



Australian Government

CPCCCO2021A Handle concreting materials

Release 1

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Modification History

This version first released with CPC08 Construction, Plumbing and Services Training Package Version 9.

- Changes to performance criteria, range statement, evidence requirements and methods of assessment
- Range of other minor editorial changes

Not equivalent to CPCCCO2011A Handle concreting materials

Unit Descriptor

This unit of competency specifies the outcomes required to safely manually handle and store concreting materials and components in preparation for concreting work, while also applying environmental management principles.

The unit includes identifying and safely handling hazardous materials and waste according to safety data sheets (SDS). It may also include working with others and as a member of a team.

Application of the Unit

This unit of competency applies to a range of domestic and commercial construction sites where concreting materials are required.

Licensing/Regulatory Information

Licensing, legislative, regulatory or certification requirements apply to concreting work in different states and territories. Candidates are advised to consult with the relevant regulatory authorities.

Pre-Requisites

CPCCOHS2001A

Apply OHS requirements, policies and procedures in the construction industry

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

Elements and Performance Criteria

- | | | |
|---|--|--|
| 1 | Plan and prepare. | <p>1.1 Work instructions, <i>work health and safety (WHS) requirements</i> and other <i>information</i> relevant to the work are identified, confirmed and applied for <i>planning and preparation</i> purposes.</p> <p>1.2 <i>Tools and equipment</i> consistent with job requirements are selected and checked for serviceability, and faults are rectified and reported before work begins.</p> <p>1.3 Material quantity requirements are identified and calculated according to plans, specifications and <i>quality requirements</i>.</p> <p>1.4 <i>Materials</i> appropriate to the work application are obtained, prepared, safely handled and located ready for use.</p> <p>1.5 <i>Environmental requirements</i> are identified for the project according to environmental plans and regulatory obligations.</p> |
| 2 | Handle and sort concrete materials and components. | <p>2.1 On delivery to site, <i>concrete materials and components</i> are checked for conformity to material schedule, plans and specifications.</p> <p>2.2 Concrete materials and components are moved to specified location applying safe <i>handling procedures</i>.</p> <p>2.3 Concrete materials and components are stacked or stockpiled for ease of identification and retrieval in line with task sequence and job location and according to job specifications.</p> |

- 2.4 Concrete materials and components are protected against damage and stored clear of access ways, for ease of retrieval and distribution.
 - 2.5 Components are handled and positioned ready for installation according to manufacturer recommendations, plans and specifications.
- 3 Handle and remove concrete materials and components on completion of task.
 - 3.1 Hazardous material is identified and appropriate waste management procedures are applied according to SDS and requirements of ***statutory and regulatory authorities***.
 - 3.2 Non-toxic materials are removed using correct procedures.
 - 3.3 Dust suppression procedures are used to minimise health risk to work personnel and others.
- 4 Clean up.
 - 4.1 Work area is cleared of remaining debris and materials according to workplace procedures.
 - 4.2 Tools and equipment are cleaned, checked, maintained and stored according to manufacturer recommendations and standard work practices.

Required Skills and Knowledge

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

Required skills

- learning skills to respond to change, such as differences in work site, and environmental and quality requirements
- numeracy skills to calculate and confirm correct quantities of materials for work tasks
- oral communication skills to:
 - enable clear and direct communication, using questioning to identify and confirm requirements, and share information
 - report work site hazards to appropriate personnel, including faults in tools, equipment or materials
 - use language and concepts appropriate to cultural differences
- reading skills to:
 - interpret documentation, including drawings and specifications
 - understand written instructions, procedures and signage
 - interpret manufacturer instructions for handling tools and equipment
- writing skills to complete pre-operational checklists and simple equipment fault forms

Required knowledge

- general construction terminology
- manual handling techniques for concrete materials
- plans, drawings and specifications
- procedures for the safe handling and storage of materials, and disposal of hazardous materials
- processes for calculating material requirements
- types, characteristics, uses and limitations of tools and equipment
- types, location and use of relevant safety resources and information:
 - job safety analyses (JSA) and safe work method statements (SWMS)
 - safety data sheets
 - signage and barricades
- workplace and equipment 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 by performing a range of tasks in the workplace or a close simulation of the workplace environment, provided that simulated or project-based assessment techniques fully replicate construction workplace conditions, materials, activities, responsibilities and procedures.

Critical aspects for assessment and evidence required to demonstrate competency in this unit A person should demonstrate the ability to:

- safely handle a range of hazardous and non-hazardous concreting materials and components in preparation for concreting work to commence
- identify and follow appropriate environmental and waste management policies and procedures for the treatment of hazardous and non-hazardous concreting materials
- locate, interpret and apply relevant information, standards and specifications relating to handling concrete materials
- comply with site safety plan and WHS procedures applicable to the work site and workplace operations
- comply with organisational policies and procedures relating to handling concrete materials while maintaining quality requirements
- safely and effectively operate and use plant, tools and equipment required to handle concreting materials
- communicate and work effectively and safely with others.

Context of and specific resources for assessment Assessment of this unit:

- must be in the context of the work environment
- may be conducted in an off-site context, provided it is realistic and sufficiently rigorous to cover all aspects of workplace performance, including task skills, task management skills, contingency management skills and job role environment skills
- must meet relevant compliance requirements.

Resource implications for assessment include:

- an induction procedure
- realistic tasks or simulated tasks covering the mandatory task requirements
- 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
- safety data sheets.

Method of assessment

Assessment for this unit must verify the practical application of the required skills and knowledge, using a combination of the following methods:

- direct observation of tasks in real or simulated work conditions
- questioning to confirm the ability to consistently identify and correctly interpret the essential underpinning knowledge required for practical application
- review of relevant authenticated documentation from third parties, such as existing supervisors, team leaders or specialist training staff.

Guidance information for assessment

This unit could be assessed on its own or in combination with other units relevant to the job function.

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.

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.

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 requirements must comply with state and territory legislation and regulations and project safety plan, and may include:

- assistance of others or the use of manual or mechanical lifting devices with handling activities where size, weight or other issues, such as disability, are a factor
- emergency procedures, including extinguishing fires, organisational first aid requirements, and evacuation procedures
- hazard control
- hazardous materials and substances, including cement and curing agents

- personal protective equipment (PPE) prescribed under legislation, regulations and workplace policies and practices
- safe operating procedures, including the conduct of operational risk assessment and treatments associated with:
 - earth leakage boxes
 - lighting
 - power cables, including overhead service trays, cables and conduits
 - signage and restricted access barriers
 - surrounding structures
 - traffic control
 - trip hazards
 - work site visitors and the public
 - working at heights
 - working in confined spaces
 - working in proximity to others
 - working outdoors in warm climates
- use of firefighting equipment
- use of tools and equipment
- workplace environmental requirements and safety.

Information may include:

- instructions issued by authorised organisational and external personnel
- memos
- regulatory and legislative requirements relating to handling concreting materials, including Australian standards
- safe work procedures relating to handling concreting materials
- safety data sheets
- signage
- verbal, written and diagrammatical instructions, including manufacturer specifications and instructions where specified
- work bulletins
- work schedules, plans and specifications.
- assessing conditions and hazards
- determining work requirements and safety plans and procedures
- identifying and rectifying equipment defects
- inspecting work sites.

Planning and preparation must include:

Tools and equipment may include:

- brooms
- rakes
- shovels
- tarpaulins and covers
- wheel barrows.

Quality requirements

must include:

- relevant regulations that include:
 - Australian standards
 - internal organisational quality policy and standards
 - manufacturer specifications
 - workplace operations and procedures.

Materials:

- include:
 - aggregates
 - cement
 - form release agents
 - non-toxic materials, including general concreting materials
 - sand
 - water
- may include:
 - additives
 - curing compound
 - oxides.

Environmental

requirements may

include:

- clean-up management
- dust suppression, including:
 - covering
 - keeping dust in the air to a minimum
 - spraying with water
 - using a vacuum cleaner
- noise control
- stormwater management
- vibration management
- waste management.

Concrete materials and components:

- must include:
 - bar chairs
 - bracing
 - plastic membrane
 - reinforcement mesh
 - spacers
 - steel and timber formwork
- may include:
 - bar steel
 - decking
 - key joints
 - push-pull props
 - reinforcement bars

- scaffolding
 - support props
 - tilt panels.
- Handling procedures*** must include:
- following SDS
 - manual handling, including:
 - carrying materials using correct lifting techniques
 - controlling waste
 - using pallets.

Unit Sector(s)

Concreting

Custom Content Section

Not applicable.