40514 Apply specialised coating systems and perform remedial repairs

Kaupae Level	4
Whiwhinga Credit	50
Whāinga Purpose	 This skill standard is for people intending to complete qualifications and credentials in the painting and decorating trades. People with this skill standard have the skills to identify, prepare, apply specialised coating systems and perform remedial repair to the level required of a commercially competent painter and decorator. This skill standard aligns with the New Zealand Certificate in Painting and Decorating (Level 4) with strands in Spray Systems, Wallcoverings and Specialised Coatings [Ref: 3568].

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

Hua o te ako Learning outcomes		Paearu aromatawai Assessment criteria		
1.	Identify components and properties of specialised surface coatings.	a.	The components, properties and the cause of common defects in the application of specialised coatings are described correctly.	
2.	Prepare work area for application of specialised coatings.		Ventilation is provided and application area is prepared to be dust free in accordance with worksite requirements.	
		b.	Measures are taken to ensure sufficient clearance is available for the expansion of the coating in case of fire in accordance with worksite and legislative requirements.	
		C.	Priming coats are applied to ensure coating adhesion is in accordance with workplace requirements.	

Hua o te ako Learning outcomes	Paearu aromatawai Assessment criteria		
3. Apply specialised coating systems	a. Specialised coating systems and methods of application are selected for specialised coating jobs in accordance with manufacturer's specifications and worksite requirements.		
	 Specialised coatings are handled and stored in accordance with the manufacturer's specifications and worksite requirements. 		
	c. Specialised coatings and any required finishing coats are applied in accordance with the manufacturer's specifications and worksite requirements.		
 Perform remedial work on specialised coatings. 	 Failures and remedies in specialised surface coatings resulting from component failure and substrate are identified correctly. 		
	b. Remedial work is performed on specialised coatings in accordance with worksite requirements.		

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

Assessment specifications:

The candidate must be capable of selecting and applying two or more different specialised coatings to the standards expected of a commercially competent painter and decorator.

Specialised coatings may include liquid membranes, protective paint coating systems, intumescent coatings, industrial coatings, and finish coatings to proprietary plaster cladding systems.

Evidence must include application to internal and external corners, and on vertical and horizontal surfaces.

Commercial competence requires a candidate to be capable of consistently performing the requirements of the skill specification:

- to current regulatory, industry and commercial standards
- within a commercially viable timeframe
- in commercial environments
- without supervision
- in different and unfamiliar contexts.

Ngā momo whiwhinga | Grades available

Achieved

Ihirangi waitohu | Indicative content

Technical skills and knowledge

- Interpreting specialised coating project instructions.
- Components of specialised surface coatings include pigments, extenders, fillers, binders, thinners, additives, catalysts.
- Process by which specialised surface coatings dry and harden, and their atmospheric and substrate influences.
- Methods by which specialised surface coatings dry and harden: oxidation, evaporation, polymerisation.
- Substrate and atmospheric influences affecting drying conditions.
- Properties of specialised surface coatings including opacity, consistency, flow, adhesion, elasticity, drying time, gloss, spreading rate, durability, container stability.
- Container stability defects like skinning, fattening, livering, settling, flocculation, gelling.
- Component failures including bleeding, cracking, crazing, chalking, discolouration, loss of gloss, retarded drying, floating, yellowing, mould, mildew, blistering.
- Substrate failures including bleeding, saponification, efflorescence, cissing, sinkage, flashing, flaking, rust spotting, bleaching, mould, mildew adhesion, blistering.
- The handling and application requirements for different specialised coatings.
- The requirements for, and methods of surface preparation for different specialised coatings.
- Application methods of different specialised coatings.
- Finish and quality control requirements including micron film testing for different specialised coatings.
- Maintenance requirements for different specialised coatings.
- Limitations and failures in different specialised coatings and how they are remedied.
- Safety instructions, dust and debris management, signage and barricade requirements.
- Tools and equipment checked for serviceability prior to use.
- Environmental requirements.

Communication, literacy, and numeracy

- Required types and standards of documentation.
- Required communication.
- Material quantities.

Rauemi | Resources

Legislation available at http://legislation.govt.nz

- Resource Management Act 1991.
- Hazardous Substances and New Organisms Act 1996.
- Health and Safety at Work Act 2015.

NZ Standards available at http://www.standards.co.nz/

• AS/NZS 2311:2009. Guide to the painting of buildings.

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 > Painting and Decorating	
Ko te tohutoro ki ngā Whakaritenga i te Whakamanatanga me te Whakaōritenga CMR	0048	

Hātepe Process	Putanga Version	Rā whakaputa Review Date	Rā whakamutunga mō te aromatawai Last date for assessment		
Rēhitatanga Registration	1	24 April 2025	N/A		
Korero whakakapinga Replacement information	This skill standard replaced unit standard 31111.				
Rā arotake Planned review date	31 December 2029				

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