

Title	Describe applications and production of structural precast concrete units and supervise their installation		
Level	5	Credits	8

Purpose	People credited with this unit standard are able to: describe the applications of structural precast concrete units; describe methods of production and installation of structural precast concrete units; and supervise the installation of structural precast concrete units on site.
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Classification	Construction Trades > Carpentry
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Available grade	Achieved
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Guidance Information

1 Definitions

Contract documentation refers to plans and drawings, working drawings, work or product specifications relating to the specified construction site operation.

On site refers to a wide range of building and construction environments within which trade skills are applied.

Specifications refer to documented instructions (oral, written, graphic) and may include any of the following: manufacturer's specifications, recommendations or technical data sheets; material specifications; specifications from a specialist source such as an architect, designer, engineer or a supervisor; site or work-specific requirements.

Work site practice refers to the documented procedures specific to a work site which set out the standard and required practices of that work site.

2 Practical elements of this unit standard may be assessed on the basis of evidence of demonstrated performance in the workplace or in simulated work situations designed to draw upon similar performance to that required in a workplace.

3 Legislation and publications relevant to this unit standard include: Health and Safety at Work Act 2015 and Health and Safety in Employment Regulations 1995;

Building Act 2004, Building (Forms) Regulations 2004;

Resource Management Act 1991;

New Zealand Building Code;

available from <https://www.legislation.govt.nz/>

Safe work with precast concrete; available from <https://www.worksafe.govt.nz/>

NZS 3109:1997 *Concrete construction*;

NZS 3114:1987 *Specification for concrete surface finishes*.

New Zealand Standards are available from Standards New Zealand

<http://www.standards.co.nz>.

WorkSafe New Zealand *Safe work with precast concrete*, available from www.worksafe.gov.nz; and all subsequent amendments and replacements.

Outcomes and performance criteria

Outcome 1

Describe the applications of structural precast concrete units.

Performance criteria

1.1 Types of precast concrete units are described in terms of their applications.

Range structural units (panels, beams, columns, floor components), structural or visual units.

Outcome 2

Describe methods of production and installation of structural precast concrete units.

Range tilt-up, precast, prestressed.

Performance criteria

2.1 Production methods for structural precast concrete units are described in terms of process.

2.2 Permanent fixing and fastening of structural precast concrete units in position are described.

Range materials, components, locating techniques.

Outcome 3

Supervise the installation of structural precast concrete units on site.

Performance criteria

3.1 Work activities are planned for the installation of structural precast concrete units.

3.2 Structural precast concrete units are checked on delivery to confirm compliance with contract documentation.

3.3 Procedures for lifting, stacking and erecting structural precast concrete units are identified and communicated to site personnel in accordance with contract documentation, Code of Practice and work site practice.

Range inserts, bolt holes, lifting clutches, braces, lifting eyes, lifting beams, chain angles, hooks, strops, crane, use of dunnage points.

3.4 Monitoring of installation procedures confirms that the completed installation of structural precast concrete units complies with contract documentation.

Planned review date	31 December 2027
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	22 September 2004	31 December 2025
Rollover and Revision	2	12 December 2008	31 December 2025
Review	3	15 April 2011	31 December 2025
Review	4	30 March 2023	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 Waihanga Ara Rau Construction and Infrastructure Workforce Development Council qualifications@waihangaararau.nz if you wish to suggest changes to the content of this unit standard.