Tänavavalgustuspostid. Osa 4: Nõuded armatuuriga ja pressvormitud betoonist tänavavalgustuspostidele

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

EESTI STANDARDI EESSÕNA **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 40-4:2006 sisaldab Euroopa standardi EN 40-4:2006+AC:2006 ingliskeelset teksti. Käesolev dokument on jõustatud 27.02.2006 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 40-4:2006 consists of the English text of the European standard EN 40-4:2006+AC:2006. This document is endorsed on 27.02.2006 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.

Käsitlusala: 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.	**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.

ICS 93.080.40

Võtmesõnad:

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

Ref. No. EN 40-4:2005: E

Contents

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

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)