

Line marking — All roads



Fact sheet #11 of 13

Safety standard

All new permanent line marking should be cold applied plastic.

Safety countermeasure

Clear and effective pavement markings are essential to the safety of drivers, motorcycle riders, bicycle riders, and pedestrians as they traverse the road network. Pavement markings delineate the travel lanes and other features of the roadway, providing safety benefits. Pavement markings also help drivers stay in their traffic lanes. There are, however, some limitations to pavement markings:

- They may not be clearly visible if the road is wet
- They become less visible with tyre wear and require frequent re-marking
- Their effect on skid resistance requires careful choice of materials and means they cannot be used on large marked surface areas
- Markings within a traffic lane may be a hazard to motorcycles and should, where practicable, be avoided on curves.

Historically, line marking has been undertaken using water-based paint which has a limited life, particularly on busy roads with large numbers of heavy vehicles.

Trials of alternative products conducted by Transport and Main Roads across Queensland have indicated that

cold-applied plastic line markings appear to be more durable and more visible than water-based line marking.

Transport and Main Roads recommends that all new capital works projects, re-marking and maintenance activities on existing roads should use cold-applied plastic for permanent line marking.

The use of cold-applied plastic must comply with all TMR technical specifications*.

Safety outcome

In trial installations, cold-applied plastics have demonstrated improved visibility of line markings for road users in low-light conditions, such as in the wet and at night.

Figure 1: Close-up of cold-applied plastic line marking



Cold-applied
plastic
line marking



lasts **5** times longer
than
water-based
line marking.

* For guidance, refer to Transport and Main Roads Specifications: *Category 3: Roadworks, Drainage, Culverts and Geotechnical – MRTS45 Road Surface Delineation Technical Specifications*.

This fact sheet is designed to assist the implementation of 13 safety standards for new and upgraded infrastructure on Queensland's state-controlled roads, as per the department's *Road Safety Policy* (2018, Appendix A). While every care has been taken in preparing this publication, the State of Queensland accepts no responsibility for decisions or actions taken as a result of any data, information, statement or advice, expressed or implied, contained within. To the best of our knowledge, the content was correct at the time of publishing.



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