

Title	Apply and repair specialist finishes to concrete surfaces		
Level	3	Credits	14

Purpose	People credited with this unit standard are able to: finish formed concrete; finish unformed concrete surfaces; finish concrete with exposed aggregate; diagnose and repair faults to specialist finishes; and complete work operations.
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Classification	Construction Trades > Concrete Construction
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Available grade	Achieved
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Guidance Information

- 1 Legislation relevant to this unit standard includes: Health and Safety in Employment Act, 1992.
- 2 Reference material relevant to this unit standard includes: New Zealand Standards (NZS), NZS 3109:1997 *Concrete construction*; NZS 3114:1987 *Specification for concrete surface finishes* available from Standards New Zealand (<http://www.standards.co.nz>).
- 3 Assessment against this unit standard must be undertaken on site. *On site* refers to a wide range of building and construction environments within which trade skills are required, and includes concrete production and concrete construction sites.

Outcomes and performance criteria

Outcome 1

Finish formed concrete.

Range concrete – wet and dry.

Performance criteria

- 1.1 Wet concrete surfaces are finished in accordance with NZS 3109 and job specifications.

Range concrete finishes – fair face, form liners, textured forms.

1.2 Dry concrete surfaces are finished in accordance with NZS 3109 and job specifications.

Range concrete finishes, three of – bag rubbing, fractured rib ground-honed, polished, bush hammered, acid etched, light-blasted, painted, sealed.

1.3 Acceptable finish tolerances are identified in accordance with NZS 3114.

Range tolerances – colour variation, physical irregularities, surface plane variations, surface dressing.

1.4 All operations are carried out with hazard control procedures in place for identified hazards in accordance with manufacturer's recommendations, site safety plan, and Health and Safety in Employment Act, 1992.

Outcome 2

Finish unformed concrete surfaces.

Range concrete – wet and dry.

Performance criteria

2.1 Equipment selected for finishing is that most suitable for the job and finish required.

2.2 Wet concrete surfaces are finished in accordance with NZS 3109 and job specifications.

Range unformed concrete finishes – surface retardant, colour, imprinting, specialist finishes.

2.3 Dry concrete surfaces are finished in accordance with NZS 3109 and job specifications.

Range unformed concrete finishes, three of – acid etched, lightblasted, sealing, painted, ground honed, polished, bush-hammered, scabbled.

2.4 Defects are identified in accordance with NZS 3114.

Range defects – colour variation, physical irregularities, surface plane variations, surface dressing.

Outcome 3

Finish concrete with exposed aggregate.

Range concrete – wet and dry.

Performance criteria

- 3.1 Equipment selected for finishing is suitable for the job and finish required.
- 3.2 Finish is carried out in accordance with approved sample, NZS 3109, NZS 3114, and job specifications.
- Range finish of concrete with exposed aggregate – face mix and two of, etching, bush hammer, polish, hone, grit blasting, retarding, sand beds.

Outcome 4

Diagnose and repair faults to specialist finishes.

Performance criteria

- 4.1 The causes of architectural faults are identified in accordance with job specifications and NZS 3114, or approved sample.
- Range causes of architectural faults – detailing, materials, workmanship, chipping, spalling, fins, ledges, cracking, honeycombing, irregularities.
- 4.2 Specialist repair techniques are identified relevant to the fault.
- Range specialist repair techniques – chemical injection, dry pack, concrete placement, plaster, gunite, chemically based mortars, exposed aggregate patching.
- 4.3 Equipment selected for specialist repairs is that most suitable for the job and finish required.
- 4.4 Patching and/or finishing repairs are completed to comply with job specifications, NZS 3114, or approved sample.

Outcome 5

Complete work operations.

Performance criteria

- 5.1 All operations are carried out with hazard control procedures in place for identified hazards in accordance with manufacturer's recommendations, site safety plan and Health and Safety in Employment Act, 1992.
- 5.2 Documentation is completed and processed in accordance with workplace practice.

This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	21 May 1999	31 December 2023
Revision	2	12 February 2003	31 December 2023
Review	3	26 July 2004	31 December 2023
Review	4	28 October 2021	31 December 2023

Consent and Moderation Requirements (CMR) reference

0048

This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.