Approval of reflective material for traffic signs – Information

Clause 4.4(7) of the Land Transport Rule: Traffic Control Devices 2004 states:

‘If this rule requires a traffic sign or part of a traffic sign to be reflectorised, it must be:

(a) reflectorised by the use of reflective material that is approved by the Director (of Land Transport Safety) by notice in the Gazette; ...’

In deciding which materials should be approved for use on signs, Land Transport New Zealand (Land Transport NZ) considers AS/NZS 1906.1:1993 Retroreflective materials and devices for road traffic control purposes Part 1: Retroreflective sheeting. This details tests for the performance of retro-reflective sheeting including:

- photometric
- colour
- rainfall performance
- physical properties – tensile strength and elongation, bending, impact, scratch resistance, shrinkage, wrinkling, solvent resistance and maintenance
- adhesion – application, stability, bonding
- durability – outdoor and indoor accelerated weathering, resistance to sea salt.

Due to the current absence of standards for fluorescent, retro-reflective materials Land Transport NZ has established interim criteria described in more detail in Traffic Note 26.
A material that meets all the test requirements should perform at acceptable levels throughout a long life. Land Transport NZ is primarily concerned with reflectivity and colour performance, as these determine the effectiveness of a traffic sign for motorists. Traffic signs should always meet the above photometric and colour standards. How long these properties last is determined by the other components of the standard.

Road controlling authorities must be empowered to make their own arrangements with sign suppliers concerning performance delivery. They should have policies balancing costs against manufacturers’ warranties, longevity etc consistent with maintenance and replacement programmes that ensure photometric and colour performance is always achieved.

After extensive consultation the Land Transport Safety Authority (now Land Transport NZ) published a notice in the New Zealand Gazette\(^1\) approving reflective materials in 1998. This was given on the basis of evidence the materials comply with the photometric and colour performance standards of AS/NZS 1906.1. The notice did not consider compliance with the other parts of this standard.

Since 1998 a number of replacement notices have been issued on the same approval basis\(^2\). A replacement notice is published in the New Zealand Gazette as material is approved or deleted. This note will not be revised solely to record the publication of further replacement notices.

A copy of the latest notice approving materials may be obtained from the Land Transport NZ webpage at [http://www.landtransport.govt.nz/roads/traffic-notes.html](http://www.landtransport.govt.nz/roads/traffic-notes.html) as an appendix to the webpage version of this note. Otherwise please contact your nearest Land Transport NZ regional office.

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\(^1\) New Zealand Gazette 12 November 1998, No 184, page 4350.