Australian Government

CPCCCO3036A Plan concrete work and brief team

Release 1

INDUSTRY SKILLS COUNCILS
Creating Australia's Future

CPCCCO3036A Plan concrete work and brief team

Modification History

New unit.
This version first released with CPC08 Construction and Property Services Training Package Version 9.

Unit Descriptor

This unit of competency specifies the outcomes required to assess the size and scope of a concreting job, identify the resources required to complete the project on time and within budget, and communicate requirements to team members in preparation for concreting work to commence.

Application of the Unit

This unit of competency supports those who plan and prepare for concreting tasks. The person may be a nominated member of a team, or the team supervisor of concreters working on residential, commercial or civil construction sites.

Licensing/Regulatory Information

Licensing, legislative, regulatory or certification requirements apply to concreting work in different states and territories. Candidates are advised to consult with the relevant regulatory authorities.

Pre-Requisites

CPCCOHS2001A	Apply OHS requirements, policies and procedures in the construction industry

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the required performance needed to demonstrate achievement of the element. Where ***bold italicised*** text is used, further information is detailed in the required skills and knowledge and/or the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

1	Assess concreting site and scope of work.	1.1	Site plans are reviewed and size and complexity of concreting tasks are evaluated.
		1.2	Site access and egress information and traffic management plan are assessed and additional provisions or changes negotiated as required.
		1.3	Provisions for site storage and amenities are assessed and additional provisions or changes are negotiated as required.
		1.4	Concurrent work of other construction teams is assessed and communication channels established or confirmed.
		1.5	***Work specifications*** are assessed and ***project stages*** identified and sequenced to meet project timelines for completion.
		1.6	***Work health and safety (WHS)*** and ***environmental requirements*** are confirmed and applied to planning.
2	Determine and source team.	2.1	Dimensions of each pour are confirmed, predicted weather conditions assessed, and basic person-hour requirements for concreting work are then calculated.
		2.2	***Specialised skill requirements*** for different project stages are determined and skills of available team members assessed to identify skill shortages.
		2.3	Additional team members with required skills are recruited within required timeframe to ensure prompt start to work.

		2.4	Team members are allocated to tasks and human resource requirements for all project stages are checked and confirmed as complete.
3	Plan concrete pour.	3.1	***Material requirements*** are calculated, documented and sourced in preparation for work to commence on time and on budget.
		3.2	Type of concrete and curing time in predicted weather conditions are assessed for each pour and tasks are scheduled to meet project requirements.
		3.3	***Plant, tools and equipment*** required for each project stage are identified, documented and sourced in line with task schedule to ensure availability on site.
		3.4	Safe work method statements (SWMS) are developed or adapted for individual tasks according to workplace procedures and safety requirements.
		3.5	Potential risks, hazards and contingencies are assessed and management strategies developed.
4	Brief team members.	4.1	Site tour and induction for site safety and environmental requirements are arranged or conducted according to project and workplace requirements.
		4.2	Details of task allocations and scheduling are explained and discussed and team understanding of work requirements is confirmed.
		4.3	Concurrent work of other construction teams and communication channels are explained to team members and their understanding is confirmed.
		4.4	Provisions for dealing with risks, hazards and contingencies are explained and understanding of team members is confirmed.
		4.5	Team members are encouraged to clarify work requirements and suggest process improvements at all stages.

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills

- learning skills to develop and build understanding of:
  - types of concrete materials
  - properties and behaviour of concrete in different environmental conditions
- numeracy skills to calculate dimensions of pour and resource requirements
- oral communication skills to:
  - brief team members on work specifications and requirements
  - liaise with site personnel
- reading skills to interpret site plans and work specifications
- writing skills to develop or adapt SWMS

Required knowledge

- project management principles and strategies relevant to concrete work
- regulations and standards relevant to concrete work:
  - AS 3600 Concrete structures
  - environmental
  - WHS
- risks, hazards and contingencies relevant to concrete work and effective management strategies
- role and responsibilities of construction site personnel
- skills, plant, tools, equipment and materials required for concrete work
- terminology used on construction sites in relation to concreting and other trades

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment

This unit of competency could be assessed by performing the mandated tasks in the workplace or a close simulation of the workplace environment, provided that simulated or project-based assessment techniques fully replicate construction workplace conditions, materials, activities, responsibilities and procedures.

Critical aspects for assessment and evidence required to demonstrate competency in this unit

A person should demonstrate the ability to:

- predict the number of resources and time required to complete three separate concrete projects, each measuring a minimum of 100 square metres, and identify skill requirements for each project
- identify and source appropriately skilled workers to complete the concreting work
- brief the concreting team on the work to be completed and quality requirements of the finished work.

Context of and specific resources for assessment

Assessment of this unit:

- must be in the context of the work environment
- may be conducted in an off-site context, provided it is realistic and sufficiently rigorous to cover all aspects of workplace performance, including task skills, task management skills, contingency management skills and job role environment skills
- must meet relevant compliance requirements.

Resource implications for assessment include:

- an induction procedure
- realistic tasks or simulated tasks covering the mandatory task requirements
- relevant specifications and work instructions
- support materials appropriate to activity.

Method of assessment

Assessment for this unit must verify the practical application of the required skills and knowledge, using a combination of the following methods:

- direct observation of tasks in real or simulated work conditions
- questioning to confirm the ability to consistently identify and correctly interpret the essential underpinning knowledge required for practical application
- review of relevant authenticated documentation from third

parties, such as existing supervisors, team leaders or specialist training staff.

Guidance information for assessment

This unit could be assessed on its own or in combination with other units relevant to the job function.

Reasonable adjustments for people with disabilities must be made to assessment processes where required. This could include access to modified equipment and other physical resources, and the provision of appropriate assessment support.

Assessment processes and techniques should, as far as is practical, take into account the language, literacy and numeracy capacity of the candidate in relation to the competency being assessed.

Range Statement

The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. **Bold italicised** wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Work specifications may include:

- instructions issued by authorised organisational and external personnel
- regulatory and legislative requirements relating to concrete work, including Australian standards
- safety data sheets (SDS) for substances to be used
- verbal, written and diagrammatic instructions, including manufacturer specifications and instructions where specified
- work schedules, plans and specifications.

Project stages must include:

- work preparation:
  - fitting personal protective equipment (PPE)
  - selecting and checking tools and equipment
- site preparation:
  - excavation
  - formwork
  - subgrade
- delivery
- pouring
- compaction
- levelling
- finishing

- curing
- site clean-up.

Work health and safety requirements must include:

- assistance of others or the use of manual or mechanical lifting devices with handling activities where size, weight or other issues, such as disability, are a factor
- emergency procedures, including extinguishing fires, organisational first aid requirements, and evacuation procedures
- hazard control
- hazardous materials and substances
- PPE prescribed under legislation, regulations and workplace policies and practices relevant to concrete work
- safe operating procedures, including the conduct of operational risk assessment and treatments associated with:
  - earth leakage boxes
  - lighting
  - power cables, including overhead service trays, cables and conduits
  - signage and restricted access barriers
  - surrounding structures
  - traffic control
  - trip hazards
  - work site visitors and the public
  - working at heights
  - working in confined spaces
  - working in proximity to others
  - working outdoors in warm climates
- use of plant, tools and equipment.

Environmental requirements must include:

- clean-up management
- dust and noise control
- stormwater management
- vibration management
- waste management.

Specialised skill requirements must include:

- decorative concreting
- cutting and coring
- concrete repairs.

Material requirements must include:

- concrete additives
- reinforcements.

Plant, tools and equipment must include combinations of the

- hand tools, including:
  - bolt cutters
  - crow bars

following relevant to the tasks:

- cutting knives
- edging tools
- floats
- grinders
- hammers
- jointers
- kneel boards
- levelling equipment
- long handled shovels
- marking tools
- measuring tapes
- nail bags
- picks
- pinch bars
- pliers
- rakes
- sledge hammers
- steel fixing reels
- string lines
- wire brushes
- trowels:
  - frezno
  - magnesium trowels
  - ride-on trowelling machine with pans or blades
  - stick trowels
  - walk behind trowels
- power tools
- plant and equipment:
  - compressors
  - material shifting equipment
  - vibrators.

Unit Sector(s)

Concreting

Custom Content Section

Not applicable.