

40814 Construct sub-floor timber framing and flooring

Kaupae Level	4
Whiwhinga Credit	5
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 construct sub-floor timber framing and flooring.</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. Construct sub-floor timber framing.	a. Sub-floor framing and bracing requirements are determined and set out in accordance with plans and specifications.
	b. Sub-floor framing and bracing are constructed and fixed in accordance with plans and specifications.
2. Apply flooring materials to sub-floor framing.	a. Flooring material requirements are determined and set out in accordance with plans and specifications.
	b. Flooring materials are applied in accordance with 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 constructing sub-floor timber framing and flooring 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.

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 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

Materials:

- Light gauge steel, timber, composite materials.
- Treatment considerations for durability, pest resistance, and moisture protection.

Parts of sub-floor framing

- Bearers, ribbon boards, joists, and specialised connectors.
- How components interact for structural stability.

Fixings

- Application of hangers, nail plates, nail-on plates, flitch plates, screws, bolts, nails.
- Techniques for achieving secure and compliant connections.

Bracing and joining joists

- Methods: flitch plates, lapped joins, nail plates.
- Ensuring stability and compliance with design specifications.

Flooring types and properties

- Characteristics of strip flooring, composite, solid timber, tongue and groove, sheet flooring, plywood, reconstructed wood, fibre cement, strand board.
- Specific durability and treatment considerations.

Flooring applications

- Suitable flooring types for indoor, outdoor, and wet area applications.
- Where flooring types would be most effective.

Stringers

- Role of stringers in connecting floor framing to structures.
- Fixing methods for permanent stability.

Regulations and standards

- Consented and non-consented works.
- Key regulatory requirements: Building Act, NZBC, NZS, and local planning rules.

Penetrations and modifications

- Framing around penetrations for access or services in floors.
- Best practices for notches and holes to avoid compromising structural integrity.

Bracing and design considerations

- Bracing designs to resist lateral and vertical forces.
- Fire passive protection measures for floors.
- Sound design considerations for acoustics and vibration control.

Rauemi | Resources

Programme Guidance information available from qualifications@waihangaararau.nz.

Pārongo Whakaū Kouna | 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
Rēhītatanga 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.