Title	Demonstrate knowledge of roadmarking materials and application processes		
Level	3	Credits	10

Purpose	People credited with this unit standard are able to: explain the requirements of the New Zealand Roadmarking Federation (NZRF) Materials Guide 2009 and demonstrate knowledge of roadmarking material application processes.
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Classification	Infrastructure Works > Roadmarking
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Available grade	Achieved
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# **Guidance Information**

- 1 Evidence presented for assessment against this unit standard must be consistent with safe working practices and be in accordance with relevant industry requirements.
- 2 Legislation and standards relevant to this unit standard include:
  - Hazardous Substances and New Organisms Act 1996;
  - Health and Safety at Work Act 2015;
  - Health and Safety at Work (Hazardous Substances) Regulations 2017;
  - Resource Management Act 1991;
  - Traffic Regulations 1976; available from www.legislation.govt.nz/;
  - Quality Standard TQS1 and TQS; available from <a href="https://www.nzta.govt.nz/resources/index.html">https://www.nzta.govt.nz/resources/index.html</a>;
  - NZS 3910:2013: Conditions of contract for building and civil engineering construction;
  - NZS 3915:2005: Conditions of contract for building and civil engineering construction (where no person is appointed to act as engineer to the contract); available from www.standards.co.nz/;
  - NZRF Roadmarking Materials Guide 2009; available from www.nzrf.co.nz/;
  - and all subsequent amendments and replacements.

# 3 Definitions

Industry requirements refer to relevant policies, processes, methodologies, industry codes of practice, site specific health and safety plans, standard operating procedures, site safety plans, quality plans, scope of works, work plans, traffic management plans, contract work programmes, job safety analysis, safe work method statements, job instructions, manufacturer's requirements, contract specifications, manuals, procedural documents, Waka Kotahi NZ Transport Agency specifications and guidelines.

Materials refer to paint, Raised Pavement Markers (RPM), RPM adhesive, glass beads, angular material, thermoplastic, cement based coatings, cold-applied plastic, self-adhesive tapes

# Outcomes and performance criteria

# **Outcome 1**

Explain the requirements of the NZRF Roadmarking Materials Guide 2009.

# Performance criteria

1.1 Generic headings within the *NZRF Roadmarking Materials Guide 2009* are explained in terms of content and purpose.

# Range

generic headings may include but are not limited to – general description; composition; physical properties; performance properties; compatibility; adhesion; application parameters; manufacturing processes; testing of physical properties; handling, storage and packaging; environmental impacts; occupational health and safety hazards; application process; process monitoring equipment; post-application measuring equipment; test methods; quick reference safety guide; recorded environmental hazards; recorded health and safety incidents, related national/international standard specifications; useful references; evidence of eight generic headings is required.

- 1.2 General descriptions for roadmarking materials are explained in accordance with the *NZRF Roadmarking Materials Guide 2009*.
- 1.3 The suitability of roadmarking materials for specific operations are explained in terms of sample heading content and scope in accordance with the NZRF Roadmarking Materials Guide 2009.

# Range

sample heading content and scope may include but are not limited to – general description, composition, physical properties, performance properties, compatibility, adhesion, application parameters, manufacturing processes, testing of physical properties, handling, storage and packaging, environmental impacts, occupational health and safety hazards, application process, process monitoring equipment, post-application measuring equipment, test methods, quick reference safety guide, recorded environmental hazards, recorded health and safety incidents, related national or international standard specifications, useful references;

evidence of eight is required with two materials within the general description of paint and one material from each of the following general descriptions – RPMs, RPM adhesive, glass beads, angular material;

two other materials from – thermoplastic, cement-based coatings, cold-applied plastic, self-adhesive tapes.

# Outcome 2

Demonstrate knowledge of roadmarking material application processes.

# Performance criteria

2.1 Roadmarking material application processes are explained in accordance with contract specifications and material supplier instructions.

Range protection of work sites, applicator set up, set-out, preparation of

work surface, climatic conditions, application conditions,

environmental management, protection of markings until set or

dry.

2.2 Equipment used in the application process of roadmarking material is identified and explained in accordance with contract specifications and material supplier instructions.

Range hazards, personal protective equipment, cleaning, application,

maintenance, quality assurance.

Planned review date	31 December 2026

Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	22 September 2005	31 December 2018
Review	2	20 April 2017	31 December 2023
Review	3	30 September 2021	N/A

Consent and Moderation Requirements (CMR) reference	0101
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This CMR can be accessed at <a href="http://www.nzqa.govt.nz/framework/search/index.do">http://www.nzqa.govt.nz/framework/search/index.do</a>.

# Comments on this unit standard

Please contact Connexis - Infrastructure Industry Training Organisation <a href="mailto:qualifications@connexis.org.nz">qualifications@connexis.org.nz</a> if you wish to suggest changes to the content of this unit standard.