organisational quality procedures and processes

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - General Construction terminology
 - Plant, tools and equipment types, characteristics, uses and limitations
 - Techniques in removing and replacing tiles to walls and floors
 - Tiling materials (including tiles, adhesives, mortar, grouting and substrates, their qualities, characteristics, preparation, techniques, applications, limitations and finishing)
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets and hazards associated with solvents, adhesives and cement/epoxy based grouts
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to repairing floor and wall tiles
 - hand and power tools, plant and equipment appropriate to repairing floor and wall tiles
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGWF3005B**Unit Descriptor****Carry out decorative tiling**

This unit specifies the competency required to locate and set out dimensions and plans for decorative tiling projects, to form a specific pattern and meet client requirements.

This unit includes the identification, setting out, cutting and laying out of tiles to walls and floors where advanced setting out is required to align wall and floor joints, including heritage tiles.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Wall and Floor Tiling

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Tools and equipment selected to carry out tasks that are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.4 Material quantity requirements are calculated in accordance with plans and/or specifications 1.5 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use 1.6 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Prepare pattern and materials for tiling	2.1 Suitable architectural or historical period is identified and a range of appropriate patterns is produced 2.2 Style of tile is selected to conform with the elements of design 2.3 Colour and shape of tile is selected to conform with specifications and the geometry of the project 2.4 Details of pattern and selected tiles are confirmed with client
3. Form decorative design	3.1 Tiles are set out to required shape and size to conform to pattern and design 3.2 Examples of border, beading and strip returns are laid out 3.3 Tiles are cut, as necessary, to complete the pattern set out 3.4 Wall and floor tile joints are aligned plumb and square and cut tiles are positioned
4. Prepare substrate	4.1 Substrate surfaces are prepared to specification and standard 4.2 Location of tiles is set out or marked directly onto the surface in accordance with job drawings and specification

- 5. Fix tiles
 - 5.1 Adhesive/mortar is applied to set out area
 - 5.2 Wall tiles are laid from a selected position to ensure correct set out
 - 5.3 Floor tiles are set out and laid from the centre, if necessary, to even set out
 - 5.4 Border tiles are laid and adjusted to suit set out
 - 5.5 Surface is finished in accordance with job specifications
- 6. Grout Tiles
 - 6.1 Tiled surface is cleaned free of dust and adhesive
 - 6.2 Grout is mixed and applied in accordance with manufacturer's specifications and to meet job requirements
 - 6.3 Finished surface is cleaned and polished with dry cloth to specifications
- 7. Clean up
 - 7.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification
 - 7.2 Tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for decorative tiling, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturer's instructions, material safety data sheets and equipment instructions	1
Planning and organising activities	Conduct activities associated with decorative tiling, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	2
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances and levels, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	2
Using technology	Use workplace technology related to decorative tiling, including the use of calculators, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables may be present for this particular unit:

Unit scope

- The unit requires the planning, assembly and application of decorative patterns to tiled floors and walls
- Patterns are to be formed from the principles of design relating to the architectural style required
- Decorative tiling is to be installed in conformance with advanced setting out techniques to achieve a whole room joint alignment or heritage effect
- Types of tiles may include, but not be limited to, ceramic, stone, tessellated, terracotta, glass and porcelain
- Client may include a builder, an architect, an interior designer or a customer
- Surfaces may include fibre cement sheet, brickwork, blockwork, concrete walls, timber, rendered surfaces and other waterproof surfaces
- Tiles may be fixed by adhesives, cement mortar and cement mortar with adhesive additive

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with lighting, concealed services (water, power and gas) trip hazards, working with dangerous/hazardous materials, working in confined spaces, restricted access, working at height, personnel, worksite visitors, the public and traffic control
- Emergency procedures related to this unit are to include but may not be limited to extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust, vibration and clean-up management

Quality Requirements	Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified
Statutory/Regulatory Authorities	Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice
Tools and equipment	- Tools and equipment are to include tile cutters and scribes, measuring tapes/rules, straight edges, levelling equipment, string lines, scrapers, shovels, wooden floats, trowels, spacers/wedges, squares, buckets, power drills, sponges, rags, rubber mallets, lump hammers, caulking guns, nippers, squeegees, meter heating devices and pointed grouters - Tools and equipment may include concrete mixers and masonry drill bits
Materials	Materials are to include tiles, patterns, adhesives, cement mortar (with and without additives), caulking compound and grout
Communications	- Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals - On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues
Information	- Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, maps, material safety data sheets (MSDS), diagrams or sketches and graphics - Safe work procedures related to decorative tiling - Regulatory/legislative requirements pertaining to decorative tiling - Manufacturer's specifications and instructions where specified - Organisation work specifications and requirements - Instructions issued by authorised organisational or external personnel - Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools, plant and equipment
- Communication and working effectively and safely with others
- As a minimum, select, set out and lay heritage style wall tiles and decorative strips to a 2 square meter wall finished to differing heights; and select, set out and lay tessellated floor tiles and a decorative border to an L shaped area of approximately 1.5 square meter, ensuring:
 - correct identification of requirement and completion of the tiling
 - correct selection and use of appropriate processes, tools and equipment
 - completing all work to specification
 - compliance with regulations, standards and organisational quality procedures and processes

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - General Construction terminology
 - Plant, tools and equipment types, characteristics, uses and limitations
 - Decorative tiling techniques
 - Decorative tiling materials (including tiles, adhesives, mortar, grouting and substrates, their characteristics, preparation, methods, application and finishing)
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets and hazards associated with solvents, adhesives and cement/epoxy based grouts
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - Heritage tiles and patterns
 - Design reproduction and application methods
 - JSAs/Safe Work method Statements

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to decorative tiling
 - hand and power tools, plant and equipment appropriate to decorative tiling
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGWF3006B**Unit Descriptor****Carry out mosaic tiling**

This unit specifies the competency required to fix a mosaic directly into place to a tiled wall or floor.

This unit includes the cutting and laying out of a pattern/template and application of the tiles to the required area.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Wall and Floor Tiling

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Plant, tools and equipment selected to carry out tasks that are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Prepare materials	2.1 Work area for mosaic fixing is prepared for the requirements of the task 2.2 Mosaic sheets are checked for conformity to size, pattern, colour and characteristics in accordance with the plans and specifications 2.3 Mosaic work is set out to be symmetrical, balanced and produce minimal waste in accordance with specifications and standards 2.4 Adhesive is selected, prepared and mixed in accordance with standard work practices, manufacturers' recommendations and specifications
3. Prepare substrate	3.1 Substrate surfaces are prepared for application of render 3.2 Render is mixed to specification 3.3 Substrate surfaces are rendered to specified thickness, standard and finish 3.4 Surface is cleaned free of contaminants and loose material ready for tile application

4. Fix mosaic to flat surfaces	4.1 Prepared mosaic sheets or tiles are marked to identify the section of application 4.2 Appropriate fixing medium is selected to ensure light coloured tiles not darkened 4.3 Fixing medium is applied to substrate and mosaic sheets or tiles are laid in accordance with manufacturers' specifications, maintaining alignment to set out lines and face surface of tiles, to the specified finish 4.4 Mosaic tiles are positioned prior to final set and adjusted to ensure the specified mosaic lines and spaces are consistent 4.5 Surface is finished so that the face of tiles are flush and the surface flat
5. Fix mosaic to curved surfaces	5.1 Extent of curve is established from site inspection 5.2 Datum line is set out around wall. 5.3 Tiles are set out to determine design balance and to identify any cutting requirement 5.4 Template is made to form the finished curve of the tiled surface 5.5 Tile laying method is determined, and the location of the first tile is identified 5.6 Render is mixed to specifications 5.7 Substrate surfaces are rendered to specified thickness and finished to prepared template 5.8 Mortar and/or adhesive is prepared to manufacturers' specifications 5.9 Tiles are fixed level, plumb, flush and square in accordance with specifications 5.10 Horizontally laid tiles are set out to grid with perimeter tiles, marked and cut to fit curve lines
6. Fix mosaic to a circular column	6.1 Surface is prepared and cleaned for render application 6.2 Template is prepared for the diameter profile of column 6.3 Render is mixed to specifications 6.4 Render is applied to specified thickness and finished to prepared template 6.5 Template is prepared for diameter profile of finished tiled face 6.6 Mosaic sheet or tiles are fixed to column maintaining an even spacing and plumb and level finish, to specification
7. Grout tile face	7.1 Tiled surface is cleaned free of dust and adhesive 7.2 Oxides are selected and grout is mixed and applied to mosaic surface in accordance with manufacturers' specifications and to meet job requirements 7.3 Finished mosaic surface is cleaned and polished with dry cloth to specifications
8. Clean up	8.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification 8.2 Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for mosaic tiling, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	1
Planning and organising activities	Conduct activities associated with mosaic tiling, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	2
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances and levels, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	2
Using technology	Use workplace technology related to mosaic tiling, including the use of calculators, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope

- The unit requires the planning, layout and fixing of mosaic sheet/tiles to walls and/or floors
- Tiles may be ceramic, marble, stone, granite, terracotta, porcelain or glass
- Surfaces may include fibre cement sheet, brickwork, blockwork, concrete walls, timber and may include approved waterproof surfaces
- Surfaces may be flat horizontal, flat vertical, curved horizontal, curved vertical and circular
- Tiles may be fixed by adhesives, cement mortar and cement mortar with adhesive additive
- Release agents on concrete tilt-up slabs are to be removed prior to tiling

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with lighting, concealed services (water, power and gas) trip hazards, working with dangerous/hazardous materials, working in confined spaces, restricted access barriers, traffic control, working at heights, working in proximity to others, worksite visitors and the public
- Emergency procedures related to this unit are to include but may not be limited to extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust, vibration and clean-up management

Quality Requirements	• Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified
Statutory/Regulatory Authorities	• Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice
Tools and equipment	• Tools and equipment are to include tile cutters and scribes, measuring tapes/rules, straight edges, levelling equipment, string lines scrapers, shovels, wooden floats, trowels, spacers/wedges, squares, buckets, power drills, sponges, rags, rubber mallets, lump hammers, caulking guns, nippers, squeegees and pointed grouters • Tools and equipment may include concrete mixers and masonry drill bits
Materials	• Materials are to include tiles, mosaic sheet, paper faced mosaic, adhesives, cement mortar (with and without additives), paper, caulking compound and grout
Communications	• Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals • On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues
Information	• Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches • Safe work procedures related to mosaic tiling • Regulatory/legislative requirements pertaining to mosaic tiling • Manufacturers' specifications and instructions where specified • Organisation work specifications and requirements • Instructions issued by authorised organisational or external personnel • Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools, plant and equipment
- Communication and working effectively and safely with others
- As a minimum, prepare and lay 2 square meter of mosaic tile (half in adhesive and half in render and lay) for a bathroom wall; prepare and lay mosaic tile to a hob and return; and prepare and lay paper based mosaic tile to a column of more than 360mm radius and at least 1m high, ensuring:
 - correct identification of requirement and completion of the tiling
 - correct selection and use of appropriate processes, tools and equipment
 - completing all work to specification
 - compliance with regulations, standards and organisational quality procedures and processes

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - General Construction terminology
 - Plant, tools and equipment types, characteristics, uses and limitations
 - Mosaic tiling methods and set out procedures
 - Mosaic tiling materials (including tiles, adhesives, mortar, grouting and substrates, their characteristics, preparation, methods, application and finishing)
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets and hazards associated with solvents, adhesives and cement/epoxy based grouts
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
- JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

**Specific resource
requirements for this unit**

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to mosaic tiling
 - hand and power tools, plant and equipment appropriate to mosaic tiling
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGWF3007B**Unit Descriptor****Tile curved surfaces**

This unit specifies the competency required to tile curved surfaces on solid and sheet substrate, using mortar or adhesive.

This unit includes the preparation for and tiling of curved wall and floor surfaces, columns, circular walls and arches.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Wall and Floor Tiling

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Plant, tools and equipment selected to carry out tasks that are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Tile curved wall and floor surfaces	2.1 Extent of curve is established from site inspection 2.2 Levelling equipment is used for intermediate marking to level line set out around wall 2.3 Location of tiles is set out to determine balanced design and identify any cutting requirements 2.4 Template is made to form an accurate curve line for tiled surface around wall 2.5 Required method of laying tiles is determined by identification of location of first tile 2.6 Mortar and/or adhesive is prepared where applicable to manufacturers' specifications 2.7 Pad tiles are fixed to level set out and template curve and to specifications 2.8 Minimum voids are maintained in mortar tile beds and tiles are fixed level, plumb (wall), flush and square 2.9 Floor tiles are laid to set out grid with perimeter tiles marked and cut to fit curved wall 2.10 Grout is mixed and applied to joints according to specifications, to provide flush and smooth finish 2.11 Tiled surface is polished to specifications

- 3. Tile circular columns, walls and arches
 - 3.1 Template is set out and cut to ensure conformity to tile surface for curve
 - 3.2 Pad tiles are positioned accurately and fixed to line, to maintain uniform spacing
 - 3.3 Tiles are marked out accurately where applicable and fixed into place, to specifications
 - 3.4 Tiles are fixed on walls, plumb, maintaining levels and curvature of wall to specifications
 - 3.5 Line and curvature is maintained to specifications when fixing tiles to archways
 - 3.6 Grout is mixed and applied to joints and tile surface is finished to specifications
- 4. Clean up
 - 4.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification
 - 4.2 Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for tiling curved surfaces, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	2
Planning and organising activities	Conduct activities associated with tiling curved surfaces, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	2
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances and levels, calculate material requirements and establish quality checks	2
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	2
Using technology	Use workplace technology related to tiling curved surfaces, including the use of calculators, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope

- The unit requires the setting out, cutting, fixing and grouting of tiles to curved walls and floor surfaces, circular columns and archways
- Curve templates may be made from plywood, hardboard or sheet metal
- Types of tiles may include, but not be limited to, ceramic, marble, stone, granite, terracotta, glass and porcelain
- Wall surfaces may include fibre cement sheet, brickwork, blockwork, concrete, timber, rendered surfaces and approved waterproof surfaces
- Tiles may be fixed by adhesives, cement mortar and cement mortar with adhesive additive
- Release agents on concrete tilt-up slabs are to be removed prior to tiling
- Fixings and fasteners may include, but not limited to, plasterboard nails, clouts, soft sheet nails, self tapping screws and wall board adhesive

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with lighting, concealed services (water, power and gas) trip hazards, working with dangerous/hazardous materials, working in confined spaces, restricted access barriers, traffic control, working at heights, working in proximity to others, worksite visitors and the public
- Emergency procedures related to this unit are to include but may not be limited to extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust, vibration and clean-up management

Quality Requirements	• Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified
Statutory/Regulatory Authorities	• Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice
Tools and equipment	• Tools and equipment are to include tile cutters and scribes, hammers, saws, wet and dry diamond saws, power drills, power leads, cement sheet cutters, measuring tapes/rules, straight edges, levelling equipment, string lines, brushes, wire brushes, brooms, sanding blocks, scrapers, shovels, wooden floats, trowels, spatulas, shovels, wheelbarrows, spacers/wedges, squares, buckets, mortar boards, sponges, rags, rubber mallets, lump hammers, ladders, hose and water sprays, caulking guns, nippers, squeegees, pointed grouters and templates • Tools and equipment may include concrete mixers, power sanders, power grinders and masonry drill bits
Materials	• Materials are to include tiles, adhesives, cement mortar (with and without additives), caulking compound and grout
Communications	• Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals • On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues

Information

- Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches
- Safe work procedures related to tiling curved surfaces
- Regulatory/legislative requirements pertaining to tiling curved surfaces
- Manufacturers' specifications and instructions where specified
- Organisation work specifications and requirements
- Instructions issued by authorised organisational or external personnel
- Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools, plant and equipment
- Communication and working effectively and safely with others
- As a minimum, tile a circular concrete column of a minimum of 360mm diameter and 1m high abutting a concrete flat wall. Continue the tiling to the floor (to 150mm radius) from the column; and tile an standard door archway in a fibre cement sheet wall, including vertical returns and soffit, ensuring:
 - correct identification of requirement and completion of the tiling
 - correct selection and use of appropriate processes, tools and equipment
 - completing all work to specification
 - compliance with regulations, standards and organisational quality procedures and processes

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - General Construction terminology
 - Plant, tools and equipment types, characteristics, uses and limitations
 - Techniques for setting out and fixing tiles to curved surfaces
 - Tiling materials (including tiles, adhesives, mortar, grouting and substrates, their qualities, characteristics, preparation, techniques, applications, limitations and finishing)
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets and hazards associated with solvents, adhesives and cement/epoxy based grouts
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - Measurement and calculations
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to tiling curved surfaces
 - hand and power tools, plant and equipment appropriate to tiling curved surfaces
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGWF3008B**Unit Descriptor****Tile domestic pools and spas**

This unit specifies the competency required to tile a domestic pool or spa.

This unit includes the set out for, tiling and finishing of straight, curved and tapered pool/spa wall and floor surfaces.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Wall and Floor Tiling

ELEMENT**PERFORMANCE CRITERIA****1. Plan and prepare**

- 1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied
- 1.2 Safety requirements are followed in accordance with safety plans and policies
- 1.3 Signage/barricade requirements are identified and implemented
- 1.4 Plant, tools and equipment selected to carry out tasks that are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement
- 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications
- 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use
- 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied

2. Set out tiling job

- 2.1 Levels of pool/spa are identified and established in accordance with specifications
- 2.2 Size of tile to be used is determined in accordance with curvature of pool or spa
- 2.3 Pool or spa surface is divided into sectional shapes involving whole tiles and cut tiles
- 2.4 Sections are determined by considering sheet sizes of tiles and maintaining straight lines where possible
- 2.5 Cross centre lines are marked out on pool/spa surface
- 2.6 Curved surface is set out to form regular shapes running down and through base
- 2.7 Tapered sections are set out in highly curved and concave areas, whereby tiles are cut leading to and into the base

3. Tile straight lines and full sheet sections of surface	3.1 Paper patterns are marked and cut to shape of section or layout directed to prepare sheets/tiles 3.2 Spacing is determined and/or adjusted to ensure minimum cutting in these sections 3.3 Prepared sheets or tiles are marked to identify with section of application 3.4 Specified waterproof adhesive is prepared for application to manufacturers' specifications 3.5 Tiles are laid working from coping down, maintaining parallel to cross centre lines and regular face alignment
4. Lay tiles to tapered sections	4.1 Tapered areas are set out where applicable, to allow for full tile at top 4.2 Tile sizes and shapes are determined and set out 4.3 Shaped tiles are cut to designed setout, to specified tolerance 4.4 Adhesive is applied and tiles are laid maintaining alignment to set out lines and surface of tiles
5. Lay tiles to curved sections	5.1 Template is set out and cut to ensure conformity to tile surface for curve in both dimensions 5.2 Pad tiles are positioned accurately and fixed to line, to maintain uniform spacing and taper 5.3 Adhesive is applied and tiles are laid maintaining alignment to template line and surface of tiles 5.4 Tiles are fixed to walls, plumb, maintaining levels and curvature of wall in both dimensions to specifications
6. Grout tile surface	6.1 Tile spacings are cleaned and excess adhesive is removed from surface to receive grout 6.2 Specified grout is mixed and applied according to manufacturers' specifications 6.3 Tiled surface is cleaned and polished with dry cloth to specifications
7. Clean up	7.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification 7.2 Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for tiling pools and spas, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	2
Planning and organising activities	Conduct activities associated with tiling pools and spas, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	2
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances and levels, calculate material requirements and establish quality checks	2
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	2
Using technology	Use workplace technology related to tiling pools and spas, including the use of calculators, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope	• The unit requires the setting out, cutting, fixing and grouting of tiles to a domestic pool or spa • Curve templates may be made from plywood, hardboard or sheet metal • Types of tiles may include, but not be limited to, ceramic, marble, stone, granite, terracotta, glass and porcelain • Tiles may be fixed by adhesives or cement mortar with adhesive additive • Pool or spa surfaces may be flat, tapered or curved in two dimensions
Safety (OH&S)	• OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances • Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices • Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with lighting, concealed services (water, power and gas) trip hazards, working with dangerous/hazardous materials, restricted access barriers, traffic control, working at heights, working in proximity to others, worksite visitors and the public • Emergency procedures related to this unit are to include but may not be limited to extinguishing fires, organisational first aid requirements and evacuation
Environmental Requirements	• Environmental requirements are to include but are not limited to waste management, noise, dust, vibration and clean-up management
Quality Requirements	• Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified

Statutory/Regulatory Authorities	• Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice
Tools and equipment	• Tools and equipment are to include tile cutters and scribes, measuring tapes/rules, straight edges, levelling equipment, string lines, brushes, brooms, scrapers, spatulas, spacers/wedges, squares, buckets, sponges, rags, rubber mallets, lump hammers, ladders, hose and water sprays, nippers, squeegees, pointed grouters and templates
Materials	• Materials are to include tiles, adhesives, cement mortar with adhesive additive and grout
Communications	• Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals • On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues
Information	• Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches • Safe work procedures related to tiling pools and spas • Regulatory/legislative requirements pertaining to tiling pools and spas • Manufacturers' specifications and instructions where specified • Organisation work specifications and requirements • Instructions issued by authorised organisational or external personnel • Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools, plant and equipment
- Communication and working effectively and safely with others
- As a minimum, tile a three dimensional corner of a pool or spa with the wall coving into the floor. The floor is to fall (1 in 10) in one direction. Detail is to include copers and a mosaic water line, ensuring:
 - correct identification of requirement and completion of the tiling
 - correct selection and use of appropriate processes, tools and equipment
 - completing all work to specification
 - compliance with regulations, standards and organisational quality procedures and processes

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - General Construction terminology
 - Plant, tools and equipment types, characteristics, uses and limitations
 - Techniques in tiling pools and spas
 - Pool and spa tiling materials
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets and hazards associated with solvents, adhesives and cement/epoxy based grouts
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - Tiling curved and tapered surfaces
 - Measurement and calculations
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to tiling pools and spas
 - hand and power tools, plant and equipment appropriate to tiling pools and spas
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGWP2001B**Unit Descriptor****Handle waterproofing materials**

This unit specifies the competency required to safely handle waterproofing materials manually and mechanically, including their storage requirements.

It also includes the preparation, handling, sorting, stacking and disposal of waterproofing products, materials and components in the application of waterproofing systems, including the disposal of waste.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Wall and Floor Tiling

ELEMENT**PERFORMANCE CRITERIA**

1. Prepare for work	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Plant, tools and equipment selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications 1.6 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Manually handle waterproofing materials	2.1 Waterproofing materials and components are identified and checked for conformity to material schedule, plans and specifications 2.2 Handling characteristics of waterproofing materials and components are identified and safe and effective handling techniques applied 2.3 Waterproofing materials and components are sorted and stacked/located for support of the job in accordance with supervisor's instructions and/or specifications 2.4 Waterproofing materials and components are protected against physical damage and stored clear of trafficways
3. Prepare for mechanical handling of materials	3.1 Waterproofing materials and components are prepared and positioned for mechanical handling in accordance with type of material and plant/equipment to be used 3.2 Materials and components are loaded, unloaded, moved, located and/or installed in accordance with workplace procedures 3.3 Waterproofing materials and components are safely handled with assistance of mechanical lifting devices/hoists in accordance with workplace requirements

- 4. Handle and remove waste materials
 - 4.1 Waste waterproofing materials and components are handled in accordance with MSDS and regulatory requirements
 - 4.2 Hazardous material is identified for separate handling
 - 4.3 Non-toxic waste materials are removed and disposed of using appropriate procedures
 - 4.4 Dust suppression procedures are used to minimise health risk to work personnel and others
- 5. Clean up
 - 5.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification
 - 5.2 Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for the handling of waterproofing materials, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	1
Planning and organising activities	Conduct activities associated with the handling of waterproofing materials, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	1
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances and levels, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	1
Using technology	Use workplace technology related to the handling of waterproofing materials, including the use of calculators, measuring and levelling devices, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit

Unit scope

- The unit requires the manual and mechanical handling, sorting and stacking of waterproofing materials in support of the installation of waterproofing systems, including the disposal of waste materials
- Waterproofing materials and components may be sorted in accordance with material type, size, ease of identification, task sequence and job allocation
- Waterproofing materials may be applied to prepare substrate for waterproofing installation, waterproofing internal, external and below ground level wet areas and to apply remedy waterproofing techniques
- Waterproofing systems may include sheet and sprayed material membranes, hot mix bituminous felt material membranes, liquid sealants or sealant devices, cement based waterproofing systems or as injected materials
- Waterproofing tasks may be performed on a new construction site, an existing structure being renovated or extended or an existing structure subject to service restoration or maintenance
- Stored/stacked materials may be protected by covering, tying and banding, barricading, signage and secured (hazardous materials)
- Dust suppression procedures may include but not be limited to spraying with water, covering and use of vacuum cleaner
- Waste materials may include but not be limited to banding straps, packing pieces, broken or damaged materials/components, cardboard, plastic, paper and loose material

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with power cables (including overhead service trays, cables and conduits), underground services (water, gas, electricity, communications), lighting, earth leakage boxes, trip hazards, working with dangerous materials, working in confined spaces, surrounding structures, restricted access barriers, working at heights, personnel, worksite visitors, the public and traffic control
- Emergency procedures related to this unit are to include but may not be limited to extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust, vibration, stormwater management and clean-up management

Quality Requirements

- Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified

Statutory/Regulatory Authorities

- Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice

Tools and equipment

- Tools and equipment required for the handling of waterproofing material is dependant on the waterproofing system being applied and may include rollers, nylon rollers, pressure rollers and seam probes, brushes, cutting blades, scissors, straight edges, measuring tapes/rules, spirit levels, chisels, hammers, cold chisels, angle grinders, electric drills/screwdrivers, gas burners and torches, buckets, brooms, trowels, wood floats, vacuum cleaners, mixers/mixing apparatus, dumpy/laser/water levels, electric hammers, caulking guns, moisture meters, extension leads, solvent applicators
- Plant may include high pressure water equipment, excavating equipment, pumps, heat welders, hot air welders, impact drills and pressure injection equipment (including pumps, compressors, cartridge applications, vacuum pumps and hoses)

Materials

- Materials required to prepare for waterproofing are dependant on the system of waterproofing being applied and may include waterproofing material/membrane for the application which may be liquid applied (including polyurethane, acrylic, injection and cementitious based) or sheet (including PVC, EPDM, butanol, ECB and bentonite composites) primers and adhesives, geotech fabric, drainage cells and protection boards.
- For remedial waterproofing processes, materials may be polyurethane resin systems, single and dual component resins, epoxies, cementitious products, expanding polyurethane foam and silicon/silane/siloxane products

Communications

- Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals
- On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues

Information

- Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, hand drawings, memos, maps, material safety data sheets (MSDS), diagrams or sketches and graphics
- Safe work procedures related to the handling of waterproofing materials
- Regulatory/legislative requirements pertaining to the handling of waterproofing materials
- Manufacturers' specifications and instructions where specified
- Organisation work specifications and requirements
- Instructions issued by authorised organisational or external personnel
- Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools, plant and equipment
- Communication and working effectively and safely with others
- As a minimum, given the plans and specifications for the application of a waterproofing system (either internal, external, below ground or remedial):
 - confirm the adequacy and condition of the materials required to prepare for the application
 - safely and effectively manually and mechanically handle them before and during the application, and
 - dispose/recycle the waste/ surplus materials for the project

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - General Construction terminology
 - The techniques of handling waterproofing materials
 - Waterproofing materials associated with application systems
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets and hazards associated with waterproofing materials
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - Measurement and calculation
 - Communication processes - verbal and signalling
 - JSAs/Safe work method statements

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated workplace
- Assessment is to occur under standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory or Australian Standards requirements

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to the handling of the specific waterproofing applications
 - hand and power tools, plant and equipment appropriate to the handling of waterproofing materials
 - realistic tasks covering the mandatory task requirements
 - specifications and work instructions

BCGWP2002B**Unit Descriptor****Use waterproofing tools and equipment**

This unit specifies the competency required to safely and effectively use tools and equipment used in waterproofing.

It includes the identification, selection and use of hand and power tools, plant and equipment used in masonry work.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Wall and Floor Tiling

ELEMENT**PERFORMANCE CRITERIA**

1. Prepare for work	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Identify hand and power tools	2.1 Types and functions of hand and power tools to be used in the waterproofing work are identified 2.2 The methods of operation of hand and power tools are identified from specifications, standards and manufacturers' instructions 2.3 Specific OH&S requirements for specific hand and power tools are identified and applied 2.4 Personal protective equipment required for the operation of the tools is identified in accordance with regulatory and workplace requirements
3. Select tools for work	3.1 Tools and personal protective equipment are selected consistent with job requirements 3.2 Tools, including leads and hoses, are checked for tags, serviceability and safety and any faults reported to supervisor 3.3 Power tools guards, guides and controls are checked and maintained in accordance with manufacturers' recommendations 3.4 Equipment to hold or support material during operation is selected and inspected for faults 3.5 Pre-operational checks, including lubricants, hydraulic fluid and water, are completed in accordance with manufacturers' recommendations

4. Use tools	4.1 Power and/or compressed air supply to work area is connected to the area of work in accordance with regulatory and workplace requirements and codes of practice 4.2 Start up and shut down procedures are observed 4.3 Tools are used safely and effectively according to manufacturers' recommendations and regulatory requirements 4.4 Tools are safely switched and located when not in use
5. Identify and select plant and equipment	5.1 Function and limitations of plant and equipment to be used in the waterproofing work are identified 5.2 The method of operation of plant/equipment is identified from specifications, standards and manufacturers' instructions 5.3 OH&S requirements for specific plant and equipment, including requirements for guarding, guiding and controls, are identified and applied 5.4 Personal protective equipment required for the operation of plant and equipment is identified in accordance with regulatory and workplace requirements 5.5 Items of plant and equipment are selected consistent with hazard minimisation and needs of the job 5.6 Plant and equipment is checked for safety, and faults reported to supervisor in accordance with workplace procedures 5.7 OH&S requirements for operating and using plant and equipment are recognised and adhered to
6. Use plant and equipment	6.1 Start up and shut down procedures are observed 6.2 Plant and equipment is used safely and effectively according to manufacturers' recommendations and regulatory requirements 6.3 Plant and equipment is safely switched off and located when not in use
7. Clean up	7.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification 7.2 Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for the use of waterproofing tools and equipment, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturer's instructions, material safety data sheets and equipment instructions	1
Planning and organising activities	Conduct activities associated with the use of waterproofing tools and equipment, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	1
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances and levels, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	1
Using technology	Use workplace technology related to the use of waterproofing tools and equipment, including the use of calculators, the use of communication, measuring and levelling devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope

- The unit requires the identification, selection, preparation and safe and effective application of hand and power tools, plant and equipment for their intended waterproofing tasks
- Waterproofing hand and power tools, plant and equipment are those required for waterproofing internal, external and below ground level wet areas and to apply remedy waterproofing techniques
- Waterproofing systems may include sheet and sprayed material membranes, hot mix bituminous felt material membranes, liquid sealants or sealant devices, cement based waterproofing systems or as injected materials
- Waterproofing tasks may be performed on a new construction site, an existing structure being renovated or extended or an existing structure subject to service restoration or maintenance

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with power cables (including overhead service trays, cables and conduits), underground services (water, gas, electricity, communications), lighting, earth leakage boxes, trip hazards, working with dangerous materials, working in confined spaces, surrounding structures, restricted access barriers, working at heights, personnel, worksite visitors, the public and traffic control
- Emergency procedures related to this unit are to include but may not be limited to emergency shutdown and stopping, extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust, vibration, stormwater management and clean-up management

Quality Requirements	• Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers' specifications where specified
Statutory/Regulatory Authorities	• Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice
Tools and equipment	• Tools and equipment required for waterproofing tasks is dependant on the waterproofing system being applied and may include rollers, nylon rollers, pressure rollers and seam probes, brushes, cutting blades, scissors, straight edges, measuring tapes/rules, spirit levels, chisels, hammers, cold chisels, angle grinders, electric drills/screwdrivers, gas burners and torches, buckets, brooms, trowels, wood floats, vacuum cleaners, mixers/mixing apparatus, dumpy/laser/water levels, electric hammers, caulking guns, moisture meters, extension leads and solvent applicators • Plant may include high pressure water equipment, excavating equipment, pumps, heat welders, hot air welders, impact drills and pressure injection equipment (including pumps, compressors, cartridge applications, vacuum pumps and hoses)
Communications	• Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals • On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues

Information

- Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, hand drawings, memos, maps, material safety data sheets (MSDS), diagrams or sketches and graphics
- Safe work procedures related to the use of waterproofing hand and power tools, plant and equipment
- Regulatory/legislative requirements pertaining to the use of waterproofing hand and power tools, plant and equipment
- Manufacturer's specifications and instructions where specified
- Organisation work specifications and requirements
- Instructions issued by authorised organisational or external personnel
- Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

What critical aspects of evidence are required to demonstrate competency in this unit?

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools, plant and equipment
- Communication and working effectively and safely with others
- As a minimum, follow work instructions and operating procedures to safely and effectively use the appropriate tools, plant and equipment for the preparation of the substrate for waterproofing and the application of at least one of the following applications:
 - an internal wet area;
 - an external wet area
 - a below ground level wet area; or
 - a remedial waterproofing project
- ensuring:
 - correct selection and use of appropriate processes, tools and equipment
 - there is no damage to tools, plant and equipment
 - completing all work to specification
 - compliance with regulations, standards and organisational quality procedures and processes

Are there any other units which should be assessed with this unit or which relate directly to this unit?

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - General Construction terminology
 - The applications, limitations and method of operation and maintenance of hand and power tools, plant and equipment applicable to waterproofing tasks
 - Material Safety Data Sheets and hazards associated with the use of waterproofing tools, plant and equipment
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - Measurement and calculation
 - Communication processes - verbal and signalling
 - JSAs/Safe Work Method Statements

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated workplace
- Assessment is to occur under standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory or Australian Standards requirements

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - hand and power tools, plant and equipment appropriate to waterproofing tasks
 - realistic tasks covering the mandatory task requirements
 - specifications and work instructions

BCGWP2003B**Prepare for construction process
(Waterproofing)****Unit Descriptor**

This unit specifies the competency required to apply waterproofing to differing types of wet areas in varying building situations.

The unit includes the identification of the processes required, its planning and the preparation for materials for application.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Wall and Floor Tiling

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Plant, tools and equipment are selected to carry out tasks that are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.5 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Identify design concepts and processes	2.1 Plans and specifications are examined for work area identification, product description, performance requirements and design requirements 2.2 Worksite is visited and work requirements are confirmed 2.3 Waterproof product process is referenced and identified as being in conformance with regulations 2.4 Practices and principles of waterproof design for construction of wet areas are identified as being in conformance with codes and standards 2.5 Appropriateness of the system of waterproofing for the structure/work is determined in relation to the structural elements 2.6 The potential for and consequences of water penetration and methods of prevention and control are identified and outlined 2.7 Method of waterproofing installation is identified 2.8 Identified waterproofing materials are confirmed for product suitability, conformity to codes and specification and are compatible with substrate required finishes, installation technique and building schedule 2.9 Application of bond-breaker/fillet system forming part of the waterproofing installation is identified as fit for purpose 2.10 Potential faults and contingencies and techniques for addressing them are identified

- 3. Select and prepare materials
 - 3.1 Waterproofing material is checked for conformity to specification and compatibility with substrate material and proposed application is in accordance with manufacturers' specifications
 - 3.2 Substrates to be waterproofed are prepared to manufacturers' specification and prime coated to waterproofing material manufacturers' specification
 - 3.3 Flashings are prepared to job requirements and ready for placement and fixing to job specifications
 - 3.4 Any reinforcing material is set out and cut to requirements of area waterproofing junctions and surface requirements in accordance with manufacturers' specifications and job requirements
 - 3.5 Waterproofing membrane is prepared for installation to wet area surface in accordance with job and manufacturers' specifications
 - 3.6 Waterproofing material is mixed or prepared for application to surface in accordance with manufacturers' specifications and job requirements
- 4. Clean up
 - 4.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification
 - 4.2 Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	2
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for preparing for waterproofing construction processes, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	2
Planning and organising activities	Conduct activities associated with preparing for waterproofing construction processes, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	2
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	2
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances and levels, calculate material requirements and establish quality checks	2
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	2
Using technology	Use workplace technology related to preparing for waterproofing construction processes, including the use of calculators, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope

- This unit requires the identification of the waterproofing design processes from plans and specifications, making an assessment of their suitability for the construction process and the selection and preparation of the identified materials
- Waterproofing processes may be applied to internal, external and below ground
- Waterproofing may be applied as a liquid, a sheet or as injected material
- A site visit may permit liaison with others and the confirmation of such detail as risk assessment, substrates, schedules, levels, moisture content, measurements and structure and termination requirements
- Performance requirements may include, but not be limited to, detail relating to materials, quality/standards of work, quality assurance, provision of site access/facilities, cost, work schedules and standard procedures and practices
- Scope of Work may include but not limited to the type of product/service, quantities, characteristics, sizes, patterns, dimensions, location, surfaces, and compatibility of work
- Considerations in water exclusion may include, but not be limited to capillary action, damp proof courses and flashings, joining, corners and terminations, use of sealants, hydrostatic pressure, use of bond-breakers, waste allowances, curing times of compounds and their applications, impact of environmental conditions, surface applications and protection requirements, shelf life of waterproofing products, direction of fall of substrate or decorative finish, perimeter treatment (including pressure seals and over flashing, thermal shrinkage (expansion and contraction), and causes of water penetration (including leakage through wall and floor finishes, penetration at joints / junctions, movement from shrinkage, accumulated drainage and failure of or damage to waterproofing system)
- Structural considerations include design principles, drainage requirements, hydrostatic pressures, substrate type and condition, environmental factors (including water run off and impact on adjoining property, allowing water flow and slope/fall/grade of surfaces) and waterproofing protection
- Wet areas may include, but not be limited to, bathrooms, laundries, showers, en suites, kitchens, food preparation areas, slabs, planter boxes, retaining walls, roofs, patios and decks, lift pits, stair wells and foundation works

- Substrates may include fibrous cement sheeting, timber and timber based products, wet area plasterboard, cement render, PVC, ferrous and non-ferrous piping, brickwork, blockwork, reinforced in situ concrete, pre-cast concrete, aerated autoclaved concrete materials (Hebel/Thermolite)

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with overhead cables and lines, underground services and utilities, lighting, earth leakage boxes, working with dangerous materials, working in confined spaces, surrounding structures, restricted access barriers, traffic control, working at heights, working in proximity to others, worksite visitors and the public
- Emergency procedures related to this unit are to include but may not be limited to, extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust, vibration and clean-up management

Quality Requirements

- Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified

Statutory/Regulatory Authorities

- Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice

Tools and equipment	• Tools and equipment required to prepare for waterproofing are to include straight edges, measuring tapes/rules, spirit levels, mixer/mixing apparatus and moisture meters, • Tools and equipment may include rollers, brushes, cutting blades, scissors, dumpy/laser/water levels, evacuating equipment and pumps, vacuum cleaners, floodlights and fans
Materials	• Materials required to prepare for waterproofing are to include waterproofing material/membrane for the application which may be liquid applied (including polyurethane, acrylic, injection and cementitious based) or sheet (including PVC, EPDM, butanol, ECB and bentonite composites) primers and adhesives
Communications	• Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals • On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues
Information	• Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches • Safe work procedures related to prepare for the waterproofing construction process • Regulatory/legislative requirements pertaining to prepare for the waterproofing construction process • Manufacturers' specifications and instructions where specified • Organisation work specifications and requirements • Instructions issued by authorised organisational or external personnel • Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools, plant and equipment
- Communication and working effectively and safely with others
- As a minimum, given the plans and specifications of a waterproofing construction process:
 - read and interpret the plans to assess the specified product's suitability for the work
 - identify the structure and building process, the building program and site constraints
 - plan the waterproofing process, identifying the materials and the tools and equipment specifically required for the selected process/membrane
 - confirm plan/specifications on site, including measurements and levels
 - interpret and apply MSDS, manufacturers' instructions and codes
 - prime the substrate and prepare for the application of the membrane, ensuring:
 - correct identification of requirement and preparation for the installation
 - correct selection and use of appropriate processes, tools and equipment
 - completing all work to specification

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - General Construction terminology
 - Plant, tools and equipment types, characteristics, uses and limitations
 - Preparation for waterproofing processes and waterproofing techniques
 - Waterproofing process materials, including durability, compatibility, applications and protection requirements
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets and the handling of hazardous materials
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - Building structures and work scheduling
 - Construction systems and waterproofing considerations and requirements
 - The characteristics and applications of waterproofing materials and adhesives
 - The principles and considerations of water exclusion
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to preparing for waterproofing construction processes
 - hand and power tools, plant and equipment appropriate to preparing for waterproofing construction processes
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGWP2004B

Prepare surfaces for waterproofing application

Unit Descriptor

This unit specifies the competency required to repair and/or prepare different material surfaces which form part of the application of waterproofing within the construction process.

The unit includes the inspection, preparation for and the repair and finishing of surfaces prior to the application of the waterproofing process.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Wall and Floor Tiling

ELEMENT

PERFORMANCE CRITERIA

1. Plan and prepare

- 1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied
- 1.2 Safety requirements are followed in accordance with safety plans and policies
- 1.3 Signage/barricade requirements are identified and implemented
- 1.4 Plant, tools and equipment selected to carry out tasks that are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement
- 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications
- 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use
- 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied

- 2. Prepare work area
 - 2.1 Area to be waterproofed is identified from plans and specifications
 - 2.2 Surface to be waterproofed is inspected/tested to determine the appropriateness of the installation and any contaminants, moisture or incompatible materials
 - 2.3 Ventilation is provided in accordance with MSDS
 - 2.4 Run off and environmental controls are provided in accordance with regulatory and workplace requirements
 - 2.5 Work area is prepared for the preparation of the waterproofing application processes in accordance with manufacturers' specifications
 - 2.6 Surface mounted wet area construction units, fixtures and/or attachments are detached, removed or arranged for removal from the work area and stored
 - 2.7 Building structure service penetrations, cavities or knockout sections are cleaned of unwanted materials or debris in accordance with good building practice
 - 2.8 Cross cavity flashings/overlapping are inspected for damage and fitness for purpose
 - 2.9 Work surface of the building structure is cleaned free of unwanted materials in accordance with good building practice
- 3. Prepare/repair substrate
 - 3.1 Surface/area to be prepared/repared is assessed for defects to ascertain responsibility for repair, referring areas of concern to supervisor/structural engineer
 - 3.2 Tools are selected to prepare/repair the surface consistent with surface condition and work to be undertaken
 - 3.3 Appropriate tools are used and applied safely to remove loose or protruding material to specification
 - 3.4 Surface is prepared for repair in accordance with manufacturers' specifications and workplace procedures
 - 3.5 Method of repairing surface defects are determined in accordance with manufacturers' specifications and consistent with type of material surface, size of defect, compatibility of materials and specified finish
 - 3.6 Repair medium materials are selected, prepared and applied in accordance with manufacturers' and supervisor/structural engineer specifications and consistent with type of material, surface, size of defect, compatibility of materials and specified finish
 - 3.7 Appropriate water stops/hobs and bond breakers/fillets are installed in accordance with manufacturers' specifications, drawings and finish levels
 - 3.8 Substrate to be waterproofed is prepared and prime coated to waterproofing material manufacturers' specification
 - 3.9 Primed surface area is cleaned free of unwanted materials to provide a smooth and uniform surface in accordance with specifications, manufacturers' recommendations and good building practices
 - 3.10 Surface is protected until the application of the waterproof membrane in accordance with workplace procedures

- 4. Clean up
 - 4.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/ regulations/codes of practice and job specification
 - 4.2 Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	1
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for preparing surfaces for the waterproofing application, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	1
Planning and organising activities	Conduct activities associated with preparing surfaces for the waterproofing application, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	1
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	1
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances and levels, calculate material requirements and establish quality checks	1
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	1
Using technology	Use workplace technology related to preparing surfaces for the waterproofing application, including the use of calculators, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope

- This unit requires the inspection and identification of an area to be waterproofed to determine the preparatory requirements and the performance of the repair, filling and priming work prior to the installation of the waterproofing system
- Defects in surfaces may include but not be limited to holes, missing, cracked or damaged brick/block work, missing, cracked or damaged substrate, sheet flutter/soundness, cracks and/or splits, surface depressions or dents, substrate drumming, rough imperfect surfaces, sandy, loose and flaked surface materials, incompatible materials, loose fittings/pipework/work stops, out of plumb and level surfaces, inappropriate fixings, inadequate substrate fall, moisture and contaminants
- Waterproofing processes may be applied to internal, external and below ground
- Waterproofing may be applied as a liquid, a sheet or as injected material
- Performance requirements may include, but not be limited to, detail relating to materials, quality/standards of work, quality assurance, provision of site access/facilities, cost, work schedules and standard procedures and practices
- Wet areas may include, but not be limited to, bathrooms, laundries, showers, en suites, kitchens, food preparation areas, slabs, planter boxes, retaining walls, roofs, patios and decks, lift pits, stair wells and foundation works
- Substrates may include fibrous cement sheeting, timber and timber based products, wet area plasterboard, cement render, PVC, ferrous and non-ferrous piping, brickwork, blockwork, reinforced in situ concrete, pre-cast concrete, aerated autoclaved concrete materials (Hebel/Thermolite)

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with overhead cables and lines, underground services and utilities, lighting, earth leakage boxes, working with dangerous materials, working in confined spaces, surrounding structures, restricted access barriers, traffic control, working at heights, working in proximity to others, worksite visitors and the public
- Emergency procedures related to this unit are to include but may not be limited to extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust, vibration and clean-up management

Quality Requirements

- Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified

Statutory/Regulatory Authorities

- Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice

Tools and equipment

- Tools and equipment are to include rollers, brushes, cutting blades, scissors, straight edges, measuring tapes/rules, spirit levels, chisels, hammers, cold chisels, angle grinders, electric drills/screwdrivers, buckets, brooms, trowels, wood floats, vacuum cleaners, mixers/mixing apparatus, dumpy levels/laser and water levels, high pressure water equipment, electric hammers, caulking guns, moisture meters, extension leads, floodlights and fans, evacuating equipment and pump

Materials

- Materials required to prepare surfaces for waterproofing are to include proprietary fillers and binders, plaster, sand and cement, fibreglass, caulking compounds, sheet material, timber, masonry, brick/block/stone, metal (ferrous and non-ferrous), non-metallic, concrete, cleaning/degreasing agents, acid etching compounds and primers

Communications

- Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals
- On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues

Information

- Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches
- Safe work procedures related to prepare surfaces for the waterproofing application
- Regulatory/legislative requirements pertaining to prepare surfaces for the waterproofing application
- Manufacturers' specifications and instructions where specified
- Organisation work specifications and requirements
- Instructions issued by authorised organisational or external personnel
- Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools, plant and equipment
- Communication and working effectively and safely with others
- As a minimum, prepare for the waterproofing of a bathroom on a suspended concrete slab, with fibrous cement sheeted walls at the corner junction of a masonry wall, ensuring:
 - correct identification of requirement and preparation for the work
 - correct selection and use of appropriate processes, tools and equipment
 - completing all work to specification

Relationship to other units

Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - General Construction terminology
 - Plant, tools and equipment types, characteristics, uses and limitations
 - Preparation surfaces for waterproofing application techniques
 - Waterproofing process materials, including durability, compatibility, applications and protection requirements
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets and the handling of hazardous materials
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - Building structures and work scheduling
 - Construction systems and waterproofing considerations and requirements
 - The characteristics, compatibility and applications of waterproofing materials and adhesives
 - Flashing and termination detailing
 - Contaminants in waterproofing processes
 - Levels and falls
 - The principles and considerations of water exclusion
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to preparing surfaces for the waterproofing application
 - hand and power tools, plant and equipment appropriate to preparing surfaces for the waterproofing application
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGWP3001B**Apply waterproofing process to below ground level wet areas****Unit Descriptor**

This unit specifies the competency required to apply waterproofing practices and principles to wet areas below ground level.

The unit includes the identification of the waterproofing system to be used, its preparation and its application.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Wall and Floor Tiling

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Plant, tools and equipment selected to carry out tasks that are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Identify waterproofing system	2.1 Below ground area to be waterproofed is identified from job drawings and specifications or diagnosed for damp fault area 2.2 Area is inspected for structural and surface defects in accordance with job and manufacturers' specifications 2.3 Appropriate waterproofing systems/ products are identified, analysed and selected in accordance with job and manufacturers' specifications and with MSDS directions 2.4 Range of waterproofing materials are checked for product suitability, conformity to specification and compatibility with surface material, preparation and waterproofing installation technique 2.5 Type of waterproofing material is identified in accordance with job specification, state of structure and job safety requirements with MSDS directions

- 3. Prepare for waterproofing installation
 - 3.1 Below ground wet area site setout, building alignment and finished levels are checked to conform with specified location, structure and dimensions in accordance with drawings and specifications
 - 3.2 Moisture content in substrate is identified
 - 3.3 Appropriateness of the system of waterproofing selected for the structure/work is confirmed
 - 3.4 Below ground wet area site levels are checked for conformity to drawings and specifications
 - 3.5 The requirement for shoring of the worksite is identified and arranged
 - 3.6 Access to the installation area is assessed for adequacy and safe access to allow for the installation over the full surface of the work area
 - 3.7 Provision for drainage is identified and confirmed with supervisor/hydraulic consultant as being appropriate for the installation
 - 3.8 Existing flashings, new flashings and termination seals are prepared to job requirements and made ready for placement and fixing to job and manufacturers' specifications
 - 3.9 Waterproofing material, quantity and product type is confirmed as being in conformance with job specification, state of structure and job safety requirements and MSDS direction
 - 3.10 Substrate is prepared to a smooth and uniform finish with fillets and falls fitted in accordance with manufacturers' instructions and good building practices
 - 3.11 Surface of structure to be water proofed is prepared and primed ready for waterproofing application in accordance with job specification and to manufacturers' specification and recommendations
- 4. Apply waterproofing
 - 4.1 Waterproofing system is applied to primed surface of structure to correct thickness in accordance with manufacturers' job specification
 - 4.2 Bond breaker/fillets are installed in accordance with manufacturers specifications
 - 4.3 Waterproofing material/system is installed using methods and materials consistent with manufacturers' specification
 - 4.4 Termination seals are installed using methods and materials consistent with manufacturers' specification
 - 4.5 Completed below ground waterproofing installation is checked for conformity to manufacturers specifications
 - 4.6 Waterproofing material/system is protected and drained using methods and materials consistent with manufacturers' specification and good building practice
 - 4.7 Final inspection of site is undertaken and sign-off and hand-over of work is carried out in accordance with workplace requirements

- 5. Clean up
 - 5.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification
 - 5.2 Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	2
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for waterproofing below ground level wet areas, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	2
Planning and organising activities	Conduct activities associated with waterproofing below ground level wet areas, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	2
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	2
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances and levels, calculate material requirements and establish quality checks	2
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	2
Using technology	Use workplace technology related to waterproofing below ground level wet areas, including the use of calculators, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope

- This unit requires the identification of the waterproofing system, the preparation of the substrate and the waterproofing material and its application to a below ground level wet area. The process includes the testing, drainage and protection of the membrane system and flashings
- Below ground applications may include, but not be limited to, lift pits, stair wells, foundation work, tanks, pools and ponds, underground residential/commercial spaces such as car parks, basements and storage areas, water storage areas, retention tanks, retaining walls, external/internal vertical walls constructed below ground level and under slab waterproofing barriers
- Waterproofing systems may include sheet and sprayed material membranes, liquid sealants or sealant devices and cement based waterproofing systems. Below ground waterproofing material should be root resistant and not subject to biological attack
- Substrates may include fibrous cement sheeting, timber and timber based products, wet area plasterboard, cement render, PVC, ferrous and non-ferrous piping, brickwork, blockwork, reinforced in situ concrete, pre-cast concrete, aerated autoclaved concrete materials (Hebel/Thermolite)
- Considerations in water exclusion may include but not be limited to capillary action, damp proof courses and flashings, joining, corners and terminations, use of sealants, hydrostatic pressure, use of bond-breakers, waste allowances, curing times of compounds and their applications, impact of environmental conditions, surface applications and protection requirements, shelf life of waterproofing products, direction of fall of substrate or decorative finish, perimeter treatment (including pressure seals cross cavity and over flashing, thermal shrinkage (expansion and contraction), and causes of water penetration (including leakage through wall and floor finishes, penetration at joints / junctions, movement from shrinkage, accumulated drainage and failure of or damage to waterproofing system)
- Structural considerations include design principles, structural movement, drainage requirements, hydrostatic pressures, substrate type and condition, below ground environmental factors (including water run off and impact on adjoining property, allowing water flow and slope/fall/grade of surfaces) and waterproofing protection.

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with underground services and utilities, lighting, earth leakage boxes, working with dangerous materials, working in confined spaces, surrounding structures, restricted access, suitability of fall arrest systems, adequacy of retained soil banks, restricted access barriers, traffic control, working at heights, working in proximity to others, worksite visitors and the public
- Emergency procedures related to this unit are to include but may not be limited to extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust, vibration and clean-up management

Quality Requirements

- Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified

Statutory/Regulatory Authorities

- Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice

Tools and equipment

- Tools and equipment are to include rollers, brushes, cutting blades, scissors, straight edges, measuring tapes/rules, spirit levels, chisels, hammers, cold chisels, angle grinders, electric drills/screwdrivers, gas burners and torches, buckets, brooms, trowels, wood floats, vacuum cleaners, mixers/mixing apparatus, dumpy/laser/water levels, high pressure water equipment, electric hammers, caulking guns, moisture meters, extension leads, excavating equipment, pumps and shoring equipment

Materials

- Waterproofing materials for below ground application may be liquid applied (including polyurethane, acrylic, bituminous, injection and cementitious based) or sheet (including PVC, EPDM, Butanol, ECB and Bentonite composites)
- Waterproofing materials are to include geotech fabric, substrate primer, adhesives, drainage cells, drainage piping and protection boards

Communications

- Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals
- On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues

Information

- Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches
- Safe work procedures related to waterproofing below ground level wet areas
- Regulatory/legislative requirements pertaining to waterproofing below ground level wet areas
- Manufacturers' specifications and instructions where specified
- Organisation work specifications and requirements
- Instructions issued by authorised organisational or external personnel
- Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools, plant and equipment
- Communication and working effectively and safely with others
- As a minimum, waterproof a basement wall excavated in a clay worksite. The wall is of masonry block and has a concrete column at mid span. The wall and column are supported on a strip concrete footing. There is a cavity wall above the block wall. The site is to be backfilled and access to the bottom edge of the footing is currently not available. Select the appropriate root resistant waterproofing material and provide for drainage and protection of the waterproofing, ensuring:
 - correct identification of requirement and installation of the waterproofing system
 - correct selection and use of appropriate processes, tools and equipment
 - completing all work to specification
 - proposed termination detailing

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - General Construction terminology
 - Plant, tools and equipment types, characteristics, uses and limitations
 - Below ground level waterproofing processes and techniques
 - Below ground level waterproofing materials
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - Construction systems and waterproofing considerations
 - The characteristics and applications of waterproofing materials and adhesives
 - The principles and considerations of water exclusion
 - Shoring techniques and requirements
 - Termination and overflashing detailing
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to waterproofing below ground level wet areas
 - hand and power tools, plant and equipment appropriate to waterproofing below ground level wet areas¹
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGWP3002B**Apply waterproofing process to internal wet areas****Unit Descriptor**

This unit specifies the competency required to apply waterproofing practices and principles to internal wet areas.

The unit includes the identification of the waterproofing system to be used, its preparation and its application.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Wall and Floor Tiling

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Plant, tools and equipment selected to carry out tasks that are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Identify waterproofing system	2.1 Internal area to be waterproofed is identified from job drawings and specifications 2.2 Area of structure to be waterproofed is inspected for defects and soundness in accordance with job and manufacturers' specifications 2.3 Appropriate waterproofing systems/ products are identified, analysed and selected in accordance with job and manufacturers' specifications and with MSDS directions 2.4 Range of waterproofing materials are checked for product suitability, conformity to specification and compatibility with surface material, preparation and waterproofing installation technique 2.5 Termination detailing is determined 2.6 Type of waterproofing material is identified in accordance with job specification, state of structure and job safety requirements with MSDS directions

3. Prepare for waterproofing installation
 - 3.1 Internal wet area and wet area fitment or fixtures are checked for specific measurements and set out in accordance with drawings and specifications
 - 3.2 Substrate is checked for soundness of fit, curing compounds, moisture content and other contaminants and reported/remedied as required
 - 3.3 Flooring installation levels and falls to waste outlets are checked for conformity to specification
 - 3.4 Corner flashing is installed in accordance with manufacturers' recommendations
 - 3.5 Points of connection, termination detailing and over flashings as required are checked to be in place and secure
 - 3.6 Rebates for baths and basins are checked for compliance with standards
4. Prepare substrate
 - 4.1 Defects are corrected and made good in accordance with manufacturers' specifications, to bring substrate to a smooth and uniform finish
 - 4.2 Surface of structure to be water proofed is prepared to manufacturers' specification, including fixings and bellling out around taps
 - 4.3 Water stops and hobs are installed in required location in compliance with standards and good building practice
 - 4.4 Prepared surface of structure is prime coated to manufacturers' specification, where applicable
5. Apply waterproofing
 - 5.1 Waterproofing membrane applied to primed surface of structure to correct thickness in accordance with manufacturers' job specification
 - 5.2 Appropriate bond breakers and fillets are applied as required in accordance with manufacturers' specifications
 - 5.3 Waterproofing membrane is cured in accordance with manufacturers' specification and workplace requirements
 - 5.4 Flood testing of installation is conducted if required
 - 5.5 Waterproofing material/system is protected using methods and materials consistent with manufacturers' specification, workplace requirements and good building practice
 - 5.6 Final inspection of site is undertaken in accordance with certifying authority's requirements and sign-off and hand-over of work is carried out in accordance with workplace requirements
6. Clean up
 - 6.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification
 - 6.2 Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	2
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for waterproofing external wet areas, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	2
Planning and organising activities	Conduct activities associated with waterproofing internal wet areas, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	2
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	2
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances and levels, calculate material requirements and establish quality checks	2
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	2
Using technology	Use workplace technology related to waterproofing internal wet areas, including the use of calculators, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope

- This unit requires the identification of the waterproofing system, the preparation of the substrate and the waterproofing material and its application to an internal wet area. The process includes the testing, drainage and protection of the membrane system
- Internal wet area applications may include, but not be limited to, bathrooms, laundries, showers, en-suites and other wet process areas
- Wet area fixtures may include pre-cast baths, shower bases, vanity units, sink units, trough units, water closets, bidets and urinals
- Waterproofing systems may include sheet and sprayed material membranes, hot mix bituminous felt material membranes, liquid sealants or sealant devices and cement based waterproofing systems.
- Substrates may include fibrous cement sheeting, timber and timber based products, wet area plasterboard, cement render, PVC, ferrous and non-ferrous piping, brickwork, blockwork, reinforced in situ concrete, pre-cast concrete, aerated autoclaved concrete materials (Hebel/Thermolite)
- Considerations in water exclusion may include but not be limited to capillary action, damp proof courses and flashings, joining, corners and terminations, use of sealants, hydrostatic pressure, use of bond-breakers, waste allowances, curing times of compounds and their applications, impact of environmental conditions, surface applications and protection requirements, shelf life of waterproofing products, direction of fall of substrate or decorative finish, perimeter treatment (including pressure seals and over flashing, thermal shrinkage (expansion and contraction), and causes of water penetration (including leakage through wall and floor finishes, penetration at joints / junctions, movement from shrinkage, accumulated drainage and failure of or damage to waterproofing system)
- Structural considerations include movement, design principles, drainage requirements, hydrostatic pressures, substrate type and condition, environmental factors (including water run off and impact on adjoining property, allowing water flow and slope/fall/grade of surfaces) and waterproofing protection.

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with services and utilities, lighting, earth leakage boxes, working with dangerous materials, working in confined spaces, restricted access barriers, traffic control, working at heights, working in proximity to others, worksite visitors and the public
- Emergency procedures related to this unit are to include but may not be limited to extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust, vibration and clean-up management

Quality Requirements

- Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified

Statutory/Regulatory Authorities

- Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice

Tools and equipment

- Tools and equipment are to include rollers, brushes, cutting blades, scissors, straight edges, measuring tapes/rules, spirit levels, chisels, hammers, cold chisels, angle grinders, electric drills/screwdrivers, buckets, brooms, solvent applicators, heat welders, hot air welders, nylon rollers, pressure rollers, seam probes, vacuum cleaners, moisture meters, floor scrapers, lights, fans and caulking guns

Materials

- Waterproofing materials for internal application may be liquid applied (including polyurethane, acrylic, injection and cementitious based) or sheet (including PVC, EPDM, butanol, ECB and bentonite composites), substrate primer, adhesives, drainage cell and protection board

Communications

- Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals
- On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues

Information

- Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches
- Safe work procedures related to waterproofing internal wet areas
- Regulatory/legislative requirements pertaining to waterproofing internal wet areas
- Manufacturers' specifications and instructions where specified
- Organisation work specifications and requirements
- Instructions issued by authorised organisational or external personnel
- Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools, plant and equipment
- Communication and working effectively and safely with others
- As a minimum:
 - waterproof a bathroom incorporating:
 - lap up a wall,
 - appropriate penetrations,
 - wastes and hobs; and
 - install and detail for a hobless frame shower enclosure and a bath which abuts a masonry connection wall, ensuring:
 - correct identification of requirement and installation of the waterproofing
 - correct selection and use of appropriate processes, tools and equipment
 - completing all work to specification
 - correct termination and overflashing

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - General Construction terminology
 - Plant, tools and equipment types, characteristics, uses and limitations
 - Internal waterproofing processes and techniques
 - Internal waterproofing materials
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - Construction systems and waterproofing considerations
 - Termination and flashing principals
 - Assessment of and appreciation of moisture content in substrate materials
 - The characteristics and applications of waterproofing materials and adhesives
 - The principles and considerations of water exclusion
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to waterproofing internal wet areas
 - hand and power tools, plant and equipment appropriate to waterproofing internal wet areas
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGWP3003B**Apply waterproofing process to external wet areas****Unit Descriptor**

This unit specifies the competency required to apply waterproofing practices and principles to external wet areas.

The unit includes the identification of the waterproofing system to be used, its preparation and its application.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Wall and Floor Tiling

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare

- 1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied
- 1.2 Safety requirements are followed in accordance with safety plans and policies
- 1.3 Signage/barricade requirements are identified and implemented
- 1.4 Plant, tools and equipment selected to carry out tasks that are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement
- 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications
- 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use
- 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied

2. Identify waterproofing system

- 2.1 Area to be waterproofed is identified from job drawings and specifications or diagnosed for damp fault area
- 2.2 Area is inspected for structural and surface defects in accordance with job and manufacturers' specifications
- 2.3 Appropriate waterproofing systems/ products are identified, analysed and selected in accordance with job and manufacturers' specifications and with MSDS directions
- 2.4 Range of waterproofing materials are checked for product suitability, conformity to specification and compatibility with surface material, preparation and waterproofing installation technique
- 2.5 Type of waterproofing material is identified in accordance with job specification, state of structure and job safety requirements with MSDS directions

- 3. Prepare for waterproofing installation
 - 3.1 Wet area site setout, building alignment and finished levels are checked to conform with specified location, structure and dimensions in accordance with drawings and specifications
 - 3.2 Moisture content in substrate is identified
 - 3.3 Appropriateness of the system of waterproofing selected for the structure/work is confirmed
 - 3.4 Wet area site levels are checked for conformity to drawings and specifications
 - 3.5 Access to the installation area is assessed for adequacy and safe access to allow for the installation over the full surface of the work area
 - 3.6 Provision for drainage is identified and confirmed with supervisor/hydraulic consultant as being appropriate for the installation
 - 3.7 Existing flashings, new flashings and termination seals prepared to job requirements and made ready for placement and fixing to job and manufacturers' specifications
 - 3.8 Waterproofing material, quantity and product type is confirmed as being in conformance with job specification, state of structure and job safety requirements and MSDS directions
 - 3.9 Substrate is prepared to a smooth and uniform finish with fillets and falls fitted in accordance with manufacturers' instructions and good building practices
 - 3.10 Surface of structure to be water proofed is prepared and primed ready for waterproofing application in accordance with job specification and to manufacturers' specification and recommendations
- 4. Apply waterproofing
 - 4.1 Waterproofing system is applied to primed surface of structure to correct thickness in accordance with manufacturers' job specification
 - 4.2 Bond breaker/fillets are installed in accordance with manufacturers specifications
 - 4.3 Waterproofing material/system is installed using methods and materials consistent with manufacturers' specification
 - 4.4 Termination seals are installed using methods and materials consistent with manufacturers' specification
 - 4.5 Completed waterproofing installation is checked for conformity to manufacturers specifications
 - 4.6 Waterproofing system is water tested to confirm its fitness for purpose
 - 4.7 Waterproofing material/system is protected and drained using methods and materials consistent with manufacturers' specification and good building practice
 - 4.8 Final inspection of site is undertaken and sign-off and hand-over of work is carried out in accordance with workplace requirements

- 5. Clean up
 - 5.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification
 - 5.2 Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	2
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for waterproofing external wet areas, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	2
Planning and organising activities	Conduct activities associated with waterproofing external wet areas, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	2
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	2
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances and levels, calculate material requirements and establish quality checks	2
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	2
Using technology	Use workplace technology related to waterproofing external wet areas, including the use of calculators, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables relate to this particular unit:

Unit scope

- This unit requires the identification of the waterproofing system, the preparation of the substrate and the waterproofing material and its application to an external wet area. The process includes the testing, drainage and protection of the membrane system and flashings
- External wet area applications may include, but not be limited to, balconies, planter boxes, awnings, roofs and external vertical walls
- Waterproofing systems may include sheet and sprayed material membranes, hot mix bituminous felt material membranes, liquid sealants or sealant devices and cement based waterproofing systems.
- Substrates may include fibrous cement sheeting, timber and timber based products, wet area plasterboard, cement render, PVC, ferrous and non-ferrous piping, brickwork, blockwork, reinforced in situ concrete, pre-cast concrete, aerated autoclaved concrete materials (Hebel/Thermolite)
- Considerations in water exclusion may include but not be limited to capillary action, damp proof courses and flashings, joining, corners and terminations, use of sealants, hydrostatic pressure, use of bond-breakers, waste allowances, curing times of compounds and their applications, impact of environmental conditions, surface applications and protection requirements, shelf life of waterproofing products, direction of fall of substrate or decorative finish, perimeter treatment (including pressure seals and cross cavity and over flashing, thermal shrinkage (expansion and contraction), and causes of water penetration (including leakage through wall and floor finishes, penetration at joints / junctions, movement from shrinkage, accumulated drainage and failure of or damage to waterproofing system)
- Structural considerations include design principles, structural movement, drainage requirements, hydrostatic pressures, substrate type and condition, environmental factors (including water run off and impact on adjoining property, allowing water flow and slope/fall/grade of surfaces) and waterproofing protection

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with overhead cables/lines, underground services and utilities, lighting, earth leakage boxes, working with dangerous materials, working in confined spaces, surrounding structures, adequacy of fall arrest systems, restricted access barriers, traffic control, working at heights, working in proximity to others, worksite visitors and the public
- Emergency procedures related to this unit are to include but may not be limited to extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust, vibration and clean-up management

Quality Requirements

- Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified

Statutory/Regulatory Authorities

- Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice

Tools and equipment

- Tools and equipment are to include rollers, brushes, cutting blades, scissors, straight edge, measuring tape/rule, spirit level, chisels, hammer, cold chisel, angle grinders, electric drills/screwdrivers, gas burners and torches, buckets, broom, trowel, wood float, vacuum cleaner, mixer/mixing apparatus, laser/water levels, electric hammer, caulking gun, moisture meter, extension leads, gas burners and torches
- Tools and equipment may include automatic levels, high pressure water equipment, excavating equipment and pumps

Materials

- Waterproofing materials for below ground application may be liquid applied (including polyurethane, acrylic, injection and cementitious based) or sheet (including PVC, EPDM, 'Butanol', ECB and 'Bentonite' composites)
- Waterproofing materials are to include geotech fabric, substrate primer, adhesives, drainage cell and protection board

Communications

- Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals
- On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues

Information

- Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, maps, material safety data sheets (MSDS), diagrams or sketches and graphics
- Safe work procedures related to waterproofing external wet areas
- Regulatory/legislative requirements pertaining to waterproofing external wet areas
- Manufacturers' specifications and instructions where specified
- Organisation work specifications and requirements
- Instructions issued by authorised organisational or external personnel
- Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools, plant and equipment
- Communication and working effectively and safely with others
- As a minimum:
 - Waterproof a concrete slab balcony in a cavity brick building with an integrated rendered brick planterbox; and
 - Waterproof a fibrous cement balcony in a cavity brick building where the structural floor levels have a step down of no less than 100mm from internal to external. The balcony is to cross fall to a gutter or drainage. Provide detailing through threshold cross section and indicating how waterproofing would terminate at handrail posts, which are through bolted to the floor frame under the deck.
- Both tasks are to be undertaken ensuring:
 - correct identification of requirement and installation of the waterproofing
 - correct selection and use of appropriate processes, tools and equipment
 - completing all work to specification
 - termination and flashing detailing
- demonstrate membrane testing and protection techniques to be implemented

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - General Construction terminology
 - Plant, tools and equipment types, characteristics, uses and limitations
 - Below ground level waterproofing processes and techniques
 - Below ground level waterproofing materials
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - Construction systems and waterproofing considerations
 - The characteristics and applications of waterproofing materials and adhesives
 - The principles and considerations of water exclusion
 - Termination, cross cavity and overflashing requirements.
 - Testing procedures for waterproof membrane systems
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to waterproofing external wet areas
 - hand and power tools, plant and equipment appropriate to waterproofing external wet areas
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions

BCGWP3004B**Unit Descriptor****Apply waterproofing remedial processes**

This unit specifies the competency required to apply remedial waterproofing processes to external and below ground level wet areas, using injection epoxy, cement crystallisation, or hydrostatic coating methods.

The unit includes the identification of the waterproofing system to be used, its preparation and its application.

Prerequisite Unit(s)

BCGCM1001B Follow OH&S policies and procedures

Unit Sector

Wall and Floor Tiling

ELEMENT**PERFORMANCE CRITERIA**

1. Plan and prepare	1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied 1.2 Safety requirements are followed in accordance with safety plans and policies 1.3 Signage/barricade requirements are identified and implemented 1.4 Plant, tools and equipment selected to carry out tasks that are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement 1.5 Material quantity requirements are calculated in accordance with plans and/or specifications 1.6 Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use 1.7 Environmental protection requirements are identified for the project in accordance with environmental plans and regulatory obligations and applied
2. Identify waterproofing system	2.1 Area to be waterproofed is identified from a technical report or diagnosed damp fault area and inspected for defects and soundness in accordance with job and manufacturers' specifications 2.2 Area of structure to be waterproofed is inspected for defects and soundness in accordance with job and manufacturers' specifications 2.3 Appropriate remedial waterproofing systems/products are identified, analysed and selected in accordance with job and manufacturers' specifications and with MSDS directions 2.4 Range of waterproofing materials are checked for product suitability, conformity to specification and compatibility with surface material, preparation and waterproofing installation technique 2.5 Type of waterproofing material is identified in accordance with job specification, state of structure and job safety requirements with MSDS directions

3. Prepare for waterproofing process	3.1 Site to be repaired is confirmed to be in accordance with drawings and specifications and in accordance with manufacturers' specification 3.2 Construction/installation site is set out to specified location, structure and dimensions in accordance with drawings and specifications
4. Apply waterproofing using injection	4.1 Injection hole set out spacings and depth are determined and measured in accordance with manufacturers' recommendations 4.2 Materials are prepared for injection method application in accordance with manufacturers' recommendations 4.3 Injection equipment is prepared and set up for injection process in accordance with manufacturers' recommendations 4.4 Injection system is tested and flushed in accordance with manufacturers' specifications 4.5 Damp course is made water resistant and capped using injection method in accordance with manufacturers' recommendations and to specifications
5. Apply waterproofing using hydrostatic barrier coatings	5.1 Area to be repaired is located from job instructions, drawings and specifications 5.2 Materials are prepared for remedial coating method application in accordance with manufacturers' recommendations 5.3 Application equipment is prepared and set up for application process in accordance with manufacturers' recommendations 5.4 Injection system is tested and flushed in accordance with manufacturers' specifications 5.5 System is connected to tubing caps and damp course is made water resistant and capped using injection method in accordance with manufacturers' recommendations and to specifications
6. Clean up	6.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation/regulations/codes of practice and job specification 6.2 Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturers' recommendations and standard work practices

KEY COMPETENCIES

These include a number of processes that are learned throughout work and life, which are required in most jobs. Some of these are covered by the national key competencies, although others may be added. The details below highlight how these competencies are to be applied in the attainment of this unit.

Application of the key competencies in this unit are to satisfy the nominated level in which:

Level 1 -relates to working effectively within set conditions and processes;

Level 2 -relates to the management or facilitation of conditions or processes; and

Level 3 -relates to the design, development and evaluation of conditions or process.

How will the candidate apply the following key competency in this unit? The candidate will need to:

Key Competency	Example of Application	Performance Level
Communicating ideas and information	Communicate ideas and information orally and in writing, in simple English to enable confirmation of work requirements, passage of information and requests to other workers during operations and the reporting and recording of work outcomes	2
Collecting analysing and organising information	Collect, organise, interpret and understand the information required for remedial waterproofing processes, including work instructions, plans/sketches/diagrams, safety instructions, signage, labels, quality procedures, manufacturers' instructions, material safety data sheets and equipment instructions	2
Planning and organising activities	Conduct activities associated with remedial waterproofing processes, including the coordination and use of equipment, materials and tools to avoid backtracking and rework	2
Working with others and in teams	Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity	2
Using mathematical ideas and techniques	Use mathematical ideas and techniques to correctly calculate time to complete tasks, estimate measurements, distances and levels, calculate material requirements and establish quality checks	2
Solving problems	Establish safe and effective work processes which anticipate likely problems and blockages and systematically work around these to avoid or minimise reworking and avoid wastage	2
Using technology	Use workplace technology related to remedial waterproofing processes, including the use of calculators, the use of communication devices and the reporting/recording of results	1

RANGE STATEMENT

The Range Statement provides advice to interpret the scope and context of this unit of competency allowing for differences between enterprises and workplaces. It relates to the unit as a whole and facilitates holistic assessment. The following variables may be present for this particular unit:

Unit scope

- This unit requires the identification of the remedial waterproofing system, the preparation of the waterproofing material and its application to a structural substrate
- Remedial waterproofing systems may include a barrier of silicon to stop rising damp, saturants on an external wall (in case of flood), concrete repair injection hydrostatic barrier coatings, membranes, concrete crystallisation or by injection
- Defects which may be addressed using injection methods include cracks in concrete walls and floors and damp or wet areas occurring in structures
- Waterproofing surface applications may include, but not be limited to, standard wet areas, wall surfaces, floor surfaces and roof surfaces
- Substrates may include fibrous cement sheeting, timber and timber based products, wet area plasterboard, cement render, PVC, ferrous and non-ferrous piping, brickwork, blockwork, reinforced in situ concrete, pre-cast concrete, aerated autoclaved concrete materials (Hebel/Thermolite)
- Structural considerations include design principles, drainage requirements, hydrostatic pressures, substrate type and condition, environmental factors (including water run off and impact on adjoining property, allowing water flow and slope/fall/grade of surfaces) and waterproofing protection

Safety (OH&S)

- OH&S requirements are to be in accordance with legislation/regulations/codes of practice, organisational safety policies and procedures and project safety plan. This may include protective clothing and equipment, use of tools and equipment, workplace environment and safety, handling of materials, use of fire fighting equipment, organisational first aid, hazard control and hazardous materials and substances
- Personal protective equipment is to include that prescribed under legislation/regulation/codes of practice and workplace policies and practices
- Safe operating procedures are to include but not be limited to the conduct of operational risk assessment and treatments associated with cables and overhead lines, underground services and utilities, lighting, earth leakage boxes, working with dangerous materials, working in confined spaces, restricted access barriers, traffic control, working in proximity to others, worksite visitors and the public
- Emergency procedures related to this unit are to include but may not be limited to extinguishing fires, organisational first aid requirements and evacuation

Environmental Requirements

- Environmental requirements are to include but are not limited to waste management, noise, dust, vibration and clean-up management

Quality Requirements

- Quality requirements are to include but not be limited to relevant regulations including Australian Standards, internal company quality policy and standards, workplace operations and procedures and manufacturers specifications where specified

Statutory/Regulatory Authorities

- Statutory/regulatory authorities may include Federal, State and Local Authorities administering the applicable acts, regulations and codes of practice

Tools and equipment

- Tools and equipment are to include straight edges, measuring tapes/rules, spirit levels, chisels, hammers, angle grinders, electric drills/screwdrivers, mixing equipment, impact drills and pressure injection equipment (including pumps, compressors, cartridge applications, vacuum pumps and hoses)

Materials

- Remedial injection materials may be polyurethane resin systems, single and dual component resins, epoxies, cementitious products, expanding polyurethane foam and silicon/silane/siloxane products

Communications

- Communications are to include but not limited to verbal and visual instructions and fault reporting and may include mobile phone, site specific instructions, written instructions, plans or instructions related to job/task, two way radio and hand signals
- On site meeting processes may include notification/scheduling (time, place, purpose), task discussions and local coordination of procedural and operational issues

Information

- Information sources may include but not be limited to verbal or written and graphical instructions, signage, work schedules/plans/specifications, work bulletins, memos, material safety data sheets (MSDS), diagrams or sketches
- Safe work procedures related to remedial waterproofing processes
- Regulatory/legislative requirements pertaining to remedial waterproofing processes
- Manufacturers' specifications and instructions where specified
- Organisation work specifications and requirements
- Instructions issued by authorised organisational or external personnel
- Relevant Australian Standards

EVIDENCE GUIDE

The Evidence Guide identifies the critical aspects, knowledge and skills to be demonstrated to confirm competency for this unit. This is an integral part of the assessment of competency and should be read in conjunction with the Performance Criteria, the Range Statement, and the Assessment Guidelines of the Training Package.

Critical aspects of evidence required to demonstrate competency in this unit

- Location, interpretation and application of relevant information, standards and specifications
- Compliance with site safety plan and OH&S legislation/regulations/codes of practice applicable to workplace operations
- Compliance with organisational policies and procedures including quality requirements
- Safe and effective operational use of tools, plant and equipment
- Communication and working effectively and safely with others
- As a minimum:
 - Repair a crack in a concrete basement wall or a suspended car park slab, identifying the remedial waterproofing method to be used, determining the type of material to be used, the repair requirement (eg. spacing of injection ports/packers if using an injection method) and testing the application.
 - Inject a chemical damp course into a solid 230 brick wall/party wall and a cavity brick wall, plugging each procedure with epoxy plug, ensuring:
 - correct identification of requirement and installation of the waterproofing
 - correct selection and use of appropriate processes, tools and equipment
 - completing all work to specification

Relationship to other units

- Pre-requisite units are:

BCGCM1001B Follow OH&S policies and procedures

Competency in this unit may be assessed in conjunction with other functional units which together form part of the holistic work role

Specific knowledge required to achieve the performance criteria

- A knowledge of
 - Workplace and equipment safety requirements
 - Quality requirements
 - General Construction terminology
 - Plant, tools and equipment types, characteristics, uses and limitations
 - Remedial waterproofing processes and testing techniques
 - Remedial waterproofing materials
 - Processes for the calculation of material requirements
 - Material Safety Data Sheets
 - Plans, drawings and specifications
 - Materials handling, storage and environmentally friendly waste management
 - Construction systems and waterproofing considerations
 - The characteristics and applications of remedial waterproofing materials
 - The principles and considerations of water exclusion
 - JSA's/Safe work method statement

The context of assessment

- The application of competency is to be assessed in the workplace or realistically simulated construction site
- Assessment is to occur using standard and authorised work practices, safety requirements and environmental constraints
- Assessment of essential underpinning knowledge, other than confirmatory questions, will usually be conducted in an off-site context
- Assessment is to comply with relevant regulatory requirements including specified Australian Standards

Methods of assessment

- Assessment must satisfy the endorsed assessment guidelines of the Building and Construction industry's General Construction Training Package
- Assessment methods must confirm consistency and accuracy of performance together with application of underpinning knowledge
- Assessment must be by direct observation of tasks, with questioning on underpinning knowledge and it must also reinforce the integration of key competencies
- Assessment methods must confirm the ability to access and correctly interpret and apply the essential underpinning knowledge
- Assessment may be applied under project related conditions (real or simulated) and require evidence of process
- Assessment must confirm a reasonable inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances
- Assessment may be in conjunction with assessment of other units of competency, including those listed above

Specific resource requirements for this unit

- The following resources should be made available:
 - workplace location or simulated workplace
 - materials relevant to remedial waterproofing processes
 - hand and power tools, plant and equipment appropriate to remedial waterproofing processes
 - realistic activities covering the mandatory task requirements
 - specifications and work instructions



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BCG03 General Construction Training Package

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