

## Piles L4      Install piles or poles for residential construction

<b>Kaupae   Level</b>	4
<b>Whiwhinga   Credit</b>	
<b>Whāinga   Purpose</b>	<p>This skill standard recognises the skills required to install piles and poles for residential construction.</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. Prepare for pile or pole installation.	a. The requirements for components and installing piles and poles are identified and preparations are made for construction to reflect plans, specifications, or industry standards.
	b. Piles or posts are set out to reflect plans and specifications.
	c. Excavations are confirmed as correct for piles or posts to reflect plans, specifications, and industry standards.
2. Complete construction tasks for piles or pole installation.	a. Piles or poles are placed and temporarily braced in position, ensuring correct placement and alignment.
	b. Installation process and end-product are ensured to meet industry standards for quality and performance.

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

#### Assessment specifications:

To achieve this standard the candidate must be capable of installing ordinary and braced or anchor piles or poles for residential house sub-floors or decks to industry standards.

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

Plans and specifications can include working drawings, plan specifications, manufacturer specifications, installation instructions and, work, 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**

### Setting out for installation

- Establish profiles and string lines.
- Measurements to check for square and mark excavations.
- Excavate holes and prepare for placing piles or poles.

### Placing and bracing piles

- Position and brace piles correctly.
- Add concrete to holes and ensure minimum depth requirements are met.
- Check pile heights for accuracy.

### Types of piles and poles

- Ordinary, braced, anchor, cantilever, driven, and screw piles.

### Loads

- Address vertical, lateral, and seismic loads during installation.

### Tools and equipment

- Machinery and tools for safe excavation, cutting, and placement of piles and poles.

### Calculations

- Calculate the volume of concrete for filling holes and estimate material needs.

### Regulations and Standards

- Compliance with NZS3604 for pile height limits.
- Understanding SED requirements and re-piling consents.

### Ground conditions

- Suitability of "good ground" for stability and compliance.

### Health and safety

- Securing the site, following safe practices with excavating machinery, and adhere to safety protocols.

### Finishing and inspection

- Ensuring piles and poles are correctly positioned and meet design specifications.

## **Rauemi | Resources**

Roofing 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	0048

<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	[dd mm yyyy]	N/A
<b>Kōrero whakakapinga   Replacement information</b>	This skill standard replaces unit standards:		
<b>Rā arotake   Planned review date</b>	31 December 2029		

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.