



**Australian Government**

**Department of Education, Employment and Workplace Relations**

# **CPCCCO3024A Carry out decorative finishes to concrete**

**Release: 1**

## CPCCCO3024A Carry out decorative finishes to concrete

### Modification History

Not Applicable

### Unit Descriptor

#### Unit descriptor

This unit of competency specifies the outcomes required to apply decorative finishes to concrete surfaces, providing a distinct featured face finish for driveways, patios, paths or other areas requiring a decorative finish.

The finish includes the use of stamps, stencils, colours, exposed aggregate and textured finishes.

### Application of the Unit

#### Application of the unit

This unit of competency supports the attainment of the understanding and skills to apply decorative finishes to concrete, which may include working with others and as a member of a team.

### Licensing/Regulatory Information

Not Applicable

### Pre-Requisites

#### Prerequisite units

CPCCOHS2001A

Apply OHS requirements, policies and procedures in the construction industry

## Employability Skills Information

**Employability skills**      This unit contains employability skills.

## Elements and Performance Criteria Pre-Content

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Elements describe the essential outcomes of a unit of competency.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

## Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Plan and prepare.	<p>1.1. Work instructions and operational details are obtained using relevant <b>information</b>, confirmed and applied for <b>planning and preparation</b> purposes.</p> <p>1.2. <b>Safety (OHS)</b> requirements are followed in accordance with safety plans and policies.</p> <p>1.3. Signage and barricade requirements are identified and implemented.</p> <p>1.4. Plant, <b>tools and equipment</b> selected to carry out tasks are consistent with the requirements of the job, checked for serviceability and any faults are rectified or reported prior to commencement.</p> <p>1.5. Materials quantity requirements are calculated in accordance with plans, specifications and <b>quality requirements</b>.</p> <p>1.6. <b>Materials</b> appropriate to the work application are identified, obtained, prepared, safely handled and located ready for use.</p> <p>1.7. <b>Environmental requirements</b> are identified for the project in accordance with environmental plans and regulatory obligations and applied.</p>
2. Carry out stencil finishes.	<p>2.1. <b>Stencil finish</b> is prepared so that any lapping will maintain alignment and bond.</p> <p>2.2. Stencil is laid carefully onto screeded surface to specifications ensuring alignment, bond and flat.</p> <p>2.3. Dry topping mix of colour, stone dust and cement is prepared and applied to specifications.</p> <p>2.4. Surface is finished with wood or steel float to a consistent texture in accordance with specifications.</p> <p>2.5. Stencil is lifted in accordance with setting time to manufacturer recommendations.</p> <p>2.6. <b>Control joints</b> are inserted during placement and/or cut into applied finish after setting, to specifications.</p>
3. Carry out stamp finishes.	<p>3.1. Method of applying pattern is determined in accordance with designed finish and specifications.</p> <p>3.2. <b>Stamped finish</b> pattern equipment is checked for cleanliness and serviceability.</p> <p>3.3. Design layout is planned and initial starting point determined to specifications and design.</p> <p>3.4. Base colour and topping dust are prepared and applied to specifications.</p>

ELEMENT	PERFORMANCE CRITERIA
	<p>3.5. Base colour is floated into surface to specifications.</p> <p>3.6. Colours are randomly applied, where specified, on to surface at random locations to create decorative type colourings.</p> <p>3.7. <b>Release agent</b> is prepared and applied to specifications.</p> <p>3.8. Stamp is used to create designed pattern and surface effect to specifications.</p> <p>3.9. Control joints are inserted during placement and/or cut into applied finish after setting, to specifications.</p>
4. Carry out exposed aggregate finishes.	<p>4.1. Selected aggregates are incorporated in concrete mix to specifications.</p> <p>4.2. Surface matrix is removed to exposed aggregate.</p> <p>4.3. <b>Exposed aggregate</b> is left clean and free to designed effect and specifications.</p> <p>4.4. Control joints are inserted during placement and/or cut into applied finish after setting, to specifications.</p>
5. Carry out textured finishes.	<p>5.1. Method of applying <b>texture</b> is determined in accordance with designed finish and specifications.</p> <p>5.2. Base colour and topping dust are prepared and applied to specifications.</p> <p>5.3. Base colour is floated into surface to specifications.</p> <p>5.4. Colours are randomly applied, where specified, on to surface at random locations to create decorative type colourings.</p> <p>5.5. Finish is applied with trowel to create designed pattern and surface effect to specifications.</p> <p>5.6. Control joints are inserted during placement and/or cut into applied finish after setting, to specifications.</p>
6. Clean up.	<p>6.1. Work area is cleared and materials disposed of, reused or recycled in accordance with legislation, regulations, codes of practice and job specification.</p> <p>6.2. Plant, tools and equipment are cleaned, checked, maintained and stored in accordance with manufacturer recommendations and standard work practices.</p>

## Required Skills and Knowledge

## REQUIRED SKILLS AND KNOWLEDGE

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

### Required skills

Required skills for this unit are:

- communication skills to:
  - determine requirements
  - enable clear and direct communication, using questioning to identify and confirm requirements, share information, listen and understand
  - follow instructions
  - read and interpret:
    - documentation from a variety of sources
    - drawings and specifications
  - report faults
  - use language and concepts appropriate to cultural differences
  - use and interpret non-verbal communication, such as hand signals
- evaluating own actions and making judgments about performance and necessary improvements
- identifying and accurately reporting to appropriate personnel any faults in tools, equipment or materials
- organisational skills, including the ability to plan and set out work
- recognising procedures, following instructions, responding to change and contributing to workplace responsibilities, such as current work site environmental and sustainability frameworks or management systems
- teamwork skills to coordinate own work with others to action tasks and relate to people from a range of cultural and ethnic backgrounds and with varying physical and mental abilities
- technological skills to:
  - use a range of mobile technology, such as two-way radio and mobile phones
  - voice and hand signals to access and understand site-specific instructions.

### Required knowledge

Required knowledge for this unit is:

- concrete decorative finishing techniques
- concrete placement, finishing and curing
- control joints
- decorative concrete finishing materials
- general construction terminology
- job safety analysis (JSA) and safe work method statements
- material safety data sheets (MSDS)

**REQUIRED SKILLS AND KNOWLEDGE**

- materials storage and environmentally friendly waste management
- plans, drawings and specifications
- processes for the calculation of material requirements
- quality requirements
- types, characteristics, uses and limitations of plant, tools and equipment
- workplace and equipment safety requirements.

# Evidence Guide

## EVIDENCE GUIDE

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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 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 who demonstrates competency in this unit must be able to provide evidence of the ability to:

- locate, interpret and apply relevant information, standards and specifications
- comply with site safety plan and OHS legislation, regulations and codes of practice applicable to workplace operations
- comply with organisational policies and procedures including quality requirements
- safely and effectively operate and use tools, plant and equipment
- communicate and work effectively and safely with others
- complete decorative finish projects to a minimum of 20 square metres each of concrete, using two out of four of the decorative techniques specified in the range statement to job specification.

### Context of and specific resources for assessment

This competency is to be assessed using standard and authorised work practices, safety requirements and environmental constraints.

Assessment of essential underpinning knowledge will usually be conducted in an off-site context.

Assessment is to comply with relevant regulatory or Australian standards' requirements.

Resource implications for assessment include:

- an induction procedure and requirement
- realistic tasks or simulated tasks covering the



## EVIDENCE GUIDE

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mandatory task requirements

- relevant specifications and work instructions
- tools and equipment appropriate to applying safe work practices
- support materials appropriate to activity
- workplace instructions relating to safe work practices and addressing hazards and emergencies
- material safety data sheets
- research resources, including industry related systems information.

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.

### Method of assessment

Assessment methods must:

- satisfy the endorsed Assessment Guidelines of the Construction, Plumbing and Services Training Package
- include direct observation of tasks in real or simulated work conditions, with questioning to confirm the ability to consistently identify and correctly interpret the essential underpinning knowledge required for practical application
- reinforce the integration of employability skills with workplace tasks and job roles
- confirm that competency is verified and able to be transferred to other circumstances and environments.

Validity and sufficiency of evidence requires that:

- competency will need to be demonstrated over a period of time reflecting the scope of the role and the practical requirements of the workplace
- where the assessment is part of a structured learning experience the evidence collected must relate to a number of performances assessed at different points in time and separated by further learning and practice, with a decision on competency only taken at

## EVIDENCE GUIDE

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the point when the assessor has complete confidence in the person's demonstrated ability and applied knowledge

- all assessment that is part of a structured learning experience must include a combination of direct, indirect and supplementary evidence.

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.

Supplementary evidence of competency may be obtained from relevant authenticated documentation from third parties, such as existing supervisors, team leaders or specialist training staff.

## Range Statement

### RANGE STATEMENT

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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.

***Information*** includes:

- diagrams or sketches
- instructions issued by authorised organisational or external personnel
- manufacturer specifications and instructions, where specified
- MSDS
- memos
- regulatory and legislative requirements pertaining to decorative concreting
- relevant Australian standards
- safe work procedures relating to decorative concreting
- signage

## RANGE STATEMENT

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***Planning and preparation***  
include:

- verbal, written and graphical instructions
- work bulletins
- work schedules, plans and specifications.
- assessment of conditions and hazards
- determination of work requirements and safety plans and policies
- equipment defect identification
- work site inspection.

***Safety (OHS)*** is to be in accordance with state and territory legislation and regulations and project safety plan and may include:

- emergency procedures, including extinguishing fires, organisational first aid requirements and evacuation
- handling activities that may require the assistance of others or the use of manual or mechanical lifting devices where size, weight or other issues, such as a disability are a factor
- hazard control
- hazardous materials and substances
- organisational first aid
- PPE prescribed under legislation, regulations and workplace policies and practices
- 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
  - 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
- use of firefighting equipment
- use of tools and equipment
- workplace environmental requirements and safety.
- include:

***Tools and equipment:***

## RANGE STATEMENT

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- floats
- hand tools
- hoses
- shovels
- trowels
- may include:
  - brooms
  - concrete mixers
  - power trowels
  - rollers
  - spray attachments
  - spray bottles
  - stamps
  - stipple devices
  - wheelbarrows.

***Quality requirements*** include:

- internal company quality policy and standards
- manufacturer specifications where specified
- relevant regulations, including Australian standards
- workplace operations and procedures.

***Materials*** include:

- colourants
- mortar additives
- release agents
- river gravel aggregates
- stencils.

***Environmental requirements*** include:

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

***Stencil finishes:***

- can be applied with a decorative designed pre-prepared cut roll of material specified to customer's requirements
- can be floated into the surface of the concrete
- involve the application of colour.

***Control joints:***

- are cut using:
  - hand held power saw
  - walk behind power saw
- are included in the concrete surface to control cracking according to engineer's drawings and

## RANGE STATEMENT

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- Stamped finishes:*
- specifications.
  - are applied with individual, specially designed rubber mats providing a slate look impression which are pressed into the concrete surface by even distribution of weight
  - includes the application of colour.
- Form *release agents* include:
- release agent powder.
- Exposed aggregate* finishes:
- are achieved by hosing off the top layer of cement slurry from the concrete which exposes the added naturally coloured stone finish determined by the customer.
- Textured* finishes include:
- application of colour
  - polished finish
  - rough textured finish (non-slip) applied with a trowel
  - stipple device.

## Unit Sector(s)

Unit sector                      Construction

## Co-requisite units

Co-requisite units              Nil

## Functional area

Functional area