40281 Mechanically prepare flooring surfaces and repair cracks or joints

Kaupae Level	4
Whiwhinga Credit	20
Whāinga Purpose	This skill standard recognises the skills required to mechanically prepare flooring surfaces and repair cracks or joints.
	This skill standard aligns with the New Zealand Certificate in Flooring Surface Preparation (Level 4) [Ref: 4299].

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

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria		
Plan and prepare for mechanical preparation of flooring surfaces.	Mechanical preparation is planned to optimise work schedule and coordinate with the requirements of others on site.		
	b. Products, tools, plant, equipment, and accessories are selected and set up to optimise safety, ease of working, and to meet the job requirements.		
	c. Dust management systems are set up to maintain a safe work environment during mechanical preparation operations.		
	d. The substrate and surroundings are assessed for signs of moisture and suitability for mechanical preparation before starting work.		
Mechanically abrade timber flooring substrate surfaces in readiness for floor underlayment.	Timber substrate is mechanically abraded to remove all surface contaminants and achieve a finished surface to meet the job requirements.		
Perform repairs to cracks or joints in concrete substrate.	a. Cracks or joints are mechanically prepared ready for appropriate crack or joint filling products.		
	Products are applied to fill cracks or joints to achieve a smooth surface ready for further flooring operations.		

Hua o te ako Learning outcomes		Paearu aromatawai Assessment criteria	
4.	Mechanically abrade concrete flooring substrate surfaces in readiness for floor covering or floor coating.	Mechanical equipment is used to abrade concrete to achieve a sound substrate appropriate for further flooring operations according to job requirements.	
		b. Resurfacing compounds are applied to achieve a surface appropriate for the next process.	

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

Assessment specifications:

Candidates must be capable of consistently mechanically preparing complex timber and concrete flooring substrates to the standard expected of commercial competence.

Assessment for this standard must include mechanically preparing internal and external corners, and falls for wet areas.

Commercial competence refers to:

- performing the skill in a safe manner
- performing the skill to required industry standards
- performing the skill within a commercially viable timeframe
- repeating the skill on demand
- performing the skill without supervision
- applying the skill to other work.

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

Workplace procedures refer to verbal and written information covering company policy, standard operating procedures, and job specific instructions.

Assessment must conform to workplace conditions and meet workplace health and safety requirements. Health and safety requirements must include dust control and dust removal practices.

Ngā momo whiwhinga | Grades available

Achieved.

Ihirangi waitohu | Indicative content

Planning

- Interpreting job requirements.
- Selecting appropriate products for the environment and application.
- Interpreting product data sheets.
- Products, tools, plant, equipment, and accessories.
- Dust management.
- Protection of other surfaces.
- Removal of existing surfaces and loose debris.

Mechanical abrading floors

- Mechanically abrading to remove surface contaminants including adhesive, dust, paint, wax, oil, old rubber underlay residue or grease residue, bond breakers or curing compounds.
- Achieving a smooth surface.
- Methods to abrade including internal and external corners.

Concrete

- Concrete properties and preparation.
- Crack injection processes and products.
- Identifying active and dormant cracks, and consulting specialists when required.
- Selecting and applying resin injection and resin-based fill.
- Surface textures required for different coverings and coatings.
- Gradients and falls for wet areas.

Timber

- Timber types, properties, and preparation.
- Types of floor construction and supports.
- Surface textures required for different coverings and coatings.

Rauemi | Resources

Flooring Programme Guidance available from qualifications@waihangaararau.nz.

New Zealand Standards, available from www.standards.govt.nz:

- AS/NZS 1080.1:2012 Timber Methods of test -Method 1: Moisture content
- NZS AS 1884:2013 Floor coverings Resilient sheet and tiles Installation practices.

Best practice guidelines, available from www.floor.org.nz:

FloorNZ. (2024). Resilient Floor Coverings Planning and Installation.

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 > Flooring	
Ko te tohutoro ki ngā Whakaritenga i te Whakamanatanga me te Whakaōritenga CMR	0048	

Skill standard 40281 version 1

Page 4 of 4

Hātepe Process	Putanga Version	Rā whakaputa Date	Rā whakamutunga mō te aromatawai Last date for assessment	
Rēhitatanga Registration	1	28 November 2024	N/A	
Kōrero whakakapinga Replacement information	N/A			
Rā arotake Planned review date	31 December 2029			

Please contact Waihanga Ara Rau Construction and Infrastructure Workforce Development Council at qualifications@waihangaararau.nz if you wish to suggest changes to the content of this skill standard.