



Australian Government

CPCPCM2054A Carry out simple concreting and rendering

Release 1

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Modification History

Prerequisite unit updated

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

Not equivalent to CPCPCM2034A

Unit Descriptor

This unit of competency specifies the outcomes required to perform minor repairs and undertake minor concreting and rendering tasks.

Application of the Unit

This unit of competency supports development of basic concreting skills needed for plumbing applications.

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

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| 1 | Prepare for work. | 1.1 | Job requirements are determined and various levels are obtained. |
| | | 1.2 | <i>Work health and safety</i> (WHS) and <i>environmental requirements</i> associated with levelling activities are adhered to throughout the work. |
| | | 1.3 | <i>Quality assurance requirements</i> are identified and adhered to according to workplace requirements. |
| | | 1.4 | <i>Tools and equipment</i> , including personal protective equipment, are selected and checked for serviceability. |
| | | 1.5 | <i>Sustainability principles and concepts</i> are applied. |
| 2 | Place concrete. | 2.1 | Concrete mixture is prepared to meet job and manufacturer requirements. |
| | | 2.2 | Formwork or excavation area is cleaned of excess material and debris prior to concrete placement. |
| | | 2.3 | Concrete is safely transported by an approved method. |
| | | 2.4 | Concrete is placed in formwork or placement site to specified depth ensuring all cavities are filled. |
| | | 2.5 | Concrete is screeded to the alignment of formwork and project specified datums. |
| | | 2.6 | Surface of concrete is finished according to specifications. |

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| 3 | Place rendering. | 3.1 | Render mixture is prepared to meet manufacturer requirements. |
| | | 3.2 | Render is safely transported by an approved method. |
| | | 3.3 | Render is applied in the required location. |
| | | 3.4 | Surface of render is finished according to specifications. |
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| 4 | Clean up. | 4.1 | Work area is cleared and materials disposed of, reused or recycled according to legislation, regulation, codes of practice and job specification. |
| | | 4.2 | Tools and equipment are cleaned, checked, maintained and stored according to manufacturer recommendations and workplace procedures. |
| | | 4.3 | Information is accessed and documentation 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:
 - enable clear and direct communication, using questioning to identify and confirm requirements, share information, listen and understand
 - follow instructions
 - report hazards
 - use and interpret non-verbal communication, such as hand signals
 - use language and concepts appropriate to cultural differences
- initiative and enterprise skills to:
 - contribute to workplace responsibilities, such as current work site environmental or sustainability frameworks, or management systems
 - evaluate own actions and make judgements about performance and necessary improvements
 - identify and report to appropriate personnel any faults in tools, equipment or materials
- literacy skills to complete workplace documentation
- planning and organising skills to plan and set out work
- self-management skills to:
 - recognise procedures
 - respond to change
- 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
- technology skills to:
 - access and understand site-specific instructions in a variety of media
 - use mobile communication technology

Required knowledge

- basic levelling techniques
- categories of materials and their safe handling, storage and transport requirements
- concrete and plastering materials
- concreting and plastering techniques
- job safety analysis (JSA) and safe work method statements (SWMS)
- material safety data sheets (MSDS)
- WHS and environmental legislation and requirements
- plans, drawings and specifications

- processes for the calculation of material requirements
- simple formwork and reinforcing componentry
- types of waste and their disposal, including an awareness only of the requirements for asbestos handling and disposal
- workplace safety requirements

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, standards and specifications as required to carry out concreting and rendering to a simple form
- applying safety requirements throughout the work sequence, including the use of personal protective clothing and equipment
- given the plans and specifications, carrying out one of the following:
 - bench an access chamber
 - install thrust blocks
 - pipe penetration through a floor or wall
 - place concrete as required within AS/NZS3500 National plumbing and drainage: Part 1.2 Water supply – Acceptable solutions
 - pour a concrete slab up to 600mm square
 - repair concrete up to 600mm square
 - repair pipe chases in a brick wall
- all activities carried out should ensure:
 - application of sustainability principles and concepts
 - correct identification of location, design and details of proposed tasks
 - correct selection and use of appropriate processes, tools and equipment
 - completing all work to plans and 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.

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.

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

- electrical safety
- handling of materials
- hazard control
- hazardous materials and substances
- personal protective clothing and equipment prescribed under legislation, regulations and workplace policies and practices
- use of firefighting equipment

- use of first aid equipment
- use of tools and 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:

- Australian standards
- Environment Protection Authority (EPA)
- internal company quality assurance policy and risk management strategy
- International Standards Organisation
- National Construction Code (NCC)
- site safety plan
- workplace operations and procedures.

Tools and equipment may include:

- brooms
- bull floats
- edging tools
- hand floats (steel and wood)
- levels
- shovels
- stipple devices
- trowels
- wheel barrows.

Sustainability principles and concepts:

- cover the social, economic and environmental use of resources to meet current and future needs
- may include:
 - appropriate material selection to ensure minimal environmental impact
 - efficient use of materials
 - recycling of material
 - minimal water wastage.

Information may include:

- charts and hand drawings
- instructions issued by authorised organisational or external personnel

- manufacturer specifications and instructions
- 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 and/or gasfitting authority regulations
- relevant Australian standards
- safe work procedures relating to handling and storing plumbing materials, including the disposal of waste
- signage
- verbal, written and graphical instructions
- work bulletins
- work schedules, plans and specifications.

Unit Sector(s)

Functional area

Unit sector Plumbing and services

Custom Content Section

Not applicable.