



Australian Government

CPCCCO3035 Assess and specify concrete supply requirements

Release: 1

CPCCCO3035 Assess and specify concrete supply requirements

Modification History

Release 1.

Supersedes and equivalent to CPCCCO3035A Assess and specify concrete supply requirements.

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 evaluate concreting projects and determine the type and volume of concrete to be sourced in preparation for concreting work in a range of residential, commercial, car park, public footpaths, and civil and industrial construction work sites, including multi-storey sites.

It includes application of knowledge to assess volume concrete, identify and specify concrete supply, and schedule concrete delivery.

It applies to specialist concreters 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. Assess concreting site and nature of work.	1.1 Review site plans and determine general size and nature of required concreting work. 1.2 Assess project specifications for concreting work and

	determine requirements of different concrete material for each area or feature. 1.3 Determine delivery method for concrete supply at different locations and heights, and assess implications for required concrete material properties.
2. Assess properties of required concrete supply.	2.1 Review strength grade designation (MPa) of concrete supply for different areas and features of concrete work from project documentation and consultation with nominated personnel. 2.2 Review variable components of, and additives to concrete mix for, different areas and features of concrete work from project documentation and consultation with nominated personnel. 2.3 Determine concrete specifications to be met at on-site delivery from project documentation and consultation with nominated personnel. 2.4 Itemise and document concrete specifications for each area and feature for the supplier, in accordance with project plans and documents and Australian Standards (AS).
3. Determine total volumes and cost of supply of different types of concrete.	3.1 Determine dimensions of each area or feature of concreting work from detailed site drawings and specifications. 3.2 Calculate and document volume of concrete required for each area or feature according to industry standards, and workplace and project requirements. 3.3 Calculate and document total volumes of concrete supply for areas and features requiring identical properties. 3.4 Estimate and document total cost of required concrete in accordance with workplace procedures.
4. Determine concrete delivery requirements and schedule.	4.1 Determine concrete delivery locations, and site access and egress details in consultation with required project personnel. 4.2 Review project timelines and sequencing of work, and calculate and document concrete delivery schedule to ensure continuous and timely supply. 4.3 Develop supplier specifications for volumes of different concrete mixes. 4.4 Confirm delivery schedule with project personnel, adjust as required, document and finalise for inclusion with concrete specifications.
5. Finalise specifications for concrete supply.	5.1 Review specifications for concrete supply and check for accuracy of concrete mix details for different areas and features. 5.2 Review individual area, feature dimensions and concrete

	supply volume calculations and check for accuracy. 5.3 Review total volumes of concrete supply for areas and features requiring identical properties and check for accuracy. 5.4 Consult team members and supervisor or manager for feedback on specifications as required and in accordance with workplace procedures. 5.5 Process supplier specifications in accordance with workplace procedures. 5.6 Place concrete order with supplier, including precise detail of delivery schedule, and confirm order acceptance.
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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.

- 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.

Unit Mapping Information

Supersedes and is equivalent to CPCCCO3035A Assess and specify concrete supply requirements.

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 CPCCCO3035 Assess and specify concrete supply requirements

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Performance Evidence

To demonstrate competency in this unit, a person must assess and specify concrete supply requirements for three different types of concreting projects, including a multi-storey building.

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 assessing and specifying concrete supply requirements
- requirements of Australian Standards (AS) and the National Construction Code (NCC) relating to assessing and specifying concrete supply requirements
- workplace requirements for all aspects of assessing and specifying concrete supply requirements including interpreting work orders and reporting problems
- relevant AS, including:
 - AS 1379 Specification and supply of concrete
 - AS 2758 Aggregates and rock for engineering purposes
 - AS 3600 Concrete structures
 - AS 3972 Portland and blended cements
- concrete material, including:
 - normal class with strength grades in the range N20 to N50
 - special class with strength grades in the range S20 to S100
- concrete composition, including types and application of:
 - cement
 - aggregate
 - additives
- concrete specifications, including:

- required temperature of concrete
- slump-test measurement, including:
 - fit for purpose:
 - ramp or slope
 - slab
- consistency with:
 - formwork
 - placement method
- processes for reviewing project plans and specifications to determine project concrete requirements
- delivery methods and their effect on the concrete material properties
- interpreting concrete specifications, including:
 - MPa
 - additives
 - material properties at time of site delivery
- takeoff and costing methods relative to project concrete materials
- methods of developing material delivery schedules, including:
 - time of delivery
 - volume
 - MPa
 - additives
 - site access point
- methods of specifying and placing orders for concrete materials.

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 for concreting tasks, including a multi-storey building
- appropriate documents, materials, tools, equipment and personal protective equipment currently used in industry
- computer, software, printer and internet connection
- requirements of appropriate sections of legislation and regulations
- relevant workplace policies and procedures.
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