



Australian Government

Department of Education, Employment and Workplace Relations

CPCCB2001A Handle and prepare bricklaying and blocklaying materials

Release: 1

CPCCB2001A Handle and prepare bricklaying and blocklaying materials

Modification History

Not Applicable

Unit Descriptor

Unit descriptor This unit of competency specifies the outcomes required to safely handle bricklaying and blocklaying materials manually and mechanically, including their storage requirements. It also includes preparatory mixing requirements and environmental requirements for the disposal of waste.

Application of the Unit

Application of the unit This unit of competency supports achievement of skills and knowledge for the manual and mechanical handling, sorting and stacking of bricklaying and blocklaying materials in support of bricklaying and blocklaying work on a work site, which includes working with others and as a member of a team.

Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Prerequisite units CPCCOHS2001A Apply OHS requirements, policies and procedures in the construction industry

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.	1.1. Work instructions, including plans, specifications, quality requirements and operational details, are obtained, confirmed and applied from relevant information. 1.2. Safety (OHS) requirements are followed in accordance with safety plans and policies. 1.3. Signage and barricade requirements are identified and implemented. 1.4. Plant, tools and equipment selected to carry out bricklaying and blocklaying tasks are consistent with job requirements, checked for serviceability, and any faults are rectified or reported prior to commencement. 1.5. Material quantity requirements are calculated in accordance with plans and specifications. 1.6. Materials appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use. 1.7. Environmental requirements are identified for the project in accordance with environmental plans and statutory and regulatory authority obligations, and are applied.
2. Manually handle bricklaying and blocklaying materials.	2.1. Bricklaying and blocklaying materials and components are identified and checked for conformity to material schedule, plans and specifications. 2.2. Handling characteristics of bricklaying and blocklaying materials and components are identified and safe and effective handling techniques, including mechanical handling, are applied. 2.3. Bricklaying and blocklaying materials and components are sorted and stacked for support of the job in accordance with supervisor's instructions and/or specifications. 2.4. Bricklaying and blocklaying materials and components are protected against physical damage and stored clear of traffic ways.
3. Perform mechanical handling of materials.	3.1. Bricklaying and blocklaying materials and components are prepared and positioned for mechanical handling in accordance with type of material and plant or equipment to be used.

ELEMENT	PERFORMANCE CRITERIA
	3.2. Materials and components are loaded, unloaded, moved, located and/or installed in accordance with workplace procedures.
	3.3. Bricklaying and blocklaying materials and components are safely handled with assistance of mechanical lifting devices in accordance with workplace requirements.
4. Mix bricklaying and blocklaying mortar.	4.1. Mortar ingredients are identified and positioned in the vicinity of the mixing area.
	4.2. Mixing equipment is prepared and operated in accordance with manufacturers' instructions and workplace procedures.
	4.3. Mortar is mixed to specifications in accordance with workplace procedures.
5. Handle and remove waste materials.	5.1. Waste bricklaying and blocklaying materials and components are handled in accordance with material safety data sheet (MSDS) and regulatory requirements.
	5.2. Hazardous material is identified for separate handling.
	5.3. Non-toxic materials are removed using appropriate procedures.
	5.4. Dust suppression procedures are used to minimise health risk to work personnel and others.
6. Clean up.	6.1. Work area is cleared and waste materials disposed of, reused or recycled in accordance with legislation, regulations, codes of practice and job specification.
	6.2. Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturer recommendations and standard work practices.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

REQUIRED SKILLS AND KNOWLEDGE

Required skills for this unit are:

- communication skills to:
 - 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
- numeracy skills to apply measurements and make calculations
- organisational skills, including the ability to plan and set out work
- 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:
 - use a range of mobile technology, such as two-way radio and mobile phones
 - voice and hand signals to access and understand site-specific instructions.

Required knowledge

Required knowledge for this unit is:

- bricklaying and blocklaying materials
- calculation of and techniques for preparing mixes
- construction terminology
- hazards associated with the use of bricklaying and blocklaying tools, plant and equipment
- job safety analysis (JSA) and safe work method statements
- manual handling techniques
- materials storage and environmentally friendly waste management
- MSDS
- plans, specifications and drawings
- processes for the calculation of material requirements
- quality requirements
- techniques for bricklaying and blocklaying tasks
- types, characteristics, uses and limitations of plant, tools and equipment
- workplace and equipment safety requirements.

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, 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 who demonstrates competency in this unit must be able to provide evidence of the ability to:

- locate, interpret and apply relevant information, standards and specifications
- comply with site safety plan and OHS legislation, regulations and codes of practice applicable to workplace operations
- comply with organisational policies and procedures, including quality requirements
- demonstrate safe and effective use of tools, plant and equipment
- communicate and work effectively and safely with others
- as a minimum:
 - on a ground level work site, manually relocate a pallet of bricks and associated mortar, aggregate and cement from a storage site in proximity to a specified work area and set out to reflect the laying sequence for a job requiring the blending of bricks (by colour and/or texture)
 - using manual and mechanical means, relocate a pallet of bricks to a raised platform
 - set up a cement mixer and mix a quantity of mortar to Australian standard AS3700 M3 standard, using the bucket gauging technique.

Context of and specific resources This competency is to be assessed using standard

EVIDENCE GUIDE

for assessment

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 mandatory 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.

EVIDENCE GUIDE

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 regional contexts) may also be included.

Information includes:

- diagrams or sketches
- instructions issued by authorised organisational

RANGE STATEMENT

	or external personnel
	• manufacturer specifications and instructions where specified • memos • MSDS • organisation work specifications and requirements • plans and specifications • regulatory and legislative requirements pertaining to handling and preparing bricklaying and blocklaying materials • relevant Australian standards • safe work procedures related to handling and preparing bricklaying and blocklaying materials • signage • verbal or written and graphical instructions • work bulletins • work schedules.
Safety (OHS) is to be in accordance with legislation, regulations, codes of practice, organisational safety policies and procedures, and project safety plan and may include:	• emergency procedures, including emergency shutdown and stopping, extinguishing fires, organisational first aid requirements and evacuation • handling of materials • hazard control • hazardous materials and substances • 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 • restricted access barriers • surrounding structures • traffic control • trip hazards • underground services, including water, gas, electricity and communications • work site visitors and the public • working at heights

RANGE STATEMENT

Tools and equipment:

- working in confined spaces
- working in proximity to others
- working with dangerous materials
- organisational first aid
- personal protective clothing and equipment prescribed under legislation, regulations and workplace policies and practices
- use of firefighting equipment
- use of tools and equipment
- workplace environment and safety.
- include:
 - bolsters
 - brick grabs
 - brooms
 - builders' lines
 - concrete mixers
 - hammers (brickies, club and scutch)
 - hoses
 - jointing tools
 - line blocks
 - line pins
 - masonry saws
 - measuring tapes and rules
 - mortar boards
 - profiles
 - rakes
 - shovels
 - spirit levels
 - straight edges
 - trowels
 - wheelbarrows
- may include:
 - brick buggies
 - elevators
 - forklifts
 - materials hoists
 - pallet trolleys
 - scaffolds.

RANGE STATEMENT

Bricklaying and blocklaying tasks:

- include all clay brick (wire cut/pressed) and concrete block (hollow and solid) masonry work
- may be performed on a new construction site, an existing structure being renovated or extended or an existing structure subject to service restoration or maintenance.

Materials include:

- aggregates
- cement, lime and waterproofing materials
- clay bricks
- masonry blocks
- reinforcing materials
- sealants
- timber and plyboard.

Environmental requirements include:

- clean-up protection
- noise and dust
- vibration
- waste management.

Statutory and regulatory authorities include:

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

Bricklaying and blocklaying materials and components may be sorted according to:

- ease of identification
- task sequence and job allocation
- type, size, colour and texture.

Mechanical handling includes:

- elevators
- forklifts
- materials hoists
- pallet trolleys.

Sorted and stacked materials may be protected by:

- covering
- tying and banding
- barricading
- signage
- securing (hazardous materials).

Dust suppression procedures include:

- covering
- spraying with water
- using vacuum cleaner.

Waste materials include:

- banding straps
- broken or damaged materials or components
- cardboard, plastic, paper and loose material
- packing pieces.

Unit Sector(s)

Unit sector Construction

Co-requisite units

Co-requisite units Nil

Functional area

Functional area