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BSI Standards Publication

Lighting applications — Emergency lighting for buildings

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National foreword

This British Standard is the UK implementation of EN 1838:2024. It supersedes BS EN 1838:2013, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee EL/1/1, Emergency lighting.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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EUROPÄISCHE NORM

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English Version

Lighting applications - Emergency lighting for buildings

Éclairagisme - Éclairage de secours pour les bâtiments

Angewandte Lichttechnik - Notbeleuchtung für
bauliche Anlagen

This European Standard was approved by CEN on 19 May 2024.

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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 CEN-CENELEC Management Centre has the same status as the official versions.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

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European foreword

This document (EN 1838:2024) has been prepared by Technical Committee CEN/TC 169 “Light and lighting”, the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by June 2025, and conflicting national standards shall be withdrawn at the latest by June 2027.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 1838:2013.

EN 1838:2024 includes the following significant technical changes with respect to EN 1838:2013:

- Requirements for emergency escape route lighting have been amended to cover the width of the escape route;
- Greater detail has been included for the requirements for emergency lighting of points of emphasis and specific areas of hazard;
- Considerations for emergency lighting systems during and after a premises lockdown or prolonged periods where power is disconnected have been added as Annex C.

This document is read in conjunction with EN 50172.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

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

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Introduction

Emergency lighting for buildings is provided for use when the supply to the normal lighting fails and is therefore powered from a source independent of that supplying the normal lighting. It may provide lighting for both safety and operational tasks.

For the purposes of this document emergency lighting is regarded as a generic term of which there are a number of specific forms, as shown in Table 1.

Table 1 — Specific forms of emergency lighting

Emergency lighting see Clauses 4, 5, 6 and 7				
Emergency escape lighting , see Clause 4 and 5				
Escape route lighting see 5.1	Open area (anti-panic) lighting see 5.2	High-risk task area lighting see 5.3	Local area lighting see 7.1	Standby lighting see 7.2
Safety signs including adaptive safety signs see Clause 6				

Emergency lighting can be provided by maintained luminaires and maintained safety signs when the normal lighting is available. Maintained luminaires and maintained exit and safety signs shall operate when the normal lighting is required but fails. (Refer to EN 50172 for further details on normal lighting failures.)

Adaptive emergency escape lighting (AEEL) is a technique that can be used as a supplement to emergency escape lighting and, when applied to escape routes in addition to emergency escape lighting, can enhance their effectiveness in an emergency. These techniques are included in CEN/TS 17951.

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1 Scope

This document specifies the luminous requirements for emergency lighting systems, including adaptive emergency escape lighting systems, electric emergency lighting, installed in premises or locations where such systems are required or needed and which are principally applicable to locations where the public or workers have access.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 12665:2024, *Light and lighting - Basic terms and criteria for specifying lighting requirements*

EN 50172:2024, *Emergency escape lighting systems*

EN IEC 60598-1, *Luminaires - Part 1: General requirements and tests (IEC 60598-1)*

EN 60598-2-22, *Luminaires - Part 2-22: Particular requirements - Luminaires for emergency lighting*

EN ISO 7010, *Graphical symbols - Safety colours and safety signs - Registered safety signs (ISO 7010)*

ISO 3864-1, *Graphical symbols — Safety colours and safety signs — Part 1: Design principles for safety signs and safety markings*

ISO 3864-3, *Graphical symbols — Safety colours and safety signs — Part 3: Design principles for graphical symbols for use in safety signs*

ISO 3864-4, *Graphical symbols — Safety colours and safety signs — Part 4: Colorimetric and photometric properties of safety sign materials*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 12665:2024 and the following apply.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1 emergency lighting

lighting provided for use when the power supply to the normal electric lighting fails

[SOURCE: EN 12665:2024, 3.5.6]

3.2 place of safety

designated place normally outside the building where escaping people can assemble safely and are not at risk of the emergency status

[SOURCE: EN 12665:2024, 3.5.100]