



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **CPCCJN3005A Cut and install glass**

**Release: 1**

## CPCCJN3005A Cut and install glass

### Modification History

Not Applicable

### Unit Descriptor

**Unit descriptor** This unit specifies the outcomes required to manually cut glass to simple shapes for installation purposes.

### Application of the Unit

**Application of the unit** This unit of competency supports the achievement of skills and knowledge to cut glass for installation in an off-site environment in accordance with AS1288 Glass in building - Selection and installation, and may include 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. Plan and prepare.	<p>1.1. Work instructions and operational details are obtained using relevant <i>information</i>, confirmed and applied for <i>planning and preparation</i> purposes.</p> <p>1.2. <i>Safety (OHS)</i> requirements are followed in accordance with safety plans and policies.</p> <p>1.3. Signage and barricade requirements are identified and implemented.</p> <p>1.4. <i>Tools and equipment</i> selected to carry out tasks are consistent with job requirements, checked for serviceability and any faults are rectified or reported prior to commencement.</p> <p>1.5. Material quantity requirements are calculated in accordance with plans, specifications and <i>quality requirements</i>.</p> <p>1.6. <i>Materials</i> appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use.</p> <p>1.7. <i>Environmental requirements</i> are identified for the project in accordance with environmental plans and <i>statutory and regulatory authority</i> requirements, and are applied.</p> <p>1.8. Safe working area around glass installation is maintained in accordance with site requirements and OHS regulations.</p>
2. Cut glass to a straight line.	<p>2.1. Type, size and thickness of glass are selected appropriate for application (thickness less than 6.38mm) and location is determined from job drawings, specifications and glazing schedule.</p> <p>2.2. Openings to receive glass are inspected for obstructions and clearances in accordance with standard operating procedures.</p> <p>2.3. Cutting process is identified in accordance with AS1288 Glass in building - Selection and installation, and glass is cut to specification on a line using straight edge and scoring and breaking to run cut to tolerance of <math>\pm 1</math>mm.</p> <p>2.4. Glass sheets are used in the most economical layout, with cutting defects recognised and corrective action taken.</p> <p>2.5. Sharp edges are removed to provide safe edges to glass.</p>

ELEMENT	PERFORMANCE CRITERIA
3. Circle and hole cutting.	<p>3.1. Type and thickness of glass is selected appropriate for application and centre of hole or circle is set out using edge, rule and permanent marking pen.</p> <p>3.2. Circles and holes in glass are cut to specification using pyramid method, completing pre-cut checks before positioning circle cutter.</p> <p>3.3. Cutting defects are recognised and corrective action is taken in line with standard procedures and according to AS1288, with most economical layout used with glass sheets.</p> <p>3.4. Sharp edges are removed to provide safe edges to glass.</p>
4. Cut glass to simple shapes.	<p>4.1. Glass to be used is selected and template is marked and prepared to designed shape.</p> <p>4.2. Template is used to mark outline on glass with permanent marking pen.</p> <p>4.3. Glass is cut to shape and size to specification and glass offcuts are removed safely to AS1288 specification.</p> <p>4.4. Cutting defects are recognised and corrective action is taken in line with standard procedures and according to AS1288, with most economical layout used with glass sheets.</p> <p>4.5. Sharp edges are removed to provide safe edges to glass.</p>
5. Clean up.	<p>5.1. Recyclable material is sorted and stored for collection.</p> <p>5.2. Glass surface and surrounding frame are cleaned and cleared of waste material and assembled according to job specifications, with loose debris and waste material removed and disposed of safely.</p> <p>5.3. Tools and equipment are cleaned, maintained and stored.</p>

## Required Skills and Knowledge

### REQUIRED SKILLS AND KNOWLEDGE

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

## **REQUIRED SKILLS AND KNOWLEDGE**

### **Required skills**

Required skills for this unit are:

- ability to recognise procedures, respond to change and contribute to workplace responsibilities, such as current work site environmental or sustainability frameworks or management systems
- communication skills to:
  - enable clear and direct communication, using questioning to identify and confirm requirements, share information, listen and understand
  - follow instructions
  - read and interpret:
    - drawings and specifications
    - glazing schedules
  - use and interpret non-verbal communication
  - use language and concepts appropriate to cultural differences
- innovation skills to select appropriate tools and equipment, respond to workplace challenges and put ideas into action
- numeracy skills to apply measurements
- planning and organisational skills to identify requirements, apply relevant resources and sequence tasks
- problem solving skills to recognise and take action to rectify minor faults and problems
- teamwork skills to be able to work with others to action tasks and relate to people from a range of cultural, social, ethnic backgrounds and with varying physical and mental abilities.

### **Required knowledge**

Required knowledge for this unit is:

- AS1288 Glass in buildings - Selection and installation
- job safety analysis (JSA) and safe work method statements
- material handling processes related to glass
- measuring and setting out processes relevant to glass cutting
- safe procedures for glass cutting
- types of glass and their characteristics
- 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 set out and cut glass, providing evidence of the ability to:

- select and use appropriate processes, tools and equipment to carry out application tasks
- comply with OHS regulations applicable to workplace operations
- apply organisational quality procedures and processes within the context of glazing
- demonstrate sound techniques in selecting, handling and placing glass for cutting
- display sound and accurate techniques to set out glass or templates
- demonstrate sound and safe techniques to cut regular and irregular shaped glass and cut a hole in a glass panel
- communicate with others to ensure safe and effective workshop operations.

### 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:

- workshop location and appropriate bench or table
- tools and equipment appropriate for

## EVIDENCE GUIDE

---

application tasks

- range of glass suitable for proposed activities
- drawings and documentation relevant to tasks.

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 a reasonable inference that competency is not only verified under the particular assessment circumstance, but is 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 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.



## EVIDENCE GUIDE

---

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
- material safety data sheets (MSDS)
- memos
- regulatory and legislative requirements pertaining to cutting and installing glass
- relevant Australian standards
- safe work procedures relating to cutting and installing glass
- signage
- verbal, written and graphical instructions
- work bulletins
- work schedules, plans and specifications.
- assessment of conditions and hazards
- determination of work requirements and safety plans and policies
- equipment defect identification

***Planning and preparation*** include:

## RANGE STATEMENT

---

**Safety (OHS)** is to be in accordance with state and territory legislation and regulations and project safety plan and may include:

- work site inspection.
- emergency procedures, including extinguishing fires, organisational first aid requirements and evacuation
- hazard control
- hazardous materials and substances
- organisational first aid
- PPE prescribed under legislation, regulations and workplace policies and practices
- safe operating procedures, including the conduct of operational risk assessment and treatments associated with:
  - concealed services (water, power and gas)
  - lighting
  - restricted access barriers
  - traffic control
  - work site visitors and the public
  - working at heights
  - working in confined spaces
  - working in proximity to others
- use of firefighting equipment
- use of tools and equipment
- workplace environmental requirements and safety.

**Tools and equipment** include:

- dividers and wing compasses
- glass cutters
- measuring tapes and rules
- pincers
- squares
- straight edges
- tee squares.

**Quality requirements** include relevant regulations, including:

- AS1288 Glass in buildings - Selection and installation
- internal company quality policy and standards
- manufacturer specifications where specified
- workplace operations and procedures.

**Materials** include:

- aluminium
- glass
- timber.

**Environmental requirements**

- clean-up management

## RANGE STATEMENT

---

include:

- dust and noise
- stormwater protection
- waste management.
- federal, state and local authorities administering applicable Acts, regulations and codes of practice.

*Statutory and regulatory authority* includes:

## Unit Sector(s)

Unit sector                      Construction

## Co-requisite units

Co-requisite units              Nil

## Functional area

Functional area