

Improving First Coat Painted Markings on Sprayed Seal Pavements in Rural Areas

Summary:	Audience:
This Technical Direction outlines an improved approach for longitudinal marking on a new sprayed seal. The benefits of the improved method include cost savings due to reduced establishment costs, increased durability and improved visibility. It also improves safety for work crews and road users.	Staff involved in sprayed sealing works and linemarking operations.

Background

Currently, first coat painted markings on new sprayed seals are applied as a thin layered 'sacrificial' coat of paint with small sized glass beads, followed two to three months later by a second thicker coat of paint and larger glass beads (for better wet weather night visibility). This requires two visits to each resurfaced section, potentially reducing road safety benefits if the second visit is delayed.

It has been demonstrated by a recent Roads & Maritime trial that it is beneficial to apply two thicker coats of paint with high performance large glass beads during a single visit (i.e. second application on top of the first after the first is touch dry) using improved but simple application methods of low pressure double angled paints guns and a static bead drop system. This has been shown to be at least comparable in cost, but delivers far superior marking visibility (retroreflectivity) and durability resulting in improved benefits to road safety. The trial site showed that all of the lines easily exceeded the dry retroreflectivity performance requirements of RMS R145 performance based marking specification. Currently, new and resurfaced sprayed seal pavements are exempt from this specification and marked under the activity based RMS R141 specification. All other longitudinal lines on the Roads & Maritime network, which have adopted this new approach for more than a year, are marked under RMS R145, and have generally exceeded the dry retroreflective performance requirements in the specification.

Action

Staff involved in sprayed resealing works and linemarking operations should note the following actions:

- Adopt the new method of applying two thicker linemarking coats during a single visit. The performance based specification RMS R145 should be used to advance this new approach.
- The guide notes to support this new method will be updated in RMS R145 by August 2015.
- Initial dry retroreflectivity results are to be requested as outlined in RMS R145.

Approvals:

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Technical Direction – Asset Maintenance Planning

The introduction of this new approach only applies to rural areas. In built up areas thermoplastic pavement marking, although more costly, is more suited to the effects of early and more intense trafficking.

Some consideration should also be given to pavement marking on new works. If an initial seal is to be applied and the application of the final seal is anticipated within 12 months, then Project Managers are encouraged to use their discretion in applying the methodology that is most suited to a given situation.

The improved application method (i.e. low pressure double angled paints guns and a static bead drop system) has already been adopted by the internal Roads & Maritime marking operation and a few other contractors.

Reference Documents:

- *RMS R141 Pavement Marking*
- *RMS R145 Pavement Marking (Performance Based)*