

Lighting columns - Part 3-2: Design and verification - Verification by testing

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- Verification by testing

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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| <p>Käesolev Eesti standard EVS-EN 40-3-2:2000 sisaldab Euroopa standardi EN 40-3-2:2000 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 08.08.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p> | <p>This Estonian standard EVS-EN 40-3-2:2000 consists of the English text of the European standard EN 40-3-2:2000.</p> <p>This document is endorsed on 08.08.2000 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p> |
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| <p>Käsitlusala:</p> <p>This European Standard specifies the requirements for the verification of the design of a lighting column by testing. It does not cover testing for quality control proposes. It applies to post top columns not exceeding 20 m high for top post top lanterns and to columns with brackets not exceeding 18 m height for side entry lanterns.</p> | <p>Scope:</p> <p>This European Standard specifies the requirements for the verification of the design of a lighting column by testing. It does not cover testing for quality control proposes. It applies to post top columns not exceeding 20 m high for top post top lanterns and to columns with brackets not exceeding 18 m height for side entry lanterns.</p> |
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ICS 91.160.20

Võtmesõnad:

English version

Lighting columns

Part 3-2: Design and verification – Verification by testing

Candélabres d'éclairage public –
Partie 3-2: Conception et vérification –
Vérification par essais

Lichtmaste – Teil 3-2: Bemessung
und Nachweis – Nachweis durch
Prüfung

This European Standard was approved by CEN on 1999-12-11.

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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.

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CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

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Foreword

This European Standard has been prepared by Technical Committee CEN/TC 50 "Lighting columns and spigots", the secretariat of which is held by BSI.

This European Standard replaces EN 40-8:1982.

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 August 2000, and conflicting national standards shall be withdrawn at the latest by August 2000.

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, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

There are six Parts to this standard as follows:

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

1 Scope

This European standard specifies the requirements for the verification of the design of steel, aluminium and concrete lighting columns by testing. It gives type tests and so does not cover testing for quality control purposes. It applies to post top lighting columns not exceeding 20 m height for post top lanterns and to lighting columns with brackets not exceeding 18 m height for side entry lanterns.

The requirements for lighting columns made from materials other than concrete, steel or aluminium (for example wood, plastic and cast iron) are not specifically covered in this standard.

This standard includes performance requirements for horizontal loads due to wind. Passive safety and the behaviour of a lighting column under the impact of a vehicle are not included, this group of lighting columns will have additional requirements (see prEN 40-2:1999).

2 Normative references

This European standard incorporates by dated or undated reference provisions from other standards. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references subsequent amendments or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 40-1, *Lighting columns - Definitions and terms*.

EN 40-3-1:2000, *Lighting columns - Part 3-1: Design and verification — Specification for characteristic loads*

prEN 40-3-3:1999, *Lighting columns - Part 3-3: Design and verification - Verification by calculation*

prEN 40-4:1999, *Lighting columns - Specification for reinforced and prestressed concrete lighting columns*

3 Terms and definitions

For the purposes of this European standard the terms and definitions given in EN 40-1 apply.

4 Test loads

The serviceability and structural test loads for the verification test are the characteristic dead and wind loads specified in clause 3 and 4 of EN 40-3-1:2000.

5 Acceptance criteria

5.1 General

If the following criteria are satisfied the lighting column shall be deemed to have successfully passed the test and the design for that type of lighting column verified.

5.2 Serviceability requirements

a) The vertical deflection of the lantern connection caused by the vertical forces shall not exceed the value of 0,025 w (see prEN 40-3-3:1999).