



Australian Government

Department of Education, Employment and Workplace Relations

CPCCCA3010A Install and replace windows and doors

Release: 1

CPCCCA3010A Install and replace windows and doors

Modification History

Not Applicable

Unit Descriptor

Unit descriptor

This unit of competency specifies the outcomes required to plan, prepare, set out and install window and door units, and to replace window and door units to different types and styles of buildings for access, security, weather proofing and replacement of defective windows and doors. It includes timber and metal window and door units.

Application of the Unit

Application of the unit

This unit of competency supports achievement of skills to install windows and doors in new or existing buildings for a range of construction projects, 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. Plan and prepare.	<p>1.1. Work instructions, including plans, specifications, quality requirements and operational details, are obtained, confirmed and applied using relevant <i>information</i> 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. Plant, <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> obligations, and are applied.</p>
2. Install window units to frame.	<p>2.1. <i>Window</i> opening size is checked to be greater than overall window frame.</p> <p>2.2. <i>Reveals</i> are joined and fixed securely to frames where specified.</p> <p>2.3. Window unit is located to suit brickwork and eaves finish for veneer construction, whichever is applicable.</p> <p>2.4. Window unit is positioned in place so that head/sill are level and stiles are plumb and in wind, ensuring reveals or frame are finished flush with face of inside wall lining.</p> <p>2.5. Window is packed and fixed to wall frame through/to studs, in accordance with specified fixing and fastening methods.</p>
3. Replace window units/door frames.	<p>3.1. Architraves and nosing are removed.</p> <p>3.2. Sill bricks or cladding are removed where specified.</p> <p>3.3. Fasteners are cut, packing removed and flashing detached from frame.</p> <p>3.4. Window unit/ <i>door frame</i> is removed.</p>

ELEMENT	PERFORMANCE CRITERIA
4. Prepare door opening, and construct and fix jamb.	<p>3.5. Window unit/door frame and <i>window components</i> are installed to plumb, level and wind.</p> <p>3.6. Architraves and mouldings are replaced.</p> <p>4.1. Door frame opening size is checked to be greater than the overall door jamb width and height, allowing for plumbing of stiles, thickness of floor covering, levelling of door head and level of floor.</p> <p>4.2. Jamb stiles are marked and cut to length allowing for clearances according to specifications.</p> <p>4.3. Head is trenched to accommodate jamb stiles allowing for clearance according to specification.</p> <p>4.4. Jamb frame is assembled, squared and braced with rebates flush.</p> <p>4.5. Joints and rebates are cleaned and finished to quality requirements.</p>
5. Install door and door unit.	<p>5.1. <i>Door</i> unit is positioned in place so that the head/sill is level and stiles are plumb and in wind, ensuring reveals or frame finished flush with face of inside wall lining.</p> <p>5.2. Door is fitted to jamb allowing for clearances according to specifications with lock stile door backed off to facilitate correct operation.</p> <p>5.3. Hinges are marked out on door and jamb.</p> <p>5.4. Hinges are fitted to door and jamb.</p> <p>5.5. Final adjustments of door are made.</p> <p>5.6. <i>Door furniture components</i> are fitted and fixed to manufacturer specifications.</p>
6. Clean up.	<p>6.1. Work area is cleared and materials disposed of, reused or recycled in accordance with legislation, regulations, codes of practice and job specification.</p> <p>6.2. Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturer recommendations and standard work practices.</p>

Required Skills and Knowledge

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, specifications and drawings
 - 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:

- construction terminology
- flashing requirements and installation techniques
- 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
- plant, tools and equipment types, characteristics, uses and limitation
- processes for setting out
- processes for the calculation of material requirements
- quality requirements for windows and doors
- window and door installation and replacement techniques
- window and door materials
- 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, OHS regulations and state and territory legislation 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
- install one standard window or glazed sliding door unit to specifications
- replace one standard window or glazed sliding door unit to specifications
- construct and fit one standard external rebated door jamb/frame to specifications
- fit and hang one standard door, including the door furniture and a pair of doors with door jambs to specifications.

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

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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.

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

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

RANGE STATEMENT

Planning and preparation
include:

Safety (OHS) is to be in accordance with state or territory legislation, regulations, codes of practice, organisational safety policies and procedures, and project safety plan and may include:

- plans and specifications
- regulatory and legislative requirements pertaining to installing and replacing windows and doors
- relevant Australian standards
- safe work procedures related to installing and replacing windows and doors
- signage
- verbal or written and graphical instructions
- work bulletins
- work schedules.
- work site inspection
- equipment defect identification
- assessment of conditions and hazards
- determination of work requirements.
- emergency procedures, including 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
 - work site visitors and the public
 - working at heights
 - 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

RANGE STATEMENT

Tools and equipment include:

- use of firefighting equipment
- use of tools and equipment
- workplace environment and safety.
- air compressors and hoses
- bevels
- chisels
- hammers
- hand saws
- marking equipment
- measuring tapes and rules
- nail bags
- nail guns
- power drills
- power leads
- power saws
- protractors
- saw stools
- scaffolding
- spirit levels
- squares (combination/tri)
- stair clips and tables
- steel squares and fences
- string lines.

Quality requirements include relevant regulations, including:

- Australian standards
- internal company quality policy and standards
- manufacturer specifications, where specified
- workplace operations and procedures.

Materials include:

- barrel bolts
- cabin hooks
- closers
- dead bolts
- flash bolts
- flashings
- handles
- hinges (butt and parliament)
- latches
- locks
- metal
- night latches
- passage sets

RANGE STATEMENT

Environmental requirements
include:

- timber.
- 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.

Windows include:

- all size windows
- casement, double hung, hopper, straight and sliding, including glazed sliding doors, curved and bay.

Reveals:

- may or may not be fitted with windows.

Door frames:

- may be fixed first and then the door installed or doors may be fixed to the frame prior to installation
- doors may be hung to timber or metal frames.

Window components include:

- reveal
- sill
- trimmers.

Doors include:

- flush panel, framed and panelled, and glazed
- door units are to cover hinged door units and include standard doors, sliding, flywire, combination window/door units, door sidelight units (glazed or unglazed) and internal doors
- door jambs, door stiles and door sills.

Door furniture components
include:

- grips, latches/deadlocks, push plates and closers
- handles and locks.

Unit Sector(s)

Unit sector

Construction

Co-requisite units

Co-requisite units Nil

Functional area

Functional area