Title	Place and finish concrete for precast concrete manufacture		
Level	3	Credits	7

Purpose	This unit standard is intended for those working in precast concrete manufacturing.
	People credited with this standard are able to place and finish concrete for precast concrete manufacture to commercial standards.

Classification	Concrete > Precast Concrete
Available grade	Achieved

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.

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 <u>www.bcito.org.nz</u>.

Legislation accessed at <u>www.legislation.govt.nz</u>

- 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 <u>www.worksafe.govt.nz</u> 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

Place and finish concrete for precast concrete manufacture.

Knowledge

The procedures for reviewing concrete supplied against job specifications.

Methods used to transport fresh concrete on-site.

Procedures for placing and compacting fresh concrete for precast concrete elements.

The concrete finish classifications systems and how they are used in precast concrete manufacture.

Range must include – NZS 3114:1987.

Methods used to achieve specified surface finishes on precast concrete elements.

Methods used to form concrete joints in fresh precast concrete elements.

The curing methods applied to precast concrete elements.

Skills

Review supplied concrete against job specification for precast concrete manufacture.

Transport, place and compact fresh concrete for precast concrete elements.

Apply surface finishes to manufactured precast concrete elements.

Complete concrete curing processes for precast concrete elements.

Performance level guidance

Performance must reflect current regulatory, industry and commercial standards relevant to a specific concrete construction process in a concrete construction workplace.

Transporting fresh concrete is within the confines of the manufacturing site only and does not include transport from the concrete supplier.

Placing and finishing must reflect workplace procedures and meet design specifications.

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 <u>http://www.nzqa.govt.nz/framework/search/index.do</u>.

Comments on this unit standard

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