



Australian Government

CPCCCO3041 Place concrete

Release: 1

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Modification History

Release 1.

Supersedes and equivalent to CPCCCO3041A Place concrete.

The unit of competency was updated to the Standards for Training Packages 2012.

This version first released with CPC Construction, Plumbing and Services Training Package Version 4.0.

Application

This unit of competency specifies the skills and knowledge required to place concrete into prepared formwork or foundations to establish a strong base for further building work.

It includes:

- calculating the required volume of concrete
- moving concrete from truck to pour location
- placing and screeding concrete on residential, commercial or civil construction sites.

It applies to concreters and other construction workers working as members of a team with at least a moderate degree of autonomy. They would be expected to complete routine activities without close supervision.

Licensing, legislative, regulatory or certification requirements apply to this unit of competency in all states and territories except Tasmania. Relevant state and territory regulatory authorities should be consulted to confirm these requirements.

Pre-requisite Unit

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

Unit Sector

Construction

Elements and Performance Criteria

Elements describe the essential outcomes.	Performance criteria describe what needs to be done to demonstrate achievement of the element.
1. Plan and prepare to place concrete.	1.1 Review and clarify task to place concrete. 1.2 Assess work site to determine scope of work. 1.3 Review task specifications and check to make sure they are in

	accordance with legislation, regulations and codes of practice. 1.4 Review work health and safety (WHS) requirements for the task in accordance with safety plans and policies. 1.5 Identify safety signage and barricade requirements. 1.6 Review environmental requirements for the task in accordance with environmental plans and legislative requirements. 1.7 Select plant, tools and equipment, check for serviceability and rectify or report any faults. 1.8 Calculate material quantity requirements, including the volume of concrete. 1.9 Estimate the time required for concrete pour based on size of area to be concreted, volume of concrete required and level of complexity of concrete pour.
2. Prepare location for concrete placement.	2.1 Erect identified safety signage and barricades to maintain a safe working area around pour location and fit personal protective equipment (PPE). 2.2 Determine location for concrete placement from task specifications. 2.3 Discuss implications for concrete placement near existing structures with relevant personnel and define separation or connection requirements. 2.4 Check that location for placement is free of debris and waste. 2.5 Ensure site access is clear.
3. Receive concrete.	3.1 Check delivery advice for accuracy against order. 3.2 Direct concrete delivery vehicle to location of discharge. 3.3 Monitor concrete discharged via chute into appropriate receptacle.
4. Place concrete.	4.1 Place concrete in horizontal layers into location in accordance with indicated levels. 4.2 Ensure vertical drop of concrete is less than two metres to avoid segregation of concrete materials. 4.3 Consolidate poured concrete during process using approved compaction or vibration method. 4.4 Carry out measurements and calculations throughout the pour to ensure sufficient concrete is delivered to fill required area, and place orders for any shortfall as required. 4.5 Check finished levels against datum using levelling device, and rectify incorrect levels.

	4.6 Screed concrete to required levels and grades.
5. Clean up after placing concrete.	5.1 Clear work area and dispose of, re-use or recycle materials in accordance with legislation, regulations, codes of practice and task requirements. 5.2 Clean, check, maintain and store plant, tools and equipment in accordance with manufacturers' specifications and workplace requirements.

Foundation Skills

This section describes the language, literacy, numeracy and employment skills essential to performance in this unit but not explicit in the performance criteria.

The following language, literacy, numeracy and employment skills essential to performance are not explicit in the performance criteria:

- writing skills to:
 - record planning details
- oral communication skills to:
 - use questioning to identify and confirm requirements
 - discuss cause of problems
 - report work site hazards, including faults in tools, equipment and materials
 - provide feedback.

Unit Mapping Information

Supersedes and is equivalent to CPCCCO3041A Place concrete.

Links

Companion volumes to this training package are available at the VETNet website - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=7e15fa6a-68b8-4097-b099-030a5569b1ad>

Assessment Requirements for CPCCCO3041 Place concrete

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Performance Evidence

To demonstrate competency in this unit, a person must place concrete at five different sites, each measuring at least 100 square metres, with a minimum of three sites requiring each of:

- consideration for planned load bearing walls or columns
- set down or wet areas in the slab
- multiple levels and temporary formwork.

In doing this, the person must meet the performance criteria for this unit.

Knowledge Evidence

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

- jurisdictional work health and safety (WHS) and environmental legislation and regulations relating to placing concrete, including:
 - job safety analyses (JSAs)
 - safe work method statements (SWMSs)
 - safety data sheets (SDSs)
 - safety manuals and instructions for plant, tools and equipment
 - signage and barricades
 - personal protective equipment (PPE)
 - environmental and work site safety plans
- requirements of Australian Standards and the National Construction Code (NCC) relating to carrying out high-performance concreting
- workplace requirements for all aspects of placing concrete including interpreting task requirements and reporting problems
- interpreting project plans and specifications relative to concrete placement requirements, including types and applications of concrete materials and calculation of material quantity requirements
- types, characteristics, uses and limitations of plant, tools, equipment and materials required for placing concrete
- concrete placement locations, including:
 - single slab

- multi-level slab
- set down and wet areas
- temporary formwork
- compliance requirements of regulations and standards relating to placing concrete, including relevant sections of:
 - Australian Standard (AS) 3600 Concrete structures
 - AS 3610 Formwork for concrete
- concreting placement techniques, including:
 - horizontal layering
 - controlling vertical drop
 - cold joints and how to manage them effectively
 - consolidation techniques
 - concrete reinforcement techniques
 - levelling techniques
 - screeding
- processes for calculating material requirements at various times throughout the concrete pour
- processes for determining levels indicated by:
 - level pegs
 - lines
 - markers.

Assessment Conditions

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

Assessment of performance must be undertaken in the workplace or in a simulated workplace environment. Tasks are to be performed to the level of proficiency and within the time limits expected in a workplace.

Assessors are responsible for ensuring that the person demonstrating competency has access to:

- work sites and specifications to place concrete
- appropriate documents, materials, tools, equipment and PPE currently used in industry
- requirements of appropriate sections of legislation and regulations
- relevant workplace policies and procedures.

Links

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