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English Version

Road marking materials - Conditions for removing/masking road markings

Produits de marquage routier - Conditions pour le
retrait/masquage des marquages routiers

Straßenmarkierungsmaterialien - Bedingungen für das
Entfernen/Abdecken von Strassenmarkierungen

This Technical Report was approved by CEN on 14 March 2016. It has been drawn up by the Technical Committee CEN/TC 226.

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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (CEN/TR 16958:2017) has been prepared by Technical Committee CEN/TC 226 “Road equipment”, the secretariat of which is held by AFNOR.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

There are many situations in which road marking removing or masking become necessary. This document is intended to give some guidance about how to proceed in these cases.

This Technical Report (TR) describes a number of methods for removal and masking and gives guidance for the appropriate selection. Not all methods are valid or recommended in all cases; some methods are limited by the kind and nature of existing road marking and the pavement surface. Also the cost of the operation is depending on the amount of marking to be removed.

In some countries these operations are regulated, in particular in some countries masking the existing road marking only with black paint is forbidden.

The quality of the removal or masking or any combination of them, may be not enough or result in a new “phantom line”, which, under particular illumination conditions, may be more visible than the real road markings (introducing confusion) or may change the surface texture (introducing hazard). Works shall be done in such a way that the risk for confusion or hazard for drivers be minimized.

Furthermore, recommendations are given for some frequent works such as: removing and masking road studs, removing wet paints, removing curing membranes in new cement concrete pavements and cleaning existing road markings.

1 Scope

This document provides guidance for removal or/and masking existing road markings. It includes methods of removal and criteria for selecting the removal method, as well as the requirements for the masking materials and the performance requirements of the resulting surface.

It does not apply to removable temporary road markings, which shall be removed in accordance to the manufacturer instructions.

Some recommendations are given for removing and masking road studs, removing wet paints, removing curing membranes in new cement concrete pavements and cleaning existing road markings.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 1436, *Road marking materials - Road marking performance for road users*

EN 1824, *Road marking materials - Road trials*

EN 13197, *Road marking materials — Wear simulator Turntable*

EN ISO 2813, *Paints and varnishes - Determination of gloss value at 20°, 60° and 85° (ISO 2813)*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1

removal

permanent elimination of road markings, that may be partial or complete

3.2

masking

temporary hiding of existing road marking using a topcoat of a material similar in color, luminance and specular gloss, to the pavement surface

3.3

phantom line

shadow line

road marking or print resulting from removal or masking process

3.4

specular gloss

ratio of the luminous flux reflected from an object in the specular direction for a specified source and receptor angle to the luminous flux reflected from a glass with a refractive index of 1,567 in the specular direction

4 Criteria for selecting removal or/and masking procedure

There are situations in which existing road marking shall be obliterated so as to not function as a recognizable road marking (phantom line). In order to do it, Removal or Masking techniques may be used. Removal may be done totally or partially and masking may be done as the unique procedure or