

Title	Demonstrate knowledge of paint and its application		
Level	3	Credits	10

Purpose	<p>This general unit standard is for people working in the painting and decorating sector.</p> <p>People credited with this unit standard are able to demonstrate knowledge of: the types of paint; the components of paint; the process by which paint dries and hardens; the properties of paint; the effect of different substrates on paint; and defects in paint coatings.</p>
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Classification	Construction Trades > Painting and Decorating
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Available grade	Achieved
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Explanatory notes

Legislation and references relevant to this unit standard include – Health and Safety in Employment Act 1992; Resource Management Act 1991; Hazardous Substances and New Organisms Act 1996; available at <http://legislation.govt.nz>; AS/NZS 2311:2009 *Guide to the painting of buildings*, available at <http://www.standards.co.nz/>.

Outcomes and evidence requirements

Outcome 1

Demonstrate knowledge of the types of paint.

Evidence requirements

1.1 Paint is described in terms of its type.

Range includes – waterbased primers and undercoats, waterbased top coats, solvent based primers and undercoats, solvent based topcoats, protective coatings.

1.2 Paint types are described in terms of their characteristics.

1.3 Gloss levels of paint are described in terms of their characteristics.

Range includes – aesthetics, durability, gloss uniformity, full gloss, gloss, semi-gloss, low sheen, flat.

Outcome 2

Demonstrate knowledge of the components of paint.

Evidence requirements

- 2.1 Paint is described in terms of its components.
- Range includes – pigments, extenders, fillers, binders, thinners, driers, additives.
- 2.2 The components are described in terms of their functions.
- 2.3 Characteristics of the components are described in terms of their performance.
- Range includes – exposure, durability, application.
- 2.4 Components used to colour paint are identified and described in terms of the process used.

Outcome 3

Demonstrate knowledge of the process by which paint dries and hardens.

Evidence requirements

- 3.1 The methods by which paint dries and hardens are described.
- Range includes – oxidation, polymerisation, evaporation.
- 3.2 Atmospheric influences that affect drying conditions are identified and described in terms of their effect.
- Range includes – temperature, humidity, moisture, pollutants.
- 3.3 Substrate influences which affect drying conditions are identified and described in terms of their effect.
- Range includes – temperature, composition, reactivity.

Outcome 4

Demonstrate knowledge of the properties of paint.

Evidence requirements

- 4.1 Paint is described in terms of its properties.
- Range includes – opacity, consistency, flow, adhesive, elasticity, drying time, gloss, spreading rate, durability, container stability.
- 4.2 Container stability defects are described in terms of their characteristics.

Range includes – skinning, fattening, livering, settling, flocculation, gelling.

Outcome 5

Demonstrate knowledge of the effect of different substrates on paint.

Evidence requirements

5.1 Types of timber and their reaction to paint are described in terms of application.

Range includes – New Zealand native timbers, exotic timbers.

5.2 Light reflection properties of dark and light coloured paint applied to exterior substrates are described.

Range substrates include – timber, proprietary plaster cladding systems.

Outcome 6

Demonstrate knowledge of defects in paint coatings.

Evidence requirements

6.1 Types of defects are described in terms of characteristics.

Range includes – after-tack, bleaching, bleeding, blistering, bloom, blushing, bubbling, chalking, cissing, cobwebbing, cracking, crocodiling, efflorescence, flaking, holidays, intumescence, lifting, mud cracking, orange peel, peeling, pinholing, sagging, streaking, webbing, wrinkling, yellowing, saponification.

Replacement information	This unit standard replaced unit standard 1067.
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Planned review date	31 December 2019
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	18 August 2011	31 December 2016
Review	2	19 February 2015	N/A

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

Please note

Providers must be granted consent to assess against standards (accredited) by NZQA, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be granted consent to assess against standards by NZQA before they can register credits from assessment against unit standards.

Providers and Industry Training Organisations, which have been granted consent and which are assessing against unit standards must engage with the moderation system that applies to those standards.

Requirements for consent to assess and an outline of the moderation system that applies to this standard are outlined in the Consent and Moderation Requirements (CMR). The CMR also includes useful information about special requirements for organisations wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.

Comments on this unit standard

Please contact the Building and Construction Industry Training Organisation info@bcito.org.nz if you wish to suggest changes to the content of this unit standard.