

Unit of Competency CPCCJS3006

Construct, assemble and install composite external stairs

Application

This unit of competency specifies the skills and knowledge required to construct and install stairs with one or more flights incorporating composite components, meeting all relevant requirements of the National Construction Code (NCC), Australian Standards, work health and safety (WHS), and Commonwealth and state or territory legislation.

It includes installing treads, stringers, handrails and balustrades fabricated from composite (non-timber) materials.

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.	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. Set out stair components.	2.1	Determine exit and ground finish levels from drawings and site location.
	2.2	Calculate rise, going and pitch of stair and check for compliance

	<p>with requirements.</p> <p>2.3 Make full-size set out of stairs to determine rise, going and pitch of stairs to actual location of landings, stringers, treads and newel posts.</p> <p>2.4 Determine location of stair and newel posts from drawings and pitch of stairs and full-size set out.</p> <p>2.5 Mark location of footings to layout of designed stairs to meet drawings and specifications and full-size set out.</p> <p>2.6 Select material for stringers and check against set out.</p> <p>2.7 Select components for newel posts set-out to design of stairs, storey rods and drawings and full-size set out.</p> <p>2.8 Assemble newel posts and check to provide tight fit for stringers and bearers.</p> <p>2.9 Check material for treads against set out and square to length.</p>
3. Assemble and install stairs.	<p>3.1 Prepare footings with post support.</p> <p>3.2 Attach tread supports to stringers to set-out.</p> <p>3.3 Erect newel posts and temporarily brace to plumb.</p> <p>3.4 Attach stringers to building using fixings and fasteners to maintain stair width.</p> <p>3.5 Fix treads and decking to location, and bracing and lateral ties to newel posts.</p>
4. Fit and fix hand railing and balustrade.	<p>4.1 Check material for hand railing and balustrade to length.</p> <p>4.2 Fit and fix hand railing into place above nosing line of a flight and above a landing deck.</p> <p>4.3 Fit and fix balustrade into place.</p>
5. Finish stairs.	<p>5.1 Remove sharp edges and finish to specification.</p> <p>5.2 Adhere non-slip surface to treads.</p>
6. Clean up.	<p>6.1 Clean up, meeting all legislative and workplace requirements for safety, waste disposal and materials handling.</p> <p>6.2 Check, maintain and store tools and equipment and report any faults.</p>

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 CPCCJS3006A Construct fabricated stairs

Links

Companion Volume Implementation Guide:

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

Assessment Requirements for CPCCJS3006

Construct, assemble and install composite external stairs

Performance Evidence

To demonstrate competency, a candidate must meet the performance criteria of this unit by constructing and installing one flight of composite external stairs from ground level to a minimum height of one metre, including a landing, handrail and balustrade to the open side of the flight and landing.

The handrail, balustrade, stringers and treads must be constructed of three or more composite materials.

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 constructing and installing composite stairs
- workplace quality policies and standards for constructing and installing composite stairs
- safety requirements for constructing and installing composite stairs
- application of and requirements for line, level and plumb when constructing and installing stairs
- terminology used in the construction and installation of composite stairs
- processes for reading and interpreting plans, specifications and drawings for constructing and installing composite stairs
- types and uses of tools and equipment used to construct and install composite stairs
- processes for measuring and calculating material lengths and quantities for constructing and installing composite stairs
- stair construction techniques, including different methods of joining and fixing components
- range and characteristics of different stair types
- techniques used in the construction of composite stairs
- types and uses of materials used in composite stair construction:
 - metals
 - concrete
 - glass
 - plastic composites
 - timber
- types and uses of fixings and fastening used in fabricated 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

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