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| Title | Complete pre-pour processes for precast concrete manufacture | | |
| Level | 3 | Credits | 8 |

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| Purpose | <p>This unit standard is intended for those working in the precast concrete manufacturing industry.</p> <p>People credited with this standard are able to complete pre-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.

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 4230:2004 *Design of reinforced concrete masonry structures*.

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*.

Outcomes and performance criteria

Outcome 1

Complete pre-pour processes for precast concrete manufacture.

Knowledge

Methods used to prepare casting beds for precast concrete manufacture.

Methods used to assemble, modify and prepare moulds for precast concrete manufacture.

The purpose of reinforcing and cast-in elements used for precast concrete manufacture.

Methods used to position and secure reinforcing, and cast-in elements for precast concrete manufacture.

Skills

Prepare, set and check the casting surface for precast concrete manufacture.

Range may include – the use and alteration of pre-made moulds, forming rebates, joints and block outs;
check includes review against working drawings, and design specifications.

Assemble, modify and prepare moulds, and formwork for precast concrete manufacture.

Position and secure reinforcing, and cast-in elements for precast concrete manufacture.

Range may include – integrating or modifying prefabricated cages, and some cutting, bending and tying individual reinforcing elements to form the overall reinforcing requirements but does not include running stressing strands.

Performance criteria

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

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

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| Replacement information | This unit standard was replaced by skill standard 41151. |
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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 | 28 October 2021 | 31 December 2027 |
| Review | 2 | 26 February 2026 | 31 December 2027 |

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| 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>.