

# **CPCCBL3007A Install glass blockwork**

Release: 1



### CPCCBL3007A Install glass blockwork

## **Modification History**

Not Applicable

## **Unit Descriptor**

**Unit descriptor** This unit of competency specifies the outcomes required to

install glass blockwork to buildings. It includes preparation, set out and installation of the blocks.

## **Application of the Unit**

**Application of the unit** This unit of competency supports achievement of skills to

carry out the preparation for, setting out and installation of glass blocks, which includes working with others and

as a member of a team.

## **Licensing/Regulatory Information**

Not Applicable

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## **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.

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#### **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* to determine laying of *glass blockwork*.
- 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 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, specifications and *quality requirements*.
- 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. Prepare for installation.
- 2.1.Location and dimensions of glass blockwork are determined from plans and specifications.
- 2.2. Work platform is erected in accordance with regulatory authorities' and workplace requirements.
- 2.3. Area for set out is located and base and abutting surfaces are checked for level and plumb, and are finished to specifications.
- 2.4. Surface area preparation for blockwork installation is checked to be clean, dry and in accordance with manufacturer recommendations, plans and specifications.
- 2.5. Wall or section of blockwork is set out to base details according to plans and specifications.
- 2.6. Mortar mix is prepared and checked for conformity to specifications and standards.
- 3. Install glass blocks.
- 3.1. If required by specifications, frame is installed onto the base and fixed into position in accordance with manufacturer requirements.
- 3.2. Mortar mix is applied according to manufacturer

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#### **ELEMENT**

#### PERFORMANCE CRITERIA

- recommendations, standards, plans and specifications.
- 3.3. *Glass blocks* are laid to set out line, plumb, level and to design pattern in accordance with manufacturer recommendations, plans and specifications.
- 3.4. Glass blockwork installation is completed to standards, plans and specifications.
- 3.5. Glass blockwork joints are tool finished to achieve specified finish in accordance with manufacturer recommendations, standards, plans and specifications.
- 3.6. Excess mortar mix is removed from glass blockwork and surfaces are cleaned in accordance with manufacturer recommendations, standards, plans and specifications.
- 4.1. Work area is cleared and materials disposed of, reused or recycled in accordance with legislation, regulations, codes of practice and job specification.
- 4.2. Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturer recommendations and standard work practices.

#### 4. Clean up.

## 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:
  - 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
    - plans and specifications

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#### REQUIRED SKILLS AND KNOWLEDGE

- · 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:

- characteristics, applications and limitations of materials for the installation of glass blockwork
- construction terminology
- hazards associated with the installation of glass blockwork
- job safety analysis (JSA) and safe work method statements
- material safety data sheets (MSDS)
- materials storage and environmentally friendly waste management
- plans, specifications and drawings
- processes for the calculation of material requirements
- quality requirements
- techniques for installing glass blockwork
- types, characteristics, uses and limitations of plant, tools and equipment
- workplace and equipment safety requirements.

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#### **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
- safely and effectively use tools, plant and equipment
- communicate and work effectively and safely with others
- as a minimum, calculate material requirements, prepare, set out and install a panel of glass blocks, at least 1.2m x 1.2m, into a masonry wall, ensuring:
  - correct identification of requirement and installation and finishing of the panel
  - correct selection and use of appropriate processes, tools and equipment
  - completing all work to specification.

# 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.

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#### **EVIDENCE GUIDE**

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.

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

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#### **EVIDENCE GUIDE**

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 or external personnel
- manufacturer specifications and instructions where specified
- memos
- MSDS
- organisation work specifications and requirements
- plans and specifications
- regulatory and legislative requirements

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#### RANGE STATEMENT

pertaining to installing glass blockwork

relevant Australian standards

a new construction site

- safe work procedures related to installing glass blockwork
- signage
- verbal or written and graphical instructions
- work bulletins
- work schedules.
- an existing structure being renovated or extended
- an existing structure subject to service restoration or maintenance.
- emergency procedures related to this unit include 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
  - traffic control
  - trip hazards
  - underground services, including water, gas, electricity and communications
  - work site visitors and the public
  - working at heights
  - 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

Glass blockwork may be performed on:

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:

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#### RANGE STATEMENT

- use of tools and equipment
- workplace environment and safety.
- Tools and equipment:
- include:
  - bolsters
  - brooms
  - builders' lines
  - concrete mixers
  - hooked end tool (Frenchman)
  - hammers
  - jig saws
  - jointing tools
  - line blocks
  - line pins
  - masonry saws
  - measuring tapes and rules
  - mortar boards
  - profiles
  - rubber mallets
  - shovels
  - spirit levels
  - sponges
  - straight edges
  - trowels
  - wheelbarrows
- may include:
  - elevators
  - forklifts
  - · materials hoists
  - pallet trolleys
  - scaffolds.

*Quality requirements* include relevant regulations, including:

- Australian standards
- internal company quality policy and standards
- manufacturer specifications, where specified
- workplace operations and procedures.
- glass blocks
- mortar
- reinforcing materials and spacers
- sealants

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*Materials* include:

#### RANGE STATEMENT

## Environmental requirements

include:

- waterproofing materials.
- 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.

aumormes include:

Glass blocks:

- are for ornamental rather than structural purpose
- are hollow glass blocks of standard size (190mm x 190mm)
- may be clear or coloured
- may be laid flat or curved direct to a base or fixed into a frame for installation.

## **Unit Sector(s)**

**Unit sector** 

Construction

## **Co-requisite units**

**Co-requisite units** 

Nil

#### **Functional** area

**Functional** area

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