



Australian Government

CPCCCO3049 Apply and finish sprayed concrete

Release: 1

CPCCCO3049 Apply and finish sprayed concrete

Modification History

Release 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.

Application

This unit of competency specifies the skills and knowledge required to apply and finish pre-mixed spray concrete to a variety of surfaces to develop retaining structures.

It includes applying and finishing sprayed concrete to surfaces where conventional concreting methods cannot be applied, including 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.

It applies to 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. Plan and prepare to apply and finish sprayed concrete.	1.1 Review and clarify task to apply and finish sprayed concrete. 1.2 Review task specifications and check to make sure they are in accordance with legislation, regulations and codes of practice. 1.3 Review work health and safety (WHS) requirements for the

	task in accordance with safety plans and policies. 1.4 Identify safety signage and barricade requirements. 1.5 Review environmental requirements for the task in accordance with environmental plans and legislative requirements. 1.6 Select plant, tools and equipment, check for serviceability and rectify or report any faults. 1.7 Calculate material quantity requirements. 1.8 Acquire materials for the task and locate them safely ready for use.
2. Apply concrete using dry and wet spray process.	2.1 Erect identified safety signage and barricades, and fit personal protective equipment (PPE). 2.2 Prepare dry pumping or wet pumping equipment for delivery of concrete mix to spray nozzle. 2.3 Check reinforcement to ensure it is away from structure where concrete is to be applied. 2.4 Apply concrete to surface using wet spray or dry spray method within specified tolerances. 2.5 Shape and finish sprayed concrete to required form.
3. Clean up after applying and finishing sprayed concrete.	3.1 Clear work area and dispose of, re-use or recycle materials in accordance with legislation, regulations, codes of practice and task requirements. 3.2 Clean, check, maintain and store tools and equipment in accordance with manufacturers' specifications and workplace requirements.

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
 - provide feedback.

Unit Mapping Information

Supersedes and is equivalent to CPCCCO3049A Apply and finish sprayed concrete.

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 CPCCCO3049 Apply and finish sprayed concrete

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Performance Evidence

To demonstrate competency in this unit, a person must apply and finish sprayed concrete:

- using both wet and dry spraying concreting methods
- in two different projects, each project involving a minimum of 10 square metres of concrete.

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 applying and finishing sprayed concrete, including:
 - job safety analyses (JSAs)
 - safe work method statements (SWMSs)
 - safety data sheets (SDSs)
 - safety manuals and instructions for plant, tools and equipment
 - signage and barricades
 - personal protective equipment (PPE)
 - environmental and work site safety plans
- requirements of Australian Standards and the National Construction Code (NCC) relating to applying and finishing sprayed concrete
- workplace requirements for all aspects of applying and finishing sprayed concrete, including interpreting work orders and reporting problems
- types, characteristics, uses and limitations of tools, equipment and materials required for applying and finishing sprayed concrete, including:
 - safe operating procedures
 - operational, maintenance and basic diagnostic procedures
 - workplace and equipment safety requirements
- techniques for applying and finishing sprayed concrete

- quality requirements relevant to applying and finishing sprayed concrete
- processes, materials and equipment for applying and finishing sprayed concrete
- concrete surfaces where spray methods may be applied, including:
 - barrel vaulting
 - caissons
 - canal linings
 - diaphragm walls
 - drainage channels
 - irrigation
 - piled wall facings
 - reservoirs
 - shell roofs and domes
 - silo structures
 - swimming pools
 - tunnel linings
 - walls
 - water towers
- requirements for cleaning up work area and tools, materials storage and environmentally friendly waste management.

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 applying and finishing sprayed concrete
- appropriate documents, materials, tools, equipment and PPE currently used in industry
- requirements of appropriate sections of legislation and regulations
- relevant workplace policies and procedures.

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