

41152 Operate and maintain equipment of standard complexity for precast concrete manufacture

Kaupae Level	3
Whiwhinga Credit	5
Whāinga Purpose	<p>This skill standard is intended for people working in or entering the construction trades.</p> <p>People credited with this skill standard have the skills to operate and maintain equipment of standard complexity for precast concrete manufacture.</p> <p>This skill standard aligns with the New Zealand Certificate in Concrete Construction Skills (Level 3) [Ref: 4189] 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. Operate equipment used for precast concrete manufacture.	a. Checks and reporting requirements are completed in line with manufacturer's instructions.
	b. Equipment is operated safely and efficiently, with required personal protective equipment in line with manufacturer's instructions and industry standards.
2. Complete maintenance tasks on equipment for precast concrete manufacture.	a. Routine maintenance checks and cleaning are carried out in line with manufacturer's instructions and industry standards.
	b. Basic servicing and minor repairs are completed within the operator's responsibility in line with manufacturer's instructions.

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

Assessment specifications:

To achieve this standard the candidate must be capable of operating and maintaining equipment of standard complexity for precast concrete manufacture to industry standards under limited supervision.

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, and
- with acceptable behaviours.

The operator's responsibility for servicing and repairs includes actions such as lubrication, removing concrete build-up, tightening accessible fittings, and reporting defects. It excludes diagnostic work or mechanical repairs that require a qualified technician.

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.

Standard complexity refers to routine equipment used in precast concrete manufacture, for example, batching and mixing systems, vibration and compaction equipment, conveyors, gantry cranes, forklifts and curing systems, operated under defined procedures and supervision.

Under limited supervision refers to candidates carrying out the requirements of this skill standard with basic guidance and indirect supervision from a suitably skilled tradesperson. They are expected to source some information independently from plans, specifications, or relevant New Zealand Standards and apply these to routine or familiar projects.

Ngā momo whiwhinga | Grades available

Achieved.

Ihirangi waitohu | Indicative content

Checks and inspections

- Safety checks and inspections.
- Set-up and adjustment.
- Health, safety and environmental requirements.

Equipment

- Equipment used in precast concrete manufacture (e.g. mixers, conveyors, vibrating tables, cranes, forklifts).
- Supporting systems (e.g. for batching, mould filling, compaction, curing, lifting and cleaning).
- Safe and efficient interaction between equipment, people and work areas.
- Concrete pumping systems.

Operation

- Start-up, operation, monitoring, and shut-down procedures.
- Safe use practices for equipment.
- Monitoring performance and identifying operational issues.
- Communication, coordination and reporting procedures.

Maintenance

- Routine checks, inspections, and cleaning.
- Basic servicing within operator's responsibility.
- Hazard and risk controls.
- Reporting and escalation of faults beyond the operator's responsibility.

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 > Precast Concrete
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 32855.		
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.