



National Standards Authority of Ireland  
Údarás um Chaighdeáin Náisiúnta na hÉireann

IRISH STANDARD

**I.S. EN 12899-2:2007**

ICS 93.080.30

**FIXED, VERTICAL ROAD TRAFFIC SIGNS -  
PART 2: TRANSILLUMINATED TRAFFIC  
BOLLARDS (TTB)**

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ICS 93.080.30

English Version

## Fixed, vertical road traffic signs - Part 2: Transilluminated traffic bollards (TTB)

Signaux fixes de signalisation routière verticale - Partie 2 :  
Bornes lumineuses

Ortsfeste, vertikale Straßenverkehrszeichen - Teil 2:  
Innenbeleuchtete Verkehrsleitsäulen (TTB)

This European Standard was approved by CEN on 4 February 2007.

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

This European Standard 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 CEN Management Centre has the same status as the official versions.

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## Foreword

This document (EN 12899-2:2007) has been prepared by the Technical Committee CEN/TC 226 "Road equipment" the secretariat of which is held by AFNOR.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by May 2008, and conflicting national standards shall be withdrawn at the latest by August 2012.

No existing European Standard is superseded.

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 Directives.

For relationship with EU Directives, see informative Annex ZA, which is an integral part of this document.

This European Standard consists of the following Parts under the general title:

*Fixed, vertical road traffic signs —*

Part 1: *Fixed signs*

**Part 2: (this part) *Transilluminated traffic bollards (TTB)***

Part 3: *Delineator posts and retroreflectors*

Part 4: *Factory production control*

Part 5: *Initial type testing*

It is based on performance requirements and test methods published in CEN, CENELEC, CIE (International Commission on Illumination) and ISO documents together with standards of the CEN member organizations.

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

## **Introduction**

This European Standard is designed for use by road authorities. It can also be used by private developers who wish to use signs on their own land similar to those used on public highways.

It can be used to implement type approval and certification testing.

It derives from performance requirements and test methods published in CEN, CENELEC, CIE and ISO documents together with standards of the CEN member organizations.

## 1 Scope

This Part 2 of EN 12899 specifies requirements for new transilluminated traffic bollards (TTBs) including their fixing, which may incorporate traffic signs (type 1 TTB) or may support traffic signs (type 2 TTB) to be used in traffic circulation areas.

It covers performance requirements and test methods.

Colorimetric and retroreflective properties as well as luminance of transilluminated illuminated portions are specified taking into account CIE recommendations.

Structural requirements for TTBs include performance under static and dynamic loading.

Provision is made for safety in use, including vehicle impact.

Devices of similar function, but without transillumination or less than 600 mm in height, are not covered.

NOTE Foundations are not specified in this standard but should be adequate to support the loads to be carried.

Unless otherwise stated, clauses in this standard apply to both type 1 and type 2 TTBs.

## 2 Normative references

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

EN 12899-1:2007, *Fixed vertical road traffic signs — Part 1: Fixed signs*

EN 12899-4, *Fixed vertical road traffic signs — Part 4: Factory production control*

EN 12899-5, *Fixed vertical road traffic signs — Part 5: Initial type testing*

EN 60529, *Degrees of protection provided by enclosures (IP code) (IEC 60529:1989)*

EN ISO 139 *Textiles — Standard atmospheres for conditioning and testing (ISO 139:2005)*

EN ISO 877:1996, *Plastics — Methods of exposure to direct weathering, to weathering using glass-filtered daylight, and to intensified weathering by daylight using Fresnel mirrors (ISO 877:1994)*

EN ISO 1461, *Hot dip galvanized coatings on fabricated iron and steel articles - Specifications and test methods (ISO 1461:1999)*

EN ISO 9001, *Quality management systems — Requirements (ISO 9001:2000)*

ISO 4:1997, *Information and documentation — Rules for the abbreviation of title words and titles of publications*

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