

Title	Maintain equipment and machinery used in concrete prestressing operations		
Level	4	Credits	7

Purpose	<p>This unit standard is intended for people working in the construction industry.</p> <p>People credited with this standard can maintain equipment and machinery used in concrete prestressing operations to the level of performance required of a commercially competent tradesperson.</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 (Specialist) – Specifications* and the *New Zealand Certificate in Concrete (Specialist) (Level 4)* [Ref: 4186].

Evidence for this unit standard must reflect commercial competence.

Commercial competence refers to the ability to demonstrate knowledge and skills in the context of the currently accepted requirements of a business operating in a commercial environment.

Commercial competence must be confirmed by a person with current expertise in concrete prestressing operations.

Prestressing operations occur in a precast concrete manufacturing environment.

2 Definitions

Concrete prestressing operations refer to the processes for bonding pre-tensioned high tensile steel bars or wires into a concrete structure resulting in the transfer of strength of the steel into the concrete once hardened.

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:

Specifications available from qualifications@waihanga.nz

- *New Zealand Certificate in Concrete (Specialist) – Specifications*, BCITO, October 2020.

Legislation accessed at www.legislation.govt.nz

- Health and Safety at Work (General Risk and Workplace Management) Regulations 2016.

Guidelines and Approved Codes of Practice accessed at www.worksafe.govt.nz

- *The Absolutely Essential Health and Safety Toolkit*.

New Zealand Guide to Concrete Construction 2011 (Revised Edition) accessed at www.concretenz.org.nz.

Skill specification and performance level guidance

Skill specification

Maintain equipment and machinery used in concrete prestressing operations.

Knowledge

The types and purpose of equipment and machinery used in prestressing operations.

Range includes – permanent and mobile prestressing rigs.

The procedures for the care and maintenance of equipment and machinery used in prestressing operations.

Skills

Maintain equipment and machinery used for concrete prestressing operations.

Range includes – routine checks, inspections, cleaning and servicing and repair according to manufacturer's specifications.

Performance level guidance

Performance must reflect workplace procedures, current regulatory, industry and commercial standards relevant to concrete prestressing operations.

Prestressing systems and associated equipment and machinery are patented; requiring operators to follow manufacturer's instructions and 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	27 January 2022	N/A

Consent and Moderation Requirements (CMR) reference

0048

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

Comments on this unit standard

Please contact Waihangā Ara Rau Construction and Infrastructure Workforce Development Council at qualifications@waihanga.nz if you wish to suggest changes to the content of this unit standard.