

Fire precautions in the design, construction and use of buildings

Part 0. Guide to fire safety codes of practice for particular premises/applications

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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 Building Engineers
- Association of Metropolitan Authorities
- British Gas plc
- British Retail Consortium
- British Standards Society
- British Telecommunications plc
- Chartered Institution of Building Services Engineers
- Chief and Assistant Chief Fire Officers' Association
- Consumer Policy Committee of BSI
- Department for Education
- Department of Health
- Department of the Environment (Building Research Establishment)
- Department of the Environment (Property and Buildings Directorate)
- Department of the Environment for Northern Ireland
- District Surveyors' Association
- Electricity Association
- Fire Brigades Union
- Health and Safety Executive
- Hevac Association
- Home Office
- Institute of Building Control
- Institution of Gas Engineers
- Institution of Structural Engineers
- London Fire and Civil Defence Authority
- Loss Prevention Council
- National Association of Fire Officers
- National Council of Building Material Producers
- Royal Institute of British Architects
- Royal Institution of Chartered Surveyors
- Scottish Office (Building Directorate)
- Timber Research and Development Association

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

- Access Committee for England
- Association of British Theatre Technicians
- British Automatic Sprinkler Association
- British Woodworking Federation
- Cinema Exhibitors' Association
- Flat Glass Manufacturers' Association
- Guild of Architectural Ironmongers
- Institute of Fire Safety
- Institution of Fire Engineers
- Intumescent Fire Seals Association
- National House Building Council
- Steel Window Association
- Theatres Advisory Council

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Foreword

This guide was prepared under the direction of Technical Committee FSH/14 and identifies the various documents dealing with fire safety. Annex A provides a list of former regulations, codes of practice, standards and guides pertaining to all kinds of premises, including residential, commercial and industrial and, where applicable, gives details of current legislation and publications which have superseded or replaced them.

The other Parts which comprise BS 5588 are as follows.

- Part 1 *Code of practice for residential buildings*
- Part 2 *Code of practice for shops*¹⁾
- Part 3 *Code of practice for office buildings*¹⁾
- Part 4 *Code of practice for smoke control in protected escape routes using pressurization*
- 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 incorporation of atria in buildings*²⁾
- Part 8 *Code of practice for means of escape for disabled people*
- 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 non-residential buildings*²⁾

Compliance with a British Standard does not of itself confer immunity from legal obligations.

¹⁾ Part 11 will incorporate revisions of BS 5588 : Parts 2 and 3 which will be withdrawn when Part 11 is published.

²⁾ In preparation.

Guide

1 Scope

This Part of BS 5588 lists published guidance on fire safety for particular premises/applications.

2 Use of this guide

2.1 Sources of information

The various codes, guides and other documents available are shown in tables 1 to 5.

Table 1 identifies those which deal with residential buildings; tables 2 and 3 with non-residential buildings; table 4 special applications; and table 5 flammable substances.

Each of the documents listed in the tables is described in clauses 3 to 14. Before using (or purchasing) any document listed, the reader should ensure that they have (or obtain) the latest version, as many of these are constantly under review.

NOTE 1. HMSO publications (except HSE) are available from HMSO Publications Centre, PO Box 276, London SW8 5DT (telephone 0171 873 9090 (orders), 0171 873 0011 (enquiries)). They may also be obtained through HMSO accredited agents or any good bookseller.

NOTE 2. HSE publications are available by mail order from HSE Books, PO Box 1999, Sudbury, Suffolk CO10 6FS (telephone 01787 881165). HSE priced publications are also available from bookstores nationwide.

2.2 Key to tables 1 to 5

¶ Clause numbers 3 to 14

- * Appropriate for new buildings/alterations
- † Appropriate for existing buildings/buildings in use
- ‡ Appropriate for new buildings/alterations and existing buildings/buildings in use
- § Referred to in Approved Document B.

2.3 Statutory provisions

The designer/project manager should consult the fire authority and/or the building authority to make certain the building will meet any requirements those authorities may make — particularly in those cases where a fire certificate or licence exists (or may be necessary).

3 Arson Prevention Bureau

NOTE. The following publications are available from the Arson Prevention Bureau, Melrose Avenue, Borehamwood, Herts WD6 2BJ.

3.1 Educational buildings

ARSON PREVENTION BUREAU. *How to combat arson in schools*. London: Arson Prevention Bureau, 1993.

The guide explains how the problem of arson should be addressed within the wider context of risk management. It includes two checklists dealing with 'Strategy for head teachers' and 'Guidance for responsible members of staff'.

3.2 Factories, offices and shops

a) ARSON PREVENTION BUREAU. *Prevention and control of arson in industrial and commercial premises*. London: Arson Prevention Bureau, 1992.

The guide is intended to assist the management of companies whose premises may be at risk together with their safety and security staff and insurance surveyors.

b) ARSON PREVENTION BUREAU. *Prevention and control of arson in retail premises. A management guide*. London: Arson Prevention Bureau, 1995.

The guide is intended for senior management and policy makers in the retail trade and for their risk management, fire and security advisers as well as for those in the fire and police services and insurance concerned with retail fire safety.

3.3 Places of assembly

ARSON PREVENTION BUREAU. *Arson. The major fire threat to places of worship ... and how to prevent it*. Borehamwood: Arson Prevention Bureau, 1995.

The leaflet includes guidance on how to assess the risk of arson and lists 24 ways of preventing it.

4 British Standards Institution

NOTE. See back cover for information on how to obtain copies of BSI publications.

4.1 Agricultural buildings

BRITISH STANDARDS INSTITUTION. *Buildings and structures for agriculture. Code of practice for fire precautions*. British Standard BS 5502 : Part 23 : 1990. London: BSI, 1990. (ISBN 0 580 18396 3)

The code gives recommendations for fire precautions for single storey agricultural buildings and structures which are exempted under building regulations and which are used for the purposes of horticulture, crop and livestock farming. It is not applicable to those buildings used for the storage of explosives or commercial quantities of chemicals.

4.2 Air supported structures

BRITISH STANDARDS INSTITUTION. *Guide for design, construction and maintenance of single-skin air supported structures*. British Standard BS 6661 : 1986. London: BSI, 1986. (ISBN 0 580 14780 0)

The guide applies to structures up to 40 m × 120 m nominal size. Safety recommendations are included for the grading of such structures into distinct classes based on occupancy and use.

Table 1. Residential buildings/premises

Document ¶	Houses, flats and maisonettes	House in multiple occupation (HMOs)	Hospitals	Prisons	Residential care premises	Hotels/boarding houses
4.6 b)* [§] Dwellings — BSI — Residential buildings	●					
6.1* Building regulations 1991 — DOE/Welsh Office	●		●		●	●
6.4 a)† Houses in multiple occupation — DOE		●				
6.4 b)† Houses in multiple occupation — Welsh Office		●				
7.1* Building Regulations — DOE for Northern Ireland	●		●		●	●
7.3‡ Residential care premises — Estates Services Directorate — Northern Ireland Firecode					●	
8.1‡ Arson prevention and control — NHS Estates			●			
8.2‡ Atrium buildings — NHS Estates			●			
8.3‡ Commercial enterprises — NHS Estates			●			
8.4† [§] Dwellings — DHSS — NHS housing for mentally handicapped or ill	●				●	
8.5* Escape bed lifts — DHSS			●			
8.6 a)‡ Flammable substances — DHSS/Welsh Office			●			
8.6 b)‡ Medical gas pipeline systems — NHS Estates			●			
8.7 a)† Policy and principle — NHS Estates			●			
8.7 b)† Health care premises — NHS Estates			●			
8.8 a)* [§] New hospitals — NHS Estates			●			
8.8 b)† Precautions in existing hospitals — NHS Estates			●			
8.8 c)† Risk assessment in hospitals — NHS Estates			●			
8.9‡ Hospital main kitchens — NHS Estates			●			
8.10 Laboratories — NHS Estates			●			
8.11‡ Laundries — DHSS/Welsh Office			●			
8.12‡ Patient hotels — NHS Estates						●
8.13‡ Textiles and furniture — NHS Estates			●			
10.2† [§] Hospitals and residential care premises — Home Office/Scottish Home and Health Department					●	
10.3 a)† Hotels — Home Office/Scottish Home and Health Department — Hotels and boarding houses requiring fire certificate						●
10.3 b)† Hotels — Home Office/Scottish Office/Fire Protection Association — Hotels and boarding houses						●
10.6 a)† HM Prison Service — Fire precautions manual				●		
10.6 b)* HM Prison Service — Design briefing system				●		
10.6 c)* HM Prison Service — Principles of design and standards of construction				●		
11.3* General — GLC	●					●
11.4† Hotels — GLC						●
13.1* Building Regulations — Scottish Office	●	●	●		●	●
13.4 a)* Hospitals and residential care premises — Scottish Education Department — Small group homes					●	
13.4 b)† Hospitals and residential care premises — Scottish Education Department — Residential homes for elderly					●	
13.4 c)* Hospitals and residential care premises — Scottish Home and Health Department — New health buildings in Scotland			●			

Table 1. Residential buildings/premises (concluded)						
Document ¶	Houses, flats and maisonettes	House in multiple occupation (HMOs)	Hospitals	Prisons	Residential care premises	Hotels/boarding houses
13.4 d) Hospitals and residential care premises — Scottish Home and Health Department — Firecode in Scotland: policy and principles			●			
13.5† Houses in multiple occupation — Scottish Home and Health Department		●				
13.7 a)* Prisons — Scottish Prison Service — Code of practice for new and existing buildings				●		
13.7 b)* Prisons — Scottish Prison Service — Building control				●		
13.7 c)† Prisons — Scottish Prison Service — Fire safety management				●		
14.4 a)† Dwellings — Chief and Assistant Chief Fire Officers' Association	●					
14.4 b)‡ Dwellings — The Child Accident Prevention Trust	●					●

Table 2. Non-residential buildings/premises (office, shops and assembly)						
Document ¶	Offices	Shops	Shopping centres and markets	Assembly	Education	Sport
3.1‡ Educational buildings — Arson Prevention Bureau — How to combat arson in schools					●	
3.2 a)‡ Factories, offices and shops — Arson Prevention Bureau — Industrial and commercial premises		●				
3.2 b)‡ Factories, offices and shops — Arson Prevention Bureau — Retail premises		●				
3.3† Places of assembly — Arson Prevention Bureau — Places of worship				●		
4.7a)*‡ Offices and shops — BSI — Shops		●				
4.7 b)*‡ Offices and shops — BSI — Offices	●					
4.8*‡ Places of assembly — BSI				●		
4.9‡‡ Shopping complexes — BSI			●			
5.1‡‡ Design of educational buildings — DEE					●	
5.2‡ Laboratories — DEE					●	
6.1* Building Regulations — DOE and Welsh Office	●	●	●	●	●	●
7.1* Building Regulations — DOE for Northern Ireland	●	●	●	●	●	●
7.2 a)† Places of assembly — DOE for Northern Ireland — Building Regulations				●		
7.2 b)† Places of assembly — DOE for Northern Ireland — Building Regulations — Technical requirements				●		
9.5 a)† Places of assembly — HSE — Electrical safety places of entertainment				●		
9.5 b)† Places of assembly — HSE — Fairgrounds and amusement parks				●		
9.5 c)† Places of assembly — HSC/Home Office/Scottish Office — Pop concerts and similar events				●		
9.5 d)† Places of assembly — RM Consultants — Crowd safety				●		●
10.1 a)†‡ Factories, offices, shops and railway premises — Home Office/Scottish Office — Existing places of work etc. that require fire certificate	●	●	●			

Table 2. Non-residential buildings/premises (office, shops and assembly) (concluded)						
Document ¶	Offices	Shops	Shopping centres and markets	Assembly	Education	Sport
10.1 b)† Factories, offices, shops and railway premises — Home Office/Scottish Office — Existing places of work etc. that do not require fire certificate	●	●	●			
10.1 c)† Factories, offices, shops and railway premises — Home Office/Scottish Home and Health Dept — Fire safety at work	●	●	●			
10.4† Places of assembly — Home Office/Scottish Home and Health Dept — Fire precautions existing places of entertainment				●		
10.7† Sports grounds — Home Office/Scottish Office						●
11.3* General — GLC	●	●		●		
11.5* Offices — London District Surveyors Association	●					
11.6 a)† Halls for stage presentations — GLC				●		
11.6 b)† Model rules for places of public entertainment — London District Surveyors Association/Association of London Chief Environmental Health Officers				●		
11.6 c)‡ Model regulations for places of public entertainment — London District Surveyors Association/London Fire Brigade/GLC — General				●		
11.8 Sports grounds — London District Surveyors Association						●
13.1* Building Regulations — Scottish Office	●	●	●	●	●	●
13.2* Educational Buildings — Scottish Office					●	
14.8‡ Miscellaneous — Markets			●			
14.9† Miscellaneous — Places of assembly — Occasional licences theatre				●		
14.10 a)† Sports grounds — Seating						●
14.10 b)* Sports grounds — Spectators with disabilities						●
14.10 c)† Sports grounds — ISE appraisal						●

Table 3. Non-residential buildings/premises (industrial and storage)				
Document ¶	Factories	Agricultural	Warehouses	Car parks
3.2 a)‡ Factories, offices and shops — Arson Prevention Bureau — Industrial and commercial premises	●		●	
4.1* Agricultural buildings — BSI		●		
4.3* Chemical industries — BSI	●			
6.1* Building regulations — DOE and Welsh Office	●		●	●
7.1* Building regulations — DOE	●		●	●
9.3 b)† Industrial — HSE — Premises subject to Fire Certificates	●			
9.3 c)‡ Industrial — HSE — Explosives factories and magazines	●		●	
9.3 d)† Industrial — HSE — Printing industry	●			
10.1 a)† Factories, offices, shops and railways — Home Office/Scottish Office — Places of work that require a fire certificate	●			
10.1 b)† Factories, offices, shops and railways — Home Office/Scottish Home and Health Dept — Places of work that do not require a fire certificate	●			
10.1 c)† Fire Precautions Act 1971 — Home Office/Scottish Home and Health Dept	●			
10.8 a)* Single-storey spirit storages and associated buildings — Home Office/Scottish Home and Health Dept			●	
10.8 b)‡ Automated warehouses — Home Office/Scottish Home and Health Dept			●	
11.3* General — GLC	●		●	

Table 3. Non-residential buildings/premises (industrial and storage) (concluded)

Document ¶	Factories	Agricultural	Warehouses	Car parks
12.4‡ Warehouses — Loss Prevention Council			●	
13.1* Building Regulations — The Scottish Office	●	●	●	●
14.1 a)† Miscellaneous — Agricultural buildings — Ministry of Agriculture, Fisheries and Food		●		
14.1 b)† Miscellaneous — Farms — NFU		●		
14.3* Miscellaneous — Car parks — Association for Petroleum and Explosives Administration				●
14.11* Miscellaneous — High bay warehouses			●	

Table 4. Special applications

Document ¶	General	Arson	Atria	Buildings under construction	Disabled people
3.1‡ Educational buildings — Arson Prevention Bureau		●			
3.2 a)‡ Factories, offices and shops — Arson Prevention Bureau		●			
3.2 b)‡ Retail premises — Arson Prevention Bureau		●			
3.3† Places of worship — Arson Prevention Bureau		●			
4.2‡ Air-supported structures — BSI	● ¹⁾				
4.4* Computer installations — BSI	● ²⁾				
4.5‡‡ Means of escape for disabled people — BSI					●
6.2* Contractors at Crown Civil and Defence Estates — DOE/Ministry of Defence/Home Office				●	
8.1‡ Arson prevention and control in NHS health care premises — NHS Estates		●			
8.2‡ Atria on hospital premises — NHS Estates			●		
11.1* Atrium buildings — London District Surveyors Association			●		
11.2* Buildings of excess height — London District Surveyors Association	● ³⁾				
12.1* Buildings under construction — Building Employers Confederation/Loss Prevention Council/National Contractors' Group				●	
14.1 b)† Farm — NFU		●			
14.6 a) Design principles of fire safety — Bickerdike Allen Partners	● ⁴⁾				
14.6 b)* Thatched roofs — Society for the Protection of Ancient Buildings/Council for Small Industries in Rural Areas	● ⁵⁾				
14.10 a)* Football stadia — The Football Stadia Advisory Design Council					●
¹⁾ air supported structures ²⁾ computer installations ³⁾ buildings of excess cube/height ⁴⁾ design principles ⁵⁾ thatch					

Table 4. Special applications (concluded)				
Document ¶	General	Historic buildings	Services	Transport premises
4.6 a)* Mobile homes — BSI	● ⁶⁾			
4.10 a)* [§] Smoke control in protected escape routes using pressurization — BSI			●	
4.10 b)* [§] Firefighting stairs and lifts — BSI	● ⁷⁾			
4.10 c)* [§] Ventilation and air conditioning ducts — BSI			●	
4.10 d)* [§] Building services in ducts — BSI			●	
5.2‡ Science laboratories — DES	● ⁸⁾			
6.3† Historic buildings — The Conservation Unit, DOE		●		
8.5* Escape bed lifts — DHSS/Welsh Office			●	
8.10 Laboratories — NHS Estates	● ⁸⁾			
9.1* Buildings under construction — HSE	● ⁹⁾			
9.3 a)* Industrial — HSE — Vehicle finishing units: fire and explosion hazards	● ¹⁰⁾			
9.4‡ Petrol filling stations — HSE	● ¹¹⁾			
10.1 a)† [§] Factories, offices, shops and railway premises — Home Office/Scottish Office — Places of work that require a fire certificate				●
10.1 b)† [§] Factories, offices, shops and railway premises — Home Office/Scottish Office — Places of work that do not require a fire certificate				●
10.1 c)† [§] Factories, offices, shops and railway premises — Scottish Home and Health Dept				●
10.5‡ Police buildings — Home Office	● ¹²⁾			
11.7† Railway premises — London Fire Brigade/British Rail/Home Office/Scottish Office				●
12.2† Historic buildings — The United Kingdom Working Party on Fire Safety in Historic Buildings		●		
12.3† Insurance requirements	● ¹³⁾			
13.3† Historic buildings — Historic Scotland/Dept of National Heritage		●		
13.6 Police buildings — Scottish Home and Health Dept	● ¹²⁾			
14.2* Airport buildings — British Airports Authority				●
14.7 a)† Historic Buildings — A.C. Parnell — Building legislation and historic buildings		●		
14.7 b)† Historic Buildings — Dept of National Heritage		●		
⁶⁾ mobile homes ⁷⁾ firefighting stairs & lifts ⁸⁾ laboratories ⁹⁾ site huts ¹⁰⁾ vehicle finishing units ¹¹⁾ petrol filling stations ¹²⁾ police buildings ¹³⁾ insurance rules of construction				