

Draft 0.1

This is our work-in-progress update to CPCCCO3051 Conduct off-form vertical concrete operations: <https://training.gov.au/Training/Details/CPCCCO3051>.

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
- application modified
- performance criteria modified to better articulate requirements
- PC 3.3 – removed option to ‘weld’ – requires skills/knowledge not covered by unit
- knowledge evidence rationalised to clarify requirements
- new knowledge points:
 - processes for placing, finishing and curing concrete
 - typical uses of slip form and jump form formwork in vertical concrete operations
 - types, purpose and application of release agents in vertical concrete operations
 - risks associated with silica exposure
- assessment conditions: standard wording changed and modified requirement for candidates

Unit of Competency

CPCCON3051 Conduct off-form vertical concrete operations

Modification history

Release	Comments
1	Supersedes and equivalent to CPCCCO3051A Conduct off form vertical concrete operations. 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 CPCCCO3051 Conduct off form vertical concrete operations. 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 prepare and apply concrete to slip form or jump form structures in the construction of multi storey buildings. It includes sequencing, placing and compacting concrete in formwork.

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. Plan and prepare to conduct off-form vertical concrete operations.	1.1 Interpret drawings and specifications for off-form vertical concrete operations and clarify requirements with relevant persons. 1.2 Plan all work to comply with relevant legislation, regulations, standards, codes, work health and safety, environmental and workplace requirements. 1.3 Select and fit personal protective equipment appropriate for work activities. 1.4 Inspect work site, assess hazards and apply risk controls, including required signage and barricades. 1.5 Select plant, tools and equipment, check for serviceability and rectify or report any faults. 1.6 Calculate material quantities to meet work specifications. 1.7 Acquire required materials and safely locate them ready for use.
2. Set out and prepare slip-form or jump-form location.	2.1 Set out location and size of pour in accordance with drawings and specifications.

	<p>2.2 Prepare equipment specifically associated with slip formwork or jump formwork installation.</p> <p>2.3 Prepare, place and fix edge formwork with plumb and align to specifications.</p> <p>2.4 Use required equipment to apply form release agent to slip formwork or jump formwork in accordance with specifications.</p>
3. Place and tie reinforcement and cast-in fittings.	<p>3.1 Check reinforcement, accessories and cast-in fittings for conformity with drawings and specifications.</p> <p>3.2 Position reinforcement and accessories in accordance with engineering drawings and specifications.</p> <p>3.3 Tie reinforcement in correct placement in accordance with engineering drawings and specifications.</p>
4. Place, finish and cure concrete.	<p>4.1 Determine sequencing of concrete from specifications.</p> <p>4.2 Place concrete evenly into formwork in layers and consolidate to specification, avoiding material segregation and using approved compaction method.</p> <p>4.3 Screed and finish concrete surface to specification ensuring cast-in fittings are clear.</p> <p>4.4 Add curing compound in accordance with specifications.</p> <p>4.5 Continue placement cycle after slip-form or jump-form formwork is progressed by riggers, avoiding cold joint.</p>
5. Clean up.	<p>5.1 Clear work area and dispose of, reuse or recycle materials in accordance with regulatory and workplace requirements.</p> <p>5.2 Clean, check, maintain and store tools and equipment in accordance with manufacturers' instructions and workplace requirements.</p>

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 CPCCCO3051 Conduct off-form vertical concrete operations

Links

Companion Volume Implementation Guide:

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

Assessment Requirements for CPCCON3051 Conduct off-form vertical concrete operations

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Performance Evidence

To demonstrate competency, a candidate must meet the elements and performance criteria of this unit by conducting two different off-form vertical concrete operations.

Knowledge Evidence

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

- processes for conducting off-form vertical concrete operations in conjunction with other personnel involved in the slip form or jump form process:
 - carpenters
 - electricians
 - other concreters
 - riggers
 - steel fixers
- processes for placing, finishing and curing concrete
- requirements of Australian Standards and the National Construction Code relating to off-form vertical concrete operations
- requirements of Commonwealth and state or territory work health and safety and environmental legislation and regulations relevant to off-form vertical concrete operations:
 - hazard identification and risk control
 - hazardous material and waste disposal
 - job safety analyses
 - personal protective equipment
 - risks associated with silica exposure
 - safe work method statements
 - safety manuals and instructions for plant, tools and equipment
 - signage and barricades
- types, characteristics, uses and limitations of tools, equipment and materials required for conducting off-form vertical concrete operations
- types, purpose and application of release agents in vertical concrete operations
- typical uses of slip form and jump form formwork in vertical concrete operations
- workplace requirements for conducting off-form vertical concrete operations:
 - cleaning up
 - maintaining and storing materials, plant, tools and equipment
 - quality

- reporting problems.

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, drawings, specifications, work sites, materials, tools and equipment required to achieve the performance evidence.

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