

Fire precautions in the design, construction and use of buildings —

Part 8: Code of practice for means of escape for disabled people

ICS 13.220.20; 91.040.30

Committees responsible for this British Standard

The preparation of this British Standard was entrusted to Technical Committee FSH/14, Fire precautions in buildings, upon which the following bodies were represented:

Association of British Theatre Technicians
 Association of Specialist Fire Protection
 British Standards Society
 Chief and Assistant Chief Fire Officers Association
 Consumer Policy Committee of BSI
 Department for Education
 Department of Health (NHS Estates)
 Department of the Environment, Transport and the Regions (Represented by the Building Research Establishment)
 Department of the Environment, Transport and the Regions (Construction Directorate)
 Department of the Environment for Northern Ireland
 District Surveyors Association
 Electricity Association
 Fire Brigades Union
 Fire Safety Development Group
 Guild of Architectural Ironmongers
 Health and Safety Executive
 Hevac Association
 Institute of Building Control
 Institute of Fire Safety
 Institution of Fire Engineers
 Institution of Structural Engineers
 Line of Fire
 London Fire and Civil Defence Authority
 Loss Prevention Council
 National Association of Fire Officers
 National House-building Council
 Royal Institute of British Architects
 Royal Institution of Chartered Surveyors
 Scottish Office (Construction and Building Control Group)
 Steel Window Association

The following bodies were also represented in the drafting of the standard, through subcommittees and panels:

Committee on Mobility for Disabled People
 Home Office
 Joint Committee on Mobility for the Blind and Partially Sighted
 National Federation of the Blind of the United Kingdom

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Contents

	Page
Committees responsible	Inside front cover
Foreword	ii
Introduction	1
1 Scope	1
2 Normative references	1
3 Definitions	2
4 Use of this code	4
5 Provision for escape	6
6 Escape routes	7
7 Horizontal escape routes	7
8 Refuges	8
9 Stairways	15
10 Ramps	15
11 Lifts	16
12 Fire safety signs	17
13 Advice to management	17
14 <i>Deleted</i>	17
15 <i>Deleted</i>	17
16 <i>Deleted</i>	17
17 Construction of refuges and evacuation lift enclosures	17
18 Fire alarm systems	18
Annex A (normative) Application of this part of BS 5588 to existing buildings	20
Annex B (informative) Sources of information	21
Bibliography	23
Figure 1 — Principles of evacuation	6
Figure 2 — Exits from same storey with different ground levels	7
Figure 3 — Examples of refuges in buildings not provided with evacuation lifts	10
Figure 4 — Examples of refuges in buildings provided with evacuation lifts	12
Figure 5 — Wheelchair spaces in protected stairways	14
Figure 6 — <i>Deleted</i>	17

Foreword

This part of BS 5588 was prepared by Technical Committee FSH/14. It supersedes BS 5588-8:1988, which is withdrawn.

The start and finish of text introduced or altered by amendment is indicated in the text by tags **A₁** **A₁**. Tags indicating changes to text carry the number of the amendment. For example, text altered by Amendment No. 1 is indicated by **A₁** **A₁**.

All matters dealing with fire safety management are now located in BS 5588-12.

The other parts which comprise BS 5588 are as follows:

- *Part 0: Guide to fire safety codes of practice for particular premises/applications;*
- *Part 1: Code of practice for residential buildings;*
- *Part 4: Code of practice for smoke control using pressure differentials;*
- *Part 5: Code of practice for firefighting stairs and lifts;*
- *Part 6: Code of practice for places of assembly;*
- *Part 7: Code of practice for the incorporation of atria in buildings;*
- *Part 9: Code of practice for ventilation and air conditioning ductwork;*
- *Part 10: Code of practice for shopping complexes;*
- *Part 11: Code of practice for shops, offices, industrial, storage and other similar buildings;*
- *Part 12: Managing fire safety.*

The axiom that buildings should be accessible to disabled people is firmly established. In 1967, BSI published CP 96, *Access for the disabled to buildings*. The Chronically Sick and Disabled Persons Act [1] was enacted in 1970 (and amended in 1976) with the requirement in Section 4 that buildings to which the public, or some sections of the public, have access should, wherever practicable and reasonable, be accessible. In 1979, CP 96 was revised as BS 5810. The Disabled Persons Act, 1981 [2] included in Section 6 a requirement that provision of access and facilities for disabled people in public buildings should be in accordance with BS 5810 in order that access should be more effectively secured. Following consultations on how Section 6 of the 1981 Act might be implemented, the Government decided that the intentions of the legislation would be better satisfied by using building regulations as a control instrument. Regulations came into force in Northern Ireland from December 1984, in Scotland from March 1985 and in England and Wales from August 1985. This has subsequently been reinforced by the Disability Discrimination Act 1995 [3]. A basic tenet of building law is that access provision has to be complemented by egress provision, and it is on this account that this part of BS 5588 has been prepared.

It has been assumed in the drafting of this standard that the execution of its provisions will be entrusted to appropriately qualified and experienced people.

As a code of practice, this British Standard 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.

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 does not of itself confer immunity from legal obligations.

In particular, attention is drawn to 4.3.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 23 and a back cover.

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Introduction

Management systems are an essential part of the means of escape for disabled people and **[A1]** BS 5588-12 provides **[A1]** guidance for management to aid it in making the best use of the facilities described in this part of BS 5588.

It is envisaged that those responsible for the management of existing buildings would adopt the principles underlying this standard and its recommendations as part of their routine administrative procedures. In many instances, it would be sufficient simply to take account of the advice to management that is contained in **[A1]** BS 5588-12 **[A1]** to ensure that the use of a building is facilitated, notwithstanding an individual's disability.

1 Scope

[A1] This part of BS 5588 provides guidance, additional to that in the other parts of BS 5588, for designers, the building construction team and building managements on incorporating into new buildings, or buildings that are being altered, measures that enable disabled people to be assisted to safety in the event of a fire. It applies to all buildings except single-family dwelling houses, flats and maisonettes and buildings used as a house in multiple occupation. **[A1]**

This part of BS 5588 is not applicable to buildings purpose built for disabled people, including Health Care Premises which are covered by specific guidance documents issued by Government Departments and NHS Estates.

NOTE 1 These are usually provided with means of escape that are more comprehensive than those recommended in this part of BS 5588.

People with learning difficulties are not catered for in this standard as they need to be treated no differently from children or the very elderly with regards to their needs.

NOTE 2 Application of this standard to existing buildings is covered in Annex A.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this British Standard. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. For undated references, the latest edition of the publication referred to applies.

BS 476-4, *Fire tests on building materials and structures — Part 4: Non-combustibility test for materials.*

BS 476-7, *Fire tests on building materials and structures — Part 7: Method of test to determine the classification of the surface spread of flame of products.*

BS 476-8, *Fire tests on building materials and structures — Part 8: Test methods and criteria for the fire resistance of elements of building construction.*

BS 476-11, *Fire tests on building materials and structures — Part 11: Method for assessing the heat emission from building materials.*

BS 476-20, *Fire tests on building materials and structures — Part 20: Method for determination of the fire resistance of elements of construction (general principles).*

BS 476-21, *Fire tests on building materials and structures — Part 21: Methods for determination of the fire resistance of loadbearing elements of construction.*

BS 476-22, *Fire tests on building materials and structures — Part 22: Methods for determination of the fire resistance of non-loadbearing elements of construction.*

BS 476-23, *Fire tests on building materials and structures — Part 23: Methods for determination of the contribution of components to the fire resistance of a structure.*

BS 476-31.1, *Fire tests on building materials and structures — Part 31: Methods for measuring smoke penetration through doorsets and shutter assemblies — Section 31.1 Method of measurement under ambient temperature conditions.*

BS 5395-2:1988, *Stairs, ladders and walkways — Part 2: Code of practice for the design of helical and spiral stairs.*

BS 5499-1, *Fire safety signs, notices and graphic symbols — Part 1: Specification for fire safety signs.*

BS 5568:1978, *Specification for folding wheelchairs for adults*.

BS 5588-11, *Fire precautions in the design, construction and use of buildings — Part 11: Code of practice for shops, offices, industrial, storage and other similar buildings*.

BS 5588-12, *Fire precautions in the design, construction and use of buildings — Part 12: Managing fire safety*. ^{A1}

BS 5655-1, *Lifts and service lifts — Part 1: Safety rules for the construction and installation of electric lifts*.

BS 5655-2, *Lifts and service lifts — Part 2: Safety rules for the construction and installation of hydraulic lifts*.

BS EN 1125, *Building hardware — Panic exit devices operated by a horizontal bar — Requirements and test methods*.

BS 5810, *Code of practice for access for the disabled to buildings*.

BS 5839-1, *Fire detection and alarm systems for buildings — Part 1: Code of practice for system design, installation and servicing*.

BS 5839-3, *Fire detection and alarm systems for buildings — Part 3: Specification for automatic release mechanisms for certain fire protection equipment*.

BS 6206, *Specification for impact performance requirements for flat safety glass and safety plastics for use in buildings*.

BS 7036, *Code of practice for safety at powered doors for pedestrian use*.

PD 6512, *Use of elements of structural fire protection with particular reference to the recommendations given in BS 5588, Fire precautions in the design and construction of buildings*.

3 Definitions

For the purposes of this part of BS 5588 the following definitions apply.

3.1

accommodation stairway

stairway, additional to that or those required for escape purposes, provided for the convenience of occupants

3.2

ambulant disabled people

disabled people who are able to walk but who may depend on prostheses (artificial limbs), orthoses (callipers), sticks, crutches or walking aids

3.3

disabled people

people with a physical, hearing or sight impairment which affects their mobility or their use of buildings

3.4

escape route

route forming part of the means of escape from any point in a building to a final exit (see 3.6)

NOTE It might be necessary to pass through further doorways before reaching a place of safety, for example if escape was via an internal courtyard.

3.5

evacuation lift

lift that may be used for the evacuation of disabled people in a fire under the direction of management or firefighters

3.6

final exit

termination of an escape route from a building giving direct access to a street, passageway, walkway or other open space sited to ensure the rapid dispersal of persons from the vicinity of a building so that they are no longer in danger from fire and/or smoke

3.7**(fire) compartment**

building or part of a building, comprising one or more rooms, spaces or storeys, constructed to prevent the spread of fire to or from another part of the same building, or an adjoining building

3.8**fire door**

door or shutter provided for the passage of persons, air or objects, which, together with its frame and furniture as installed in a building, is intended, when closed, to resist the passage of fire and/or gaseous products of combustion and is capable of meeting specified performance criteria to those ends

3.9**firefighting lift**

lift designed to have additional protection against fire, with controls that enable it to be used under the direction control of the fire service in fighting a fire

3.10**fire resistance**

ability of a component or construction of a building to satisfy for a stated period of time some or all of the appropriate criteria specified in the relevant part of BS 476

3.11**manual call point**

component of a fire detection and fire alarm system which is used for the manual initiation of an alarm (see BS EN 54)

3.12**non-combustible material**

any material capable of satisfying the performance requirements specified in BS 476-4, or any material which when tested in accordance with BS 476-11 does not flame or cause any rise in the temperature on either the centre (specimen) or furnace thermocouples

3.13**protected stairway/lobby/corridor**

stairway, including any exit passageway leading therefrom to its final exit, or lobby or corridor, enclosed with (other than any part that is an external wall of a building) fire-resisting construction

3.14**refuge**

area that is enclosed with fire-resisting construction (other than any part that is an external wall of a building) and served directly by a safe route to a storey exit, evacuation lift or final exit, thus constituting a temporarily safe space for disabled people to await assistance for their evacuation

NOTE 1 Examples of refuges are shown in Figure 3 and Figure 4.

NOTE 2 Refuges are relatively safe waiting areas for short periods. They are not areas where disabled people should be left alone indefinitely until rescued by the fire brigade, or until the fire is extinguished. (This should not be confused with the use of refuges in progressive horizontal evacuation, e.g. in hospitals from which people may not need to escape but from where there is the potential for further escape should that become necessary.)

3.15**storey exit**

final exit, or a doorway, giving direct access to a protected stairway, firefighting lobby or external escape route

3.16**two-stage fire alarm system**

fire alarm system in which the initial alarm is given only in a restricted part of the premises, with an alert signal being given in the remainder of the premises

3.17**wheelchair bound person**

wheelchair user who is confined to the wheelchair and requires assistance to negotiate stairs whilst remaining in his or her wheelchair

3.18

wheelchair user

disabled person who depends on a wheelchair for mobility

3.19

wheelchair stairlift

appliance for transporting a person in a wheelchair between two or more levels by means of a guided carriage moving substantially in the direction of a flight of stairs and travelling in the same path in both upward and downward directions

4 Use of this code

4.1 Provision and use of fire safety arrangements

The principles and philosophy underlying the provision of means of escape from buildings and the related precautions in the case of fire are:

- a) the planning and protection of horizontal and vertical escape routes leading to safety from any area that may be threatened by fire, so enabling any person to turn away and to escape;
- b) the construction and finishing of the building with materials which embody fire resistance in the structure;
- c) segregation of high fire risk/hazard areas;
- d) fire warning systems and, where appropriate, systems for the automatic detection of fire;
- e) effective management control.

4.2 Relationship with other standards for means of escape

The design for means of escape should be in accordance with the standards for the types of occupancy in relevant codes and regulations. Clauses 5 to 12 of this part of BS 5588 describe the additional measures needed to provide escape for disabled people.

4.3 Relationship with statutory provisions

4.3.1 General

It is important to appreciate the relationships between this part of BS 5588 and the various statutory provisions relevant to the design and construction of buildings and to the fire precautions to be provided in existing buildings. The relevant legislation indicated in general terms in 4.3.2 has to be complied with in the event of a conflict with this code.

NOTE The Technical Standards for conformity to the Building Standards (Scotland) Regulations [4] include specific provisions for means of escape for disabled people in the event of fire.

There should be preliminary design consultation to avoid the need to make changes to a design at a late stage. For England and Wales, reference should be made to the guidance document, *Building Regulation and Fire Safety, Procedural Guidance* [5]. For Scotland, reference should be made to the Building (Procedure) (Scotland) Regulations 1981 (as amended) [6].

4.3.2 Building Regulations

The design and construction of new buildings and extensions to and of material alterations of existing buildings, are controlled by the following statutory provisions which are collectively referred to as building regulations in this part of BS 5588.

England and Wales: The Building Regulations.

Scotland: The Building Standards (Scotland) Regulations.

Northern Ireland: Building Regulations (Northern Ireland).

4.3.3 Legislation and other regulations for fire safety in buildings

In addition to the controls mentioned in 4.3.2, fire safety and means of escape for a wide variety of buildings is dealt with under the following legislation.

England and Wales:

The Fire Precautions Act 1971, as amended by the Health and Safety at Work etc. Act 1974 and the Fire Safety and Safety of Places of Sport Act 1987.

The Building Act 1984.

The Fire Certificates (Special Premises) Regulations 1976, SI 1976 No. 2003 (as amended).

The Fire Precautions (Workplace) Regulations 1997.

Scotland:

The Fire Precautions Act 1971, as amended by the Health and Safety at Work etc. Act 1974 and the Fire Safety and Safety of Places of Sport Act 1987.

The Building (Scotland) Act 1959 (as amended).

The Fire Certificates (Special Premises) Regulations 1976, SI 1976 No. 2003 (as amended).

The Fire Precautions (Workplace) Regulations 1997.

Northern Ireland:

The Fire Services (Northern Ireland) Order 1984 and the Health and Safety at Work (Northern Ireland) Order 1978.

The Planning and Building Regulations (Amendment Order)(Northern Ireland) Order 1990.

The Fire Precautions (Workplace) Regulations (Northern Ireland) 1998.

There are also a number of local Acts as well as entertainment and other licensing legislation that deal with fire safety and means of escape. The designer should consult the fire authority and building authority at an early stage to make certain that the building as planned will meet the requirements that authorities may make, particularly if a fire certificate or licence may be necessary.

NOTE Under the Fire Precautions Act, 1971, where means of escape in case of fire have been provided in accordance with the Building Regulations 1991 in England and Wales, or in Scotland, the Building Standards (Scotland) Regulations 1990, fire authorities cannot generally make structural or other alterations a condition of the issue of a fire certificate or serve an improvement notice, unless:

- a) such alterations are necessary to meet the requirements of any regulations made under Section 12 of the Act; or
- b) the fire authority is satisfied that the means of escape in case of fire and the means provided to secure that they can be safely and effectively used at all material times, are inadequate by reason of matters or circumstances of which particulars were not required to be supplied to the local authority in connection with the deposit of plans for building regulation/building standards purposes. The deliberate or accidental omission of required information from such plans may be viewed similarly.

4.4 Information to be given to clients

A1 Advice on evacuation procedures, including techniques for assisting disabled people to leave buildings, and on the management of evacuation lifts is given in BS 5588-12. **A1**

Designers should inform their clients of the nature, function and capabilities of the fire precautions that have been designed into the building, and especially those whose nature may be less evident. This enables a better understanding of the responsibility for ensuring that a high standard of safety is maintained.

The development, maintenance and implementation of **A1** evacuation procedures (see BS 5588-12) **A1** including assistance techniques, and the initial management of evacuation lifts, is the responsibility of the building's management team. It is also the responsibility of the building's management team to provide formal guidance to ensure that, where necessary, those people who use the building can familiarize themselves with the various strategies and management systems. By this means individual building users can be made aware of a clear role for themselves within escape procedures in the event of an emergency.

4.5 Use of the diagrams

The diagrams in Figure 1 to **A1** Figure 5 **A1** are intended to clarify concepts, and should not be taken as indicating the only acceptable forms of planning. Features not relevant to the concepts or principle(s) being illustrated are not shown.