

Unit of Competency CPCCJS3002

Manufacture stair components for straight flighted stairs

Application

This unit of competency specifies the skills and knowledge required to manufacture components for straight-flight stairs, meeting all relevant requirements of the National Construction Code (NCC), Australian Standards, work health and safety (WHS), and Commonwealth and state or territory legislation.

The unit includes manufacturing cut and closed stringers, newels, balusters, risers, treads, handrails, landing joists, glue blocks and wedges.

Completion of the general construction induction training program specified by the model Code of Practice for Construction Work is required for any person who is to carry out construction work.

Achievement of *CPCCWHS1001 Prepare to work safely in the construction industry* meets this requirement.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Prerequisite Unit

CPCCWHS2001 Apply WHS requirements, policies and procedures in the construction industry.

Elements and Performance Criteria

1. Plan and prepare.	<ul style="list-style-type: none">1.1 Read and interpret work instructions and plan sequence of work.1.2 Plan all work to comply with laws and regulations, the National Construction Code (NCC), Australian Standards, work health and safety (WHS) and environmental requirements, manufacturers' specifications, workplace requirements, drawings and specifications.1.3 Select tools and equipment, check for serviceability and report any faults.1.4 Select and use personal protective equipment (PPE) for each part of the task.1.5 Inspect work site, locate services, assess hazards and apply risk controls, including required signage and barricades.1.6 Select materials required for task, calculate quantities, handle safely and prepare and position ready for use.
2. Prepare stringers.	<ul style="list-style-type: none">2.1 Set-out stringers for treads and risers with nosing marked accurately and housings cut to set-out and depth.2.2 Apply grooves or mortises to receive balusters to set-out.2.3 Cut stringers to set-out shape and mark to accommodate treads and risers and junction with newels or landing.
3. Prepare newel posts.	<ul style="list-style-type: none">3.1 Cut and make housings to newel post set-out and required depth.3.2 Cut mortises to set-out and required depth, and mark newel posts for identification.
4. Prepare treads, risers and wedges.	<ul style="list-style-type: none">4.1 Cut treads to specified length and shape.4.2 Cut risers to designed length, shape and quantity, and apply markings for junctions, stringers and wedges.4.3 Cut wedges to specified pitch.

5. Prepare balustrade.	5.1	Manufacture handrail with groove run for balusters.
	5.2	Set-out mortises for balusters in handrail.
	5.3	Cut balusters to specification.
	5.4	Cut manufactured handrail to length and mark sections.
6. Finish surface and preassemble stair.	6.1	Sand exposed surfaces of components to specification for finish.
	6.2	Preassemble components to ensure stair will assemble correctly.
	6.3	Disassemble components and prepare/store for transport.
7. Clean up.	7.1	Clean up, meeting all legislative and workplace requirements for safety, waste disposal and materials handling.
	7.2	Check, maintain and store tools and equipment and report any faults.

Foundation skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Unit Mapping Information

Supersedes and is equivalent to CPCCJS3002A Manufacture stair components for straight flighted stairs.

Links

Companion Volume Implementation Guide:

<https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=7e15fa6a-68b8-4097-b099-030a5569b1ad>

Assessment Requirements for CPCCJS3002

Manufacture stair components for straight flighted stairs

Performance Evidence

To demonstrate competency, a candidate must meet the performance criteria of this unit by manufacturing the following components for a set of straight-flight stairs with a minimum height of one metre, one side with a cut stringer and one side with a closed stringer:

- balusters
- glue blocks
- newel posts
- nosings
- risers
- stringers
- treads
- wedges

Knowledge Evidence

To be competent in this unit, a candidate must demonstrate knowledge of:

- compliance requirements of the National Construction Code and Australian Standards relevant to manufacturing components for straight-flight stairs
- workplace quality policies and standards for manufacturing components for straight-flight stairs
- safety requirements for manufacturing components for straight-flight stairs
- principles of stair design for straight flight stairs:
 - characteristics of common types of straight flight stairs
 - range of components required for straight flight stairs
 - stair construction and joining methods
- processes to read and interpret drawings and specifications for components required for straight flight stairs
- components of straight-flight stairs:
 - balusters
 - glue blocks
 - newel posts
 - nosings
 - risers
 - stringers
 - treads
 - wedges
- materials identification marking systems for manufacturing components for straight-flight stairs
- measuring and setting out processes applicable to stair construction
- types and uses of static machines, tools and equipment for manufacturing components for straight-flight stairs
- types of materials and their characteristics applicable to stair construction.

Assessment Conditions

Assessors must meet the requirements for assessors contained in the Standards for Registered Training Organisations.

This unit must be assessed in the workplace or a close simulation using realistic workplace conditions and standards, materials, activities, responsibilities, procedures, safety requirements and environmental considerations.

Links

Companion Volume Implementation Guide:

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