

<b>Title</b>	<b>Demonstrate understanding of water penetration and materials chemistry for painting and decorating</b>		
<b>Level</b>	<b>4</b>	<b>Credits</b>	<b>3</b>

<b>Purpose</b>	<p>This unit standard aligns with the New Zealand Certificate in Painting and Decorating - Specifications, developed on behalf of the painting and decorating industry to specify the skills and knowledge required to achieve the New Zealand Certificate in Painting and Decorating (Level 4) with strands in Specialised Spraying, Wallcoverings, and Specialised Coatings [Ref: 3568].</p> <p>This unit standard is intended for those working in the painting and decorating industry.</p> <p>People credited with this unit standard are able to demonstrate understanding of water penetration and materials chemistry for for painting and decorating to the level required of a commercially competent painter and decorator.</p>
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<b>Classification</b>	Construction Trades > Painting and Decorating
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<b>Available grade</b>	Achieved
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### Guidance Information

This unit standard is one of a family of standards that align with the *New Zealand Certificate in Painting and Decorating – Specifications* and should be read, interpreted and assessed in the context of those *Specifications* and the New Zealand Certificate in Painting and Decorating (Level 4) with strands in Specialised Spraying, Wallcoverings, and Specialised Coatings [Ref: 3568].

The overarching level of performance for the family of unit standards is commercial competence.

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.

The sufficiency of evidence required to demonstrate commercial competence against this unit standard is determined within the context of the family of unit standards aligned to the *Specifications*.

The assessor must be confident that the candidate is capable of applying the skills and knowledge included in this skill specification to the level, scope and complexity required to support the achievement of related skills included in the *Specifications*.

Commercial competence can only be demonstrated, and must be assessed, in the workplace.

The assessment of commercial competence must be corroborated and confirmed by a person who has current expertise in the painting and decorating trade and has had the opportunity to regularly observe the candidate in the workplace.

#### Reference

*New Zealand Certificate in Painting and Decorating – Specifications*, BCITO, September 2016, available from [www.bcito.org.nz](http://www.bcito.org.nz).

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## Skill specification and performance level guidance

### Skill specification

Demonstrate understanding of water penetration and materials chemistry for painting and decorating.

**Know** The principles of water penetration and methods used to manage weather tightness.

Materials chemistry.

### Performance level guidance

Water penetration principles are capillary action, hydrostatic pressure, gravity, wind pressure and surface tension.

Materials chemistry includes the compatibility of different products due to: their chemical composition; the manner in which they are used; their susceptibility to deterioration over time; the effects of climatic conditions on their performance; and their effects on system performance, the environment and people.

The level of knowledge required is that of a painting and decorating tradesperson rather than that of an engineer, designer or chemist.

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**This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.**

### Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	26 April 2018	31 December 2026
Review	2	24 April 2025	31 December 2028

<b>Consent and Moderation Requirements (CMR) reference</b>	0048
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

This unit standard is expiring