

<b>Title</b>	<b>Operate and maintain machinery, plant and equipment used to manufacture precast concrete elements</b>		
<b>Level</b>	<b>3</b>	<b>Credits</b>	<b>5</b>

<b>Purpose</b>	<p>This unit standard is intended for those working in precast concrete manufacture.</p> <p>People credited with this standard are able to operate and maintain machinery, plant, and equipment used to manufacture precast concrete elements to commercial standards.</p>
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<b>Classification</b>	Concrete > Precast Concrete
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<b>Available grade</b>	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

*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](http://www.bcito.org.nz).

Legislation accessed at [www.legislation.govt.nz](http://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](http://www.standards.govt.nz)

- NZS 3101:1&2:2006 *Concrete structures*
- NZS 3114:1987 *Specification for concrete surface finishes*.

Guidelines and Approved Codes of Practice accessed at [www.worksafe.govt.nz](http://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*.

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## Outcomes and performance criteria

### Outcome 1

Operate and maintain machinery, plant and equipment used to manufacture precast concrete elements.

#### Knowledge

The pre-production checks and inspection requirements for machinery, plant and equipment used to manufacture precast concrete elements.

The purpose and operating procedures of a range of machinery, plant and equipment used to manufacture precast concrete elements.

The maintenance procedures for a range of machinery, plant and equipment used to manufacture precast concrete elements.

#### Skills

Complete pre-production checks and inspections on machinery, plant and equipment used to manufacture precast concrete elements.

Operate a range of machinery, plant and equipment to manufacture precast concrete elements.

Range includes – carrying out safety checks, following safe use practices.

Maintain machinery, plant and equipment used to manufacture precast concrete elements.

Range includes – routine checks, inspections, cleaning, and basic servicing and repair.

### Performance criteria

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

Operation and maintenance of machinery, plant, and equipment is according to manufacturer's instructions and workplace procedures.

<b>Replacement information</b>	This unit standard was replaced by skill standard 41152.
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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

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