

## Operate 2      Operate and maintain equipment of standard complexity for precast concrete manufacture

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Kaupae   Level</b>     | 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Whiwhinga   Credit</b> | 10                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Whāinga   Purpose</b>  | <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 for precast concrete manufacture under limited supervision.</p> <p>This skill standard aligns with the New Zealand Certificate in Concrete Construction Skills (Level 3) [Ref: XXXX] 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 are operated safely and efficiently, with required personal protective equipment in line 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 under limited supervision to 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.

*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.

*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/

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.

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.

### ***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 and efficient handling of moulds, inserts, reinforcement, and precast elements
- 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 [qualifications@waihangaararau.nz](mailto:qualifications@waihangaararau.nz).

**Pārongo Whakaū Kounga | Quality assurance information**

|                                                                                            |                                                                                |
|--------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| <b>Ngā rōpū whakatau-paerewa  </b><br>Standard Setting Body                                | Waihanga Ara Rau Construction and Infrastructure Workforce Development Council |
| <b>Whakaritenga Rārangi Paetae Aromatawai  </b><br>DASS classification                     | Concrete > Concrete Construction                                               |
| <b>Ko te tohutoro ki ngā Whakaritenga i te Whakamanatanga me te Whakaōritenga  </b><br>CMR | 0120                                                                           |

| <b>Hātepe  </b> Process                                 | <b>Putanga  </b><br>Version                        | <b>Rā whakaputa  </b><br>Review Date | <b>Rā whakamutunga mō te aromatawai  </b><br>Last date for assessment |
|---------------------------------------------------------|----------------------------------------------------|--------------------------------------|-----------------------------------------------------------------------|
| <b>Rēhitatanga  </b> Registration                       | 1                                                  | dd mm 2025                           | N/A                                                                   |
| <b>Kōrero whakakapinga  </b><br>Replacement information | This skill standard replaced unit standards 32855. |                                      |                                                                       |
| <b>Rā arotake  </b><br>Planned review date              | [dd mm yyyy]                                       |                                      |                                                                       |

Please contact Waihanga Ara Rau Construction and Infrastructure Workforce Development Council at [qualifications@waihangaararau.nz](mailto:qualifications@waihangaararau.nz) to suggest changes to the content of this skill standard.