

**Draft 0.1**

This is our work-in-progress update to CPCCCO3035 Assess and specify concrete supply requirements: <https://training.gov.au/Training/Details/CPCCCO3035>.

We are working with industry experts to ensure the updated unit:

- meets current and anticipated industry needs
- complies with current Standards for Training Packages
- is written in clear understandable English.

Information on our training package review and development process is available here:

<http://www.artibus.com.au/project-stage>.

**Summary of changes from current endorsed unit:**

- code changed to comply with policy for NSSC endorsement required changes to units
- title changed to better reflect work outcome and AQF alignment
- changed requirement to assess and specify for multi-storey buildings to make unit more accessible to residential concreters
- elements and PCs modified to be more appropriate to level of work being done at Certificate III
- Performance Evidence changed to be more accessible to residential concreting, ie "... determining concrete supply requirements for three different concreting projects requiring different concrete strengths"
- knowledge evidence reworked to clarify requirements and remove duplication:
  - deleted 'requirements of Commonwealth and state or territory work health and safety and environmental legislation and regulations relevant to determining concrete supply requirements' as it doesn't link with PCs or work outcome
  - deleted slump test measurements associated with "fit for purpose - ramp or slope, slab – and consistency with: formwork and placement method"
- assessment conditions: standard wording changed and modified requirement for candidates

## Unit of Competency

### CPCCON3035 Determine concrete supply requirements

#### Modification history

Release	Comments
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.
2	Supersedes and equivalent to CPCCCO3035 Assess and specify concrete supply requirements. Minor change to unit title. This version first released with CPC Construction, Plumbing and Services Training Package Version 6.0.

#### Application

This unit of competency specifies the skills and knowledge required to determine concrete supply requirements for different areas and features of planned concreting work. It includes identifying required concrete properties, volumes and costs from site and project documentation, and scheduling delivery in consultation with the supplier.

A person who has achieved this unit of competency would be expected to take responsibility for organising and completing these tasks with a high degree of self-direction.

Licensing, legislative, regulatory or certification requirements apply to this unit of competency in some states and territories. For further information, check with the relevant regulatory authority.

#### Prerequisite Unit

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

#### Unit Sector

Concreting.

#### Elements and Performance Criteria

1. Assess site to identify concrete supply requirements.	1.1 Review site information to determine general size and nature of planned concreting work. 1.2 Review project documentation and identify required concrete materials for each concreting area and feature. 1.3 Identify delivery method for concrete supply at different locations and heights and assess implications for required concrete material properties.
2. Identify required concrete properties.	2.1 Identify strength grade designation of concrete supply for different areas or features of concrete work from project documentation and consultation with relevant persons. 2.2 Identify variable components of, and additives to concrete mix for different areas or features of concrete work from project documentation and consultation with relevant persons. 2.3 Identify concrete specifications to be met at on-site delivery from project documentation and consultation with relevant personnel.

	2.4 Itemise and document concrete supply requirements for each area and feature in accordance with specifications for concreting work, relevant Australian Standards and workplace requirements.
3. Calculate and document concrete volumes and supply costs.	3.1 Identify dimensions of each area and feature of concreting work from site drawings and specifications. 3.2 Calculate and document required concrete volumes for each area and feature in accordance with specifications for concreting work and workplace 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 concrete supply in accordance with workplace requirements.
4. Schedule concrete delivery.	4.1 Identify concrete delivery locations and site access and egress details in consultation with relevant persons. 4.2 Review project timelines and sequencing of work and calculate and document concrete delivery schedule to ensure continuous and timely supply. 4.3 Prepare supplier specifications for volumes of different concrete mixes. 4.4 Confirm delivery schedule with relevant persons, document and finalise for inclusion with concrete specifications.
5. Finalise specifications for concrete supply.	5.1 Check specifications for concrete supply to confirm accuracy of concrete mix details for different areas or features. 5.2 Check individual area, feature dimensions and concrete supply volume calculations to confirm accuracy. 5.3 Check total volumes of concrete supply for areas and features requiring identical properties and confirm accuracy. 5.4 Consult with relevant persons to obtain feedback on specifications and make required adjustments in accordance with workplace requirements. 5.5 Complete supplier specifications in accordance with workplace requirements. 5.6 Place concrete order with supplier including precise detail of delivery schedule, and confirm order acceptance in accordance with workplace requirements.

#### Foundation skills

Candidates require:

- numeracy skills to calculate concrete volume ( $m^3$ ) and strength grades in megapascals (MPa).

#### Unit Mapping Information

Supersedes and is equivalent to CPCCCO3035 Assess and specify concrete supply requirements

#### Links

Companion Volume Implementation Guide:

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

## Assessment Requirements for CPCCON3035 Determine concrete supply requirements

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### Performance Evidence

To demonstrate competency, a candidate must meet the elements and performance criteria of this unit by determining concrete supply requirements for three different concreting projects requiring different concrete strengths.

### Knowledge Evidence

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

- concrete composition including types and application of cement, aggregate and additives
- concrete delivery methods and their effects on concrete material properties
- concrete delivery scheduling considerations:
  - additives
  - megapascals (MPa)
  - site access point
  - time of delivery
  - volume
- content of concrete supply specifications
- processes for ordering correct slump for application
- processes for reviewing project plans and specifications to identify concrete supply requirements
- requirements of Australian Standards and the National Construction Code related to concrete supply specifications
- types of concrete materials:
  - normal class with strength grades in the range N20 to N50
  - special class with strength grades in the range S20 to S100
- workplace requirements for determining concrete supply requirements:
  - documenting and checking supply requirements
  - placing orders
  - quality
  - reporting problems
  - scheduling deliveries.

### Assessment Conditions

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

Assessment must be conducted in the workplace or a simulated workplace using realistic conditions, materials, activities, responsibilities, procedures, safety requirements and environmental considerations.

Candidates must have access to documentation, specifications, technologies and equipment required to achieve the performance evidence.

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