



BS 4533 : Section 102.57 : 1990
EN 60 570 : 1989

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British Standard

Luminaires

Part 102. Particular requirements

Section 102.57 Electrical supply track systems for luminaires

Luminaires

Partie 102. Règles particulières

Section 102.57 Systèmes d'alimentation électriques par rail pour luminaires

Leuchten

Teil 102. Besondere Anforderungen

Abschnitt 102.57 Elektrische Stromschienen-Systeme für Leuchten

This European Standard EN 60 570 : 1989 has the status of a British Standard

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BS 4533 : Section 102.57 : 1990

Contents

	Page
National foreword	Inside front cover
Brief history	2
Technical text	2
Text of EN 60 570	4
National appendix NA (informative)	16
National appendix NB (informative)	Inside back cover
National appendix NC (informative)	Inside back cover
Cooperating organizations	Back cover

National foreword

This Section of BS 4533 has been prepared under the direction of the Electrical Illumination Standards Policy Committee and is the English language version of EN 60 570 'Electrical supply track systems for luminaires', published by the European Committee for Electrotechnical Standardization (CENELEC). It was derived by that organization from IEC Publication 570 (1985) edition 2, which has a similar title as that of the European Standard. This Section of BS 4533 supersedes BS 4533 : Part 2 : Section 2.6 : 1979 which is withdrawn.

The CENELEC Common Modifications have been implemented at the appropriate place in the text of IEC Publication 570 (1985) edition 2 and are indicated by a side line in the margin. The foreword and preface of IEC Publication 570 (1985) edition 2 and the deleted parts of the original IEC text which do not form part of the text of EN 60 570 have been quoted in national appendix NA. Annexes designated 'normative' are part of the body of the standard. Annexes designated 'informative' are given for information only. National appendices are designated 'informative'.

Where the words 'Publication 598-1' appear they should be read as 'BS 4533 : Part 101'.

Cross-references. Details of international publications quoted in this British Standard and corresponding British Standards are given in national appendix NB.

Product certification. Users of this British Standard are advised to consider the desirability of third party certification of product conformity with this British Standard based on testing and continuing surveillance, which may be coupled with assessment of a supplier's quality systems against the appropriate Part of BS 5750.

Enquiries as to the availability of third party certification schemes will be forwarded by BSI to the Association of Certification Bodies. If a third party certification scheme does not already exist, users should consider approaching an appropriate body from the list of Association members.

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English version

Electrical supply track systems for luminaires

(IEC 570 (1985) ed 2, modified)

Systèmes d'alimentation électrique par rail pour
luminaires
(CEI 570 (1985) ed 2, modifiée)

Elektrische Stromschienen-Systeme für Leuchten
(IEC 570 (1985) Ausg. 2, modifiziert)

This European Standard was ratified by CENELEC on 2 December 1987.

CENELEC members are bound to comply with the requirements of the 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 CENELEC Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French and German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to CENELEC Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxemburg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

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

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Brief history

The CENELEC Questionnaire Procedure performed for finding out whether or not IEC 570 (2nd edition — 1985) could be accepted without textual changes, has shown that some common modifications were necessary for acceptance as European Standard (EN). The Reference Document modified by common modifications prepared by TC 34Z was submitted to the CENELEC members for formal vote and acceptance by CENELEC.

Technical text

The text of the International Standard IEC 570 (2nd edition — 1985) with common modifications was approved by CENELEC on 1987-12-02 as a European Standard.

Annexes designated "normative" are part of the body of the standard.

Annexes designated "informative" are given only for information.

In this European Standard:

- Annex ZA is normative;
- Annex ZB is informative.

The following dates were fixed:

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|---|--------------|
| — date of announcement (doa) | : 1988-06-01 |
| — date of latest publication (dop) | : 1989-06-01 |
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Contents

Clause	Page
1. Scope	4
2. Definitions	4
3. Classification	5
4. General test requirements	5
5. Marking	6
6. General requirements	6
7. Construction	6
8. Creepage distances and clearances	9
9. Terminals	9
10. External and internal wiring	9
11. Thermal endurance and operating temperatures	9
12. Protection against electric shock	10
13. Resistance to humidity	10
14. Insulation resistance and electric strength	10
15. Provision for earthing	11
16. Resistance to heat, fire and tracking	11
Figures	13
ANNEX ZA (normative) – Special national conditions	14
ANNEX ZB (informative) – National deviations	15

ELECTRICAL SUPPLY TRACK SYSTEMS FOR LUMINAIRES

1. Scope

This standard applies to track systems with two or more poles and with provision for earthing (Class I), with a rated voltage not exceeding 440 V between poles (live conductors), rated frequency not exceeding 60 Hz and a rated current not exceeding 16 A per conductor for the connection of luminaires to the electrical supply.

It applies to track systems designed for ordinary interior use for mounting on, or flush with, or suspended from walls and ceilings. These track systems are not intended for locations where special conditions prevail as in ships, vehicles and the like and in hazardous locations, for example, where explosions are liable to occur.

2. Definitions

For the purposes of this standard, the definitions of Section One of IEC Publication 598-1 apply together with the following definitions:

Note. – The use of the term luminaire (see Publication 598-1) hereinafter also includes components of the luminaire track system.

2.1 Luminaire track system

A system, including a track with conductors, for the connection of luminaires to an electrical supply in a range of different positions determined only by the length and location of the track and comprising some or all of the components defined in Sub-clauses 2.2 to 2.8. (See also Figure 1, page 24.)

2.2 Track

A generally linear assembly of conductors within a housing providing for the mechanical support and electrical connection of luminaires.

Note. – Luminaires can be positioned or repositioned along the length of track in a simple manner (that is, without the use of tools).

2.3 Coupler

A component enabling electrical or mechanical connection to be made between tracks.

2.4 Track supply connector

A component used for the electrical connection of a mains supply to the track.

Note. – The functions of a coupler and a track supply connector may be combined.

2.5 Luminaire supply connector

A component for the electrical connection of a luminaire to the track. A connector does not provide mechanical connection of a luminaire to the track.

2.6 Adaptor

A component used for the electrical and mechanical connection of a luminaire to the track.

Note. – An adaptor may incorporate a switch or a fuse.

2.7 Track suspension device

A component used for the mechanical connection of the track system to the supporting surface.

2.8 Luminaire suspension device

A component used for the mechanical connection of a luminaire to the track.

2.9 Rated current

The current assigned to the track or the component by the manufacturer.

Note. – Where the term current is used, it implies the r.m.s. value, unless otherwise specified.

2.10 End cover

A component intended to be fixed at the end of a track, providing electrical and mechanical protection of the ends of the conductors.

3. Classification

Luminaire track systems shall be Class I in accordance with the provisions of Section Two of Publication 598-1.

4. General test requirements

4.1 The requirements and tests of this standard shall not be applied to equipment already subject to its own separate IEC standard.

4.2 Tests according to this standard are type tests.

One test sample as described in Sub-clause 4.3 shall be subjected to all relevant tests.

In order to reduce the time of testing and to allow for any tests which may be destructive, the manufacturer may submit additional samples or parts of samples provided that these are of the same materials as the original sample and that the results of the test are the same as if carried out on a single sample.

4.3 Unless otherwise specified, the sample is tested as delivered and under the most unfavourable conditions of use taking into account the manufacturer's instructions, at an ambient temperature of between 10 °C and 30 °C.

The minimum test sample shall include the following items:

- a) at least three sections of track, comprising a total length when assembled together of not less than 2.4 m and including one section of maximum length as indicated in the manufacturer's literature;
- b) 1 track supply connector;
- c) 1 end cover (if required);
- d) 1 coupler per length of track supplied (minimum of 3);
- e) 1 adaptor per length of track supplied (minimum of 3);
- f) 1 luminaire supply connector per length of track supplied (if applicable) (minimum of 3);
- g) the necessary suspension devices and any other components as specified by the manufacturer in his installation instructions.

4.4 Unless otherwise specified, the tests are carried out in the order of the clauses.