

41206**Design, erect, and dismantle scaffolding ties and repair attachment points**

Kaupae Level	4
Whiwhinga Credit	10
Whāinga Purpose	This skill standard is for people intending to complete qualifications and credentials in the scaffolding trades. People with this skill standard have the skills to design ties as part of scaffold plans; erect ties and complete inspection reports; and dismantle scaffolding ties and repair attachment points. This skill standard aligns with the New Zealand Certificate in Scaffolding (Elementary) (Level 4) [Ref: 5659].

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

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria
1. Design ties with minimum capacity of 6kN as part of scaffold plans.	a. The nature and the integrity of the supporting structure is ascertained in accordance with the Good Practice Guidelines for Scaffolding in NZ.
	b. Optimum type or types of ties to be used are designed in accordance with the Good Practice Guidelines for Scaffolding in NZ and AS/NZS1576 Scaffolding, Part 1 General requirements.
	c. The optimum placement of ties is designed and justified in accordance with the Good Practice Guidelines for Scaffolding in NZ and scaffold and anchor manufacturers information.
	d. Scaffold plans are produced incorporating ties in accordance with the Good Practice Guidelines for Scaffolding in NZ and anchor manufacturers information.

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria
2. Erect scaffolding ties and complete inspection reports.	a. The ties to scaffolds and the supporting structures are erected and fitted in accordance with the Good Practice Guidelines for Scaffolding in NZ, scaffold plans and anchor manufacturers information.
	b. Ties are checked for compliance in accordance with the scaffold plan, the Good Practice Guidelines for Scaffolding in NZ and where applicable, engineer's requirements.
	c. Anchors used for ties are tested in accordance with the Good Practice Guidelines for Scaffolding in NZ.
	d. Inspection reports are completed in accordance with the Good Practice Guidelines for Scaffolding in NZ.
	e. Changes are made where structure is not compliant to the Good Practice Guidelines for Scaffolding in NZ and the inspection report is amended accordingly.
3. Dismantle scaffolding ties and repair attachment points.	a. The ties from the supporting structure are detached by level and in sequence in accordance with the Good Practice Guidelines for Scaffolding in NZ.
	b. The attachment points are repaired and restored in accordance with the Good Practice Guidelines for Scaffolding in NZ and industry standards.

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

Assessment specifications:

The candidate must be capable of designing, erecting, and dismantling scaffolding ties and repairing attachment points to the standards expected of a commercially competent scaffolder.

This skill standard has been developed for learning and assessment on-job, or off-job in a simulated environment. Where supervision is required by law, the supervisor must hold the appropriate Certificate of Competence for the scaffolding work undertaken.

Scaffolding ties include but are not limited to

- drilled in rigid ties,
- box ties,
- lip/opening ties and
- reveal ties.

Scaffold tie and its connection to the scaffold component shall be designed to resist a tension or compression force of not less than 6.0kN, unless specifically designed and documented for lower forces.

Evidence may need to be demonstrated on a number of separate occasions for the same tie type to cover variations in componentry dimensions, substrate of supporting structure, complexity and interaction.

Candidates may carry out practical scaffolding activities as part of a team. However, assessment must confirm that each candidate has independently demonstrated competence in all aspects of the required assessment criteria. Evidence must confirm that the candidate has actively and independently applied the relevant skills, knowledge, and safety behaviours across the full scope of the standard, including compliance with regulatory and site-specific requirements.

Commercial competence requires a candidate to be capable of consistently performing the requirements:

- to current regulatory, industry and commercial standards
- within a commercially viable timeframe
- in commercial environments
- with limited supervision
- in different and unfamiliar contexts.

Definitions:

Anchors attaching ties to the supporting structure are to be tested to the anchor manufacturers specifications.

Good Practice Guidelines for Scaffolding in NZ contain specific requirements for scaffolds. For proprietary scaffolds the guidelines require use of manufacturer's specifications.

Restore or repair refer to the steps taken to ensure the supporting structure is repaired in accordance with site requirements.

Scaffold plan is a key design document used as a basis for the erection of a particular scaffold. For this skill standard, it must be prepared by the candidate.

A *tie* is a member or assembly of members used to tie a scaffold to a supporting structure.

Ngā momo whiwhinga | Grades available

Achieved

Ihirangi waitohu | Indicative content

Technical skills and knowledge

- Interpreting project instructions on agreed work to be carried out.
- Quality management systems.
- Regulatory, industry and Good Practice Guidelines for Scaffolding in NZ and manufacturer operating instructions.
- Scaffold plans and the use of the correct sequence.
- Advantages of rigid ties includes multi directional support, point of attachment security, fewer components, simplicity, ability to vary the length and strength of fixing components.

- Bracing options include plan bracing at the level of the tie, additional transverse bracing, increasing the base width of the scaffold (raker tubes and/or raker bays [also known as bolster bays] installation).
- The nature and integrity of the supporting structure includes documentary evidence, visual and physical examinations, strength testing.
- The optimum type/s and placement of ties include the nature and integrity of the supporting structure, the nature of the scaffold and any additional attachments, optimum attachment points and their condition, the length and strength of fixing components, the availability and practicality of additional bracing.
- Installation and testing of anchors including minimum spacing between anchors.
- Scaffold plans incorporating ties include tie placement and description, the impact of scaffolding configurations on tie type and placement (including screening, wind load and environmental load), intended use and engineer's requirements.
- Sequence in dismantling.
- Methods to maintain clean and tidy sites.
- Safe loading and unloading of tools, equipment, and product.
- Manufacturer's product data specifications.

Communication, literacy and numeracy

- Relevant documentation.
- Workplace communication.
- Interpersonal skills.
- Measurement and calculation.

Rauemi | Resources

Legislation available at <http://legislation.govt.nz>

- Health and Safety at Work Act 2015;
- AS/NZS1576.1: 2019, *Scaffolding: Part 1, General requirements*, available from [Standards New Zealand](#);
- The Good Practice Guidelines - Scaffolding in New Zealand (GPG), 2016 available from <https://www.worksafe.govt.nz/topic-and-industry/working-at-height/scaffolding-in-new-zealand/>; and all subsequent amendments and replacements.

Pārongo Whakaū Kouna | Quality assurance information

Ngā rōpū whakatau-paerewa Standard Setting Body	Construction and Specialist Trades Industry Skills Board
Whakaritenga Rārangi Paetae Aromatawai DASS classification	Service Sector > Lifting Equipment > Elementary Scaffolding
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	30 July 2026	N/A
Kōrero whakakapinga Replacement information	This skill standard replaced unit standard 23715.		
Rā arotake Planned review date	31 December 2031		

Please contact the Construction and Specialist Trades Industry Skills Board at info@cstisb.nz if you wish to suggest changes to the content of this skill standard.