

Draft 0.1

This is our work-in-progress update to CPCCCO3049 Apply and finish sprayed concrete:
<https://training.gov.au/Training/Details/CPCCCO3049>.

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
- element 2 reworded to better reflect all PCs
- performance evidence reworded for clarity
- new knowledge points:
 - processes for applying and finishing sprayed concrete using wet and dry spraying methods:
 - dense flow process
 - mixing, transporting and placing sprayed concrete
 - thin flow process
 - water/cement ratios
 - typical uses and applications of sprayed concrete
- assessment conditions: standard wording changed and modified requirement for candidates

Unit of Competency

CPCCON3049 Apply and finish sprayed concrete

Modification history

Release	Comments
1	Supersedes and equivalent to CPCCCO3049A Apply and finish sprayed 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.
2	Supersedes and equivalent to CPCCCO3049 Apply and finish sprayed concrete. 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 apply and finish pre-mixed concrete using wet and dry spraying methods. Sprayed concrete has application where conventional concreting methods cannot be used such as for barrel vaulting, caissons, canal linings, diaphragm walls, drainage channels, irrigation systems, piled wall facings, reservoirs, shell roofs and domes, silo structures, swimming pools, tunnel linings, walls and water towers.

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 apply and finish sprayed concrete.	<ul style="list-style-type: none">1.1 Interpret specifications for concrete spraying 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. Carry out concrete spraying activities.	<ul style="list-style-type: none">2.1 Prepare pumping equipment for delivery of concrete mix to spray nozzle.2.2 Check reinforcement to ensure it is away from structure where concrete is to be applied.

	2.3 Apply concrete to surface using required spray method within specified tolerances. 2.4 Shape and finish sprayed concrete to required form in accordance with work specifications.
3. Clean up.	3.1 Clear work area and dispose of, reuse or recycle materials in accordance with regulatory and workplace requirements. 3.2 Clean, check, maintain and store plant, tools and equipment in accordance with manufacturers' instructions and workplace requirements.

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 CPCCCO3049 Apply and finish sprayed concrete

Links

Companion Volume Implementation Guide:

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

Assessment Requirements for CPCCON3044 Apply and finish sprayed concrete

Modification history

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Performance Evidence

To demonstrate competency, a candidate must meet the elements and performance criteria of this unit by applying and finishing sprayed concrete in two different projects:

- each project must involve a minimum of 10 square metres of concrete
- wet and dry spraying concreting methods must be used across the two projects.

Knowledge Evidence

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

- processes for applying and finishing sprayed concrete using wet and dry spraying methods:
 - dense flow process
 - mixing, transporting and placing sprayed concrete
 - thin flow process
 - water/cement ratios
- requirements of Australian Standards and the National Construction Code relating to applying and finishing sprayed concrete
- requirements of Commonwealth and state or territory work health and safety and environmental legislation and regulations relevant to applying and finishing sprayed concrete:
 - hazard identification and risk control
 - hazardous material and waste disposal
 - job safety analyses
 - personal protective equipment
 - safe work method statements
 - safety manuals and instructions for plant, tools and equipment
 - signage and barricades
- types, characteristics, uses and limitations of plant, tools, equipment and materials used to apply and finish sprayed concrete
- typical uses and applications of sprayed concrete
- workplace requirements for applying and finishing sprayed concrete:
 - 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, specifications, work sites, materials, plant, tools and equipment required to achieve the performance evidence.

Links

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