

BS 5266-1:2016



BSI Standards Publication

# Emergency lighting –

## Part 1: Code of practice for the emergency lighting of premises

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## Foreword

### Publishing information

This part of BS 5266 is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 31 May 2016. It was prepared by Subcommittee EL/1/1, *Emergency lighting*, under the authority of Technical Committee EL/1, *Light and lighting applications*. A list of organizations represented on these committees can be obtained on request to their secretary.

### Supersession

This part of BS 5266 supersedes BS 5266-1:2011, which is withdrawn.

### Relationship with other publications

This part of BS 5266 is intended for use in conjunction with BS EN 1838 and BS EN 50172.

BS EN 50172:2004, 4.1 specifies compliance with the wiring rules given in HD 384/HD 60364. The UK applicable parts of HD 384/HD 60364 are implemented in the IET Wiring Regulations (BS 7671).

BS 5266 is published in the following parts:

- Part 1: *Code of practice for the emergency lighting of premises;*
- Part 2: *Code of practice for electrical low mounted way guidance systems for emergency use;*
- Part 4: *Code of practice for design, installation, maintenance and use of optical fibre systems;*
- Part 5: *Specification for components parts of optical fibre systems;*
- Part 6: *Code of practice for new electrical low mounted way guidance systems for emergency use – Photoluminescent systems;*
- Part 8: *Emergency escape lighting systems (also numbered BS EN 50172).*

The following topics are covered in BS EN 50172 and BS EN 1838:

- general requirements for emergency escape lighting;
- escape route lighting;
- open area (anti-panic) lighting;
- high risk task area lighting;
- standby lighting.

Detailed guidance on fire risk assessments is given in PAS 79, in a series of guides published by the Department for Communities and Local Government [1–11], and in guidance published by the Justice Department of the Scottish Government [12–21].

Guidance on risk assessments for health and safety is given in HSE publication INDG 163 [22].

A summary of the hierarchy of standards covering the different aspects of emergency lighting systems is given in Annex A.

### Information about this document

This is a full revision of the standard. The principal change introduced is an expansion of the scope to cover emergency safety lighting and standby lighting, as well as emergency escape lighting.

The aim of this standard is to promote wider understanding of the different types of emergency lighting system which may be employed, and to give guidance on their correct application to the varied requirements of different categories of premises.

The recommendations given in this standard have been drawn up to encourage uniformity of application, based on providing adequate safety to people in the event of interruption of the normal lighting, and having due regard to the hazard level and degree of familiarity of occupants with particular premises. The standard recognizes that, in addition to ensuring safe unobstructed means of escape from the premises at all times, an important function of emergency lighting is to make possible the immediate location and operation of fire alarm call points and fire-fighting equipment, and another is to minimize the chance of panic arising in enclosed spaces, such as lifts. Although the standard makes recommendations for the provision of emergency lighting in a wide variety of premises, the fact that particular types of premises are mentioned in Clause 9 does not necessarily mean that all such premises are required by law to have emergency lighting installed. For certain types of premises, the provisions of this standard might be supplemented or replaced by alternative requirements at the discretion of the enforcing authority.

### Use of this document

As a code of practice, this part of BS 5266 takes the form of guidance and recommendations. It should not be quoted as if it were a specification and particular care should be taken to ensure that claims of compliance are not misleading.

Any user claiming compliance with this part of BS 5266 is expected to be able to justify any course of action that deviates from its recommendations.

BSI permits the reproduction by individual users of BS 5266-1:2016, Figures H.1, H.2, H.3, H.4, I.1, I.2, K.1, K.2, L.1, M.2 and M.3. This reproduction is only permitted where it is necessary for the user to use the sample certificates given in the figures during each application of the standard.

### Presentational conventions

The provisions in this standard are presented in roman (i.e. upright) type. Its recommendations are expressed in sentences in which the principal auxiliary verb is "shall".

*Comments, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.*

Where words have alternative spellings, the preferred spelling of the Shorter Oxford English Dictionary is used (e.g. "organization" rather than "organisation").

### Contractual and legal considerations

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

### Compliance with a British Standard cannot confer immunity from legal obligations.

Particular attention is drawn to legal requirements in respect of emergency lighting. Further guidance is given in the Building Regulations 2010, Approved Document B [23] and its equivalents in Wales [24], Scotland [25] and Northern Ireland [26].

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## Introduction

UK legislation imposes a duty on persons, including employers and other persons with control of premises, to carry out risk assessments and to take such precautions as to ensure as far as reasonably practicable the safety of the occupants. These measures include the provision of safe means of escape, including emergency escape routes and exits, together with, where necessary, signs indicating them. Legislation also states that suitable and sufficient emergency lighting needs are to be provided, where people are particularly exposed to danger, in the event of failure of the supply to the normal lighting.

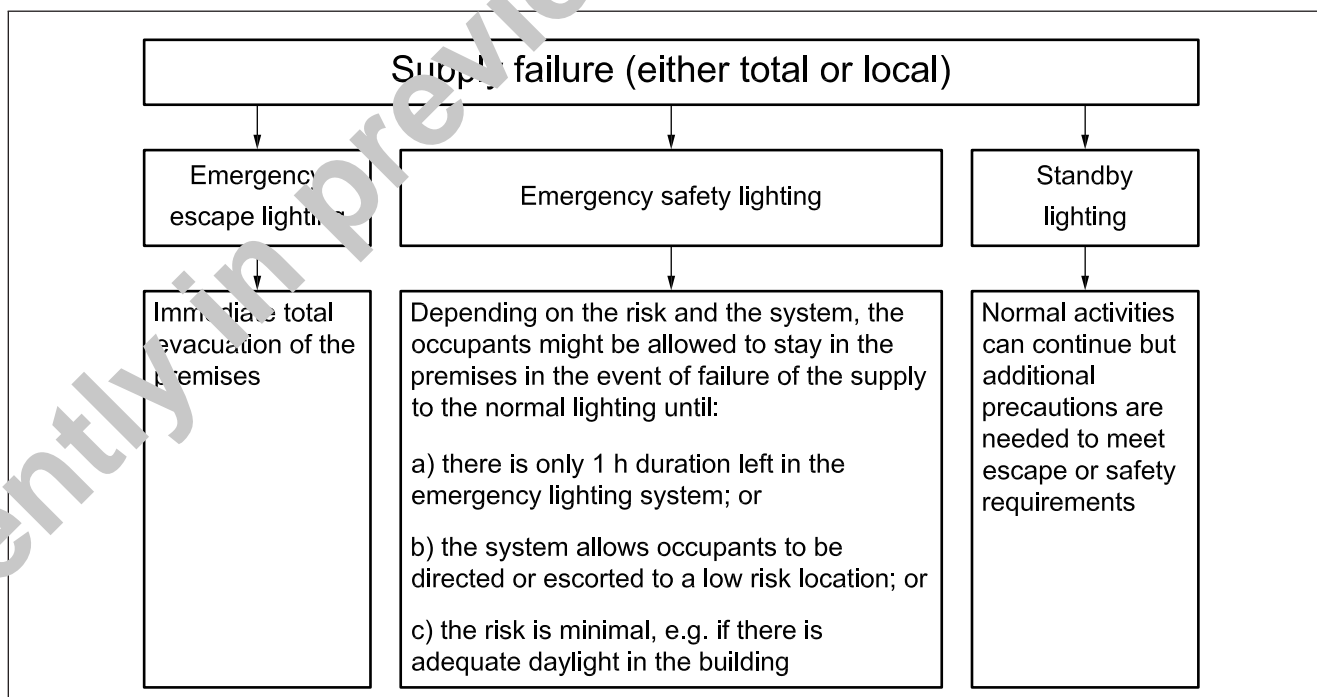
There is increasing recognition of the application of emergency lighting to assist the safety of occupants who stay in a building during a mains supply failure. In many instances, particularly in places with frequently occurring power cuts, it might not be necessary or appropriate to evacuate the premises in the event of failure of the supply to the normal lighting, but precautions need to be taken to enable occupants to remain on the premises in safety. This revised edition of the standard covers the use of emergency lighting in premises that are not evacuated immediately, as well as conventional emergency escape lighting. Some guidance on new developments in emergency lighting application and technology is given in Annex B.

Emergency lighting can perform the following functions, some of which can be combined into a single system:

- emergency escape lighting, which provides illumination of escape routes, signs and points of emphasis to assist occupants to evacuate the premises;
- emergency safety lighting, which provides lighting for safe movement in the premises when the occupants need not evacuate the premises immediately;
- standby lighting, powered by an alternative power supply, which provides sufficient lighting to operate the premises normally in the event of a total failure of the main power supply.

The different types of emergency lighting are illustrated in Figure 1. Guidance on the application of emergency lighting systems is given in Annex C.

Figure 1 Types of emergency lighting



## 1 Scope

This part of BS 5266 gives recommendations and guidance on the factors that need to be taken into account in the design, installation and wiring of electrical emergency lighting systems, in order to provide the lighting performance needed for safety of people in the building in the event of failure of the supply to the normal lighting.

This British Standard applies to emergency lighting systems used to:

- a) assist occupants to leave a building during an emergency;
- b) help protect occupants if they stay in a building during an emergency;
- c) help occupants to continue normal operations in the event of failure of the supply to the normal lighting.

This part of BS 5266 also gives recommendations for lighting in areas with fixed seating.

This part of BS 5266 is not applicable to dwellings; however, its provisions are applicable to common access routes within blocks of flats or maisonettes.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

BS 4678-4, *Cable trunking – Part 4: Specification for cable trunking made of insulating material*

BS 5499-4:2013, *Safety signs – Part 4: Code of practice for escape route signing*

BS 5499-10:2014, *Guidance for the selection and use of safety signs and fire safety notices*

BS 7273-4, *Code of practice for the operation of fire protection measures – Part 4: Actuation of release mechanisms for doors*

BS 7629-1, *Electric cables – Specification for 300/500 V fire resistant, screened, fixed installation cables having low emission of smoke and corrosive gases when affected by fire – Part 1: Multicore cables*

BS 7843, *Electric cables – Thermosetting insulated, armoured, fire-resistant cables of rated voltage 600/1 000 V for fixed installations, having low emission of smoke and corrosive gases when affected by fire – Specification*

BS 8334-2, *Methods of test for assessment of the fire integrity of electric cables – Part 2: Test for unprotected small cables for use in emergency circuits – BS EN 50200 with 930 deg flame and with water spray*

BS 8519, *Selection and installation of fire-resistant power and control cable systems for life safety and fire-fighting applications – Code of practice*

BS 8592, *Electric cables – Thermosetting insulated, non-armoured, fire-resistant, single core non-sheathed cables of rated voltage 450/750 V, having low emission of smoke and corrosive gases when affected by fire – Specification*

BS EN 81-20, *Safety rules for the construction and installation of lifts – Lifts for the transport of persons and goods – Part 20: Passenger and goods passenger lifts*