Floor L4 Install sub-floor timber framing and flooring

Kaupae Level	4
Whiwhinga Credit	
Whāinga Purpose	This skill standard recognises the skills required to install sub-floor timber framing and flooring.
	It contributes to the New Zealand Certificate in Carpentry (Level 4) with optional strand in Metal Roof Cladding Installation [Ref:2738].

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

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria		
Sub-floor timber framing is constructed.	Sub-floor framing and bracing are constructed and fixed in accordance with plans, specifications, and relevant manufacturer's instructions.		
	b. Sub-floor framing is ensured to meet all required standards for stability and compliance requirements.		
2. Flooring materials are installed.	 Flooring materials are installed in accordance with plans and specifications, ensuring proper alignment and secure attachment. 		
	b. Flooring is confirmed to meet all required standards for stability and compliance requirements.		

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

Assessment specifications:

Skill standard

To achieve this standard the candidate must be capable of installing 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:

- 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:

- Detailed understanding of light gauge steel, timber, composite materials.
- Treatment considerations for durability, pest resistance, and moisture protection.

Parts of Floor Framing

- Bearers, ribbon boards, joists, and specialized 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.

Stringer Beams

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

Regulations and Standards

- Comprehension of consented and non-consented works.
- Key regulatory requirements: Building Act, NZBC, SNZ, 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 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	CMR 0003 can be accessed at: 003	

Hātepe Process	Putanga Version	Rā whakaputa Review Date	Rā whakamutunga mō te aromatawai Last date for assessment
Rēhitatanga Registration	1	[dd mm yyyy]	N/A
Kōrero whakakapinga Replacement information	This skill standard replaces unit standards:		
Rā arotake Planned review date	31 December 202	9	

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.