



Australian Government

CPCCCO3046 Repair and rectify concrete

Release: 1

CPCCCO3046 Repair and rectify concrete

Modification History

Release 1.

Supersedes and equivalent to CPCCCO3046A Repair and rectify 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 repair and rectify minor and major defects in concrete work.

It includes patching, refinishing, sealing and colouring concrete on residential, commercial or civil construction sites to repair damaged concrete on surfaces that could include driveways, foundations and footpaths.

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 repair and rectify concrete.	1.1 Review and clarify task to repair and rectify 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. Carry out minor repairs to concrete.	2.1 Erect identified safety signage and barricades, and fit personal protective equipment (PPE). 2.2 Repair colour variations by applying a concrete staining agent. 2.3 Repair effects of dusting by applying suitable surface hardener/dust inhibiting agent or removing the weak top layer. 2.4 Repair damaged or blistered concrete either by grinding or topping. 2.5 Apply repair mortars and self-levelling floor compounds in accordance with manufacturers' specifications.
3. Repair cracks and other major defects.	3.1 Erect identified safety signage and barrier requirements, and fit personal protective equipment (PPE). 3.2 Determine and rectify root cause of defect. 3.3 Prepare concrete and apply flexible epoxy resins in accordance with manufacturers' specification. 3.4 Apply toppings to concrete using correct materials and techniques. 3.5 Apply acid etching and clean safely according to manufacturers' requirements.
4. Clean up after repairing and rectifying concrete.	4.1 Clear work area and dispose of, re-use or recycle materials in accordance with legislation, regulations, codes of practice and task requirements. 4.2 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 CPCCCO3046A Repair and rectify 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 CPCCCO3046 Repair and rectify concrete

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Performance Evidence

To demonstrate competency in this unit, a person must repair and rectify a minimum of one square metre of affected area for each of three minor repairs and one major repair to 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 repairing and rectifying concrete, including:
 - job safety analyses (JSAs)
 - safe work method statements (SWMSs)
 - safety data sheets (SDSs)
 - signage and barricades
 - personal protective equipment (PPE)
- workplace requirements for all aspects of repairing and rectifying concrete, including interpreting work orders and reporting problems
- types, characteristics, uses and limitations of tools, equipment and materials required for repairing and rectifying concrete, including:
 - safe operating procedures
 - operational, maintenance and basic diagnostic procedures
 - workplace and equipment safety requirements
- techniques for repairing and rectifying concrete
- quality requirements relevant to repairing and rectifying concrete
- processes, materials and equipment for major repairs to concrete, including:
 - cracks: wet, live and dormant
 - non-bonding of new to old interfaces
 - non-compliant surfaces
 - subsidence

- processes, materials and equipment for minor repairs to concrete, including:
 - acid etching and cleaning
 - bonded toppings failure
 - existing concrete toppings failure
 - levelling failure
 - mortar failure
- 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 repairing and rectifying 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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