# CEN/TC 226/WG 3 N 35

# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

# DRAFT EN 12899-1:2007

prA1 [Month] 2010

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**English Version** 

# Fixed, vertical road traffic signs - Part 1: Fixed signs

Signaux fixes de signalisation routière verticale – Partie 1: Ortsfe Panneaux fixes

Ortsfeste, vertikale Straßenverkehrszeichen - Teil 1: Verkehrszeichen

This draft amendment is submitted to CEN members for unique acceptance procedure. It has been drawn up by the Technical Committee CEN/TC 226.

This draft amendment A1, if approved, will modify the European Standard EN 12899-1:2007. If this draft becomes an amendment, 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.

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

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# EN 12899-1:2007/prA1:2010 (E)

# Foreword

This document (EN 12899-1:2007/prA1:2010) has been prepared by Technical Committee CEN/TC 226 "Road equipment" the secretariat of which is held by AFNOR.

This document is currently submitted to the Unique Acceptance Procedure.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

The amendment of the following parts of EN 12899-1:2007 have become necessary to incorporate Part 6 of this Standard which deals with the visual performance of retroreflective sheeting materials.

# **1** Modification to Contents

*In line 4.1, delete* "Glass bead material" *and replace with* "General" *Delete line 4.2* 

# 2 Modification to Foreword

In paragraph 2,

line 2 – delete "May 2008" and replace with "month year"

line 3 - delete "August 2009" and replace with "month year"

Insert the following text between paragraphs 2 and 3:

"This document includes Amendment 1 which became necessary to incorporate Part 6 of this Standard which deals with the visual performance of retroreflective sheeting materials.

The start and finish of text introduced or altered by amendment is indicated in the text by tags  $A_1$   $A_1$ ."

In paragraph 3, delete "2001" and replace with "2007"

In paragraph 6, add "Part 6: Performance of retroreflective sign face materials" to the end of the list

# 3 Modification to Introduction

In paragraph 3,

line 1 – delete "in respect of materials based on glass bead technology"

line 2 - insert "Part 6 of" between "in" and "this"

delete last sentence

## 4 Modification to Clause 2, Normative references

Add reference to:

"EN 12899-6, Fixed vertical road traffic signs — Part 6: Performance of retroreflective sign face materials"

Delete references to:

"EN ISO 4892-2, Plastics – Methods of exposure to laboratory light sources - Part 2: Xenon-arc lamps (ISO 4892-2:2006)"

"EN ISO 6272, Paints and varnishes – Rapid-deformation (impact resistance) tests" "CIE 54.2, Retroreflection – Definition and measurement"

## 5 Modification to 4.1

Delete sub-clause title and replace with "General"

## 6 Modification to 4.1.1.3, Daylight chromaticity and luminance factor

Delete whole sub-clause and replace with "Refer to Clause 5 of EN 12899-6."

## 7 Modification to 4.1.1.4

Delete sub-clause title and replace with "Retroreflection"

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Delete whole sub-clause and replace with "Refer to Clause 4 of EN 12899-6."

#### 8 Modification to 4.1.1.5, Durability

Delete whole sub-clause and replace with "Refer to Clause 6 of EN 12899-6."

#### 9 Modification to 4.1.2, Impact resistance

Delete whole sub-clause and replace with "Refer to Clause 7 of EN 12899-6."

#### 10 Modification to 4.2, Microprismatic material

Delete whole sub-clause

#### 11 Modification to 7.3.1.8, Durability of visual performance

In paragraph 1,

line 1 - insert "non-retroreflective" between "of" and "sign"

In paragraph 2,

line 1 - insert "of non-retroreflective materials" between "factor" and "shall"

In paragraph 3,

line 1 – delete "using microprismatic technology"

*lines 1 and 2 – delete* "can be found in the relevant European Technical Approval (ETA)" *and replace with* "shall conform to EN 12899-6"

#### 12 Modification to 7.4.2.3, Impact resistance

*Delete whole sub-clause and replace with* "Retroreflective externally illuminated signs shall conform to 4.1.2."

#### 13 Modification to 9.2, Marking and labelling

In paragraph 2,

*3rd bullet point* – *delete* "retroreflective performance class as specified in EN 12899-1 or the relevant ETA" *and replace with* "application and retroreflection performance classes as specified in EN 12899-6"

# 14 Modification to Annex ZA

In Table ZA.1,

title

delete ", using glass bead technology"

row 1 – Construction product

delete ", using glass bead technology"

row 5 – Retroreflectivity (Coefficient of retroreflection)

*column 1 – delete* "Retroreflectivity (Coefficient of retroreflection)" *and replace with* "Retroreflection"

column 4 – delete "cd.lx<sup>-1</sup>.m<sup>-2</sup>"

In Table ZA.5,

Row 5 – (Retroreflective signs)

Daylight chromaticity & luminance factor

column 2 - delete "4.2"

column 4 - delete "or ETA"

Coefficient of retroreflection R<sub>A</sub>

column 1 – delete "Coefficient of retroreflection  $R_A$ " and replace with "Retroreflection"

column 2 - delete "4.2" and replace with "4.1.1.4"

*column 4 – delete* "class or ETA" *and replace with* "application and performance classes"

Row 7 – (Transilluminated retroreflective signs)

daylight chromaticity & luminance factor

column 4 - delete "ETA" and replace with "Pass/fail selected class"

#### coefficient of retroreflection

*column 1 – delete* "coefficient of retroreflection" *and replace with* "Retroreflection"

column 2 – delete "4.2" and replace with "4.1.1.4"

*column 4 – delete* "ETA" *and replace with* "Pass/fail selected application and performance classes"

Row 12 – Resistance to weathering – sign face material

#### Retroreflective signs

column 2 - delete "4.2"

column 4, line 1 - delete "accelerated"

column 4, line 2 - delete "or ETA"

column 4, lines 3 and 4 - delete "on glass bead materials"

column 4, line 5 - delete "artificial"

#### In Table ZA.6,

Row 7 – (Retroreflective signs)

Daylight chromaticity & luminance factor

column 2 - delete "4.2"

column 4 - delete "or ETA"

Row 9 – (Retroreflective signs)

Coefficient of retroreflection R<sub>A</sub>

column 1 – delete "Coefficient of retroreflection  $R_A$ " and replace with "Retroreflection"

column 2 - delete "4.2"

*column* 4 – *delete* "class cd. $lx^{-1}$ .m<sup>-2</sup> or ETA" *and replace with* "application and performance classes"

Row 10 – (Transilluminated retroreflective signs)

daylight chromaticity & luminance factor

column 4 - delete "ETA" and replace with "Pass/fail selected class"

coefficient of retroreflection

*column 1 – delete* "coefficient of retroreflection" *and replace with* "Retroreflection"

column 2 - delete "4.2" and replace with "4.1.1.4"

*column 4 – delete* "ETA" *and replace with* "Pass/fail selected application and performance classes"

Row 16 - Resistance to weathering - sign face material

Retroreflective signs

column 2 - Delete "4.2"

column 4, line 1 – delete "accelerated"

column 4, line 2 - delete "or ETA"

column 4, lines 3 and 4 - delete "on glass bead material"

column 4, line 5 - delete "artificial"

#### In Figure ZA.1,

Description of product

delete "glass bead"

Daylight chromaticity and luminance factors

delete "RC1" and replace with "CR1"

#### Coefficient of retroreflection

*delete* "Coefficient of retroreflection – RA1" *and replace with the following text:* 

"Application class A12

Retroreflection performance class P7"

#### Title

delete ", using glass bead technology"

# In Figure ZA.5,

Coefficient of retroreflection

*delete* "Coefficient of retroreflection – RA1" *and replace with the following text:* 

"Application class A12

Retroreflection performance class P7"

# In Figure ZA.6,

Coefficient of retroreflection

*delete* "Coefficient of retroreflection – RA1" *and replace with the following text:* 

"Application class A12

Retroreflection performance class P7"