

Title	Complete post-pour processes for precast concrete manufacture		
Level	3	Credits	5

Purpose	<p>This unit standard is intended for those working in precast concrete manufacture.</p> <p>People credited with this standard are able to complete post-pour processes for precast concrete manufacture to commercial standards.</p>
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Classification	Concrete > Precast Concrete
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Available grade	Achieved
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Guidance Information

1 Assessment

This unit standard is intended to align with the *New Zealand Certificate in Concrete Construction Skills Specifications* and the *New Zealand Certificate in Concrete Construction Skills (Level 3)* [Ref: 4189].

Evidence for this standard must reflect commercial standards.

Commercial standards refer to verbal and written information covering company policy, standard operating procedures and processes, and job-specific instructions.

Working to commercial standards refers to the ability to consistently:

- perform standard processes to current industry standards, on demand and within a commercially acceptable timeframe;
- perform non-standard processes to current industry standards, on demand and within a commercially acceptable timeframe, under the supervision of a commercially competent practitioner.

Working to commercial standards must be confirmed by a person with current expertise in precast concrete manufacture.

A crane operator supervising the movement of concrete products will hold unit standard 3789, *Sling varied regular loads and safely direct a crane during crane operations* and unit standard 3800, *Use a radio remote or pendant controlled gantry crane to lift and place regular loads*.

2 Definitions

Design specifications refer to information supplied by the designer or design engineer that describes in detail the layout, materials, dimensions, quality and safety requirements of a construction.

Precast concrete manufacture refers to the production of a range of structural reinforced concrete elements using reusable and adjustable moulds.

Workplace procedures refers to the documented procedures specific to a workplace that set out the standards and required practices of that workplace.

- 3 Legislation, standards and guidance information relevant to this standard includes the following; and any subsequent amendments and replacements.

New Zealand Certificate in Concrete Construction Skills – Specifications, BCITO, May 2021, accessed at www.bcito.org.nz.

Legislation accessed at www.legislation.govt.nz

- Health and Safety at Work Act 2015
- Resource Management Act 1991
- Health and Safety at Work (General Risk and Workplace Management) Regulations 2016
- The New Zealand Building Code.

Standards accessed at www.standards.govt.nz

- NZS 3101:1&2:2006 *Concrete structures*
- NZS 3114:1987 *Specification for concrete surface finishes*
- NZS 3112.1&2:1986 *Methods of test for concrete*.

Guidelines and Approved Codes of Practice accessed at www.worksafe.govt.nz for the following topics:

- *Load-lifting rigging*
- *Manual handling*
- *Management of substances hazardous to health*
- *Safe use of machinery*
- *Management of noise in manufacturing*
- *Absolutely essential health and safety toolkit*
- *Safe work with precast concrete*.

Skill specification and performance level guidance

Skill specification

Complete post-pour processes for precast concrete manufacture.

Knowledge

The methods used to demould precast concrete elements.

The types of defects encountered in the finished surfaces of precast concrete elements.

Remediation methods used to address defects in the finished surface of precast concrete elements.

The procedures and systems used to move and store precast concrete elements.

Methods used to prevent loading stress and physical damage to precast concrete elements during lifting, movement and storage.

Skills

Demould precast concrete elements.

Assess the quality of the finished surface of precast concrete elements.

Repair and remediate defects in the finished surface of precast concrete elements.

Assist with moving, handling and storing precast concrete elements, using approved practices to prevent damage to concrete structure and surfaces.

Range includes – the use of cranes and associated lifting equipment inside the confines of the manufacturing site under the supervision of a qualified crane operator.

Clean and service moulds and casting beds used to manufacture precast concrete elements.

Performance level guidance

Performance must reflect according to current regulatory, industry and commercial standards relevant to precast concrete manufacture.

Post-pour processes must reflect workplace procedures and meet design specifications.

Planned review date	31 December 2026
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	28 October 2021	N/A

Consent and Moderation Requirements (CMR) reference	0048
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact the Building and Construction Industry Training Organisation national.office@bcito.org.nz if you wish to suggest changes to the content of this unit standard.