

Unit of Competency CPCCCA3018

Construct, erect and dismantle formwork for stairs and ramps

Application

This unit of competency specifies the skills and knowledge required to construct, erect and dismantle formwork for stairs and ramps to provide access between floors and landings, 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:

- establishing required levels on site
- constructing timber, metal or prefabricated formwork to contain wet poured concrete until it is completely cured
- stripping the formwork
- preparing and storing formwork for re-use.

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. Set out formwork.	<ul style="list-style-type: none">2.1 Check formwork location for accuracy against plans and specifications.2.2 Check design of stairs or ramp and method of joining formwork, and determine levels from drawings, specifications and site inspection.2.3 Determine rise, going and pitch of stairs and ramp from drawings, specifications, site inspection, rise measurements, and requirements of the National Construction Code (NCC).2.4 Calculate full size of stairs or ramp and set out.2.5 Set out materials for formwork, including stringer form, to pitch of stairs with rises not exceeding specified space between treads.

3. Assemble and erect formwork.	3.1	Place, fix and brace landing bearers and joists.
	3.2	Erect and brace stairs or ramp formwork soffit.
	3.3	Cut, install and brace formwork for stringers.
	3.4	Locate and fix formwork stringers for stairs and ramps.
	3.5	Set out, cut square to length, and fix material for face of treads.
	3.6	Brace risers at mid-span to prevent deflection under the load of wet concrete.
4. Strip formwork.	4.1	Strip formwork and bracing sequentially and safely.
	4.2	Check formwork for reusability and dispose of damaged components.
	4.3	Safely de-nail, clean, oil and store or stack reusable formwork components.
5. Clean up.	5.1	Clean up, meeting all legislative and workplace requirements for safety, waste disposal and materials handling.
	5.2	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 CPCCCA3018A Construct, erect and dismantle formwork for stairs and ramps.

Links

Companion Volume Implementation Guide:

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

Assessment Requirements for CPCCCA3018 Construct, erect and dismantle formwork for stairs and ramps

Performance Evidence

To demonstrate competency, a candidate must meet the performance criteria of this unit by constructing, erecting, stripping and dismantling the formwork for:

- one flight of stairs, freestanding or against a wall with a minimum rise of 1800 mm
- one ramp with a minimum rise of 400 mm and 5.6 metres long.

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, erecting and dismantling formwork for stairs and ramps
- workplace quality policies and standards for constructing, erecting and dismantling formwork for stairs and ramps
- safety requirements for constructing, erecting and dismantling formwork for stairs and ramps
- line, level and plumb for constructing, erecting and dismantling formwork for stairs and ramps
- common formwork faults, problems and rectification methods
- materials used to construct and erect formwork
- fixings for formwork
- techniques to construct, erect and strip and dismantle formwork
- contents, terms and symbols used in plans, specifications and drawings for constructing, erecting and dismantling formwork for stairs and ramps
- types and uses of tools and equipment used to erect and strip and dismantle formwork
- processes for measuring and setting out formwork
- processes for calculating material requirements for constructing and erecting formwork for stairs and ramps
- regulations on stair and ramp construction for safe use, including disability access
- processes to construct stairs and ramps.

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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