

40817 Install piles or poles for residential construction

Kaupae Level	4
Whiwhinga Credit	6
Whāinga Purpose	<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 install piles or poles for residential construction.</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

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria
1. Prepare for pile or pole installation.	a. The requirements for installing piles and poles are identified and preparations are made for construction to reflect plans and specifications.
	b. Piles or poles are set out to reflect plans and specifications.
	c. Excavations are confirmed as correct for piles or poles to reflect plans and specifications.
2. Install piles or pole for residential construction.	a. Piles or poles are placed and temporarily braced in position, ensuring correct placement and alignment.
	b. Installation process and end-product are checked and confirmed to meet 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 installing braced piles, 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 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

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, spans and spacings.
- 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

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	0120

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

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.