

## 40810 Determine pre-cast concrete wall construction requirements

<b>Kaupae   Level</b>	4
<b>Whiwhinga   Credit</b>	5
<b>Whāinga   Purpose</b>	<p>This skill standard is for people intending to complete qualifications and credentials in the carpentry trades.</p> <p>People with this skill standard have the skills to determine pre-cast concrete wall construction requirements.</p> <p>This skill standard may contribute to New Zealand qualifications designed for construction trades.</p>

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

<b>Hua o te ako   Learning outcomes</b>	<b>Paearu aromatawai   Assessment criteria</b>
1. Determine pre-cast concrete wall construction requirements.	a. Types, properties and characteristics of pre-cast concrete wall systems are determined.
	b. Requirements for the placement of precast concrete walls are determined from plans and specifications.
	c. Requirements to erect and prop precast concrete walls and other prebuilt panels are determined.

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

Assessment specifications:

To achieve this standard the candidate must be capable of determining pre-cast concrete wall construction requirements 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.

This standard must be assessed in the workplace.

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,
- in different and unfamiliar contexts,
- with acceptable behaviours.

**Ngā momo whiwhinga | Grades available**

Achieved

**Ihirangi waitohu | Indicative content****Wall structures and their composition**

- Types of wall structures and their makeup.
- Solid walls: Concrete and block.
- Panelled walls, structural steel, infill framing, and fire systems.

**Prefabricated beams and lintels**

- Types and applications of prefabricated structural elements.
- Materials, finishes, and design considerations for beams and lintels.

**Engineering and design requirements**

- Overview of design requirements and compliance.
- Load-bearing considerations, fire resistance, and integration with other building systems.

**Tilt slab walls**

- Key processes and requirements.
- Lifting and handling techniques, including crane use and safety considerations.
- Fixing tilt slab walls in place, including alignment and connection methods.

**Calculating quantities**

- Estimating material requirements for pre-cast concrete walls.
- Methods for calculating volumes, lengths, and numbers of components.

**Rauemi | Resources**

Programme Guidance information available from [qualifications@waihangaararau.nz](mailto:qualifications@waihangaararau.nz).

**Pārongo Whakaū Kouna | Quality assurance information**

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

<b>Hātepe   Process</b>	<b>Putanga   Version</b>	<b>Rā whakaputa   Review Date</b>	<b>Rā whakamutunga mō te aromatawai   Last date for assessment</b>
<b>Rēhitatanga   Registration</b>	1	28 August 2025	N/A
<b>Kōrero whakakapinga   Replacement information</b>	N/A		
<b>Rā arotake   Planned review date</b>	31 December 2030		

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.