



Australian Government

Department of Education, Employment and Workplace Relations

BCGSV5001A Assess the construction of domestic scale buildings

Release: 1

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Modification History

Not applicable.

Unit Descriptor

This unit specifies the competency required to cover the construction of domestic scale buildings and those of a similar loading, construction and size such as small industrial, commercial or public buildings.

It includes evaluation and identification of appropriate construction methods, identification of required standards and services according to and with relevant legislation, design and maintenance specifications.

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Application of the Unit

Not applicable.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

Not applicable.

Elements and Performance Criteria Pre-Content

Not applicable.

Elements and Performance Criteria

Elements and Performance Criteria

Element	Performance Criteria
1 Research for compliance with building and planning legislation	1.1 Effects of planning and construction legislation are investigated, interpreted and communicated to others throughout design and construction of the building project 1.2 Planning and construction effects of the Building Code of Australia and construction requirements of the relevant Australian Standards are researched and documented 1.3 Effects of State/Territory, local government and service supply authorities legislation on design and construction are researched and documented 1.4 Methods of foundation assessment and classification are identified and evaluated
2 Record all relevant planning and construction information	2.1 Building planning and construction information is determined and recorded using appropriate industry terminology and symbols 2.2 All salient features of a site, sufficient for the preparation of design and construction documents are recorded on the plan
3 Investigate and evaluate a site for establishment, preparation and excavation requirements	3.1 Salient features of a building site and methods of soil investigation, assessment and clarification are appraised and recorded on documents available to site services 3.2 Principles and practices of site establishment and different types and uses of builders' plant and equipment are identified and evaluated
4 Determine trade sequencing	4.1 Trade sequencing appropriate to the different forms of residential construction are identified and evaluated 4.2 Structural systems commonly used in domestic scale buildings are described and sketched 4.3 Types and principles of construction relevant to the domestic design and construction are identified and evaluated according to relevant legislation,

- including Building Code of Australia (BCA), and construction standards and practices
- 5 Evaluate and apply cyclone resistant construction to buildings
- 5.1 Cyclone category areas and code specification are defined
 - 5.2 Terrain categories and their application to cyclone design are defined
 - 5.3 Methods of 'tie down' construction are identified from BCA
 - 5.4 Applications of structural bracing principles are identified in specifications
 - 5.5 Alternative approaches of construction in cyclone areas are evaluated in accordance with BCA
- 6 Evaluate construction standards and practices
- 6.1 Standards and practices for claddings, linings, finishes and coatings associated with domestic scale buildings are identified and evaluated
 - 6.2 Standards and practices of window, door and joinery fabrication and installation are identified and evaluated
 - 6.3 Basic principles and integration of building services into the building are identified and evaluated
 - 6.4 Structural principles of loads, forces, stresses and strains applied in the design and construction of single storey domestic scale buildings are identified and evaluated
 - 6.5 Types, principles, standards and practices for the installation of the services in single and two storey residential dwellings are identified and evaluated
 - 6.6 Types, principles, construction standards and practices of relative to domestic stair construction, balustrading and hand rails are identified and evaluated

Required Skills and Knowledge

Not applicable.

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 and Range Statement.

What critical aspects of evidence are required to demonstrate competency in this unit?

Compliance with occupational health and safety regulations applicable to workplace operations.

Application of organisational management policies and procedures including quality assurance requirements where appropriate.

Application of the principles of construction, standards and services, design and maintenance specifications, the associated reporting of data, findings, recommendations and strategies for at least one (1) domestic scale building project or equivalent in compliance with relevant legislation.

Provision of reports to appropriate body/individual as determined by the project brief.

Application of strategic plans, workplace policies and procedures.

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

There are no specified relationships.

Holistic assessment should be applied where appropriate to form a complete work function.

What specific knowledge is required to achieve the performance criteria?

Processes for the interpretation of reports, working drawings and specifications.

Nature of materials and effect of performance.

Authorities and powers of a building surveyor.

Relevant national, State/Territory legislation and local government policy and procedures.

Design and construction principles of buildings.

Terminology, definitions and hazard identification.

Codes of conduct and ethics.

Research methods.

Processes for the administration and preparation of documentation.

What specific underpinning skills are required to achieve the performance criteria?

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 questions below highlight how these processes are applied in this competency unit. The number in brackets indicates the level to which the key competency needs to be demonstrated where (1) working within set conditions and processes, (2) management or facilitation of conditions or processes are exercised, and (3) design and/or development of conditions or process are required.

How will the candidate apply the following key competency in this unit?

The candidate will need to:

Collect, analyse and organise information

Research, analyse, organise and understand the principles of construction for domestic scale buildings plus subsequent reporting procedures. **Level 2**

Communicate ideas and information

Communicate and negotiate ideas and information to enable confirmation of work requirements and legislation, translation of principles of construction for domestic scale buildings. **Level 2**

Plan and organise activities

Plan and organise activities including the planning of analytical processes, the stages of trade sequencing appropriate to different forms of project construction. **Level 2**

Work with others and in a team

Work with others and in a team by recognising dependencies and using co-operative approaches to optimise satisfaction and productivity. **Level 2**

Solve problems

Establish analytical processes, including diagnostic processes, which anticipate and allow for risks, cater for both direct and indirect evidence, avoid or minimise reworking and avoid wastage. **Level 3**

Use mathematical ideas and techniques

Use mathematical ideas and techniques to correctly complete measurements, calculate analytical requirements, establish realistic sample criteria, quantify, survey and present analytical results. **Level 2**

Use technology

Use workplace technology related to information gathering and analysis, diagnosis, information research, report writing, administration and management procedures. **Level 2**

In what context should assessment occur?

Competency is demonstrated by performance of all stated criteria, including paying particular attention to the critical aspects and the knowledge and skills elaborated in the Evidence Guide and within the scope defined by the Range Statement.

Assessment must take account of the endorsed assessment guidelines in the Construction Training Package.

What methods of assessment should apply?

Assessment of this competency is most likely to be project related under real or simulated conditions and require portfolios or other forms of indirect evidence of process. Direct evidence may include certification of compliance on the final outcome or authorisation for commencement by a competent authority.

Assessment must confirm the inference that competency is able not only to be satisfied under the particular circumstance, but is able to be transferred to other circumstances.

Assessment should reinforce the integration of the key competencies.

What are the specific resource requirements for this unit?

A situation, real or realistically simulated, requiring principles of construction to be applied to domestic scale buildings.

The learner and trainer should have access to appropriate documentation and resources normally used in the workplace.

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What critical aspects of evidence are required to demonstrate competency in this unit?

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What specific knowledge is required to achieve the performance criteria?

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Nature of materials and effect of performance.

Authorities and powers of a building surveyor.

Relevant national, State/Territory legislation and local government policy and procedures.

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Research methods.

Processes for the administration and preparation of documentation.

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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

Construction principles for domestic scale buildings are to include but not be limited to the evaluation and identification of construction methods, standards and services in compliance with relevant legislation, design specifications, maintenance specifications.

Legislative requirements are limited to those relevant to domestic scale buildings (or those similar in characteristics in terms of loading, construction and size and may include small industrial, commercial and public buildings).

Domestic scale building projects requiring applying principles of construction are to include but not be limited to provision of site access/facilities, work schedules, project milestones and the calculation and processing of application or inspection fees.

Reporting systems in accordance with organisational, legislative and quality assurance procedures are to include desk based assessment and may include site-based assessment.

Types, practices and standard construction may include but not be limited to:

footing systems

termite control

structural floor systems

structural wall systems

structural roof systems

openings (floors, walls, ceilings, roofs)

damp proof courses

membranes

flashings

sarking and insulations

wall and floor cladding

floor, wall and ceiling linings including; fire rated systems and acoustic system installations

wet area floor detailing

floor, wall and ceiling finishes and coatings

timber and aluminium framed windows and doors

mouldings

cupboard joinery and finishes

paving

surface drainage

roof water plumbing and drainage

sewerage plumbing and drainage

electricity

gas

telephone

mechanical ventilation

heating and cooling systems

communication systems

Unit context

Competency requires the demonstration of research, analysis, evaluation and reporting skills within the context of relevant legislation, the Building Code of Australia and Australian Standards.

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Unit Sector(s)

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