



Australian Government

Department of Education, Employment and Workplace Relations

CPCPRF2012A Select and install roof sheeting and wall cladding

Release: 1

CPCPRF2012A Select and install roof sheeting and wall cladding

Modification History

Not Applicable

Unit Descriptor

Unit descriptor This unit of competency specifies the outcomes required to select and install roof sheeting, steel battens and wall cladding for roofs. It includes the selection and installation of non-metallic roof materials associated with metal roofing (excluding roof tiles and slate) and of insulation materials.

Application of the Unit

Application of the unit Site location for work application may be either domestic or commercial and may be a new work site or an existing structure being renovated, extended, restored or maintained.

Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Prerequisite units

CPCPCM2023A	Carry out OHS requirements
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Employability Skills Information

Employability skills This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Prepare for work.	<p>1.1. Drawings and specifications are obtained from site inspection.</p> <p>1.2. Safety (OHS) requirements associated with selecting and installing roof sheeting and wall cladding, and workplace environmental requirements, are adhered to throughout the work.</p> <p>1.3. Quality assurance requirements are identified and adhered to in accordance with workplace requirements.</p> <p>1.4. Tasks are planned and sequenced in conjunction with others involved in or affected by the work and statutory and regulatory authority requirements.</p> <p>1.5. Tools and equipment, including personal protective equipment, are selected and checked for serviceability.</p> <p>1.6. Work area is prepared to support efficient selection and installation of roof sheeting and wall cladding.</p>
2. Identify insulation requirements.	<p>2.1. Level of insulation from rain and other noise, condensation control and heat transfer reduction is determined.</p> <p>2.2. Installation method, insulation supports and insulation materials are identified to meet performance requirements, plans, specifications, regulatory authorities' requirements and relevant information.</p> <p>2.3. Quantity and type of insulation materials required are calculated from design drawings and specifications in compliance with local authorities' requirements.</p>
3. Select sheeting, cladding and non-metallic materials.	<p>3.1. Appropriate roof sheeting and wall cladding are identified to comply with design specifications.</p> <p>3.2. Quantity and type of manufactured roof coverings and/or fittings required are calculated from design drawings and specifications in compliance with local authorities' requirements.</p> <p>3.3. Manufactured non-metallic roof materials are identified from plans and specifications and verified as compliant with design requirements and regulatory authorities' requirements.</p> <p>3.4. Proposed roof and wall coverings, sealant, non-metallic materials, fixing materials, roofing and</p>

ELEMENT	PERFORMANCE CRITERIA
	catchments are selected and checked for compatibility.
	3.5. Materials , including insulation, are identified, ordered and collected in accordance with workplace procedures.
	3.6. Materials and equipment are checked for compliance with docket and order form and for acceptable condition, and faults are reported .
4. Install roof sheeting or wall cladding.	4.1. Safety mesh and thermal insulation are fixed in accordance with relevant Australian standards, job specification and manufacturers' requirements.
	4.2. Sheets are marked and trimmed prior to fixing and cut edges are treated according to manufacturer specifications.
	4.3. Sheets, cladding and non-metallic materials are fixed in compliance with relevant Australian standards and manufacturer specifications.
	4.4. Sustainability principles and concepts are applied throughout the installation
5. Clean up.	5.1. Work area is cleared and materials disposed of, reused or recycled according to legislation, regulations, codes of practice and job specification..
	5.2. Tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturer recommendations and workplace procedures.
	5.3. Documentation is completed in accordance with workplace requirements.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Required skills for this unit are:

- communication skills to:
 - access information

REQUIRED SKILLS AND KNOWLEDGE

- determine requirements
- enable clear and direct communication, using questioning to identify and confirm requirements, share information, listen and understand
- follow instructions
- read and interpret:
 - documentation from a variety of sources
 - drawings and specifications
- report faults
- use language and concepts appropriate to cultural differences
- use and interpret non-verbal communication, such as hand signals
- written skills to:
 - complete workplace documentation
 - document scope of work and work practices
- identifying and accurately reporting to appropriate personnel any faults in tools, equipment or materials
- numeracy skills to apply measurements and calculations
- organisational skills, including the ability to plan and set out work
- selecting and installing non-metallic roof materials associated with metal roofing (excluding roof tiles and slate) and insulation materials.
- teamwork skills to work with others to action tasks and relate to people from a range of cultural and ethnic backgrounds and with varying physical and mental abilities
- technological skills to:
 - access and understand site-specific instructions in a variety of media
 - use mobile communication technology.

Required knowledge

Required knowledge for this unit is:

- capillary action, thermal expansion and fabrication techniques to prevent leaking installations
- corrosion prevention treatment requirements of cut sheets
- electrolysis and problems associated with the use of dissimilar metals
- job safety analysis (JSA) and safe work method statements (SWMS)
- processes of selecting and installing roof sheeting and wall cladding
- relevant OHS regulations and fall protection codes and requirements
- relevant statutory and authority requirements related to installing roof sheeting and wall cladding, including non-metallic materials
- SI system of measurement
- types of fasteners, fixings and sealants and their application to the installation of roof coverings.

Evidence Guide

EVIDENCE GUIDE

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

This unit of competency could be assessed in the workplace or a close simulation of the workplace environment providing that simulated or project-based assessment techniques fully replicate plumbing and services workplace conditions, materials, activities, responsibilities and procedures.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

A person who demonstrates competency in this unit must be able to provide evidence of:

- locating, interpreting and applying relevant information, relevant Australian standards and specifications to selecting and installing roof coverings and wall cladding
- applying safety requirements throughout the work sequence, including electrical requirements and the use of personal protective clothing and equipment
- as a minimum the ability to, given the plans and specifications, calculate the requirements and select and install roof sheeting, wall cladding and insulation for two roof structures, each roof structure being a minimum of 4 square metres area, one of which incorporates 2 square metres of non-metallic roof sheeting
- both installations may include insulation, flashings and cappings, using the pierced and concealed fastening methods, ensuring:
 - application of sustainability principles and concepts throughout the installation
 - correct identification of requirements and details of proposed installation
 - correct fit of the completed installation
 - correct selection and use of appropriate processes, tools and equipment
 - completing all work to specification
 - compliance with regulations, relevant Australian standards and organisational

EVIDENCE GUIDE

Context of and specific resources for assessment

quality procedures and processes

- communicating and working effectively and safely with others.

This competency is to be assessed using standard and authorised work practices, safety requirements and environmental constraints.

Assessment of essential underpinning knowledge will usually be conducted in an off-site context.

Assessment is to comply with relevant regulatory or Australian standards' requirements.

Resource implications for assessment include:

- an induction procedure and requirement
- realistic tasks or simulated tasks covering the minimum task requirements
- relevant specifications and work instructions
- tools and equipment appropriate to applying safe work practices
- support materials appropriate to activity
- workplace instructions relating to safe working practices and addressing hazards and emergencies
- material safety data sheets
- research resources, including industry related systems information.

Reasonable adjustments for people with disabilities must be made to assessment processes where required. This could include access to modified equipment and other physical resources, and the provision of appropriate assessment support.

Method of assessment

Assessment methods must:

- satisfy the endorsed Assessment Guidelines of the Construction, Plumbing and Services Training Package
- include direct observation of tasks in real or simulated work conditions, with questioning to confirm the ability to consistently identify and correctly interpret the essential underpinning knowledge required for practical application
- reinforce the integration of employability skills

EVIDENCE GUIDE

with workplace tasks and job roles

- confirm that competency is verified and able to be transferred to other circumstances and environments.

Validity and sufficiency of evidence requires that:

- competency will need to be demonstrated over a period of time reflecting the scope of the role and the practical requirements of the workplace
- where the assessment is part of a structured learning experience the evidence collected must relate to a number of performances assessed at different points in time and separated by further learning and practice, with a decision on competency only taken at the point when the assessor has complete confidence in the person's demonstrated ability and applied knowledge
- all assessment that is part of a structured learning experience must include a combination of direct, indirect and supplementary evidence.

Assessment processes and techniques should as far as is practical take into account the language, literacy and numeracy capacity of the candidate in relation to the competency being assessed.

Supplementary evidence of competency may be obtained from relevant authenticated documentation from third parties, such as existing supervisors, team leaders or specialist training staff.

Range Statement

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. 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

RANGE STATEMENT

regional contexts) may also be included.

Safety (OHS) is to be in accordance with commonwealth, state and territory legislation and regulations and may include:

- handling of materials
- hazard control
- personal protective clothing and equipment prescribed under legislation, regulations and workplace policies and practices
- safe operating procedures, including recognising and preventing hazards associated with:
 - electricity
 - hazardous materials and substances
 - service lines
 - surrounding structures and facilities
 - trip hazards
 - use of tools and equipment
 - work site visitors and the public
 - working at heights
 - working in proximity to others
- use of firefighting equipment
- use of first aid equipment
- workplace environment and safety.

Environmental requirements cover water quality management and may include:

- clean-up protection
- stormwater protection
- waste management.

Quality assurance requirements may include:

- Environment Protection Authority (EPA)
- environment policy
- internal company quality assurance policy and risk management strategy
- International Standards Organisation
- site safety plan
- workplace operations and procedures.

Statutory and regulatory authorities include:

- commonwealth, state and local authorities administering applicable Acts, regulations and codes of practice.

Tools and equipment may include:

- elevated work platforms
- fall protection equipment
- hand and power tools
- ladders
- lifting and load shifting equipment, including:

RANGE STATEMENT

	<ul style="list-style-type: none"> • chain blocks • cranes • forklifts • hand trolleys • hoists and jacks • restricted height scaffolds • rollers
Roof sheeting may include:	<ul style="list-style-type: none"> • measuring equipment. • metal and non-metallic (clear and coloured) sheets • other approved materials.
Installation may include:	<ul style="list-style-type: none"> • fitting safety mesh and rainwater fittings.
Information may include:	<ul style="list-style-type: none"> • charts and hand drawings • diagrams or sketches • instructions issued by authorised organisational or external personnel • manufacturer specifications and instructions • material safety data sheets (MSDS) • memos • organisation work specifications and requirements • regulatory and legislative requirements, particularly those pertaining to: <ul style="list-style-type: none"> • building codes • OHS and environmental requirements • plumbing regulations • relevant Australian standards • safe work procedures relating to selecting and installing roof sheeting and wall cladding • signage • verbal, written and graphical instructions • work bulletins • work schedules, plans and specifications.
Insulation materials may include:	<ul style="list-style-type: none"> • batts • interlocking sections • loose fill • rolls.
Materials for selecting and installing roof sheeting and wall	<ul style="list-style-type: none"> • approved roof battens • cappings

RANGE STATEMENT

cladding may include:

- fixings and fasteners
- flashings
- insulation, including:
 - fibreglass
 - laminate
 - polyethylene
 - reflective foil
 - straw
 - wool
- insulation supports, including:
 - plaster board
 - timber board
 - wire mesh
- metal roof covers of concealed or pierce fixed types
- moulds
- plastic building sheets for walls and roofs
- rain water goods, including:
 - aluminium
 - copper
 - fibreglass
 - polycarbonate
 - stainless steel
 - steel
 - zincalume
- rivets and sealants
- self drilling and tapping screws
- trims
- other approved materials.

Fault reporting:

- may be written or verbal
- is to be in accordance with company's workplace procedures.

Sustainability principles and concepts:

- cover the current and future social, economic and environmental use of resources
- may include:
 - appropriate component selection that has minimal environmental impact
 - efficient energy use
 - efficient use and recycling of material

RANGE STATEMENT

- disposal of waste material to ensure minimal environmental impact.

Unit Sector(s)

Unit sector Plumbing and services

Co-requisite units

Co-requisite units Nil

Functional area

Functional area