

Irish Standard I.S. EN 40-4:2006

Lighting columns - Part 4: Requirements for reinforced and prestressed concrete lighting columns

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English version Version Française Deutsche Fassung

Lighting columns - Part 4: Requirements for reinforced and prestressed concrete lighting columns

Candélabres d'éclairage public - Partie 4:
Prescriptions pour les candélabres
d'éclairage public en béton armé et en
béton précontraint

Lichtmaste - Teil 4: Anforderungen an Lichtmaste aus Stahl- und Spannbeton

This corrigendum becomes effective on 20 September 2006 for incorporation in the three official language versions of the EN.

Ce corrigendum prendra effet le 20 septembre 2006 pour incorporation dans les trois versions linguistiques officielles de la EN.

Die Berichtigung tritt am 20. September 2006 zur Einarbeitung in die drei offiziellen Sprachfassungen der EN in Kraft.



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

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

EN 40-4:2005/AC:2006 (E/F/D)

English version

The superseding note shall be modified as follows:

On the title page

Supersedes EN 40-4:1982 and EN 40-9:1982

In the foreword

This document supersedes EN 40-4:1982 and EN 40-9:1982.

Version française

La mention de remplacement doit être modifiée comme suit:

Sur la page de titre

Remplace EN 40-4:1982 et EN 40-9:1982

Dans l'avant-propos

Le présent document remplace l'EN 40-4:1982 et l'EN 40-9:1982.

Deutsche Fassung

Der Ersatzvermerk muss wie folgt modifiziert werden:

Auf der Titelseite:

Ersatz für EN 40-4:1982 und EN 40-9:1982

Im Vorwort:

Dieses Dokument ersetzt EN 40-4:1982 und EN 40-9:1982.

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 40-4

December 2005

ICS 93.080.40

Supersedes EN 40-4:1982

English Version

Lighting columns - Part 4: Requirements for reinforced and prestressed concrete lighting columns

Candélabres d'éclairage public - Partie 4: Prescriptions pour les candélabres d'éclairage public en béton armé et en béton précontraint Lichtmaste - Teil 4: Anforderungen an Lichtmaste aus Stahl- und Spannbeton

This European Standard was approved by CEN on 27 October 2005.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

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



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

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

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Foreword

This document (EN 40-4:2005) has been prepared by Technical Committee CEN/TC 50 "Lighting columns and spigots", the secretariat of which is held by BSI.

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 June 2006, and conflicting national standards shall be withdrawn at the latest by August 2007.

This document supersedes EN 40-4:1982.

This document has been prepared under Mandate M/111 "Circulation fixtures" given to CEN by the European Commission and the European Free Trade Association and supports essential requirements of the EU Directive 89/106/EEC.

For relationship with EU Directive 89/106/EEC see informative Annex ZA, which is an integral part of this document.

For common aspects reference is made to EN 13369:2004, *Common rules for precast products*, from which also the relevant requirements of the EN 206-1:2000, *Concrete — Part 1: Specification, performances, production and conformity* are taken.

The references to EN 13369:2004 by precast concrete product standards are intended to make them homogeneous and to avoid repetitions of similar requirements.

This document defines in Annex ZA the application methods of CE marking to products designed using the relevant Eurocodes (normally EN 1992-1-1:2004 and EN 1992-1-2). Where, in default of applicability conditions of Eurocodes to the works of destination, design provisions other than Eurocodes are used for mechanical strength and/or fire resistance, the conditions to affix CE marking to the product are described in ZA.3.5.

This document is the fourth in a series relating to specifications for "Lighting columns". At present the Parts of this standard are as follows:

- Part 1: Definitions and terms
- Part 2: General requirements and dimensions
- Part 3: Design and verification
 - 3-1: Specification for characteristic loads
 - 3-2: Verification by testing
 - 3-3: Verification by calculation
- Part 4: Requirements for reinforced and prestressed concrete lighting
- Part 5: Requirements for steel lighting columns
- Part 6: Requirements for aluminium lighting columns
- Part 7: Requirements for fibre reinforced polymer composite lighting columns

EN 40-4:2005 (E)

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

1 Scope

This document specifies requirements for reinforced and prestressed concrete lighting columns. It applies to columns not exceeding 20 m height for post top lanterns and columns with brackets not exceeding 18 m height for side entry lanterns.

This document specifies:

- a) performance related to the essential requirement of resistance to horizontal (wind) loads, measured in accordance with EN 40-3;
- b) performance under vehicle impact (passive safety) in support of the Essential Requirement No. 4 Safety in use, measured in accordance with the corresponding test methods included in this document or available in separate European Standards.

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 40-1:1991, Lighting columns — Part 1: Definitions and terms

EN 40-2:2004, Lighting columns — Part 2: General requirements and dimensions

EN 40-3-1, Lighting columns — Part 3-1: Design and verification — Specification for characteristic loads

EN 40-3-2, Lighting columns — Part 3-2: Design and verification — Verification by testing

EN 40-3-3, Lighting columns — Part 3-3: Design and verification — Verification by calculation

EN 1992-1-1:2004, Eurocode 2: Design of concrete structures — Part 1-1: General rules and rules for buildings

EN 10204, Metallic products — Types of inspection documents

EN 12390-5, Testing hardened concrete — Part 5: Flexural strength of test specimens

EN 12767, Passive safety of support structures for road equipment — Requirements and test methods

EN 13369:2004, Common rules for precast concrete products

EN 62262, Degrees of protection provided by enclosures for electrical equipment against external mechanical impacts (IK code)

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 40-1:1991, EN 1992-1-1:2004, EN 13369:2004 and the following apply.

3.1

spun concrete

concrete compacted by pressure and vibration using a rotating mould (centrifugal force)



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