40279 Apply cementitious underlayment systems to flooring substrates

Kaupae Level	4
Whiwhinga Credit	45
Whāinga Purpose	This skill standard recognises the skills required to plan for and apply cementitious underlayment systems to flooring 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		
Plan for cementitious underlayment application to flooring substrates.	The substrate is assessed, and remedies are implemented to ensure the substrate and site environment meet the manufacturers' requirements for the underlayment application.		
	b. Products, tools, plant, and equipment are selected to meet the job requirements.		
Prepare for cementitious underlayment application to flooring substrates.	Substrate is leveled and surface flaws are remedied ready for cementitious application.		
	Heights and falls are set appropriate for the flooring area and according to job documentation.		
	c. Worksite, including mixing station, are set up to optimise safety and ease of working, and to protect adjacent surfaces.		

Hua o te ako Learning outcomes		Paearu aromatawai Assessment criteria		
3.	Apply cementitious underlayment systems to substrate.	a.	Specified primers are selected and applied according to job documentation and manufacturers' specifications.	
		b.	Cementitious underlayment is mixed, applied, levelled, and screed bulk filled to achieve the required floor finish according to job documentation.	
		C.	Self-levelling cementitious underlayment is mixed and applied to achieve the required floor finish according to job documentation.	
	d.	d.	Mechanical surface finishing is performed to achieve a flat and smooth surface.	

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

Candidates must be capable of consistently applying bulk filling and self-levelling cementitious underlayment to flooring surfaces to the standard expected of commercial competence.

Assess the substrate refers to level, fall, thickness, structural support, moisture content, fixings, surface integrity, stability, cleanliness.

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.

Remedies may include cleaning surfaces, remedying slight height variations, light grinding, or organising for specialists to carry-out repairs.

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.

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.
- Assessment of substrate and site environment.
- Tools, plant, and equipment for cementitious underlayment.
- Impact of the substrate properties on application requirements.

Preparing

- Protection of adjacent surfaces.
- Evaluating substrates clean, flat, smooth, sound, dry, pH levels.
- Remedies for surface flaws.
- Setting heights, levels and falls or changes of plane.
- Mixing station requirements.

Products

 Cementitious underlayment product properties and uses - repairing, self-levelling and fine finishing.

Application of underlayments

- Primer selection and application methods.
- Bulk filling cementitious underlayments.
- Mixing and application methods of cementitious products.
- Mechanical surface finishing.

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

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	

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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	This skill standard replaced unit standard 32559.			
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.