



MALAYSIAN STANDARD

MS EN 40-5:2012

Lighting columns - Part 5: Requirements for steel lighting columns

ICS: 77.140.01; 93.080.40

Descriptors: lighting columns, steels, road lighting, Impact testing, loading, corrosion protection, quality control, straightness measurement, physical testing

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Committee representation

The Industry Standards Committee on Building, Construction and Civil Engineering (ISC D) under whose authority this Malaysian Standard was adopted, comprises representatives from the following organisations:

Association of Consulting Engineers Malaysia
Construction Industry Development Board Malaysia
Department of Irrigation and Drainage Malaysia
Department of Standards Malaysia
Federation of Malaysian Manufacturers
Jabatan Bomba dan Penyelamat Malaysia
Jabatan Kerajaan Tempatan
Jabatan Kerja Raya Malaysia
Malaysian Timber Council
Malaysian Timber Industry Board
Master Builders Association Malaysia
Pertubuhan Akitek Malaysia
SIRIM Berhad (Secretariat)
Suruhanjaya Perkhidmatan Air Negara
The Cement and Concrete Association of Malaysia
The Institution of Engineers, Malaysia
Universiti Sains Malaysia
Universiti Teknologi Malaysia

The Technical Committee on Roads and Highways which supervised the adoption of the EN Standard as Malaysian Standard consists of representatives from the following organisations:

Association of Consulting Engineers Malaysia
Federation of Malaysian Manufacturers
IKRAM QA Services Sdn Bhd
Jabatan Bomba dan Penyelamat Malaysia
Jabatan Kerja Raya Malaysia
Malaysian Highway Authority
Opus Group Berhad
OPUS International (M) Berhad
Pertubuhan Akitek Malaysia
Projek Lebuhraya Utara-Selatan Berhad
SIRIM Berhad (Secretariat)
UEM Builders Berhad
Universiti Malaysia Pahang

The Working Group on Lighting Column which recommended the adoption of the EN Standard as Malaysian Standard consists of representatives from the following organisations:

Alyeen Engineering Sdn Bhd
Beka Sinergi Sdn Bhd
Décor Poles Sdn Bhd
Dewan Bandaraya Kuala Lumpur
Galvapole Industries Sdn Bhd
Jabatan Kerja Raya Malaysia
LYSAGHT Marketing Sdn Bhd
Malaysian Highway Authority
Ministry of Housing and Local Government
Perbadanan Putrajaya
PMW Concrete Industries Sdn Bhd
Radas Teguh Composites Sdn Bhd
SIRIM Berhad (Secretariat)
Suruhanjaya Tenaga
Tenaga Nasional Berhad (Bahagian Pembahagian)

NATIONAL FOREWORD

The adoption of the EN Standard as a Malaysian Standard was recommended by the Working Group on Lighting Column under the authority of the Industry Standards Committee on Building, Construction and Civil Engineering.

This Malaysian Standard is identical with EN 40-5:2002, *Lighting columns - Part 5: Requirements for steel lighting columns*, published by the European Committee for Standardization (CEN). However, for the purposes of this Malaysian Standard, the following apply:

- a) in the source text, "this European Standard" should read "this Malaysian Standard";
- b) the comma which is used as a decimal sign (if any), to read as a point; and
- d) reference to European Standards should be replaced by corresponding Malaysian Standards as follows:

<u>Referenced European Standards</u>	<u>Corresponding Malaysian Standards</u>
EN 40-1, <i>Lighting columns - Part 1: Definitions and terms</i>	MS EN 40-1, <i>Lighting columns - Part 1: Definitions and terms</i>
EN 40-2, <i>Lighting columns - Part 2: General requirements and dimensions</i>	MS EN 40-2, <i>Lighting columns - Part 2: General requirements and dimensions</i>
EN 40-3-1, <i>Lighting columns - Part 3-1: Design and verification - Specification for characteristics loads</i>	MS EN 40-3-1, <i>Lighting columns - Part 3-1: Design and verification - Specification for characteristics loads</i>
EN 40-3-2, <i>Lighting columns - Part 3-2: Design and verification - Verification by testing</i>	MS EN 40-3-2, <i>Lighting columns - Part 3-2: Design and verification - Verification by testing</i>
EN 40-3-3, <i>Lighting columns - Part 3-3: Design and verification - Verification by calculation</i>	MS EN 40-3-3, <i>Lighting columns - Part 3-3: Design and verification - Verification by calculation</i>
EN 40-4, <i>Lighting columns - Part 4: Requirements for reinforced and prestressed concrete lighting columns</i>	MS EN 40-4, <i>Lighting columns - Part 4: Requirements for reinforced and prestressed concrete lighting columns</i>
EN 40-5, <i>Lighting columns - Part 5: Requirements for steel lighting columns</i>	MS EN 40-5, <i>Lighting columns - Part 5: Requirements for steel lighting columns</i>

NATIONAL FOREWORD (continued)

Referenced European Standards

EN 1011-1, *Welding - Recommendations for welding of metallic materials - Part 1: General guidance for arc welding*

EN 1011-2, *Welding - Recommendations for welding of metallic materials - Part 2: Arc welding of ferritic steels*

EN 1011-3, *Welding - Recommendations for welding of metallic materials - Part 3: Arc welding of stainless steels*

Corresponding Malaysian Standards

MS 1492-1, *Welding - Recommendations for welding of metallic materials - Part 1: General guidance for arc welding (First revision)*

MS 1492-2, *Welding - Recommendations for welding of metallic materials - Part 2: arc welding of ferritic steels (First revision)*

MS 1492-3, *Welding - Recommendations for welding of metallic materials - Part 3: arc welding of stainless steels*

MS EN 40 consists of the following parts, under the general title *Lighting columns*:

Part 1: Definitions and terms

Part 2: General requirements and dimensions

Part 3-1: Design and verification - Specification for characteristics loads

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

Part 3-3: Design and verification - Verification by calculation

Part 4: Requirements for reinforced and prestressed concrete lighting columns

Part 5: Requirements for steel lighting columns

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