40259 Mechanically abrade concrete floor substrates

Kaupae Level	3
Whiwhinga Credit	10
Whāinga Purpose	This skill standard recognises the skills required to complete mechanical abrasion of concrete floor substrates.
	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		
1.	Plan and organise own work for mechanical abrasion of concrete substrates.	a.	Own tasks and priorities are planned, organised, and coordinated with other parties on the worksite and to meet the job requirements.	
2.	Mechanically abrade non-complex concrete substrate surfaces for further flooring operations.		The substrate and surroundings are assessed for signs of moisture and suitability for mechanical preparation before starting work.	
		b.	Mechanical preparation is performed using a grinder, level, and straight edge to achieve a clean and smooth surface.	
		C.	Fine resurfacing compounds are applied to achieve a smooth surface ready for further flooring operations.	
		d.	Engineered cement is ramped to achieve appropriate gradient between levels.	
		e.	Dust is managed during and after abrasion to maintain a safe work environment and to reflect workplace procedures.	

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

Assessment specifications:

Candidates must be capable of consistently mechanically abrading non-complex concrete flooring substrates ready for further flooring operations to commercial standards.

Non-complex refers to a concrete floor in a new residential building.

Commercial standards refer to:

- performing the skill in a safe manner
- performing the skill to required industry standards
- performing the skill within an acceptable timeframe
- repeating the skill on demand.

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.

Mechanical abrasion does not require asbestos removal, replacement of damaged boards, moisture treatment, or levelling of large surface areas.

Assessment must reflect workplace conditions and meet workplace health and safety requirements.

Ngā momo whiwhinga | Grades available

Achieved.

Ihirangi waitohu | Indicative content

Safe working practices

- Personal protective equipment (PPE) for mechanical abrasion.
- Mechanical abrasion risk assessment hazard management.
- Safe methods of performing mechanical abrasion tasks.
- Safe use of tools and equipment for mechanical abrasion tasks.
- Dust control and removal.

Planning work

- Planning and coordinating own tasks and coordinating tasks in conjunction with other trades.
- Establishing work activities and priorities.

Mechanically abrading concrete floor substrate

- Mechanically abrading to remove surface contaminants including adhesive, dust, paint, wax, oil, old rubber underlay residue or grease residue, bond breakers or curing compounds.
- Assessing substrate to ensure it is solid and suitable for abrading.
- Assessing substrate and surroundings for signs of moisture.
- Use of straightedge or laser to ensure the surface is smooth.
- Tolerances outlined in industry standards.
- Selecting and using mechanical equipment to achieve flat and smooth surfaces.
- Applying repairing and fine finishing compounds.
- Ramping of engineered cement.

Maintaining site and equipment

- Clearing sites of surplus product, tools, equipment, and debris.
- Cleaning, storing, and maintaining tools.
- Safe disposal of waste products.

Rauemi | Resources

Flooring Programme Guidance available from qualifications@waihangaararau.nz.

Legislation, available from www.legislation.govt.nz:

- Health and Safety at Work Act 2015
- Hazardous Substances and New Organisms Act 1996.

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

- NZS AS 1884:2013 Floor coverings Resilient sheet and tiles Installation practices
- AS/NZS 2455.1:2007 Textile floor coverings Installation practice General.

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	

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.