



**Australian Government**

# **CPCPCM2055A Work safely on roofs**

**Release 1**

## **CPCPCM2055A Work safely on roofs**

### **Modification History**

Prerequisite unit updated

Changes to performance criteria, required skills and knowledge, range statement and critical aspects

Not equivalent to CPCPCM2035A

### **Unit Descriptor**

This unit of competency specifies the outcomes required to perform safe work practices when undertaking plumbing work on roofing structures.

### **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**

In some jurisdictions, this unit of competency may form part of accreditation, licensing, legislative, regulatory or certification requirements.

### **Pre-Requisites**

CPCPCM2043A          Carry out WHS requirements

### **Employability Skills Information**

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

- |   |                                    |     |                                                                                                                                                                                                                                     |
|---|------------------------------------|-----|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Identify work safety requirements. | 1.1 | Scope of task and proposed work practices and activities are identified and documented according to workplace procedures, <b><i>statutory and regulatory authorities'</i></b> requirements and relevant <b><i>information</i></b> . |
|   |                                    | 1.2 | <b><i>Work health and safety</i></b> (WHS) and <b><i>environmental requirements</i></b> associated with working safely on roofs are adhered to throughout the work.                                                                 |
|   |                                    | 1.3 | <b><i>Quality assurance requirements</i></b> are identified and adhered to according to workplace requirements.                                                                                                                     |
|   |                                    | 1.4 | Site is inspected to determine layout and physical condition, condition of structure, prevailing weather conditions, equipment requirements and potential hazards.                                                                  |
|   |                                    | 1.5 | Safety equipment is identified, selected and checked for serviceability according to workplace requirements.                                                                                                                        |
|   |                                    | 1.6 | Certification of suitability of structure to support the safety system is obtained.                                                                                                                                                 |
| 2 | Prepare for work.                  | 2.1 | Work procedures and instructions for the task are identified.                                                                                                                                                                       |
|   |                                    | 2.2 | Materials, <b><i>tools and equipment</i></b> , including personal protective equipment, are selected and checked for serviceability.                                                                                                |
|   |                                    | 2.3 | Fall protection and perimeter protection equipment is inspected and installed, ensuring adequacy for work and conformance to regulatory requirements.                                                                               |

- 2.4 **Roof safety system** is installed according to workplace and regulatory requirements.
  - 2.5 Appropriate signage and barricades are selected and installed.
- 3 Perform work on roof.
  - 3.1 Access from ground to work area is checked to ensure it is safe and according to regulatory requirements.
  - 3.2 Fall protection and personal safety requirements are applied according to regulatory requirements.
  - 3.3 Manual handling of materials and equipment is undertaken according to regulatory requirements.
  - 3.4 Roof materials and equipment are located on roof, ensuring that they are safely secured and distributed to eliminate risk of distorting or collapsing the building framework.
  - 3.5 Safety system is checked periodically for compliance with regulations according to workplace procedures, and **faults are reported**.
  - 3.6 Risk control measures are monitored to ensure that they are effective and appropriate to the task and work environment.
  - 3.7 Risk control measures are reassessed, as required, according to changed work practices and/or site conditions, and alterations are undertaken within scope of authority.
  - 3.8 **Sustainability principles and concepts** are applied throughout the work process.
- 4 Clean up.
  - 4.1 Safety system is dismantled according to sequence and removed from work site.
  - 4.2 Work area is cleared and materials disposed of, reused or recycled according to legislation, regulations, codes of practice and job specification.
  - 4.3 Tools and equipment are cleaned, checked, maintained and stored according to manufacturer recommendations and workplace procedures.

- 4.4 Documentation is completed according to workplace requirements.

## Required Skills and Knowledge

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

### Required skills

- communication skills to:
  - access information
  - determine requirements
  - enable clear and direct communication, using questioning to identify and confirm requirements, share information, listen and understand
  - follow instructions
  - report faults
  - use language and concepts appropriate to cultural differences
  - use and interpret non-verbal communication, such as hand signals
- initiative and enterprise skills to:
- conduct a safety assessment of a roof work site
- identify and report to appropriate personnel any faults in tools, equipment or materials
- literacy skills to:
  - complete written workplace documentation
  - document scope of work and work practices
  - read and interpret:
    - documentation from a variety of sources
    - plans and specifications
- numeracy skills to apply measurements and calculations
- planning and organising skills to plan and set out work
- technical skills to provide necessary safety measures, including the installation of a roof safety system
- technology skills to:
  - access and understand site-specific instructions in a variety of media
  - use mobile communication technology

### Required knowledge

- job safety analysis (JSA) and safe work method statements (SWMS)
- nature of work undertaken on roofs
- processes of providing for safe work practices
- relevant statutory and regulatory authorities' requirements related to working safely on roofs

- risks associated with photovoltaic (solar) panels and systems
- roof safety equipment and systems and considerations to facilitate working safely on roofs
- SI system of measurement

## Evidence Guide

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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, standards and specifications for working safely on roofs
- applying safety requirements throughout the work sequence, including electrical safety requirements and the use of personal protective clothing and equipment
- given the plans and specifications for the roof working area of a corner, extending at least 4 metres in either direction and greater than 1.8m high, provide for erection, maintenance and dismantling of the fall and perimeter protection requirements for the site, incorporating handrails and footwalk or harnesses and harness fixing points for safe personal and stores access to the roof, stores and equipment locations; and risk assessment, ensuring:
  - application of sustainability principles and concepts
  - correct identification of risks and safety requirements
  - correct selection and use of appropriate processes, tools and equipment
  - completion of all work to specification
  - compliance with regulations, standards and organisational quality procedures and processes
  - communicating and working effectively and safely with others.

**Context of and specific resources for assessment**

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 work 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 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.

### Guidance information for assessment

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

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 regional contexts) may also be included.

***Statutory and regulatory authorities*** include: • commonwealth, state or territory, and local authorities administering applicable Acts, regulations and codes of practice.

***Information*** may include:

- charts and hand drawings
- instructions issued by authorised organisational or external personnel
- material safety data sheets (MSDS)
- memos

- organisation work specifications and requirements
- plans and sketches
- regulatory and legislative requirements, particularly those pertaining to:
- building codes
- WHS and environmental requirements
- plumbing regulations
- relevant Australian standards
- safe work procedures relating to working on roofs
- signage
- verbal, written and graphical instructions
- work bulletins
- work schedules, plans and specifications.

**Work health and safety** is to be according to commonwealth, state and territory legislation and regulations and may include:

- handling of materials
- hazard control, including of electrical hazards
- personal protective clothing and equipment prescribed under legislation, regulations and workplace policies and practices
- safe operating procedures, including recognising and preventing hazards associated with:
  - hazardous materials and substances
  - photovoltaic (solar) panels
  - 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** may include:

- clean-up protection
- ozone protection
- waste management.

**Quality assurance requirements** may include:

- Environment Protection Authority (EPA)
- internal company quality assurance policy and risk

management strategy

- International Standards Organisation
- site safety plan
- workplace operations and procedures.

***Tools and equipment*** include:

- fall protection
- ladders
- lifting and load shifting equipment, including:
  - chain blocks
  - cranes
  - elevated work platforms
  - forklifts
  - hand trolleys
  - hoists and jacks
  - rollers
  - scaffolds
- perimeter protection
- signage and barricades.

***Roof safety systems*** include:

- footwalks
- handrails
- harness fixing points
- kickboards
- safety harness
- scaffolds.

***Fault reporting*** include:

- may be written or verbal
- is to be according to company's workplace procedures.

***Sustainability principles and concepts:***

- cover the social, economic and environmental use of resources to meet current and future needs
- may include:
  - selecting appropriate components and material
  - choosing efficient products
  - using material efficiently.

## **Unit Sector(s)**

### **Functional area**

**Unit sector** Plumbing and services

## **Custom Content Section**

Not applicable.