

SLOVENSKI STANDARD

SIST EN 1436:1999/A1:2004

01-junij-2004

Road marking materials - Road marking performance for road users

Road marking materials - Road marking performance for road users

Straßenmarkierungsmaterialien - Anforderungen an Markierungen auf Straßen

Produits de marquage routier - Performances des marques appliquées sur la route

Ta slovenski standard je istoveten z: EN 1436:1997/A1:2003

[SIST EN 1436:1999/A1:2004](https://standards.iteh.ai/catalog/standards/sist/7a3592f2-e3e8-4bad-926f-73543e0d90fb/sist-en-1436-1999-a1-2004)

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ICS:

93.080.20 Materiali za gradnjo cest Road construction materials

SIST EN 1436:1999/A1:2004 **en**

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 1436:1997/A1

April 2003

ICS 93.080.20

English version

**Road marking materials - Road marking performance for road
users**

Produits de marquage routier - Performances des marques
appliquées sur la route

Straßenmarkierungsmaterialien - Anforderungen an
Markierungen auf Straßen

This amendment A1 modifies the European Standard EN 1436:1997; it was approved by CEN on 2 January 2003.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for inclusion of this amendment into the relevant national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Management Centre or to any CEN member.

This amendment exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.

STANDARD PREVIEW
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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

EN 1436:1997/A1:2003 (E)**Foreword**

This document (EN 1436:1997/A1:2003) has been prepared by Technical Committee CEN/TC 226 "Road equipment", the secretariat of which is held by AFNOR.

This Amendment to the European Standard EN 1436:1997 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by October 2003, and conflicting national standards shall be withdrawn at the latest by October 2003.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

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- Substitute Tables 1, 2, 3 and 4 of EN 1436:1997 with the following Tables 1, 2, 3 and 4.

Table 1 — Classes of Q_d for dry road markings

| Road marking colour | Road surface type | Class | Minimum luminance coefficient under diffuse illumination $Q_d \text{ mcd}\cdot\text{m}^{-2}\cdot\text{lx}^{-1}$ |
|---|-------------------|-------|---|
| White | Asphaltic | Q0 | No requirement |
| | | Q2 | $Q_d \geq 100$ |
| | | Q3 | $Q_d \geq 130$ |
| | | Q4 | $Q_d \geq 160$ |
| | Cement concrete | Q0 | No requirement |
| | | Q3 | $Q_d \geq 130$ |
| | | Q4 | $Q_d \geq 160$ |
| | | Q5 | $Q_d \geq 200$ |
| Yellow | | Q0 | No requirement |
| | | Q1 | $Q_d \geq 80$ |
| | | Q2 | $Q_d \geq 100$ |
| | | Q3 | $Q_d \geq 130$ |
| NOTE The class Q0 is for when daytime visibility is achieved through the value of the luminance factor β , see 4.4. | | | |

Table 2 — Classes of R_L for dry road markings

| Road marking type and colour | | Class | Minimum coefficient of retroreflected luminance R_L mcd·m ⁻² ·lx ⁻¹ |
|--|--------|-----------------|---|
| Permanent | White | R0 | No requirement |
| | | R2 ^a | $R_L \geq 100$ |
| | | R3 ^a | $R_L \geq 150$ |
| | | R4 ^a | $R_L \geq 200$ |
| | | R5 ^a | $R_L \geq 300$ |
| | Yellow | R0 | No requirement |
| | | R1 ^a | $R_L \geq 80$ |
| | | R3 ^a | $R_L \geq 150$ |
| | | R4 ^a | $R_L \geq 200$ |
| Temporary | | R0 | No requirement |
| | | R3 ^a | $R_L \geq 150$ |
| | | R5 ^a | $R_L \geq 300$ |
| NOTE The class R0 is intended for conditions, where visibility of the road marking is achieved without retroreflection under car headlamp illumination. | | | |
| ^a In some countries these classes cannot be maintained during a limited time period of the year during which the probability of lower performance of the road markings is high, due to the presence of water, dust, mud etc.. | | | |

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Table 3 — Classes of R_L for road markings during wetness

| Conditions of wetness | Class | Minimum coefficient of retroreflected luminance R_L $\text{mcd}\cdot\text{m}^{-2}\cdot\text{lx}^{-1}$ |
|--|-------|---|
| As obtained 1 min after flooding the surface in accordance with B.6 | RW0 | No requirement |
| | RW1 | $R_L \geq 25$ |
| | RW2 | $R_L \geq 35$ |
| | RW3 | $R_L \geq 50$ |
| | RW4 | $R_L \geq 75$ |
| NOTE Class RW0 is intended for cases where this type of retroreflection is not required for economic or technological reasons. | | |

Table 4 — Classes of R_L for road markings during rain

| Conditions of rain | Class | Minimum coefficient of retroreflected luminance R_L $\text{mcd}\cdot\text{m}^{-2}\cdot\text{lx}^{-1}$ |
|--|-------|---|
| As obtained after at least 5 min exposure in accordance with B.7 during uniform rainfall of 20 mm/h | RR0 | No requirement |
| | RR1 | $R_L \geq 25$ |
| | RR2 | $R_L \geq 35$ |
| | RR3 | $R_L \geq 50$ |
| | RR4 | $R_L \geq 75$ |
| NOTE Class RR0 is intended for cases where this type of retroreflectivity is not required for economic or technological reasons. | | |