

41143 Position and secure precast concrete elements in concrete construction

Kaupae Level	4
Whiwhinga Credit	10
Whāinga Purpose	<p>This skill standard is for people working in or intending to work in the construction trade.</p> <p>People with this skill standard have the skills to position and secure precast concrete elements in concrete construction.</p> <p>This skill standard aligns with the New Zealand Certificate in Concrete Construction (Building and Infrastructure) (Level 4) [Ref: 4188] and may also contribute to other construction and infrastructure qualifications.</p>

Hua o te ako me Paearu aromatawai | Learning outcomes and assessment criteria

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria
1. Position precast concrete elements for concrete construction.	a. Placement of precast elements is confirmed to meet plans and specifications and industry standards.
	b. Precast concrete elements are positioned to meet plans and specifications.
	c. Alignment and tolerances of precast concrete elements are confirmed to meet plans and specifications.
	d. Temporary supports such as bracing or propping are installed and adjusted as required for stability on site.
2. Secure precast concrete elements for concrete construction.	a. Any connections, joints, and interfaces are completed to meet plans and specifications.
	b. Fastenings, anchors or reinforcing are installed to meet plans and specifications.
	c. Requirements for subsequent works are identified and prepared to meet plans and specifications.
	d. Installed elements are confirmed for alignment, stability and compliance with industry standards.

Pārongo aromatawai me te taumata paearu | Assessment information and grade criteria*Assessment specifications:*

To achieve this standard, the candidate must be able to position and secure precast concrete elements used in concrete construction to industry standards.

Subsequent works, for example, grouting joints, installing bracing, applying sealants, or cleaning surfaces, are completed before follow-on work in accordance with industry standards.

Industry standards must reflect industry best practice, workplace procedures, and be within acceptable tolerances as defined in New Zealand codes, standards and regulations.

Plans and specifications can include working drawings, plan specifications, manufacturer specifications, installation instructions and demolition and project plans.

Evidence for this standard must be demonstrated:

- to current and relevant Legislation, Standards, and Codes (including safety),
- in an environmentally sustainable manner,
- within an acceptable timeframe,
- with acceptable behaviours.

Definitions:

Acceptable behaviours refer to professional behaviours expected in a construction environment. This includes working safely with others, communicating effectively, following workplace procedures, respecting people, tools, equipment, and materials, and responding appropriately to hazards and changing work conditions.

Precast concrete elements refer to concrete components manufactured off-site or in a controlled casting environment and transported to the construction site for installation. These may include panels, beams, columns, stairs, foundations, or other structural and architectural concrete units used in concrete construction.

Ngā momo whiwhinga | Grades available

Achieved.

Ihirangi waitohu | Indicative content

Planning and site preparation

- Plans and specifications.
- Site layout and access.
- Lifting zones and storage areas.
- Environmental and safety considerations.

Precast concrete elements

- Types and uses (e.g. panels, beams, columns, stairs).
- Composition and properties (e.g. size and weight).
- Transportation and storage requirements.

Awareness of lifting and placement operations

- Lifting equipment and accessories (e.g. slings, chains, spreader bars).
- Lifting points and load stability.
- Positioning and alignment techniques.
- Temporary supports and restraint systems.

Connections and securing systems

- Connection types (e.g. bolted, welded, grouted, dowelled).
- Joint systems.
- Fastenings, anchors, and reinforcing.
- Subsequent works (e.g. post-tensioning, grouting, service integration).

Quality and verification

- Alignment, level, and tolerance checks.
- Inspection of fixings and supports.
- Installation records.

Industry standards

Rauemi | Resources

Programme Guidance information available from info@cstisb.nz.

Pārongo Whakaū Kounga | Quality assurance information

Ngā rōpū whakatau-paerewa Standard Setting Body	Construction and Specialist Trades Industry Skills Board
Whakaritenga Rārangi Paetae Aromatawai DASS classification	Planning and Construction > Concrete > Concrete Construction
Ko te tohutoro ki ngā Whakaritenga i te Whakamanatanga me te Whakaōritenga CMR	0120

Hātepe Process	Putanga Version	Rā whakaputa Review Date	Rā whakamutunga mō te aromatawai Last date for assessment
Rēhitatanga Registration	1	26 February 2026	N/A
Kōrero whakakapinga Replacement information	This skill standard replaced unit standard 32594.		
Rā arotake Planned review date	31 December 2030		

Please contact Construction and Specialist Trades Industry Skills Board at info@cstisb.nz to suggest changes to the content of this skill standard.