



Australian Government

Department of Education, Employment and Workplace Relations

CPCJN3003A Manufacture components for door and window frames and doors

Release: 1

CPCCJN3003A Manufacture components for door and window frames and doors

Modification History

Not Applicable

Unit Descriptor

Unit descriptor

This unit specifies the outcomes required to carry out machining and manufacturing processes to set out component material in preparation for the assembly of window frames, sashes, doors and door frames. It applies to timber or plastic-covered timber-cored material construction.

Application of the Unit

Application of the unit

This unit of competency supports the achievement of skills and knowledge to manufacture components for all timber or timber-cored window and door construction, which includes window frames, door frames, sashes, doors 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, including the use of <i>personal protective equipment</i>, 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. Materials 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>
2. Set up machine.	<p>2.1. <i>Machines</i> to be used and sequence of machining are selected according to machining <i>processes</i> to be carried out.</p> <p>2.2. Safety procedures associated with each machine are identified in accordance with manufacturer's operating procedures, OHS requirements and AS1473 Guarding and safe use of woodworking machinery or equivalent.</p> <p>2.3. Routers/cutters are installed to manufacturer specifications with fences and stops secured in place.</p> <p>2.4. Guarding is secured in position to manufacturer specifications and AS1473.</p> <p>2.5. Work area is prepared for machining.</p> <p>2.6. Components are selected for respective machining processes.</p>
3. Machine components.	<p>3.1. Components are correctly positioned on machine and securely clamped where required.</p> <p>3.2. Machine is operated to designed operating procedures and AS1473.</p> <p>3.3. Components are machined accurately to set out lines and template.</p> <p>3.4. Process is completed with all components machined</p>

ELEMENT

PERFORMANCE CRITERIA

to specification and set-out requirements.

ELEMENT	PERFORMANCE CRITERIA
4. Clean up.	4.1. Cutters are removed where applicable and machine is left clean. 4.2. Area and waste are cleared to specification. 4.3. Components are restored correctly in preparation for assembly.

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:

- 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
 - relevant building codes and standards
 - 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 measure and calculate dimensions
- 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:

REQUIRED SKILLS AND KNOWLEDGE

- AS1473 Guarding and safe use of woodworking machinery
- common material identification marking systems
- component setting out techniques
- job safety analysis (JSA) and safe work method statements
- manufacturing processes for door and window construction
- materials and their characteristics relevant to window and door construction
- measuring techniques relevant to setting up static machines
- setting up processes for static machines
- types and uses of static machines
- 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 machine components for window and door frames, sashes and panelled doors, providing evidence of the ability to:

- comply with OHS regulations applicable to workplace operations
- apply organisational quality procedures and processes within context of machining components for door and window construction
- select appropriate machines to carry out each process
- demonstrate safe and accurate setting up of each machine for each process
- operate each machine safely and efficiently to produce designed result
- demonstrate sound and accurate techniques to produce manufactured components for window and door frames, sashes and a panelled door to set-out design for each component
- identify typical faults and problems that occur and action required to rectify them
- 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.

EVIDENCE GUIDE

Resource implications for assessment include:

- workshop location relevant to activity
- static machines appropriate for application tasks
- tools and equipment appropriate to activity
- set out component material for application processes
- documentation and reference notation relevant to set-out material.

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

EVIDENCE GUIDE

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
- material safety data sheets (MSDS)
- memos
- regulatory and legislative requirements pertaining to manufacturing and assembly of components for door and window frames and doors
- relevant Australian standards
- safe work procedures relating to manufacturing and assembly of components for door and window frames and doors

RANGE STATEMENT

- signage
- verbal, written and graphical instructions
- work bulletins
- work schedules, plans and specifications.

RANGE STATEMENT

Planning and preparation
include:

- assessment of conditions and hazards
- determination of work requirements and safety plans and policies
- equipment defect identification
- work site inspection.

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

- 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.

Personal protective equipment
includes:

- boots
- caps
- dust masks and respirators
- ear plugs and muffs
- gloves
- safety glasses and goggles.

Tools and equipment include:

- chisels
- clamps
- measuring tapes and rules
- power routers
- squares
- trolleys

RANGE STATEMENT

- Quality requirements** include:
- workbench.
 - attention to machining processes
 - relevant regulations, including:
 - AS1473 Guarding and safe use of woodworking machinery
 - internal company quality policy and standards
 - manufacturer specifications where specified
 - workplace operations and procedures.
- Environmental requirements** include:
- clean-up management
 - dust and noise
 - stormwater protection
 - waste management.
- Statutory and regulatory authority** includes:
- federal, state and local authorities administering applicable Acts, regulations and codes of practice.
- Machines** suitable for manufacturing processes include:
- bandsaws
 - buzzers
 - disk sanders
 - docking saws
 - mortisers
 - spindle shapers
 - trenchers.
- Manufacturing **processes** include:
- band sawing for shape
 - cutting to lengths
 - dressing material to shape
 - mortising
 - moulding material to shape
 - sanding to curved shape
 - trenching for housings
 - trenching for tenons.

Unit Sector(s)

Unit sector Construction

Co-requisite units

Co-requisite units Nil

Functional area

Functional area