

Concrete L4 Set out and prepare concrete floors

Kaupae Level	4
Whiwhinga Credit	
Whāinga Purpose	<p>This skill standard recognises the skills required to set out and prepare concrete floors.</p> <p>It contributes to the New Zealand Certificate in Carpentry (Level 4) with optional strand in Metal Roof Cladding Installation [Ref:2738].</p>

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

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria
1. Identify quantities for concrete floors.	a. Quantities of materials required for concrete floors, including concrete, reinforcement, formwork, and other necessary components, are accurately calculated.
2. Set out, excavate, and construct formwork for concrete foundations and slabs.	a. Set out for excavation and formwork construction is carried out in accordance with plans and specifications.
	b. Excavation for concrete foundations and slabs is overseen according to instructions and job specifications, ensuring alignment with the project requirements.
	c. Formwork is constructed using appropriate tools, techniques, and materials in accordance with plans and specifications.
3. Prepare and install proprietary systems for concrete foundations and slabs.	a. Proprietary system requirements are identified from plans and specifications.
	b. Proprietary systems are prepared and installed, ensuring proper installation in line with job specifications and manufacturer's instructions.
4. Carry out requirements for reinforcing concrete.	a. Reinforcing requirements are identified in accordance with plans and specifications.
	b. Cutting, bending, and tying of reinforcing are carried out to reflect plans and specifications.

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

Assessment specifications:

To achieve this standard the candidate must be capable of setting out and preparing concrete floors for a single residential building to industry standards.

Proprietary systems can include DPC, polystyrene, or pods.

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.

This standard must be assessed in the workplace.

Evidence for this standard must be:

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

Ngā momo whiwhinga | Grades available

Achieved

Ihirangi waitohu | Indicative content

Materials for foundations and slabs

- Hardfill/basecourse, damp-proofing, formwork (release agents), reinforcing steel (bars, mesh, starter bars), waffle slab pods.

Construction methods

- Ring foundations, pod/waffle systems, slab on ground, suspended concrete floors (e.g., rib and timber fill, beam and slab, flat slab, hollow core).

Formwork construction

- Methods for constructing and assembling formwork systems for concrete floors.

Installation of damp-proof membranes

- Processes for taping, lapping, and installing membranes to industry standards.

Reinforcing preparation

- Cutting, bending, and tying reinforcing steel.
- Using epoxy glues for fixing reinforcing to existing concrete.

Site preparation and logistics

- Site access, concrete supply and transport, timing and sequencing pours, task lighting, and personnel coordination.

Environmental compliance

- Preparing a site to manage concrete run-off, aligning with environmental legislation.

Planning and calculations

- Work schedules and timelines
- Calculating quantities for slab or pile foundations.

Curing and prevention of cracking

- Ponding, covering, and treatments.

Rauemi | Resources

Programme Guidance information available from qualifications@waihangaararau.nz.

Pārongo Whakaū Kounga | Quality assurance information

Ngā rōpū whakatau-paerewa Standard Setting Body	Waihanga Ara Rau Construction and Infrastructure Workforce Development Council
Whakaritenga Rārangi Paetae Aromatawai DASS classification	Planning and Construction > Construction Trades > Carpentry
Ko te tohutoro ki ngā Whakaritenga i te Whakamanatanga me te Whakaōritenga CMR	0048

Hātepe Process	Putanga Version	Rā whakaputa Review Date	Rā whakamutunga mō te aromatawai Last date for assessment
Rēhitatanga Registration	1	[dd mm yyyy]	N/A
Kōrero whakakapinga Replacement information	This skill standard replaces unit standards:		
Rā arotake Planned review date	31 December 2029		

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