

<b>Title</b>	<b>Perform simple industry calculations for roadmarking application</b>		
<b>Level</b>	<b>2</b>	<b>Credits</b>	<b>6</b>

<b>Purpose</b>	<p>This unit standard is designed for operators of a roadmarking application plant.</p> <p>People credited with this unit standard are able to: estimate usage of resources prior to operation; perform simple industry calculations for roadmarking application; and record actual resource usage.</p>
----------------	---

<b>Classification</b>	Infrastructure Works > Roadmarking
-----------------------	------------------------------------

<b>Available grade</b>	Achieved
------------------------	----------

---

### 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/](http://www.legislation.govt.nz/);
  - 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)*; [www.standards.co.nz/](http://www.standards.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 New Zealand Transport Agency specifications and guidelines.

*Simple industry calculations* are estimations and approximations based on crude measurements such as dipsticks, weight changes or comparisons and are used for internal process purposes.

---

## Outcomes and performance criteria

### Outcome 1

Estimate usage of resources prior to operation.

#### Performance criteria

- 1.1 Paint and bead usage is estimated in accordance with contract specifications.
- 1.2 Operation times are estimated in accordance with contract specifications.
- 1.3 Fuel consumption is estimated in accordance with the vehicle being used and the work to be done.

### Outcome 2

Perform simple industry calculations for roadmarking application.

#### Performance criteria

- 2.1 Paint and bead usage is calculated.  
  
Range may include but is not limited to – dipstick, flowmeter, gauges, weighing scales, calibration kit as relevant to the material being measured;  
evidence of two usage calculations is required.
- 2.2 Application rates are calculated.  
  
Range may include but is not limited to – wet and dry film thickness gauge, plate testing, paint consumption, bead consumption;  
evidence of two application rates is required.
- 2.3 Adjustments to application rates are calculated.  
  
Range may include but is not limited to – wet and dry film thickness gauge, plate testing, paint consumption, bead consumption;  
evidence of two application rate adjustments is required.

### Outcome 3

Record actual resource usage.

#### Performance criteria

- 3.1 Paint and bead usage is recorded.
- 3.2 Application rates are recorded.
- 3.3 Travel and job times are recorded.

<b>Replacement information</b>	This unit standard and unit standard 21427 replaced unit standard 15927.
--------------------------------	--

<b>Planned review date</b>	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

<b>Consent and Moderation Requirements (CMR) reference</b>	0101
--	------

This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

#### Comments on this unit standard

Please contact Connexis - Infrastructure Industry Training Organisation [qualifications@connexis.org.nz](mailto:qualifications@connexis.org.nz) if you wish to suggest changes to the content of this unit standard.