

Title	Post-tension concrete in-situ		
Level	4	Credits	10

Purpose	<p>This unit standard is intended for people working in the concrete construction industry.</p> <p>People credited with this standard can post-tension concrete in-situ to the level of performance required of a commercially competent tradesperson.</p>
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Classification	Concrete > Concrete Construction
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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 (Commercial and Civil Infrastructure) – Specifications* and the *New Zealand Certificate in Concrete Construction (Commercial and Civil Infrastructure) (Level 4)* [Ref: 4188].

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 post-tensioning concrete.

2 Definitions

Design specifications refers to the detailed description, characteristics, quantity, and quality, ratio and formation method of the material used in construction work.

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 Construction (Commercial and Civil Infrastructure) – Specifications*, BCITO, October 2020.

Legislation accessed at www.legislation.govt.nz

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

Standards accessed at www.standards.govt.nz

- NZS 3109:1997 *Concrete construction*.

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

Post-tension concrete in-situ.

Knowledge

The purpose of post-tensioning concrete in-situ.

The function and operation of items of equipment used to post-tension concrete in-situ.

Range operation includes – safety checks, equipment set-up, and start up and shut down, according to manufacturer’s instructions and workplace procedures.

The purpose of materials used for post-tensioning concrete in-situ.

Range materials include – tendons, strands, bar, ducting, blocks, anchorages, grout, couplers, wedges.

The safety procedures applied during an in-situ post-tensioning operation.

Skills

Post-tension concrete in-situ.

Range includes – setting-up, applying designed forces and verifying that specified concrete strength has been achieved;
evidence is required for a minimum of two post-tensioning operations.

Apply safety procedures when carrying out an in-situ post-tensioning operation.

Range evidence is required for a minimum of two post-tensioning operations.

Complete records for an in-situ post-tensioning operation according to workplace procedures and design specifications.

Performance level guidance

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

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
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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 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.