

Accepted products and suppliers: Traffic engineering, traffic management and road safety

Delineators – Application Requirements

October 2019

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1. Enquiries

If you have any questions regarding this document, suggestions for improvement or would like to submit a product for acceptance for use in Queensland, please contact:

Department Transport and Main Roads (DTMR) - Traffic Engineering Practice

Email: Trafficengineering.support@tmr.qld.gov.au

2. Introduction

This document is relevant to retroreflector sheeting type delineators, defined by Clause 1.4(b) of AS1906.2-2007(R2018) as "a relatively small piece of retroreflective sheeting which may or may not be attached to a rigid substrate, whose photometric performance CIL/m² is measured and specified as for sheeting, i.e. in cd.lx-1.m-2, but whose dimensional limits, both lower and upper, may be specified".

Retroreflector discrete device type delineators are not considered suitable for use on Queensland State Controlled roads.

This document specifies conditions in relation to:

- Requirements for submitting new cones and bollards products for acceptance as compliant to standards (or resubmitting those previously accepted and lapsed);
- Requirements for extending currently accepted cones and bollards products prior to the 3-year acceptance period concluding; and
- Submission requirements, standards and required inclusions.

3. Governing manuals and associated specifications and guidelines

- *AS/NZS 1906.1-2017 Retroreflective materials and devices for road traffic control purposes - Retroreflective sheeting*
- *AS/NZS 1906.2-2007(R2018) Retroreflective materials and devices for road traffic control purposes – Retroreflective devices (non-pavement application)*
- *Manual of Uniform Traffic Control Devices (MUTCD)* as published to the department's website
- *Traffic and Road Use Management (TRUM) Manual* as published to the department's website
- *MRS14 Road Furniture Specification— Measurement*
- *MRTS14 Road Furniture Technical— Specification*
- *Delineators Acceptance Checklist*

4. Acceptance of new products as suitable for use in Queensland

For a delineator product to be accepted as compliant for use in Queensland, the manufacture/distributor needs to complete the checklist provided in **Attachment 1**.

The completed checklist should be accompanied by documents to support the requirements of the checklist, the documents are to be submitted to the nominated contact in Section 1.

Additional documents and information as listed below should also be provided with the completed checklist to support the application process:

1. Dimensional Information;
2. Photometric Performance (A6 Report as per Appendix A AS/NZS 1906.1:2017);
3. Colour (Reporting as per Appendix D AS/NZS 1906.1:2017);
4. Rainfall Performance (E6 Report as per Appendix E AS/NZS 1906.1:2017);
5. Physical Properties and Adhesive (F6 Report as per Appendix F AS/NZS 1906.1:2017); and
6. Durability (Fixed Rack Method as per AS/NZS 1906.1:2017);

A sample must also be provided to allow assessment of marking, standard and packaging to the nominated contact in Section 1.

5. Conditions of Acceptance

All products are accepted on the condition that the manufacture, design and installation are in accordance with the manufacturer's instructions.

A product's acceptance will remain valid for three years from the date nominated on the letter of acceptance. If during this three-year period the product is redesigned in any way (i.e. changes are made to the product that may adversely affect its performance, durability or maintenance requirements), there is a change to any governing specifications, the manufacturing process changes, or the location of manufacturing changes the acceptance will cease and a reapplication for acceptance will be required.

Within two months of any three-year acceptance period expiring, the manufacturer/distributor is to notify the contact officer, nominated in Section 1, of intention to extend for a further three years and nominate either of the following:

- There has been no redesign of the product – further acceptance period granted
- The product has been redesigned – further acceptance period granted based on submission of relevant test results (either full suite or those relevant to the nominated changes)

Products may only be submitted for renewal once, with the maximum acceptance period for any product being six years, upon the lapsing of this six-year period, a reapplication for acceptance must be sought in line with Section 4. Additionally, if the acceptance period is allowed to expire, the product will need to be reassessed as per Section 4.

Attachment 1 – Delineators – Acceptance Checklist

Delineators – Acceptance Checklist

October 2019

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SECTION 1. APPLICANT INFORMATION

Applicant Name: _____ Date: _____

Applicant Company: _____

Product name: _____

Product distributor: _____

Product manufacturer: _____

Location of manufacturing: _____

Date of letter of acceptance: _____

Applicant contact details – name: _____

Corporate address: _____

Corporate email: _____

Phone number: _____

*Note: Please ensure that all relevant fields are filled in with all supporting information and that **Section 3 – Applicant Declaration** is completed.*

Completed form to be submitted to trafficengineering.support@tmr.qld.gov.au

Product sample required for each product/product size. Sample(s) to be sent to:

Attention: Traffic Engineering Practice
Level 6, 313 Adelaide Street
Brisbane City, Qld, 4001

SECTION 2. DELINEATORS ACCEPTANCE CHECKLIST

Applicant to complete shaded boxes only.

All delineators are to meet the requirements of AS/NZS1906.2:2007(R2018) – *Retroreflective devices (non-pavement use)*.

2.1 DIMENSIONAL REQUIREMENTS (AS/NZS1906.3-2017 Clause 3.2.2)

Australian Standard Class 1A Retro reflective Material	Product (dimension)	Pass (Y/N)
Minimum area 100 cm ²		
Minimum width 50 mm		

2.2 PHOTOMETRIC PERFORMANCE

A6 Report Submitted	Y/N	Pass (Y/N)

Test and results in accordance with Appendix A AZ/NZS 1906.1:2017.

2.3 Colour

C6 Report Submitted	Y/N	Pass (Y/N)

Test and results in accordance with Appendix D AZ/NZS 1906.1:2017 and are to fall within the colour spaces designated in AS/NZS 1906.2:2007(R2018).

2.4 Rainfall Performance

E6 Report Submitted	Y/N	Pass (Y/N)

Test and results in accordance with Appendix E AZ/NZS 1906.1:2017.

2.5 Physical Properties and adhesion

F6 Report Submitted	Y/N	Pass (Y/N)

Test and results in accordance with Appendix F AZ/NZS 1906.1:2017.

2.5.1 Tensile Strength & Elongation Test

Australian Standard Requirement	Y/N	Pass (Y/N)
Breaking Strength of the sheeting not less than 0.8N per mm width		
Maximum elongation at break point does not exceed 45%		

Test and results in accordance with Appendix F AZ/NZS 1906.1:2017.

2.5.2 Impact Test

Australian Standard Requirement	Y/N	Pass (Y/N)
Evidence of cracking, crazing, or lifting of the sheeting from the test panel		

Test and results in accordance with Appendix F AZ/NZS 1906.1:2017.

2.5.3 Scratch Resistant Test

Australian Standard Requirement	Y/N	Pass (Y/N)
Scratch resistance is greater than > 1.5 kg		

Test and results in accordance with Appendix F AZ/NZS 1906.1:2017.

2.5.4 Solvent Resistance

G5 Report Submitted	Y/N	Pass (Y/N)

Test and results in accordance with Appendix G AS/NZS 1906.1:2017.

2.5.5 Maintenance Requirements

Australian Standard Requirement	Y/N	Pass (Y/N)
Road dirt and grime can be readily removed using a cloth		

2.6 Durability

Outdoor Accelerated Weathering – Fixed Rack Method Submitted	Y/N	

Test and results in accordance with Appendix I AZ/NZS 1906.1:2017.

2.7 PACKAGING AND SHELF LIFE

Australian Standard Requirement	Y/N	Pass (Y/N)
Retro reflective sheeting is packaged so as to ensure adequate protection against physical damage in storage and transit before delivery.		
A roll or length of sheeting does not contain on average more than one splice per 11 m and the minimum length between splices and the end of a roll, and between successive splices is 3 m.		
Sheeting is capable of withstanding storage for at least 12 months at normal storage temperatures, without loss of specified properties (including adhesion and flexibility).		

2.8 MARKING

Sample of Packaging Submitted	Y/N

Australian Standard Requirement	Y/N	Pass (Y/N)
Manufacturers Name or Trademark		
Product Designation (size, type, colour)		
Production Batch Number		

2.9 SUMMARY

Category	Pass (Y/N)	Comments
Dimension Requirements		
Photometric Performance		
Colour		
Rainfall Performance		
Physical Properties & Adhesive		
Durability		
Packaging and Shelf Life		
Marking		

SECTION 3. APPLCIANT DECLARATION

I, as a representative of,
(name of applicant) (name of company)

acknowledge and verify that all information provided above is true and agree to the following:

- That I will inform DTMR should any of the information provided above change;
- If the information provided above is found to be incorrect, whether knowingly or unknowingly, DTMR may at their own volition remove the product from the accepted products register; and
- DTMR may at any time request additional information regarding any aspect of the product, sourcing, and manufacturing process.

.....
(Signature)

...../...../.....
(Date)

For DTMR Completion Only:	
Reviewer Name:	Date:
Accepted for use:	<input type="checkbox"/> Yes, product is accepted for use in Queensland
	<input type="checkbox"/> No, product is not accepted for use in Queensland.
Reviewer Signature:	