



NHS in Scotland Firecode

Scottish Fire Practice Note 7

**Fire precautions
in patient hotels**

Guidance revised December 1999
All previous guidance is superseded

About this publication

This Scottish Fire Practice Note (SFPN) provides guidance on the standards of fire precautions required in patient hotels providing accommodation for NHS patients.

SFPN 7 – Version 2.0 replaces the guidance which was previously issued as FPN 7 in NHS in Scotland Firecode – Version 1 and dated April 1998.

Patient hotels provide good quality accommodation for low-dependency patients who are mobile and able to look after themselves, and who consequently do not require the full facilities of an acute ward.

SFPN 7 has been prepared in association with a working group chaired by NHS Estates and in consultation with:

- the Home Office;
- the Department of the Environment;
- the Chief and Assistant Chief Fire Officers Association;
- the Fire Research Station;
- the National Association of Hospital Fire Officers;
- representatives from the NHS;

and is suitably textualised for use in Scotland.

Guidance revised December 1999
All previous guidance is superseded

Existing guidance

It should be noted that in addition to this document there is other fire safety guidance which is also applicable to patient hotels. In particular, it is recommended that this SFPN is read in conjunction with:

- 'The guide to fire precautions in premises used as hotels and boarding houses which require a fire certificate' – published by the Home Office and The Scottish Office;
- The Technical Standards for compliance with the Building Standard (Scotland) Regulations 1990, as amended.

In this Fire Practice Note and the associated NHS in Scotland Firecode documents, reference to chief executives means chief executives of NHS trusts.

LIST OF REVISIONS

Some document references have changed to reflect Scottish versions recently issued.

Disclaimer

The contents of the various documents comprising *NHS in Scotland Firecode* are provided by way of guidance only. Any party making any use thereof or placing any reliance thereon shall do so only upon exercise of that party's own judgement as to the adequacy of 'Firecode' in the particular circumstances of its use and application. No warranty is given as to the accuracy of 'Firecode' and the Property and Environment Forum Executive, which produces 'Firecode' on behalf of the NHS in Scotland Property and Environment Forum, will have no responsibility for any errors in or omissions therefrom.

Contents

About this publication

1 Introduction and scope *page 2*

- 1.1 General application
- 1.3 Existing guidance
- 1.5 Purpose group
- 1.6 Background
- 1.11 Exclusions

2 Glossary of terms *page 4*

3 Organisation and management of fire safety *page 5*

- 3.1 Accountability for fire safety
- 3.3 Fire safety policy
- 3.4 Emergency plans
- 3.8 Training of staff
- 3.13 Fire prevention
- 3.14 Textiles and furniture
- 3.16 Additional guidance

4 Technical recommendations *page 7*

- 4.2 Detection and alarm
 - 4.5 999 calls from bedrooms
- 4.6 Means of escape
 - 4.9 Refuge
 - 4.11 Single direction escape
 - 4.17 Travel distance
 - 4.19 Design of circulation routes
 - 4.23 Stairways
 - 4.28 Lifts
 - 4.31 Escape lighting
 - 4.33 Height above ground
- 4.35 Fire notices and signs
- 4.36 Containment
 - 4.37 Guidance in Technical Standards
 - 4.39 Enclosure of rooms
- 4.41 Fire extinguishment
 - 4.41 Fire-fighting equipment
 - 4.42 Access and facilities for the fire brigade

Appendix 1 – Doors and doorsets *page 13*

Further reading *page 15*

Miscellaneous references

1.0 Introduction and scope

General application

1.1 This Scottish Fire Practice Note (SFPN) provides guidance on the standard of fire safety applicable to:

- a. purpose-built patient hotels, either as part of NHS hospital premises, or on a separate site;
- b. conversion of non-ward hospital accommodation into patient hotels;

providing that the accommodation is for NHS patients. It should be used by all those with a responsibility for the design and management of fire safety within patient hotels.

1.2 Where it is proposed to convert existing patient care areas of a hospital into a patient hotel, the effect of the conversion on the overall standard of fire safety within the hospital needs to be considered. The major use of the building will still be a hospital and consequently, to ensure that the overall fire safety standards are not compromised, the conversion should be considered as a "major alteration" as defined in SHTM 81 and should be designed to comply with the guidance in that document.

Existing guidance

1.3 The guidance in this Scottish Fire Practice Note supplements that contained in:

- a. 'Guide to fire precautions in premises used as hotels and boarding houses which require a fire certificate'⁽¹⁾ and
- b. Technical Standards Parts D and E⁽²⁾

and should be read in conjunction with these two documents.

1.4 The additional guidance provided by this Fire Practice Note is considered necessary as within patient hotels there may be a high proportion of elderly people or people with a disability staying at any one time. These people may be slow-moving and require additional time to escape. To address these concerns SFPN 7 requires that patient hotels are provided with higher standards of detection and alarm and means of escape than would normally be provided within a hotel.

Purpose group

1.5 For the purposes of the Technical Standards patient hotels should be classified as Purpose Group 2B – Other Residential.

Background

1.6 Patient hotels provide high-quality accommodation for low-dependency patients who are mobile and able to look after themselves and who consequently do not require the full facilities of an acute ward. The standard of accommodation is broadly comparable to a motorway travel lodge; individual fully carpeted rooms are normally provided equipped with single or twin beds with en-suite bath and toilet facilities. Communal lounge and dining areas may be provided where guests can meet and entertain visitors.

1.7 The suitability of guests for accommodation in the hotel is decided clinically based on an assessment of their condition and treatment, or stage in the treatment process. Guests may be either fully discharged from the hospital or still under the supervision of a consultant. Typical guests would be:

- a. those requiring diagnostic procedures;
- b. day patients or out-patients who could not be sent home the same day for reasons of distance or domestic circumstances;
- c. those whose condition does not require nursing care for all or part of their stay.

1.8 Although only mobile low-dependency patients will use the hotel, the facilities are likely to attract a high proportion of elderly people and people with a disability, who although well enough to be discharged from hospital, may still require short-term accommodation until suitable domestic arrangements can be made.

1.9 Throughout this document, people staying in patient hotels are referred to as guests; this reflects the aim of patient hotels which is to provide a level and quality of service comparable to that of a hotel.

(1) Published by Home Office/The Scottish Office

(2) Published by The Scottish Office

1.10 The following facilities should not be provided in a patient hotel:

- a. medical gases and other bedhead services, although emergency alarms may be provided to call on nursing or medical assistance from elsewhere in the hospital;
- b. nursing or medical care.

Exclusions

1.11 Patient hotels which provide any of the facilities listed in paragraph 1.10 above fall outside the scope of this SFPN and should be designed to follow the guidance contained in SHTM 81.

2.0 Glossary of terms

2.1 For the purposes of this document the following terms are defined:

- **compartment:** a 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;
- **compartment floor:** a fire-resisting floor used to separate one fire compartment from another;
- **compartment wall:** a fire-resisting wall used to separate one fire compartment from another;
- **final exit:** the termination of an escape route from a building giving direct access to a place of safety outside the building;
- **fire door:** a 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 criteria to those ends;
- **fire hazard room:** a room or area as defined in SHTM 81;
- **fire precautions:** measures which can be taken to reduce the likelihood of ignition occurring and/or to mitigate the consequences should ignition occur. Precautions are considered under five headings, each of which is defined below:
 - (i) **prevention:** precautions to control potential ignition and fuel sources, to ensure that fires do not start; prevention also includes general fire precautions;
 - (ii) **communications/alarm and detection:** precautions which inform the occupants and fire brigade when a fire starts;
 - (iii) **means of escape:** precautions which enable the occupants of the building to turn their back on the fire, and escape to a place of safety away from the effects of the fire;
 - (iv) **containment:** precautions which contain the fire to the smallest possible area, and control the threat to life safety and the extent of property damage;
 - (v) **extinguishment:** precautions which ensure that the fire can be extinguished quickly and with the minimum disturbance to the function of the hospital and damage to its premises;
- **fire resistance:** ability of an element of building construction, component or structure to fulfil, for a stated period of time, the required load bearing capacity, fire integrity and/or thermal insulation and/or other expected duty in a standard fire resistance test;
- **fire stop:** a seal provided to close an imperfection of fit or design tolerance between elements or components, to restrict the passage of fire and smoke;
- **ignition sources:** heat sources or flames which will cause ignition;
- **place of safety:** a place where persons are in no danger from fire;
- **protected shaft:** a shaft which enables persons, air or objects to pass from one compartment to another, and which is enclosed with fire-resisting construction;
- **protected corridor:** a corridor which is adequately protected from fire in adjoining accommodation by fire-resisting construction;
- **travel distance:** the horizontal distance to be travelled by a person from any point within the floor area to the nearest adjoining compartment, sub-compartment, escape stairway or external exit, having regard to the layout of walls, partitions, fittings and furniture.

3.0 Organisation and management of fire safety

Accountability for fire safety

3.1 The guidance in the Scottish Office, Department of Health's – 'Fire Safety Policy' establishes a framework for the accountability for fire safety in premises owned or occupied by an NHS organisation: the chief executive or general manager should assume overall responsibility for fire safety in all premises occupied or used by their trust or authority. This guidance, which ensures acceptable standards of fire safety for patients, staff and visitors, applies equally to patient hotels irrespective of the ownership or the day-to-day management of the premises.

3.2 Wherever the ownership or the day-to-day management of a patient hotel is with a non-NHS organisation, the contractual arrangements should provide that the design and operation will comply with the guidance in this document and the Scottish Office, Department of Health's – 'Fire Safety Policy'.

Fire safety policy

Standard

3.3 Each patient hotel should have a separate written fire safety policy. This should clearly define:

- a. duties of management;
- b. staff with specific responsibilities or duties;
- c. duties of all staff.

Emergency plans

Standard

3.4 Each patient hotel should have a written emergency plan prepared in consultation with the local fire authority. This should include:

- means for raising the alarm in case of fire;
- the number of staff on duty;
- the number of staff required in a fire emergency;
- the responsibilities of staff in a fire emergency and the availability of additional staff to assist;
- procedures to ensure that the staff identified above are always available, 24 hours a day;

- methods for the movement or evacuation of guests, staff and other occupants in an emergency;
- procedures to ensure that staff are made aware of the location of all guests who will require assistance in the event of an evacuation;
- means for first aid fire-fighting;
- periodic and formally recorded staff training in all these matters.

3.5 The emergency plan should be continually monitored and should be reviewed whenever there is a significant change in the management, staffing or internal layout of the patient hotel.

3.6 A copy of the fire safety policy and emergency plan should be kept on the premises and be available for inspection by the local fire authority.

3.7 The emergency plan will identify the numbers and responsibilities of staff who may be required to assist in a fire emergency; these staff may be employed either in the patient hotel or elsewhere within the hospital. It is essential that these staff are **always** available (day and night) to assist in a fire emergency.

Training of staff

Standard

3.8 All staff who work in the hotel should attend fire safety training at least once in every 12-month period.

The training should cover:

- a. fire prevention;
- b. the correct action to be taken when a fire is discovered;
- c. evacuation and escape procedures for the building. This will include special arrangements for the physically disabled and the sensorily impaired; the checking of public areas; informing and reassuring members of the public, directing or escorting them to exits, and checking the register (if appropriate) of guests and staff at an assembly point;
- d. an appreciation of the importance of fire doors and their correct use and avoidance of abuse;
- e. use of first aid fire-fighting equipment provided including, where appropriate, practical demonstrations.

3.9 Further guidance on staff training is contained in SHTM 83.

3.10 Records should be kept of training and instruction and should include:

- the date of the instruction or exercise;
- the duration;
- the name of the person giving the instruction;
- the names of the people receiving the instruction;
- the nature of the instruction, training or drill.

3.11 The purpose of a drill is to ensure that staff are trained in the role they would play if a fire should occur. SHTM 83 recommends that fire drills take place once in every 12-month period. Advance warning should be given of the date and time of the drill so that guests are fully informed. Management should ensure that the operation of the fire alarm in these circumstances does not result in the attendance of the fire brigade. **Drills should not endanger those taking part.**

3.12 When the fire drill discloses defects in the emergency plan, the means of escape or the means for giving warning, the record should include every defect and details of the action taken to remedy each one.

Fire prevention

3.13 Guidance on general fire prevention measures which are applicable to all NHS premises is contained in Section 3 of SHTM 83 – 'Fire safety in healthcare premises – General fire precautions'. In particular, attention is drawn to the guidance on:

- smoking;
- arson;
- good housekeeping;
- waste disposal and collection.

Textiles and furniture

3.14 Textiles and furniture make a significant contribution to the fuel load within a building. SHTM 87 – 'Textiles and furniture' gives guidance on their selection. Although it is written primarily for hospitals, the guidance and standards quoted are also applicable to patient hotels.

Standard

3.15 The guidance in SHTM 87 – 'Textiles and furniture' should be followed for the provision of textiles and furniture within the patient hotel.

Additional guidance

3.16 Additional guidance on the responsibilities of management is contained in the 'Guide to fire precautions in premises used as hotels and boarding houses which require a fire certificate'.

4.0 Technical recommendations

4.1 Fire precautions in this chapter are considered under the following four headings:

- a. **detection and alarm** – precautions to ensure that if ignition occurs, the occupants are informed and any active fire systems are triggered;
- b. **escape** – precautions to ensure that the occupants of the building and the surrounding areas are able to move to places of safety before they are threatened by heat and smoke;
- c. **containment** – precautions to ensure that the fire is contained to the smallest possible area, limiting the amount of property likely to be damaged and the threat to life safety;
- d. **extinguishment** – precautions to ensure that the fire can be extinguished quickly and with the minimum consequential damage to the building.

Detection and alarm

4.2 The provision of adequate means for detecting a fire and raising the alarm is of vital importance in patient hotels. Early detection permits time for orderly evacuation and allows the fire to be tackled at an earlier stage, therefore reducing the risk to life and the damage caused. Unlike the situation in hospitals, the staffing levels within patient hotels are likely to be low and consequently no reliance can be placed on staff for detecting fires. For this reason it is essential that a fire alarm and detection system is installed in the patient hotel.

Standard

4.3 A type L1 alarm and detection system, designed to comply with the guidance in BS5839:Part 1:1988 – ‘Fire detection and alarm systems for buildings: Code of practice for system design, installation and servicing’ should be installed throughout the patient hotel.

4.4 With the exception of kitchen areas, which may be provided with heat detectors, automatic smoke detection should be provided throughout.

999 calls from bedrooms

4.5 Where hotel bedrooms provide a telephone with facilities for guests to dial 999 direct, the manager should ensure that guests’ attention is drawn to the need to follow the fire procedure set out on the fire instruction notice displayed in the room. The instructions should ensure that, in the event of a guest discovering a fire, the alarm should be raised within the hotel. The guests should then make their way out of the building by the escape routes.

Means of escape

4.6 The guidance for means of escape in this chapter satisfies the requirements of part E – Means of Escape – of the Technical Standards of the Building Standard (Scotland) Regulations 1990, as amended.

4.7 The guidance in this chapter has been prepared on the understanding that guests within the patient hotel will be able to reach a protected zone independently. However, some may not be able to negotiate stairways without assistance. It is accepted that many guests may be elderly, and/or slow-moving, and consequently the guidance has been prepared on this basis.

4.8 Where guests require assistance with evacuation, arrangements should be made to ensure that staff are made aware of their location in accordance with the guidance in paragraph 3.4.

Refuge

4.9 Because some guests will not be able to use the stairways without assistance, it is necessary to provide places of temporary safety on all storeys where those requiring assistance can await their evacuation.

Standard

4.10 Refuges designed in accordance with the guidance in BS5588:Part 8:1999 should be provided on all storeys above ground level.

Single direction escape

Standard

4.11 The maximum horizontal travel distance in a single direction of escape, before there is a choice of escape routes, should not be more than 15 metres, of which a maximum of 8 metres may be travel within a room.

4.12 Any part of a circulation route which has single direction of escape only, should be enclosed within 30 minute fire-resisting construction.

4.13 If a “dead-end” portion of a circulation route provides access to a point from where alternative escape routes are available, there is a risk that smoke from a fire could make both routes impassable before the occupants in the “dead-end” have escaped. To avoid this, every “dead-end” corridor should be separated by fire doors in accordance with the *Technical Standards* from any part of a circulation route which:

- a. provides two directions of escape; or
- b. continues past one storey exit to another.

See Diagram 1.

4.14 Fire hazard rooms should not be located in single direction escape circulation spaces.

4.15 Escape from an inner room, via an access room, is permitted provided that:

- a. the travel distance to the exit from the access room does not exceed 8 metres;
- b. the access room is not a fire hazard room;
- c. the inner room is not a bedroom.

4.16 Where a room is designed to accommodate more than 30 persons, a minimum of two exits should be provided, located to comply with the guidance in Diagram 1.

Travel distance

Standard

4.17 The maximum horizontal travel distance from any point to an escape stairway, or to the outside, should not be more than 30 metres, of which a maximum of 15 metres may be travel within a room, provided that escape from that room is possible in more than one direction.

4.18 The total travel distance includes the escape in a single direction. See Diagram 2.

Design of circulation routes

4.19 Although all doors, except those from sanitary accommodation, opening onto the circulation routes will be fire doors (see paragraph 4.40), it is inevitable that smoke and products of combustion will at some stage affect the circulation route. To reduce the effect that this may have on the evacuation of people, the circulation routes should be subdivided across their length at suitable intervals by fire doors.

4.20 In a fire emergency, some guests will be able to evacuate unassisted; others will require assistance. Movement on escape routes will be predominantly in one direction. However the width of horizontal escape route should be adequate to allow for slow-moving guests who are escaping and for staff who may be returning to assist with further evacuation to pass each other without causing an obstruction.

Standard

4.21 All horizontal escape routes should be internal and have a minimum clear width of 1500 mm and be subdivided every 15 metres by doors or doorsets having a minimum period of fire resistance of 30 minutes. The doors should be positioned so that no undivided circulation route is common to two storey exits.

4.22 Doors to rooms and stairways should have a minimum clear width of 800 mm.

Stairways

4.23 The basic principle of means of escape is that the occupants of a building can always turn their back on a fire and make their way safely to a fire exit. To ensure that this is possible on the upper floors of patient hotels, a minimum of two stairways will be required. The width of the stairways should be adequate to permit the evacuation of disabled people.

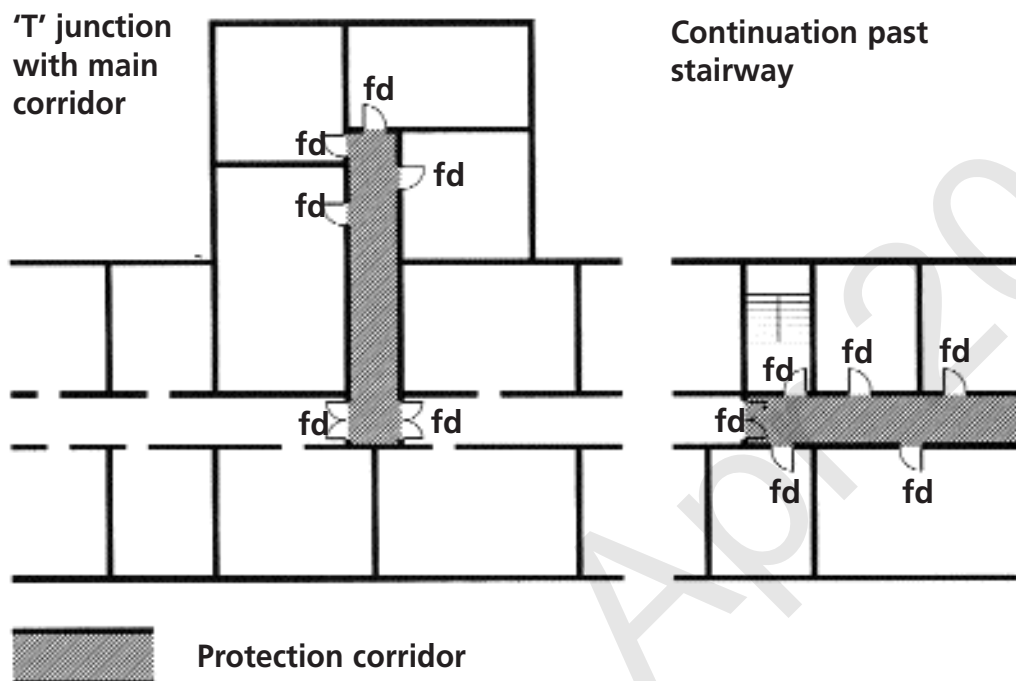
Standard

4.24 A minimum of two internal escape stairways should be provided to every storey of a patient hotel; each of these should have direct access to the outside at ground level. Such access should be suitable for the evacuation of guests and lead to a place of safety away from the building.

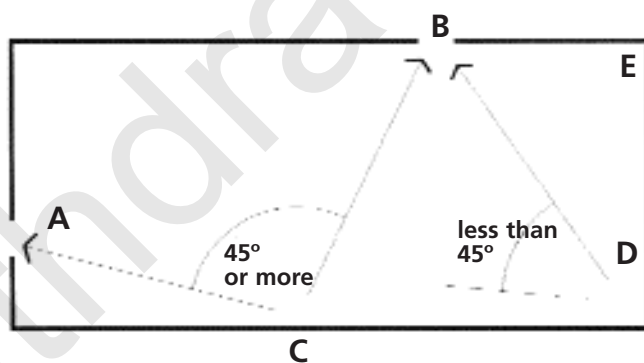
4.25 Stairways should have a minimum clear width between handrails of 1200 mm and be enclosed within a protected shaft.

Diagram 1 Means of escape

Dead-end corridors



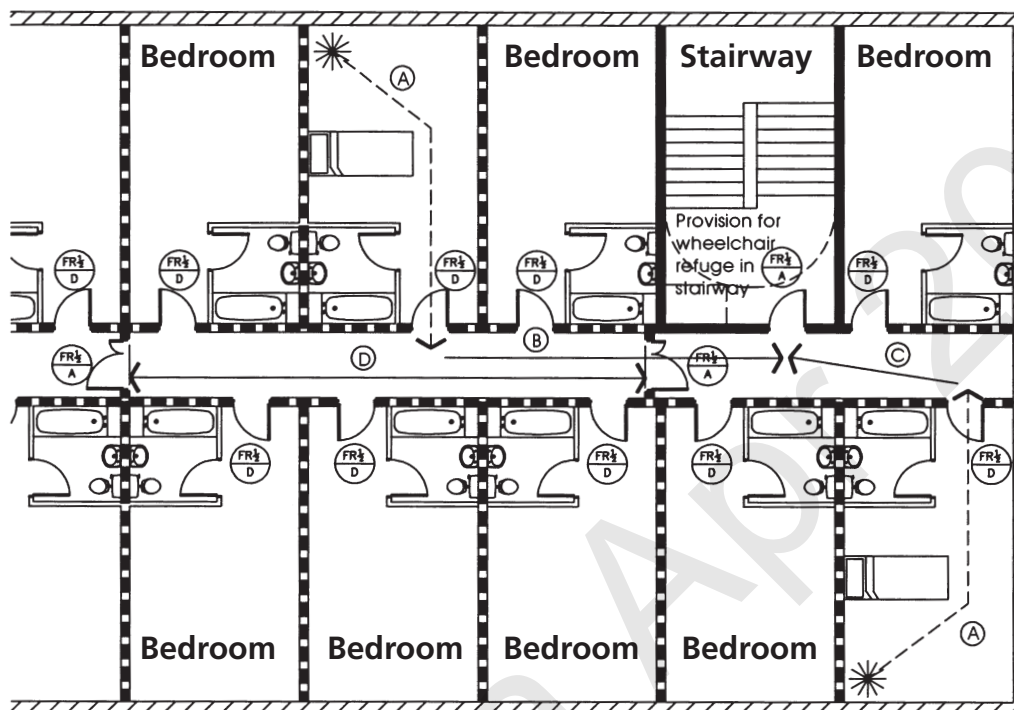
Alternative escape routes



Provided that the maximum travel distance is less than 8 metres alternative escape routes are available from C because the angle ACB is more than 45°.

Alternative routes are not available from D because angle ADB is less than 45°. There is also no alternative escape route from E.

Diagram 2 Travel distances



30 min FR wall to be taken up to the structural soffit.



Protected shaft, fire resistance determined by the guidance in Approved Document B.

Travel distances

- A 8 metres maximum
- A+B 30 metres maximum
- A+C 15 metres maximum
- D 15 metres maximum

Fire doors



30 minute fire door with electro-magnetic detents linked to fire alarm system.



30 minute fire door with delayed action closer.

4.26 With the exception of sanitary accommodation and washrooms, no accommodation should be included within a protected shaft.

4.27 An openable window, or similar, providing an area of 1 m² should be provided at the top of the stairway.

Lifts

4.28 An acceptable alternative means of escape for disabled persons requiring assistance is a passenger lift with the same structural protection as a protected stairway, a duplicated power supply, and a switch enabling an authorised person to take control.

4.29 The provision of an evacuation lift reduces the need to provide physical assistance for the evacuation of elderly or disabled guests who require help to negotiate stairways. However, it should be emphasised that this Fire Practice Note is not recommending that evacuation lifts should be provided in all patient hotels. However, where evacuation lifts are provided these should be in addition to the minimum number of stairways required by this document.

Standard

4.30 Evacuation lifts, where provided, should be designed, installed and operated in accordance with the guidance in BS5588: Part 8:1999.

Emergency lighting

4.31 Emergency lighting is required to illuminate the circulation spaces in the event of a fire and to guard against a failure of electrical supply.

Standard

4.32 Emergency lighting, which is available in the event of a fire, should be designed to comply with the guidance in the Technical Standards.

Height above ground

4.33 The location of sleeping accommodation on upper floors increases the hazard posed by the potential ignition sources and combustible materials on the lower floors; additionally there may be increased problems in the evacuation of upper floors because of the numbers of elderly and disabled people present. To ensure that the safe evacuation of

guests is always possible, the provision of sleeping accommodation on upper floors should be limited.

Standard

4.34 Unless evacuation lifts are provided, sleeping accommodation should not be located on floors more than two storey heights above ground level. Where provided, the evacuation lifts should be located to ensure that at least one is always available in the event of a fire.

Fire notices and signs

Standard

4.35 The guidance contained in the 'Guide to fire precautions in premises used as hotels and boarding houses which require a fire certificate' should be followed with regard to the provision of fire notices and signs.

Containment

4.36 The ability of a building to withstand and contain the effects of fire and smoke will largely determine the amount of time available for evacuation.

Guidance in Parts D and E of the Technical Standards

4.37 The guidance in the Technical Standards Part D should be followed to satisfy the requirements of:

- a. Part D2. 1 – Fire resistance;
- b. Part D2. 2 – Non-combustibility;

4.38 In addition to the guidance contained in the Technical Standards, patient hotels should also satisfy the guidance contained in paragraphs 4.39 to 4.40 below.

Enclosure of rooms

4.39 To inhibit the spread of fire within the patient hotel and to provide adequate time for the evacuation of guests, certain rooms should be enclosed in fire-resisting construction.

Standard

4.40 The following accommodation should be enclosed in 30 minute fire-resisting construction:

- a. bedrooms;
- b. lounge and dining rooms;
- c. fire hazard rooms.

Fire extinguishment

Fire-fighting equipment

Standard

4.41 The guidance contained in the 'Guide to fire precautions in premises used as hotels and boarding houses which require a fire certificate' should be followed with regard to the provision of fire-fighting equipment.

Access and facilities for the fire brigade

Standard

4.42 The guidance in Part E of the Technical Standards should be followed to satisfy the requirements of Part E9 – Facilities for Fire-Fighting – of the Building Standard (Scotland) Regulations 1990, as amended.

Appendix

Doors and doorsets

Location of fire doors

Location of door	Minimum period of fire resistance
Bedroom	FD30S
Lounge and dining rooms	FD30S
Fire hazard rooms	FD30S
In a compartment wall	As for the wall within which it is fitted, but add 'S' if the door is located across an escape route
To a protected shaft	Half the period of fire resistance of the wall within which it is fitted, but a minimum of FD30 and always with suffix "S"
Subdividing escape routes	FD30S
Within a cavity barrier	FD30

1. Fire doors should have the appropriate performance as indicated in the table above. In the table the doors are identified by their performance under BS476:Part 22, in terms of integrity for a period of minutes, for example FD30. A suffix (S) is added for doors where restricted smoke leakage at ambient temperatures is needed. Unless pressurisation techniques complying with BS5588:Part 4 are used, doors with the suffix "S" should also have a leakage rate not exceeding 3m³/m/hour (head and jambs only) when tested at 25Pa under BS476:Part 31.1. The method of test exposure is from each side of the doors separately, except in the case of lift doors which are tested from the landing side only.

2. All fire doors should be fitted with an automatic self-closing device except for doors to cupboards and to service ducts which are normally kept locked shut. Fire doors to bedrooms may be fitted with delayed action automatic self-closing devices, which should be adjusted to delay closure for a maximum of 30 seconds.

3. Within patient hotels it is acceptable for fire doors on circulation routes and stairways to be held open on automatic door releases provided that the following criteria can be satisfied:

- the door release mechanism should conform to BS5839:Part 3:1988 and be fail-safe (that is, in the event of a fault or loss of power the release mechanism should be triggered automatically);

- all doors fitted with automatic door releases should be linked to the alarm and detection system;

- all automatic door releases in the premises should be triggered by any of the following:

- the actuation of any automatic fire detector;
- the actuation of any manual fire alarm call point;
- any fault in the fire warning system;
- any loss of power to the fire warning system;

- automatic door releases must be provided with a ready means of manual operation from a position at the door;

- each door fitted with an automatic door release should be closed at a predetermined time each night and remain closed throughout sleeping hours. If for reasons of management this is impracticable, it should be the specific responsibility of a competent member of staff to operate the release mechanism at least once a week to ensure that:

- the mechanism is working effectively;
- the doors close effectively onto their frames.

4. All fire doors, including each leaf of double doors, should be provided with an identification disc. The disc should be a minimum 45 mm diameter clearly indicating the fire-resisting standard of the door, for example FD30, FD30S, FD60, etc. The disc should be positioned on each face of each leaf at the top of the hanging stile.
5. Fire doors on escape routes should be side hung or pivoted. Revolving doors, turnstiles and shutters are not acceptable on escape routes and should not be used.
6. Sliding doors are acceptable on escape routes provided they convert to outward opening doors when subjected to reasonable pressure from any direction. In the case of powered sliding doors, they should also be provided with a monitoring system to ensure they fail safe to the fully open position in the event of a power failure.
7. Door swings should not obstruct the circulation space or escape route designed width. However, doors to cupboards etc which are normally locked may open onto circulation routes but it is recommended that such doors should open through 180° to avoid obstruction.
8. Fire doors across escape routes providing alternative means of escape should be double swing and those across escape routes providing single direction of escape should open in the direction of escape.
9. Fire exit doors to rooms containing more than 30 persons should open outwards from the room.
10. Fire doors across circulation routes should be fitted with glazed observation panels to the upper part of the door.

Further reading

BS 476 Fire tests on building materials and structures

Part 22: 1987 – Methods for determination of the fire resistance of non-loadbearing elements of construction.

Part 31.1:1983 – Methods of measurement under ambient temperature conditions.

BS 5266 – Emergency Lighting

Part 1:1999 – Code of practice for the emergency lighting of premises other than cinemas and certain other specified premises used for entertainment.

BS 5588 – Fire precautions in the design, construction and use of buildings

Part 4:1998 – Code of practice for smoke control using pressure differentials. (AMD 5377, 9/86).

Part 8:1999 – Code of practice for means of escape for disabled people.

BS 5839 Fire detection and alarm systems for buildings

Part 1:1988 – Code of practice for system design, installation and servicing. (AMD 6317, 1/91; AMD 6874, 5/92).

Part 3:1988 – Specification for automatic release mechanisms for certain fire protection equipment.

Miscellaneous references

Fire Precautions Act 1971: guide to fire precautions in premises used as hotels and boarding houses which require a fire certificate. Home Office and the Scottish Office, 1991. The Stationery Office

The Building Standards (Scotland) Regulations 1990, as amended: Technical Standards

Part D: structural fire precautions;

Part E: means of escape from fire, facilities for fire-fighting and means of warning of fire in dwellings.