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Prepared for
Decent & Safe Homes East Midlands

FIRE SAFETY GUIDE

FOR

HOUSES IN MULTIPLE OCCUPATION

AND OTHER DWELLINGS

C.S. TODD & ASSOCIATES LTD

September 2006

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CONTENTS

		Page
1.	INTRODUCTION	1
2.	OVERVIEW	3
2.1	General	3
2.2	Evacuation strategy	3
3.	MEANS OF ESCAPE	5
3.1	Principles of means of escape	5
3.2	Escape from individual accommodation units	5
3.3	Accommodation with inner rooms	7
3.4	Escape from entrance door of the accommodation to a final exit	7
3.5	Protected routes/stairs	8
3.6	Fire risk in bath/shower rooms	8
3.7	Exit doors and escape windows	9
3.8	Automatic residential sprinklers	9
4.	FIRE SEPARATION	11
4.1	General	11
4.2	Fire separation of floors	11
4.3	Fire separation of walls and partitions	12
4.4	Fire resisting doors	13
4.5	Self-closing devices	14
4.6	Automatic residential sprinklers	15
5.	SURFACE FINISH OF WALLS AND CEILINGS	16
6.	FIRE DETECTION AND FIRE ALARM SYSTEMS	17
7.	EMERGENCY ESCAPE LIGHTING	19
8.	FIRE SAFETY SIGNS AND NOTICES	20
9.	FIRE-FIGHTING EQUIPMENT	21
10.	MANAGEMENT AND MAINTENANCE	22

Page

11.	CATEGORIES OF PREMISES AND PLANS		24
	Category 1	Single family houses (Drawing Nos. 1, 2, 3, 4 and 5)	25
	Category 2	Shared housing (Drawing Nos. 6, 7, 8, 9 and 10)	36
	Category 3	Shared housing providing supported lodgings (Drawing Nos. 11 and 12)	48
	Category 4	Single family and shared flats over commercial premises (Drawing Nos. 13, 14 and 15)	53
	Category 5	Self-contained flats and maisonettes (Drawing Nos. 16, 17, 18 and 19)	59
	Category 6	Mixed occupancies of self-contained/open flats and bedsits (Drawing Nos. 20, 21, 22, 23 and 24)	73
	Category 7	Bedsits (Drawing Nos. 25, 26, 27, 28, 29 and 30)	90

1. INTRODUCTION

DASH Project Manager: Mr Thomas Toumazou

1.1 There have been considerable changes to the mandatory requirements for protection from fire in dwellings. However, there is no defining guidance to indicate whether a dwelling will comply with all these requirements. The guidance in existence deals mostly with principles and is lacking in practical assistance. Accordingly, the translation into works required for compliance is left to the person responsible for the dwelling and the enforcement authorities to determine. For this purpose, Decent and Safe Homes East Midlands have commissioned this project, which will consider the requirements of the new legislation and provide practical guidance for compliance and the reduction of risk from fire.

1.2 The purpose of the guide is to provide the persons responsible for fire safety in houses with a reference to assist in the application of National Standards and good practices contained in:

- Draft Building Regulations Approved Document B.
- BS 5839-6[1].
- BS 5588[2].

1.3 Some consideration has also been given to the Regulatory Reform (Fire Safety) Order 2005.

1.4 These contribute to determining the ideal standard as required by the Housing Health and Safety Rating System ('HHSRS'), which is *'The perceived optimum standard, at the time of the assessment, intended to prevent, avoid or minimize the hazard'.* The guide to the HHSRS also states *'As it is the perceived optimum prevailing at the time of assessment, this will change, and it is the responsibility of those using the HHSRS to keep up-to-date on what is the ideal.'* This guide will assist in this, and provides floor plans and recommendations that Housing Standards Officers can use in carrying out their HHSRS risk assessment. This guide will also promote consistency of application.

1.5 Risk assessment, as required by the HHSRS for the hazard of fire, has not been undertaken, although consideration has been given to risk.

1.6 Revision of this guide may be required when the Building Regulations Approved Document B is finalised and guidance for compliance with the Regulatory Reform (Fire Safety) Order 2005 becomes available.

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[1] BS 5839-6: 2004. *Fire detection and fire alarm systems for buildings - Code of practice for the design, installation and maintenance of fire detection and fire alarm systems in dwellings.*
[2] BS 5588. *Fire precautions in the design, construction and use of buildings.*

1.7 Thirty different floor plans, which are typical of houses throughout the East Midlands, have been considered and a fire safety scheme applicable to each drafted. In some cases, the same floor plan has been assessed with different occupancies e.g. single household and three persons sharing. This is to give an indication of the different risks that accompany different types of occupancy. The categories used for occupancy are:

- Single household dwellings.
- Self-contained flats within a house.
- Shared houses and flats.
- Bedsits.

2. OVERVIEW

2.1 General

2.1.1 Occupants of houses in multiple occupation ('HMOs') and other dwellings come from a wide range of backgrounds and sectors of our society. Vulnerable and disadvantaged groups make up a significant percentage of people who rely on this particular housing market. The other significant group is young people, made up predominantly of students and people in training.

2.1.2 Any assessment of the risk to life from fire must, therefore, take account of the occupants of the premises and the specific risks associated with their occupation.

2.1.3 Fire risks in the private rented sector, and in particular in HMOs, can be complex. The mix of often poor quality, low cost housing and vulnerable occupants can lead to a higher than normal risk to life.

2.1.4 The challenge for fire safety professionals is to introduce adequate fire safety measures that are proportionate to the risk in a domestic environment.

2.1.5 There is a need to maintain a balance between the introduction of fire safety measures for the protection of life and the need to retain a homely environment.

2.1.6 The risk to life across the broad range of housing types and occupancy is variable. The risk in bedsits and supported housing could be considered to be high. However, the risk in single family dwellings, shared housing and self-contained flats can be considered low.

2.1.7 Consequently, the measures introduced to reduce the risk should be variable and not a prescriptive 'one size fits all' approach.

2.1.8 Fire safety provisions in the private rented sector and in HMOs should therefore be developed as an integrated package of passive and active measures that have clear objectives to address specific risks.

2.2 Evacuation strategy

2.2.1 The approach taken for the majority of existing premises or converted premises, used as a house in multiple occupation, in this guide is based on total evacuation. This includes premises with separate units, such as bedsits, flats and maisonettes, and premises used on a shared accommodation basis.

2.2.2 The strategy adopted in this guide for the category of premises detailed in Section 11, that have a single staircase, with the highest occupied floor not exceeding 11m above ground level, is based on total evacuation.

2.2.3 In purpose-built flats, and premises converted into self-contained flats, that have increased levels of compartmentation, appropriate fire protection and travel distances in accordance with the requirements of the guidance in Approved Document B ('ADB'), a 'stay put' policy can be considered, as the probability of fire spread beyond individual units is considered to be low.

2.2.4 The standards detailed in this guide should not be applied to self-contained flats, or flat conversions, that have more than one common stair and/or have any occupied floor over 11m from ground level. In these circumstances, reference should be made to other standards, such as the guidance in ADB, and BS 5588-1[3].

2.2.5 For premises providing supported lodgings for not more than six persons, the recommendations of HTM 88[4] should be followed.

2.2.6 This guide does not provide any specific guidance for fire safety in premises used as hostels, registered homes, guesthouses, bed and breakfast accommodation or hotels. The primary control of these premises would fall to other statutory authorities and are therefore outside the scope of this guidance document. However, in the above premises, where use and occupation would more appropriately class them as a house in multiple occupation, the principles contained in this guide are transferable.

2.2.7 Under the new Regulatory Reform (Fire Safety) Order 2005, the enforcement of fire safety in houses in multiple occupation will be shared between the fire and rescue authorities and housing authorities. The fire and rescue authorities will enforce fire safety in the common areas, while housing authorities will be responsible for the enforcement of fire safety in the accommodation units. In these circumstances, there will be a requirement for both authorities to consult on fire safety matters.

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[3] BS 5588-1: 1990. *Fire precautions in the design, construction and use of buildings - Code of practice for residential buildings.*

[4] HTM 88 update: 2001. *Fire precautions in housing providing NHS-supported living in the community.*

3. MEANS OF ESCAPE

3.1 Principles of means of escape

3.1.1 The principles of means of escape in this guide are based on two distinct phases of escape:

- Escape from within the individual accommodation units themselves; and
- Escape from the entrance doors of the individual accommodation units to the final exit from the premises and to a place of safety.

3.1.2 The assessment of the suitability, or otherwise, of the existing means of escape should be based on an overall assessment of the risk, taking account of the occupants and use of the building, the layout and structural condition, and the introduction of other fire protection systems, such as a fire detection and fire alarm system.

3.1.3 The recommendations on means of escape in this guide are based on the general assumption that the occupants will be capable of using the means of escape unaided, to reach a place of safety.

3.1.4 If individual on-site assessments identify occupants, who, for whatever reason, are unable to use the means of escape provided, additional measures will need to be implemented. This will be particularly relevant in those premises where window escape has been adopted for means of escape purposes.

3.2 Escape from individual accommodation units

3.2.1 In many cases, there will be no requirement to consider much beyond the need to limit the actual travel distance from the furthest point in the accommodation to the door to the exit from the accommodation.

3.2.2 In accommodation units comprising rooms that have a door or doors providing direct access to a final exit, corridor or staircase, the only consideration will be the travel distance within the room itself.

3.2.3 Individual cooking facilities provided in bedsits or rooms should be positioned clear of the exit so as not to prejudice the safe escape of the occupants.

3.2.4 In larger accommodation units that have rooms leading off an internal access lobby or corridor, there will be additional travel distance considerations. The travel distance within the internal lobby or corridor will need to be limited. There may also be a need to consider the provision of a protected lobby/corridor to the exit door from the accommodation unit, or the separation of certain high risk rooms, such as kitchens.

3.2.5 In this type of layout, it is recommended that, where practical, doors to bedrooms are positioned closer to the exit door than higher risk rooms, such as kitchens.

3.2.6 The following recommended travel distances are provided as a benchmark guide to set a reasonable standard for the majority of situations with a single direction of travel to the exit. However, the distances recommended should not be applied in a prescriptive manner; the acceptance of distances in excess of those specified can be considered in certain circumstances. A degree of flexibility should be applied, based on an overall assessment of the risk to the occupants and the level of other fire protection measures provided. This could result in a need to either reduce or increase the travel distance depending on the individual circumstances.

3.2.7 Travel distance guide:

- In smaller units of accommodation, which have open plan areas or one or two interconnected rooms, such as bedsits, etc, the travel distance from any point in a habitable room to the door to the exit from the accommodation should not exceed 9m. Any small lobbies and doors within the accommodation would not be required to be fire resisting.

- In larger units of accommodation, such as flats/maisonettes with a number of rooms accessed from an internal lobby/corridor, the following travel distances should be applied:

  - Travel distance from any point in a habitable room to the door to the exit from the room should not exceed 9m.

  - Travel distance from the door from any habitable room to the door to the exit from the accommodation should not exceed 9m.

  - This is the actual distance of travel along the lobby/corridor. The lobby/corridor should be a protected route. Doors opening onto the lobby/corridor from risk rooms should be FD20 and be self-closing.

- If the above limits on travel distance cannot be achieved, an alternative exit should be provided.

3.3 Accommodation with inner rooms

3.3.1 Accommodation that has inner rooms can provide an additional risk to the occupants and may need to be subject to further restrictions. A room is classed as an inner room when the only exit from the room is through another room, commonly referred to as an access room. The occupants of the inner room can therefore be at risk from a fire occurring in the access room.

3.3.2 In certain situations, the risk to the occupants in an inner room will be low due to the size and use of the room. An inner room is considered acceptable if the room is a:

- Bathroom/shower room or WC.
- Kitchen, laundry or utility room.
- Dressing room.

3.3.3 However, an inner room used as a habitable room, such as a lounge or bedroom, can be considered acceptable in the following situations:

- In a basement or ground floor situation, providing there is access to a suitable escape door or window leading to a place of safety.
- On an upper floor that is not more than 4.5m above ground level, providing there is access to a suitable escape door or window leading to a place of safety.

3.3.4 Any window provided for emergency egress purposes should have an unobstructed openable area that is at least 0.33m², and be at least 450mm high by 450mm wide. The bottom of the openable area should not be more than 1,100mm above the floor. The window or door should lead to a place of safety, clear of the building. In particular, with window exits, the assessment should consider the area below the window, and officers should satisfy themselves that it would be safe to use the window exit in an emergency.

3.4 Escape from the entrance door of the accommodation to a final exit

3.4.1 The travel distance from the entrance door of the accommodation to a door to the nearest stairway should not exceed 9m.

3.4.2 In single family dwellings or shared houses of not more than two storeys, the travel distance to a final exit will generally be limited due to the size and layout of the building, and there will normally be no requirement to make the stairway a protected route. However, in these circumstances, the stairs should preferably lead direct to a final exit.

3.4.3 In all other situations, and in three or four storey single family/shared houses, there will be a need to ensure that the stairway and any exit route from the stairs are made a protected route.

3.5 Protected routes/stairs

3.5.1 A protected route should be separated from the remainder of the building by fire resisting construction and fire doors.

3.5.2 The stairway should be maintained free of any obstructions and/or fire risks. In particular the stair should not contain:

- Any portable electric/gas/or oil heaters.
- Any fixed heaters using a portable heating source, such as liquefied petroleum gas.
- Any cooking facilities.
- Any furniture or storage.
- Storage cupboards that contain a potential fire risk, (such as electric/gas meters and/or contain combustible materials, etc) unless the cupboard is fire resisting and is kept locked shut or a smoke alarm/detector is fitted in the cupboard. Small cupboards within single family/shared housing would, in most situations, not present an additional risk and can be accepted.
- It is advisable that gas or electric meters and/or distribution boards are not provided in protected routes. However, in existing premises, it may be possible to accept gas/electric meters within protected routes providing a gas meter is installed in accordance with the Gas Safety Regulations and an electric meter is installed and sited in accordance with current IEE Regulations.

3.6 Fire risk in bath/shower rooms

3.6.1 In most bathrooms, there will be few, if any, ignition sources or fire risks. The provision of electric showers and fixed electric heating sources installed in accordance with current IEE Regulations, room sealed hot water and heating units installed in accordance with the Gas Safety Regulations, and airing cupboards with hot water cylinders, present little additional risk and can be accepted within the overall risk assessment.

3.6.2 Therefore in the majority of premises there will be no requirement to separate the bath/shower room with fire resisting walls and doors if it opens onto a protected route.

3.6.3 The provision of heating sources with open flames or electric bar heaters that would present an ignition source should be avoided. If there is any doubt about the suitability or safety of electric or gas appliances fitted in such rooms, additional advice should be sought from a competent person. If it is considered that there is a fire risk within a bath/shower room that opens onto a protected route or which could affect the safe escape of the occupants of the premises, it should be separated with fire resisting construction.

3.7 Exit doors and escape windows

3.7.1 All final exit doors from the premises and windows providing means of escape from individual units must be capable of being opened from the inside, without the use of keys.

3.7.2 Any security locks fitted to escape doors or escape windows should be provided with a suitable release mechanism that can be easily operated by the occupants in an emergency. In multi-occupied premises, any locks fitted to final exit doors from the building should be fitted with a suitable thumb-turn or lever release mechanism to allow the occupants to safely exit the building without the use of a key in the event of fire. It is also advisable that any locks fitted to entrance doors to individual accommodation units are fitted with a suitable thumb-turn or lever release mechanism to allow the occupants to exit the accommodation in the event of fire without the use of a key.

3.7.3 During the site visit, it should be confirmed that the occupants of individual units are capable of using the escape windows unaided in the event of fire. It should also be ensured that it would be possible to safely exit the window and proceed to a place of safety clear of the building.

3.7.4 Landlords and tenants should be advised to contact their insurers to make them aware of the above arrangements as this might affect security levels and affect their insurance policies.

3.8 Automatic residential sprinklers

3.8.1 In certain higher risk premises or, in situations where it might be difficult to provide means of escape in accordance with the recommendations of this guide, the fitting of a suitable residential sprinkler system should be considered.

3.8.2 The benefits of residential sprinklers are well documented, and can allow a more flexible approach to the design and protection of escape routes with the potential, in certain situations, to relax on accepted benchmark standards.

3.8.3 The provision of residential sprinklers should be the subject of discussion and agreement with the relevant local authority and the fire and rescue authority. Residential sprinklers should be provided in accordance with BS 9251[5].

[5] BS 9251: 2005. Sprinkler systems for residential and domestic occupancies - Code of practice.

4. FIRE SEPARATION

4.1 General

4.1.1 The general principles for safe evacuation in the event of fire are based on the need for occupants to have an early warning of a fire to give them sufficient time to leave the building, before the route to the exit is affected by smoke and fire.

4.1.2 The main objective of providing fire resisting separation is to protect the means of escape and thus ensure the occupants of the building have sufficient time to escape safely. If increased levels of fire detection are provided to give the occupants an early warning of fire, the levels of fire separation can, in certain situations, be relaxed.

4.2 Fire separation of floors

4.2.1 In the majority of premises providing sleeping accommodation, floors affording a fire resistance of 30 minutes will be adequate.

4.2.2 The suitability of an existing floor to achieve the required fire resisting standard should be subject to a site inspection and should form part of the overall fire risk assessment.

4.2.3 The fire resistance of a floor will depend primarily on the protection provided by the ceiling below. Existing ceilings, which are in sound condition, should provide a reasonable level of fire resistance and can be accepted in most locations.

4.2.4 Existing ceilings constructed of plasterboard with a plaster skim and in good condition can be expected to achieve a nominal fire resistance of 20/30 minutes and should form an effective fire barrier between floors.

4.2.5 Lath and plaster ceilings in good condition can be expected to achieve a nominal fire resistance of 20 minutes and should form an effective fire barrier between floors in certain property types.

4.2.6 In single family or shared housing of one or two storeys, it should be possible to accept this reduced level of 20 minutes fire resistance in the context of the overall risk assessment.

4.2.7 If automatic detection is provided, it should be possible to accept lath and plaster ceilings in other building types, providing the ceilings are in good condition.

4.2.8 Floors over basements/cellars should achieve a fire resistance of 60 minutes. However, 30 minutes fire resistance can be accepted if the basement/cellar is provided with automatic detection.

4.2.9 If ceilings are in poor condition, or there are concerns over the suitability of their construction, they should be upgraded to achieve the required level of 30 minutes fire resistance.

4.2.10 Upgrading a floor can be achieved by:

- Applying additional or alternative coverings to the ceiling; or
- Applying additional protection to the floor above.

4.2.11 Any new ceilings or floors should be constructed to provide a minimum of 30 minutes fire resistance.

4.3 Fire separation of walls and partitions

4.3.1 Existing walls and partitions, separating rooms or individual units of accommodation, will probably have a reasonable level of inherent fire resistance.

4.3.2 In the majority of situations, providing the existing construction is in sound condition, it should provide an acceptable level of fire resistance.

4.3.3 Walls and partitions separating individual flats or (maisonettes) from other individual flats or (maisonettes) should be constructed to provide a minimum of 30 minutes.

4.3.4 Existing walls and partitions enclosing protected routes may require additional scrutiny to ensure that they will restrict the passage of smoke and fire. In general, protected routes should be fully enclosed within structures affording a minimum fire resistance of 30 minutes.

4.3.5 Existing partitions constructed of plasterboard with a plaster skim and in good condition can be expected to achieve a nominal fire resistance of 20/30 minutes and should form an effective fire barrier.

4.3.6 Lath and plaster walls/partitions in good condition can be expected to achieve a nominal fire resistance of 20 minutes and should form an effective fire barrier in certain property types.

4.3.7 In single family or shared housing of one or two storeys, it should be possible to accept this reduced level of 20 minutes fire resistance in the context of the overall risk assessment.

4.3.8 Any walls/partitions enclosing protected routes should be carried up to the underside of the floor above to form an effective fire barrier.

4.3.9 It is important that party walls, dividing separate properties/buildings, are extended throughout the property to the underside of the roof to form an effective fire barrier of a minimum of 60 minutes.

4.3.10 Particular attention should be paid to any openings around pipes and services that pass through fire resisting structures. Such openings should be fire stopped with materials affording the same level of fire resistance as the structure itself.

4.3.11 Any services constructed of combustible materials, or materials likely to melt or be affected by fire, should be enclosed within fire resisting construction and be fire stopped to restrict the passage of smoke and fire.

4.3.12 Any new walls/partitions should be constructed to provide a minimum of 30 minutes fire resistance.

4.4 Fire resisting doors

4.4.1 Any door required to be fire resisting should conform to the relevant requirements of BS 476[6]: Parts 22 and 31 or the European equivalent.

4.4.2 FD20/FD30 fire resisting doors are required to provide respectively 20 or 30 minutes integrity from fire, when tested to BS 476-22[7].

4.4.3 FD30S fire resisting doors are required to provide 30 minutes integrity from fire and be capable of limiting the passage of smoke (by the provision of cold smoke seals), when tested to BS 476-22 and BS 476-31 respectively[8].

4.4.4 FD30/FD30S fire resisting doors, or doors required to have a fire resistance of 60 minutes, should be fitted with intumescent strips.

4.4.5 It should be possible in single family or shared housing to accept existing, well fitted and constructed solid doors, providing they are in sound condition and would provide a minimum of 20 minutes fire resistance.

4.4.6 Intumescent strips and smoke seals should be rebated/fitted into the frame or the door edge. Where practicable, intumescent strips and smoke seals should be continuous and be offset around hinges and locks.

4.4.7 Any gaps between the door and frame should be kept a minimum. As a guide, any gap should be limited to 4mm, and any smoke seals fitted should be in contact with the frame or door edge.

4.4.8 Doorstops should be continuous and not cut away to facilitate any ironmongery and door furniture.

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[6] BS 476. *Fire tests on building materials and structures.*

[7] BS 476-22: 1987. *Fire tests on building materials and structures. Methods for determination of the fire resistance of non-loadbearing elements of construction.*

[8] BS 476-31: 1983. *Fire tests on building materials and structures. Methods for measuring smoke penetration through doorsets and shutter assemblies.*

4.4.9 Heavy fire resisting doors of traditional construction may require three steel butt hinges to ensure that the doors are fitted securely in their frames. However, lighter fire resisting doors are available, which can be adequately secured with two steel hinges.

4.4.10 Any gaps or voids around locking mechanisms or ironmongery, which could affect the fire resistance of the door, should, where necessary, be infilled with fire resisting or intumescent materials.

4.4.11 It is recommended that, when existing doors are to be replaced with fire resisting doors, a complete doorset is provided.

4.4.12 It is not recommended that existing doors be upgraded because of the difficulties associated with the monitoring of the quality of the work. However, in buildings of historical or architectural importance, it may be necessary to accept alternative arrangements for upgrading the fire resistance of the door.

4.4.13 Further guidance on upgrading the fire resistance of doors is available from a variety of trade organisations, such as TRADA. Guidance on upgrading doors in premises of historical importance is also available from organizations such as English Heritage.

4.4.14 If existing doors are to be upgraded, clear documentation should be provided on the system used. The works should be carried out by a competent person and, whenever possible, monitored by housing officers. Certificates of compliance stating the standard of fire resistance achieved should be provided.

4.5 Self-closing devices

4.5.1 Any fire door required to be self-closing should be fitted with a suitable self-closing mechanism.

4.5.2 In single family/shared houses, and in the internal layout of individual flats and maisonettes, rising butt hinges may be accepted. In these circumstances, it should be ensured that the rising butt hinge is capable of overcoming the resistance of the latch and closing the door effectively in its frame.

4.5.3 In all other situations, a proprietary self-closing device, such as a hydraulic door closer, should be provided.

4.5.4 Any self-closing mechanism must be capable of closing the door in its frame and overcome the resistance of any latch.

4.5.5 Self-closing devices that cause rapid closure of the door can be a danger to the elderly and young, and can also provide a noise nuisance. Such devices should be avoided, as the likelihood is that these devices will be disabled or the doors wedged in the open position.

4.6 Automatic residential sprinklers

4.6.1 In certain situations it might be possible to reduce the standard of fire separation and fire resistance recommended in this guide, if the premises are fitted with a suitable residential sprinkler system.

4.6.2 The fitting of residential sprinklers could be used as a compensatory feature in certain situations, to relax the standard on the upgrading of the fire resistance of floors and partitions, and may obviate the need to upgrade or replace existing doors to the full fire resisting standard.

4.6.3 The provision of residential sprinklers should be the subject of discussion and agreement with the relevant local authority and the fire and rescue authority. Residential sprinklers should be provided in accordance with BS 9251[9].

[9] BS 9251: 2005. Sprinkler systems for residential and domestic occupancies - Code of practice.

5. SURFACE FINISH OF WALLS AND CEILINGS

5.1 The surface finish of walls, partitions and ceilings can sometimes contribute to the risk from fire.

5.2 Combustible surface finishes, such as hardboards, plastics and polystyrene, can contribute to the spread of fire. Combustible surface finishes are not permitted on escape routes and should, whenever possible, be avoided in other locations.

5.3 The suitability of existing surface finishes can often prove difficult to assess with any degree of accuracy. However, in general, the surface finish of walls and ceilings should be in accordance with the following:

- Class 0 (as defined in Approved Document B of the Building Regulations): Acceptable in all locations, including protected routes, circulation routes, escape routes and stairways. Typical finishes include non combustible materials and materials of limited combustibility, such as brickwork, concrete, plasterboard and plastered finishes.

- Class 1 (to BS 476-7[10]): Acceptable in rooms. Typical finishes include timber, particleboard, hardboard and surfaces covered with heavy flock wallpaper, providing they have been treated with flame retardant materials. Not accepted on escape routes and stairways.

- Class 3 (to BS 476-7): Acceptable in small rooms and parts of other rooms if the total area does not exceed more than one half of the floor area up to a maximum of 20m^2 in other rooms. Typical finishes include those specified in Class 1, with the addition of thermosetting plastics and surfaces covered with polystyrene wall and ceiling tiles. Not accepted on escape routes and stairways.

[10] BS 476-7: *Fire tests on building materials and structures. Method for Classification of the Surface Spread of Flame of Products.*

6. FIRE DETECTION AND FIRE ALARM SYSTEMS

6.1 The approach in this guide follows the guidance set out in BS 5839-6[11].

6.2 In general, this guide recommends the provision of a Category LD2 Grade A system to BS 5839-6 for the protection of the means of escape for all occupants of the HMO, and a Category LD3 Grade D system for the protection of the occupants of individual units against a fire in their own accommodation. The use of such 'mixed systems' is promoted, as it has the advantage, in certain situations, of reducing the potential for, and problems associated with, false alarms.

6.3 The need to protect the occupants of individual units from the effects of fire in their own accommodation should be the subject of individual risk assessments. If the occupants are at increased risk from fire because of their health or lifestyle, or are considered to be particularly vulnerable because of their age, the provision of additional smoke detectors/alarms should be provided.

6.4 However, the benefits of fitting smoke alarms within individual units to protect the occupants are well documented, and landlords should be encouraged, whenever possible, and particularly in certain higher risk premises, to consider the provision of additional smoke alarms.

In situations where any individual risk assessment would not identify the requirement for additional smoke alarms, it may still be appropriate to recommend that landlords consider the need to provide smoke alarms for the safety of occupants, accordingly:

- In single family and shared houses and flats, the provision of one or more additional battery powered smoke alarms should be recommended in living rooms and one or more bedrooms, on a goodwill basis. Smoke alarms should be fitted with a ten-year tamper proof battery.

- In the more traditional house in multiple occupation, with individual units of accommodation such as bedsits, the provision of one or more additional mains-powered smoke alarms with battery back up, should be recommended in each unit of accommodation, on a goodwill basis.

[11] BS 5839-6: 2004. *Fire detection and fire alarm systems for buildings - Code of practice for the design, installation and maintenance of fire detection and fire alarm systems in dwellings.*

- However, as already detailed above, each premises should be subject to a fire risk assessment, and if occupants are considered to be at increased risk from fire, the provision of additional smoke alarms to protect the occupants in their own units of accommodation should be provided as part of the normal legislative approvals process. In circumstances where it may not be possible to justify the provision of additional smoke alarms through this process but concerns remain for the safety of occupants in their own units of accommodation, the provision of additional smoke alarms should be recommended. These circumstances may include houses in multiple occupation, with individual units of accommodation where, for example, independent cooking is provided, the fire loading within each unit is considered to be higher than normal, or where the occupants may be considered to be at increased risk from fire. In these situations any additional smoke alarms should be mains powered, and be provided with battery back up.

6.5 The fire detection and fire alarm systems recommended in the guide are linked to the specific evacuation strategy for each occupant category.

6.6 The approach taken for the majority of premises, for single family and shared accommodation, and premises with separate units, such as bedsits, flats and maisonettes, has been based on total evacuation.

6.7 The positions of detectors, fire alarm sounders, associated devices and equipment indicated on the annotated plans, have been provided to indicate the areas that should be covered. They should not be viewed as the precise or fixed locations for such devices. Detectors, fire alarm sounders and other devices should be provided and installed in accordance with the recommendations of BS 5839-6.

6.8 Some relaxation can be applied to the fitting of heat detectors/alarms, particularly when retrofitting a fire detection and fire alarm system to provide a warning to occupants beyond the unit of fire origin. In such situations, heat detectors/alarms can be fitted just inside the door to each unit of accommodation on either ceilings or walls.

6.9 The audibility of the fire alarm should be in accordance with the recommendations of BS 5839-6. Compliance with BS 5839-6 requires that a Category LD system should be capable of producing a sound pressure level of 85dB(A) at the doorway to each bedroom (with the door open). However, the latter should be subject to individual risk assessments with regard to the need to provide 75dB(A) at the bed head for vulnerable individuals/groups. The outcome of this might require sounders (or smoke alarms) within each bedroom.

6.10 A relaxation in the positioning of manual call points is also considered appropriate for the majority of premises covered in this guide. The provision of a single call point by the main entrance door is considered sufficient for the majority of multi-occupied premises.

7. EMERGENCY ESCAPE LIGHTING

7.1 Emergency escape lighting would not normally be required in single family or shared houses.

7.2 In all other situations, emergency escape lighting should be provided throughout the escape route. This is particularly important where escape routes have no natural lighting, or where the route is long or complex.

7.3 Emergency escape lighting should be provided in accordance with the recommendations of BS 5266-1[12], and with the requirements of BS 5266-7[13] and BS 5266-8[14].

7.4 The escape lighting should be capable of illuminating the exit route and highlight any hazards such as stairs, changes in floor levels and changes in direction.

7.5 In most situations, self-contained, non-maintained units, capable of providing emergency escape lighting for a minimum of three hours, would be acceptable.

7.6 The positioning of luminaries will be dependent on the actual layout of the premises and the guidance in the above standards. The location of luminaries shown on the annotated plans indicate the areas to be covered and should not be taken as the precise location of any particular units.

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[12] BS 5266-1: 2005. *Emergency lighting - Code of practice for the emergency lighting of premises.*
[13] BS 5266-7: 1999 (BS EN 1838: 1999). *Lighting applications - Emergency lighting.*
[14] BS 5266-8: 2004 (BS EN 50172: 2004). *Emergency escape lighting systems.*

8. FIRE SAFETY SIGNS AND NOTICES

8.1 In the majority of premises, the provision of 'FIRE EXIT' signs and notices will not be required.

8.2 The provision of signs and notices should not be intrusive and thought needs to be given for the requirement to retain a homely environment, which can sometimes be spoilt by the excessive use of signs and notices.

8.3 Exit signs should only be used if the escape route is long and/or complex, and the route does not form part of the normal access and egress from the building. Signs may be required if the occupants are not familiar with any alternative exit route.

8.4 'FIRE DOOR KEEP SHUT' and/or 'FIRE DOOR KEEP LOCKED SHUT' signs may be required on certain doors to high risk rooms, such as kitchens, boiler rooms and storage cupboards.

8.5 Signs should be provided in accordance with BS 5499 -1[15] and BS 5499-5[16] and the Health and Safety (Safety Signs and Signals) Regulations.

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[15] BS 5499-1: 2002. *Graphical symbols and signs - Safety signs, including fire safety signs. Specification for geometric shapes, colours and layout.*

[16] BS 5499-5: 2002. *Graphical symbols and signs - Safety signs, including fire safety signs. Signs with specific safety meanings.*

9. FIRE-FIGHTING EQUIPMENT

9.1 In general, some form of fire-fighting equipment should be provided in all premises used as a house in multiple occupation.

9.2 However, in the majority of premises to which this guide applies, this requirement will not go beyond the provision of a fire blanket for each kitchen.

9.3 The requirement to provide fire-fighting equipment in the common areas of houses in multiple occupation has not been included in this guide.

10. MANAGEMENT AND MAINTENANCE

10.1 The standard of management of fire safety in houses in multiple occupation is an essential element to address in the risk assessment process. The overall management of fire safety should be in accordance with the recommendations of BS 5588-12[17].

10.2 The owner or managing agent should be made responsible for the day to day management of fire safety in the premises and to ensure that essential repairs or maintenance are carried out.

10.3 Each occupier should be given specific advice on fire prevention and fire safety in the home. Suitable advice can be found in Annex 1 of BS 5588-12 'Advice to occupiers of domestic residential buildings'. Fire safety advice is also available from local fire and rescue authorities.

10.4 It is important that escape routes are available for use at all times when the building is occupied.

10.5 Escape routes should be maintained free from obstructions. Goods, materials, unwanted furniture, etc should not be stored within any escape routes.

Testing, servicing and maintenance

10.6 Planned maintenance and inspection procedures should be established to ensure that all the fire protection measures continue to operate effectively.

10.7 Fire resisting structures should be inspected on a regular basis to ensure they remain in a good state of repair.

10.8 Fire resisting doors should be also be inspected on a regular basis to ensure the doors remain a good fit in their frame, that intumescent strips and smoke seals are in place and in good condition, and that any self-closing devices fitted, work effectively.

10.9 In order to ensure that active systems, such as fire detection and fire alarm systems and emergency escape lighting are maintained in a fully operational state, and that any faults are detected within a reasonable period, it is necessary for systems to be tested and serviced on a regular basis.

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[17] BS 5588-12: 2004. *Fire precautions in the design, construction and use of buildings - Managing fire safety.*

Fire detection and fire alarm systems

10.10 The fire detection and fire alarm systems should be tested and serviced in accordance with the recommendations of BS 5839-6[18].

10.11 Grade A systems should be tested weekly and serviced every six months by a competent person.

10.12 Grade D systems should be tested weekly by operating all alarm sounders. In the case of smoke and heat alarms, this will involve a test of the sounder in each detector by using the test button.

Emergency escape lighting

10.13 Emergency escape lighting should be subject to a monthly functional test and an annual discharge test in accordance with the requirements of BS 5266-8[19].

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[18] BS 5839-6: 2004. *Fire detection and fire alarm systems for buildings - Code of practice for the design, installation and maintenance of fire detection and fire alarm systems in dwellings.*
[19] BS 5266-8: 2004 (BS EN 50172: 2004). *Emergency escape lighting systems.*

11. CATEGORIES OF PREMISES AND PLANS

11.1 This section of the guide provides recommendations on specific plan layouts and occupancy types for existing premises. Some of the layouts provide variations that have an effect on the fire safety provisions required, others have little effect.

11.2 The guide has categorised the plans into occupation types. This approach allows application of standards based on the risk presented to the occupation of the building, rather than just on layout. Such an approach should allow housing officers to provide consistent risk 'proportionate' standards throughout the premises within their control.

11.3 Adopting this general approach, we are in a position to group premises into the following categories:

1. Single family houses, incorporating drawing Nos. 1, 2, 3, 4 and 5.

2. Shared houses, incorporating drawing Nos. 6, 7, 8, 9 and 10.

3. Shared houses providing supported lodgings, incorporating drawing Nos. 11 and 12.

4. Single family and shared flats over commercial premises, incorporating drawing Nos. 13, 14 and 15.

5. Self-contained and open flats, incorporating drawing Nos. 16, 17, 18 and 19.

6. Mixed occupancy of self-contained flats and bedsits, incorporating drawing Nos. 20, 21, 22, 23 and 24.

7. Bedsits, incorporating drawing Nos. 25, 26, 27, 28, 29 and 30.

CATEGORY 1
SINGLE FAMILY HOUSES

Single family houses, incorporating drawings Nos. 1, 2, 3, 4 and 5.

C.1.1 The risk from fire in a typical two-storey property would generally be considered to be low.

C.1.2 Consequently the fire safety measures required should be relatively simple to achieve.

C.1.3 New properties, built in accordance with the requirements of the Building Regulations 2000 and guidance in Approved Document B, will generally satisfy the requirements of this guide.

C.1.4 Existing properties should be provided with similar fire safety measures with suitable emergency egress from each storey, and a means of giving early warning in the event of fire.

C.1.5 It should be noted that the recommendations on means of escape in this guide are based on the general assumption that the occupants will be capable of using the means of escape unaided to reach a place of safety.

C.1.6 If individual on-site assessments identify vulnerable occupants, who, for whatever reason, are unable to use the means of escape provided, additional measures will need to be implemented. This will be particularly relevant in those premises where window escape has been adopted for emergency egress.

C.1.7 In these circumstances, it might be necessary to provide a protected route to the final exit and/or increase the level of the fire detection and fire alarm system.

C.1.8 Properties with any floor over 7.5m above ground level will need to be provided with additional fire safety measures. In a typical three or four storey property, there will be a need to provide a protected route to the final exit and increase the level of the fire detection and fire alarm system. In some instances, consideration should be given to the provision of an alternative means of escape from upper floors.

Drawing No. 1

Premises

Two storey – single family house with cellar.

Evacuation Strategy

Total evacuation of premises.

Means of Escape

Each storey should be provided with a suitable door or window for emergency egress in the event of fire.

Each bedroom on the first floor should preferably be provided with an emergency escape window. A single window exit might be acceptable in this particular layout, as all rooms opening onto the stairs are fitted with doors, which will provide a limited degree of fire protection to the stairs. Providing the doors are closed, it will give the occupants the opportunity to move between rooms to access the escape window.

It is generally recommended that the window exit be provided to the front elevation of the property, providing access to the main thoroughfare. This should assist the occupants to raise the alarm and seek assistance to call the fire and rescue service.

Any window provided for emergency egress purposes should have an unobstructed openable area that is at least 0.33m², and be at least 450mm high by 450mm wide. The bottom of the openable area should not be more than 1,100mm above the floor. The window should lead to a place of safety, clear of the building.

It is advisable that all doors and windows providing means of escape should be capable of being opened from the inside, without the use of keys.

In particular, any security locks fitted to final exit doors from the premises should have internal thumb-turn or lever release mechanisms. Any security devices fitted to escape windows should be provided with a suitable release mechanism.

Fire Separation

In existing properties, built in accordance with the Building Regulations, there will generally be no requirement for the provision of additional fire resistance to walls and floors.

The floor between the cellar and ground floor should afford a fire resistance of 30 minutes. The existing ceiling could be accepted providing it is in sound condition and would provide a minimum of 20 minutes fire resistance and an interlinked heat alarm is fitted in the cellar.

Fire Doors

The door at the head of the stairs to the cellar should be to FD20 standard. However, this door is not required to be fire resisting if a heat alarm is fitted in the cellar.

There will no requirement for any of the other doors in the house to be fire resisting doors. Occupants should, however, be advised to close doors at night.

Fire Detection and Fire Alarm System

A Category LD3, Grade D system with interlinked optical smoke alarms in the circulation areas at ground and first floor level.

Consideration should be given to the provision of an additional heat alarm in the kitchen.

Signs

There is no requirement for exit signs or notices.

Fire-fighting Equipment

There is no compelling requirement for the provision of fire-fighting equipment in this type of property. It should, however, be recommended that families have some form of fire-fighting equipment, such as a fire blanket and/or suitable fire extinguisher.

Drawing No. 2

Premises

Two storey – single family house.

Evacuation Strategy

Total evacuation of premises.

Means of Escape

Each storey should be provided with a suitable door or window for emergency egress in the event of fire.

Each bedroom on the first floor should preferably be provided with an emergency escape window. A single window exit might be acceptable in this particular layout, as all rooms opening onto the stairs are fitted with doors, which will provide a limited degree of fire protection to the stairs. Providing the doors are closed, it will give the occupants the opportunity to move between rooms to access the escape window.

It is generally recommended that the escape window is provided to the front elevation of the property, providing access to the main thoroughfare. This should assist the occupants to raise the alarm and seek assistance to call the fire and rescue service.

Any window provided for emergency egress purposes should have an unobstructed openable area that is at least 0.33m², and be at least 450mm high by 450mm wide. The bottom of the openable area should not be more than 1,100mm above the floor. The window should lead to a place of safety, clear of the building.

It is advisable that all doors and windows providing means of escape should be capable of being opened from the inside, without the use of keys.

In particular, any security locks fitted to final exit doors from the premises should have internal thumb-turn or lever release mechanisms. Any security devices fitted to escape windows should be provided with a suitable release mechanism.

Fire Separation

In existing properties, built in accordance with the Building Regulations, there will generally be no requirement for the provision of additional fire resistance to walls and floors.

Fire Doors

There will no requirement for any fire resisting doors. Occupants should, however, be advised to close doors at night.

Fire Detection and Fire Alarm System

A Category LD3 Grade D system with interlinked optical smoke alarms in the circulation areas at ground and first floor level.

Consideration should be given to the provision of an additional heat alarm in the kitchen.

Signs

There is no requirement for exit signs or notices.

Fire-fighting Equipment

There is no compelling requirement for the provision of fire-fighting equipment in this type of property. It should, however, be recommended that families have some form of fire-fighting equipment, such as a fire blanket and/or suitable fire extinguisher.

Drawing No. 3

Premises

Two storey – single family house.

Evacuation Strategy

Total evacuation of premises.

Means of Escape

Each storey should be provided with a suitable door or window for emergency egress in the event of fire.

Each bedroom on the first floor should preferably be provided with an emergency escape window. A single window exit might be acceptable in this particular layout, as all rooms opening onto the stairs are fitted with doors, which will provide a limited degree of fire protection to the stairs. Providing the doors are closed, it will give the occupants the opportunity to move between rooms to access the escape window.

It is generally recommended that the escape window is provided to the front elevation of the property, providing access to the main thoroughfare. This should assist the occupants to raise the alarm and seek assistance to call the fire and rescue service.

Any window provided for emergency egress purposes should have an unobstructed openable area that is at least 0.33m², and be at least 450mm high by 450mm wide. The bottom of the openable area should not be more than 1,100mm above the floor. The window should lead to a place of safety, clear of the building.

It is advisable that all doors and windows providing means of escape should be capable of being opened from the inside, without the use of keys.

In particular, any security locks fitted to final exit doors from the premises should have internal thumb-turn or lever release mechanisms. Any security devices fitted to escape windows should be provided with a suitable release mechanism.

Fire Separation

In existing properties, built in accordance with the Building Regulations, there will generally be no requirement for the provision of additional fire resistance to walls and floors.

Fire Doors

There will no requirement for any fire resisting doors. Occupants should, however, be advised to close doors at night.

Fire Detection and Fire Alarm System

A Category LD3 Grade D system with interlinked optical smoke alarms in the lounge and dining areas on the ground floor, and on the first floor landing level.

Consideration should be given to the provision of an additional heat alarm in the kitchen area.

Signs

There is no requirement for exit signs or notices.

Fire-fighting Equipment

There is no compelling requirement for the provision of fire-fighting equipment in this type of property. It should, however, be recommended that families have some form of fire-fighting equipment, such as a fire blanket and/or suitable fire extinguisher.

Drawing No. 4

Premises

Two storey – single family house.

Evacuation Strategy

Total evacuation of premises.

Means of Escape

Each storey should be provided with suitable doors and windows for emergency egress in the event of fire.

In this layout, the stairs are open to both the dining room and kitchen, which increases the risk to the occupants of the first floor bedrooms. Therefore, in this situation, each bedroom on the first floor should be provided with an emergency escape window

Any window provided for emergency egress purposes should have an unobstructed openable area that is at least 0.33m², and be at least 450mm high by 450mm wide. The bottom of the openable area should not be more than 1,100mm above the floor. The window should lead to a place of safety, clear of the building.

It is advisable that all doors and windows providing means of escape should be capable of being opened from the inside, without the use of keys.

In particular, any security locks fitted to final exit doors from the premises should have internal thumb-turn or lever release mechanisms. Any security devices fitted to escape windows should be provided with a suitable release mechanism.

Fire Separation

In existing properties, built in accordance with the Building Regulations, there will generally be no requirement for the provision of additional fire resistance to walls and floors.

Fire Doors

There will no requirement for any fire resisting doors. Occupants should, however, be advised to close doors at night.

Fire Detection and Fire Alarm System

A Category LD3 Grade D system with interlinked optical smoke alarms in the lounge and dining areas on the ground floor, and on the first floor landing level.

Consideration should be given to the provision of an additional heat alarm in the kitchen area.

Signs

There is no requirement for exit signs or notices.

Fire-fighting Equipment

There is no compelling requirement for the provision of fire-fighting equipment in this type of property. It should, however, be recommended that families have some form of fire-fighting equipment, such as a fire blanket and/or suitable fire extinguisher.

Drawing No. 5

Premises

Three storey – single family house with cellar.

Evacuation Strategy

Total evacuation of premises.

Means of Escape

This is a three storey property and the option to allow emergency egress from windows on the uppermost floor is no longer acceptable.

The stairs should be made a protected route to the final exit door.

The ground floor should be provided with suitable doors for emergency egress in the event of fire.

It is advisable that all doors and windows providing means of escape should be capable of being opened from the inside, without the use of keys.

In particular, any security locks fitted to final exit doors from the premises should have internal thumb-turn or lever release mechanisms. Any security devices fitted to escape windows should be provided with a suitable release mechanism.

Fire Separation

In general, all floors should achieve a fire resistance of 30 minutes, this should include the underside of the stairs between the cellar and the ground floor.

However, it should be possible to accept the existing floor between the first and second floor levels providing the ceilings below are in sound condition and would provide a minimum of 20 minutes fire resistance.

The existing floor between cellar and ground floor can be accepted if the ceiling is in good condition and would provide a minimum of 20 minutes fire resistance and an additional heat alarm is installed in the cellar.

In general, the walls and partitions enclosing the staircase should afford a fire resistance of 30 minutes. It should, however, be possible to accept existing walls and partitions if they are in sound condition and would provide a minimum of 20 minutes fire resistance.

Lath and plaster walls and ceilings should provide a fire resistance of approximately 20 minutes and can be accepted, in single family premises, providing they are in sound condition.

The requirement to provide a fire resisting enclosure to the stairs at second floor level can be relaxed.

Fire Doors

All doors opening into the protected stairs should be to FD20 standard. It should be possible to accept existing, well constructed solid doors, providing they are in sound condition and would provide a minimum of 20 minutes fire resistance.

Doors should be fitted with self-closing devices. Rising butt hinges are considered to be acceptable in these circumstances.

The requirement for a fire resisting door to the bedroom at second floor level can be relaxed.

The door at the head of the stairs to the cellar should be to FD20 standard. This door is not required to be fire resisting if a heat alarm is fitted in the cellar.

Fire Detection and Fire Alarm System

A Category LD3 Grade D system with interlinked optical smoke alarms in the circulation areas at ground, first and second floor levels.

Consideration should be given to the provision of additional heat alarms in the kitchen and the cellar.

Signs

There is no requirement for exit signs or notices.

Fire-fighting Equipment

There is no compelling requirement for the provision of fire-fighting equipment in this type of property. It should, however, be recommended that families have some form of fire-fighting equipment, such as a fire blanket and/or suitable fire extinguisher.

CATEGORY 2
SHARED HOUSING

Shared houses, incorporating drawing Nos. 6, 7, 8, 9 and 10

C.2.1 The fire risk in shared housing can, in the majority of situations, be considered to be similar to that in a single family unit in the same type of property.

C.2.2 Individuals will share the same facilities and live together in much the same way as single family unit.

C.2.3 This arrangement is particularly suited to students or similar groups, but can also include families that may rent out one or two rooms.

C.2.4 The main difference will be the possibility that individuals may secure their own rooms to prevent access by other occupants. If this occurs, additional fire safety measures may be required.

C.2.5 The risk from fire in a typical two storey property would generally be considered to be low.

C.2.6 Consequently the fire safety measures required should be relatively simple to achieve.

C.2.7 New properties, built in accordance with the requirements of the Building Regulations 2000 and guidance in Approved Document B, will satisfy the requirements of this guide.

C.2.8 Existing properties should be provided with similar fire safety measures with suitable emergency egress from each storey, and a means of giving early warning in the event of fire.

C.2.9 It should be noted that the recommendations on means of escape in this guide are based on the general assumption that the occupants will be capable of using the means of escape unaided, to reach a place of safety.

C.2.10 If individual on-site assessments identify vulnerable occupants, who, for whatever reason, are unable to use the means of escape provided, additional measures will need to be implemented. This will be particularly relevant in those premises were window escape has been adopted for emergency egress.

C.2.11 In these circumstances, it might be necessary to provide a protected route to the final exit and/or increase the level of the fire detection and fire alarm system.

C.2.12 Properties with any floor over 7.5m above ground level will need to be provided with additional fire safety measures. In a typical three or four storey property, there will be a need to provide a protected route to the final exit and increase the level of the fire detection and fire alarm system. In some instances, consideration should be given to the provision of an alternative means of escape from the upper floors.

Drawing No. 6

Premises

Two storey – shared house with cellar.

Evacuation Strategy

Total evacuation of premises.

Means of Escape

Each storey should be provided with a suitable door or window for emergency egress in the event of fire.

Each bedroom on the first floor should be provided with an emergency window exit.

Any window provided for emergency egress purposes should have an unobstructed openable area that is at least 0.33m², and be at least 450mm high by 450mm wide. The bottom of the openable area should not be more than 1,100mm above the floor. The window should lead to a place of safety, clear of the building.

It is recommended that all doors and windows providing means of escape should be capable of being opened from the inside, without the use of keys.

It is advisable that any security locks fitted to doors to individual rooms should be capable of being opened from the inside without the use of a key.

Any security locks fitted to the final exit doors from the premises, must have an internal thumb-turn or lever release mechanisms.

Any security devices fitted to escape windows should be provided with a suitable release mechanism.

Fire Separation

In existing properties, built in accordance with the Building Regulations, there will generally be no requirement for the provision of additional fire resistance to walls and upper floors.

The floor between the basement and ground floor should afford a fire resistance of 30 minutes. The existing floor may be accepted providing the ceiling is in good condition and would provide a minimum fire resistance of 20 minutes, and a heat alarm is fitted in the basement.

Fire Doors

The door at the head of the stairs to the cellar should be to FD20 standard. However, this door is not required to be fire resisting if a heat alarm is fitted in the cellar.

There will no requirement for any of the other doors in the house to be fire resisting doors. Occupants should, however, be advised to close doors at night.

Fire Detection and Fire Alarm System

A Category LD3 Grade D system with interlinked optical smoke alarms in the circulation areas at ground and first floor level.

Consideration should be given to the provision of interlinked heat alarms in the kitchen and the cellar.

The need to protect the occupants of individual rooms from the effects of fire should be the subject of individual risk assessments. If the occupants are at increased risk from fire because of their health or lifestyle, or are considered to be particularly vulnerable because of their age, the provision of additional smoke alarms should be considered.

Signs

There is no requirement for exit signs or notices.

Fire-fighting Equipment

A fire blanket should be provided in the shared kitchen.

Drawing No. 7

Premises

Two storey – shared house.

Evacuation Strategy

Total evacuation of premises.

Means of Escape

Each storey should be provided with a suitable door or window for emergency egress in the event of fire.

Each bedroom on the first floor should be provided with an emergency escape window

Any window provided for emergency egress purposes should have an unobstructed openable area that is at least 0.33m², and be at least 450mm high by 450mm wide. The bottom of the openable area should not be more than 1,100mm above the floor. The window should lead to a place of safety, clear of the building.

It is recommended that all doors and windows providing means of escape should be capable of being opened from the inside, without the use of keys.

It is advisable that any security locks fitted to doors to individual rooms should be capable of being opened from the inside without the use of a key.

Any security locks fitted to the final exit doors from the premises, must have an internal thumb-turn or lever release mechanisms.

Any security devices fitted to escape windows should be provided with a suitable release mechanism.

Fire Separation

In existing properties, built in accordance with the Building Regulations, there will generally be no requirement for the provision of additional fire resistance to walls and floors.

Fire Doors

There will be no requirement for any fire resisting doors. Occupants should, however, be advised to close doors at night.

Fire Detection and Fire Alarm System

A Category LD3 Grade D system with interlinked optical smoke alarms in the circulation areas at ground and first floor level.

Consideration should be given to the provision of an additional heat alarm in the kitchen.

The need to protect the occupants of individual rooms from the effects of fire should be the subject of individual risk assessments. If the occupants are at increased risk from fire because of their health or lifestyle, or are considered to be particularly vulnerable because of their age, the provision of additional smoke alarms should be considered.

Signs

There is no requirement for exit signs or notices.

Fire-fighting Equipment

A fire blanket should be provided in the shared kitchen.

Drawing No. 8

Premises

Two storey – shared house.

Evacuation Strategy

Total evacuation of premises.

Means of Escape

Each storey should be provided with a suitable door or window for emergency egress in the event of fire.

Each bedroom on the first floor should be provided with an emergency escape window

Any window provided for emergency egress purposes should have an unobstructed openable area that is at least 0.33m², and be at least 450mm high by 450mm wide. The bottom of the openable area should not be more than 1,100mm above the floor. The window should lead to a place of safety, clear of the building.

It is recommended that all doors and windows providing means of escape should be capable of being opened from the inside, without the use of keys.

It is advisable that any security locks fitted to doors to individual rooms should be capable of being opened from the inside without the use of a key.

Any security locks fitted to the final exit doors from the premises, must have an internal thumb-turn or lever release mechanisms.

Any security devices fitted to escape windows should be provided with a suitable release mechanism.

Fire Separation

In existing properties, built in accordance with the Building Regulations, there will generally be no requirement for the provision of additional fire resistance to walls and floors.

Fire Doors

There will no requirement for any fire resisting doors. Occupants should, however, be advised to close doors at night.

Fire Detection and Fire Alarm System

A Category LD3 Grade D system with interlinked optical smoke alarms in the lounge and dining areas on the ground floor, and on the first floor landing level.

The need to protect the occupants of individual rooms from the effects of fire should be the subject of individual risk assessments. If the occupants are at increased risk from fire because of their health or lifestyle, or are considered to be particularly vulnerable because of their age, the provision of additional smoke alarms should be considered.

It is recommended that an additional heat alarm be provided in the kitchen area.

Signs

There is no requirement for exit signs or notices.

Fire-fighting Equipment

A fire blanket should be provided in the shared kitchen.

Drawing No. 9

Premises

Two storey – shared house.

Evacuation Strategy

Total evacuation of premises.

Means of Escape

Each storey should be provided with suitable doors and windows for emergency egress in the event of fire.

In this layout, the stairs are open to both the dining room and kitchen, which increases the risk to the occupants of the first floor bedrooms. Therefore, in this situation, each bedroom on the first floor should be provided with an emergency escape window

Any window provided for emergency egress purposes should have an unobstructed openable area that is at least 0.33m², and be at least 450mm high by 450mm wide. The bottom of the openable area should not be more than 1,100mm above the floor. The window should lead to a place of safety, clear of the building.

It is recommended that all doors and windows providing means of escape should be capable of being opened from the inside, without the use of keys.

It is advisable that any security locks fitted to doors to individual rooms should be capable of being opened from the inside without the use of a key.

Any security locks fitted to the final exit doors from the premises, must have an internal thumb-turn or lever release mechanisms.

Any security devices fitted to escape windows should be provided with a suitable release mechanism.

Fire Separation

In existing properties, built in accordance with the Building Regulations, there will generally be no requirement for the provision of additional fire resistance to walls and floors.

Fire Doors

There will no requirement for any fire resisting doors. Occupants should, however, be advised to close doors at night.

Fire Detection and Fire Alarm System

A Category LD3 Grade D system with interlinked optical smoke alarms in the lounge and dining areas on the ground floor, and on the first floor landing level.

The need to protect the occupants of individual rooms from the effects of fire should be the subject of individual risk assessments. If the occupants are at increased risk from fire because of their health or lifestyle, or are considered to be particularly vulnerable because of their age, the provision of additional smoke alarms should be considered.

Consideration should be given to the provision of an additional heat alarm in the kitchen area.

Signs

There is no requirement for exit signs or notices.

Fire-fighting Equipment

A fire blanket should be provided in the shared kitchen.

Drawing No. 10

Premises

Three storey – shared house with cellar.

Evacuation Strategy

Total evacuation of premises.

Means of Escape

This is a three storey property, and the option to allow emergency egress from windows on the uppermost floor is no longer acceptable.

The stairs should be made a protected route to the final exit door.

The ground floor should be provided with suitable doors for emergency egress in the event of fire.

It is recommended that all doors providing means of escape should be capable of being opened from the inside, without the use of keys.

It is advisable that any security locks fitted to doors to individual rooms should be capable of being opened from the inside without the use of a key.

Any security locks fitted to the final exit doors from the premises, must have an internal thumb-turn or lever release mechanisms.

Fire Separation

In general, all floors should achieve a fire resistance of 30 minutes. This should include the underside of the stairs between the cellar and the ground floor.

However, it should be possible to accept the existing floor between the first and second floors providing the ceilings below are in sound condition and would provide a minimum of 20 minutes fire resistance.

The existing floor between cellar and ground floor can be accepted if the ceiling below is in good condition and would provide a minimum of 20 minutes fire resistance and an additional heat alarm is installed in the cellar.

In general, the walls and partitions enclosing the staircase should afford a fire resistance of 30 minutes. It should, however, be possible to accept existing walls and partitions if they are in sound condition and would provide a minimum of 20 minutes fire resistance.

Lath and plaster walls and ceilings should provide a fire resistance of approximately 20 minutes and can be accepted, in single family/shared houses, providing they are in sound condition.

Fire Doors

All doors opening into the protected stairs should be to FD20 standard. It should be possible to accept existing, well fitted and constructed solid doors providing they are in sound condition and would provide a minimum of 20 minutes fire resistance.

Doors should be fitted with self-closing devices. Rising butt hinges are considered to be acceptable in these circumstances.

An additional FD20 door should be provided at the head of the stairs to the cellar. This door is not required to be fire resisting if a heat alarm is fitted in the cellar.

Fire Detection and Fire Alarm System

A Category LD3 Grade D system with interlinked optical smoke alarms in the circulation areas at ground, first and second floor levels.

The need to protect the occupants of individual rooms from the effects of fire should be the subject of individual risk assessments. If the occupants are at increased risk from fire because of their health or lifestyle, or are considered to be particularly vulnerable because of their age, the provision of additional smoke alarms should be considered.

Consideration should be given to the provision of additional heat alarms in the kitchen and the cellar.

Signs

There is no requirement for exit signs or notices.

Fire-fighting Equipment

A fire blanket should be provided in the shared kitchen.

CATEGORY 3
SHARED HOUSES PROVIDING SUPPORTED LODGING

Shared houses providing supported lodgings, incorporating drawing Nos. 11 and 12.

C.3.1 The approach taken for shared houses, providing supported lodgings, should be in accordance with the recommendations of HTM 88[20] .

C.3.2 The measures specified in that document are supplementary to the requirements of Part B of Schedule 1 of the Building Regulations 2000.

C.3.3 The recommendations in HTM 88 are intended to apply to both staffed and unstaffed accommodation.

C.3.4 This guide should only be used for premises of not more than two floors above ground or access level and providing accommodation for no more than six residents.

C.3.5 There should be adequate means of escape in case of fire capable of being used safely by all residents.

C.3.6 Means of escape in one or two storey premises requires that all habitable rooms open directly onto a final exit or into a hallway or stair, which leads to a final exit.

C.3.7 Means of escape in premises with any floor over 4.5m above ground level requires the stairs to be made a protected route to final exit.

C.3.8 All hazard rooms, such as kitchens, lounges and bedrooms, should be enclosed within 30 minutes fire resisting construction.

C.3.9 The fire detection and fire alarm system should in accordance with the recommendations of BS 5839-6[21] for at least a Category LD1 Grade C system. In practice, a Grade A system will normally be provided.

C.3.10 Emergency escape lighting should be provided to cover common escape routes and be installed in accordance with the recommendations of BS 5266-1[22] and the requirements of BS 5266-7[23] and BS 5266-8[24].

C.3.11 Dependent on the layout and the risk to residents, consideration may need to be given to the provision of a residential sprinkler system.

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[20] HTM 88 update: 2001. *Fire precautions in housing providing NHS-supported living in the community.*
[21] BS 5839-6: 2004. *Fire detection and fire alarm systems for buildings - Code of practice for the design, installation and maintenance of fire detection and fire alarm systems in dwellings.*
[22] BS 5266-1: 2005. *Emergency lighting - Code of practice for the emergency lighting of premises.*
[23] BS 5266-7: 1999 (BS EN 1838: 1999). *Lighting applications - Emergency lighting.*
[24] BS 5266-8: 2004 (BS EN 50172: 2004). *Emergency escape lighting systems.*

Drawing No. 11

Premises

Two storey house with cellar - shared house providing supported lodgings.

Evacuation Strategy

Total evacuation of premises.

Means of Escape

The stairs should be made a protected route to a final exit.

There should be no cupboards located within stairways, but where they already exist, they should be enclosed in 30 minute fire resisting construction.

The ground floor should be provided with suitable doors for emergency egress in the event of fire.

All doors providing means of escape must be capable of being opened from the inside, without the use of keys.

Any security locks fitted to doors should have internal thumb-turn mechanisms.

Fire Separation

The walls and partitions enclosing the staircase should afford a fire resistance of 30 minutes. This should include the underside of the stairs between the cellar and the ground floor.

The floor between basement and ground floor should achieve a fire resistance of 30 minutes.

All walls and floors should achieve a fire resistance of 30 minutes. However, existing walls and partitions between individual rooms, and ceilings between the ground and first floor, providing they are in a sound condition, should be accepted because of the high level of fire detection provided throughout the premises.

Fire Doors

All doors opening into the protected stairs should be to FD30S standard.

Doors should be fitted with self-closing devices. Rising butt hinges are considered to be acceptable in these circumstances.

An additional FD30S door should be provided at the head of the stairs to the cellar.

Fire Detection and Fire Alarm System

A Category LD1 Grade A system with smoke and heat detectors should be provided throughout the premises.

In general, there will be no requirement to install fire detection in the roof, ceiling or floor voids, bathrooms or small cupboards.

The recommended sound pressure level of 65dB(A) in general areas is considered to be too high for supported living. It is recommended that this is reduced to around 55dB(A) in general areas of the home, and 75dB(A) at the bedhead in all bedrooms.

Consideration can be given to the relaxation of the requirement to provide manual call points.

The duration of the standby power supply can be relaxed to 24 hours.

Emergency Escape Lighting

Emergency escape lighting should be provided to cover the common escape routes. The emergency escape lighting should be installed in accordance with the recommendations of BS 5266-1[25] and the requirements of BS 5266-7[26] and BS 5266-8[27].

Signs

There should be no requirement for exit signs or notices.

Fire-fighting Equipment

A fire blanket should be provided in the shared kitchen.

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[25] BS 5266-1: 2005. *Emergency lighting - Code of practice for the emergency lighting of premises.*
[26] BS 5266-7: 1999 (BS EN 1838: 1999). *Lighting applications - Emergency lighting.*
[27] BS 5266-8: 2004 (BS EN 50172: 2004). *Emergency escape lighting systems.*

Drawing No. 12

Premises

Two storey - shared house providing supported lodgings.

Evacuation Strategy

Total evacuation of premises.

Means of Escape

Open stairways are not acceptable without the provision of a residential sprinkler system.

One of the following options should therefore be considered:

- The stairs should be made a protected route to a final exit; or
- A residential sprinkler system should be installed throughout the premises.

The ground floor should be provided with suitable doors for emergency egress in the event of fire.

All doors providing means of escape must be capable of being opened from the inside, without the use of keys.

Any security locks fitted to doors should have internal thumb-turn mechanisms.

Fire Separation

If the stairs are to be made a protected route, then the walls and partitions enclosing the staircase and the route to exit should afford a fire resistance of 30 minutes.

All walls and floors should achieve a fire resistance of 30 minutes. However, existing walls and partitions between individual rooms, and ceilings between floors, providing they are in a sound condition, should be acceptable because of the high level of fire detection provided throughout the premises.

The kitchen should be separated from the dining area with a 30 minute fire resisting partition and FD30S door.

Fire Doors

All doors to high risk rooms and doors opening into any protected route/stairs should be to FD30S standard.

Doors should be fitted with self-closing devices. Rising butt hinges are considered to be acceptable in these circumstances.

Fire Detection and Fire Alarm System

A Category LD1 Grade A system with smoke and heat detectors should be provided throughout the premises, including any protected route created on the ground floor.

In general, there will be no requirement to install fire detection in the roof, ceiling or floor voids, bathrooms or small cupboards.

The recommended sound pressure level of 65dB(A) in general areas is considered to be too high for supported living. It is recommended that this is reduced to around 55dB(A) in general areas of the home, and 75dB(A) at the bedhead in all bedrooms.

Consideration can be given to the relaxation of the requirement to provide manual call points.

The duration of the standby power supply can be relaxed to 24 hours.

Emergency Escape Lighting

Emergency escape lighting should be provided to cover the common escape routes. The emergency escape lighting should be installed in accordance with the recommendations of BS 5266-1[28] and the requirements of BS 5266-7[29] and BS 5266-8[30].

Signs

There should be no requirement for exit signs or notices.

Fire-fighting Equipment

A fire blanket should be provided in the shared kitchen.

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[28] BS 5266-1: 2005. *Emergency lighting - Code of practice for the emergency lighting of premises.*
[29] BS 5266-7: 1999 (BS EN 1838: 1999). *Lighting applications - Emergency lighting.*
[30] BS 5266-8: 2004 (BS EN 50172: 2004). *Emergency escape lighting systems.*

CATEGORY 4
Single Family and Shared Flats over Commercial Premises

Single family and shared flats over commercial premises, incorporating drawing Nos. 13, 14 and 15.

C.4.1 The risk from fire in a typical two or three storey property would be similar to that in a typical house with a similar layout and could generally be considered to be low.

C.4.2 Consequently, the fire safety measures required should be relatively simple to achieve.

C.4.3 The additional risk from a fire in the commercial premises must be considered. The overall risk assessment should, therefore, take account of the potential for a fire in the commercial premises to affect the means of escape from the flat.

C.4.4 In most situations, little more will be required, providing the commercial premises are separated from the accommodation above with construction affording a fire resistance of 60 minutes. This can be reduced to 30 minutes if heat detectors/alarms linked into the fire detection and fire alarm system in the accommodation are installed in the commercial premises.

C.4.5 If the commercial premises are considered to be a high fire risk, or there is a possibility that a fire could affect the means of escape for the occupants of the accommodation, then an early warning should be provided.

C.4.6 In such circumstances, the fire detection and fire alarm system in the accommodation should be extended into the commercial premises. Additional heat detectors/alarms should be installed in the commercial premises and be linked into the fire detection and fire alarm system in the accommodation.

C.4.7 New properties, built in accordance with the requirements of the Building Regulations 2000 and guidance in Approved Document B, will generally satisfy the requirements of this guide.

C.4.8 Existing properties should be provided with similar fire safety measures, with suitable emergency egress from each storey and a means of giving early warning in the event of fire.

C.4.9 It should be noted that the recommendations on means of escape in this guide are based on the general assumption that the occupants will be capable of using the means of escape unaided, to reach a place of safety.

C.4.10 If individual on-site assessments identify vulnerable occupants, who, for whatever reason, are unable to use the means of escape, additional measures will need to be implemented. This will be particularly relevant in those premises where window escape has been adopted for emergency egress.

C.4.11 In these circumstances, it might be necessary to provide a protected route to the final exit and/or increase the level of the fire detection and fire alarm system.

C.4.12 Properties with any floor over 7.5m above ground level will need to be provided with additional fire safety measures. In a typical three or four storey property, there will be a need to provide a protected route to the final exit and increase the level of the fire detection and fire alarm system. In some instances, consideration should be given to the provision of an alternative means of escape from the upper floors.

Drawing No. 13

Premises

Two storey – single family flat – over commercial premises.

Evacuation Strategy

Evacuation of commercial premises and the flat should be considered independently.

The evacuation of the commercial premises is outside the scope of this guide.

Means of Escape

The ground floor entrance hall should be maintained clear of any combustible materials or storage.

Each bedroom on the first floor should, preferably, be provided with an emergency escape window. A single escape window might be acceptable in this particular layout, as all rooms opening onto the landing are fitted with doors, which will provide a limited degree of fire protection. Providing the doors are closed, it will give the occupants the opportunity to move between rooms to access the window to escape.

Any window provided for emergency egress purposes should have an unobstructed openable area that is at least 0.33m², and be at least 450mm high by 450mm wide. The bottom of the openable area should not be more than 1,100mm above the floor. The window or door should lead to a place of safety, clear of the building.

It is advisable that all doors and windows providing means of escape should be capable of being opened from the inside, without the use of keys.

In particular, any security locks fitted to the final exit door should have an internal thumb-turn or lever release mechanism.

It is advisable that any security devices fitted to escape windows should be provided with a suitable release mechanism.

Fire Separation

The floor between the commercial premises and the residential accommodation should afford a fire resistance of 60 minutes or, alternatively, 30 minutes if an interlinked heat alarm is installed in the commercial premises.

Premises constructed in accordance with the Building Regulations should already have the required level of fire separation between the two different purpose groups.

Fire Doors

There will no requirement for any fire resisting doors. Occupants should, however, be advised to close doors at night.

Fire Detection and Fire Alarm System

A Category LD3 Grade D system with interlinked optical smoke alarms in the circulation areas at ground and first floor level.

Consideration should be given to the provision of an interlinked heat alarm in the kitchen.

Signs

There is no requirement for exit signs or notices.

Fire-fighting Equipment

There is no compelling requirement for the provision of fire-fighting equipment in this type of property. It should, however, be recommended that families have some form of fire-fighting equipment, such as a fire blanket and/or suitable fire extinguisher.

Drawing Nos. 14 and 15

Premises

Three storey – single family and shared flat – over commercial premises.

It is considered that the risk associated with single family and shared occupation is sufficiently similar to be assessed together.

Evacuation Strategy

Evacuation of commercial premises and flats should be considered independently.

The evacuation of the commercial premises is outside the scope of this guide.

Means of Escape

These are three storey properties and the option to allow emergency egress from windows on the uppermost floor is no longer acceptable.

The stairs should be made a protected route to the final exit door.

The ground floor entrance hall should be maintained clear of any combustible materials or storage.

It is recommended that all doors and windows providing means of escape should be capable of being opened from the inside, without the use of keys.

In shared flats it is advisable that any security locks fitted to doors to individual rooms should be capable of being opened from the inside without the use of a key.

Any security locks fitted to the final exit doors from the premises, should have an internal thumb-turn or lever release mechanisms.

Fire Separation

The floor between the commercial premises and the residential accommodation should afford a fire resistance of 60 minutes or, alternatively, 30 minutes if an interlinked heat alarm is installed in the commercial premises.

Premises constructed in accordance with the Building Regulations should already have the required level of fire separation between the two different purpose groups.

In general, all other floors should achieve a fire resistance of 30 minutes. However, it should be possible to accept the existing floor between the first and second floors providing the ceiling below is in sound condition and would provide a minimum of 20 minutes fire resistance.

In general, the walls and partitions enclosing the staircase should afford a fire resistance of 30 minutes. It should, however, be possible to accept existing walls and partitions if they are in sound condition and would provide a minimum of 20 minutes fire resistance.

Lath and plaster walls and ceilings should provide a fire resistance of approximately 20 minutes and can be accepted in single family/shared flats providing they are in sound condition.

Fire Doors

All doors opening into the protected stairs should be to FD20 standard. It should be possible to accept existing, well fitted and constructed solid doors, providing they are in sound condition and would provide a minimum of 20 minutes fire resistance.

Doors should be fitted with self-closing devices. Rising butt hinges are considered to be acceptable in these circumstances providing they overcome the resistance of the latch and are capable of closing the door effectively.

Fire Detection and Fire Alarm System

A Category LD3 Grade D system with interlinked optical smoke alarms in the circulation areas at ground, first and second floor levels.

Consideration should be given to the provision of an additional heat alarm in the kitchen.

Signs

There is no requirement for exit signs or notices.

Fire-fighting Equipment

There is no compelling requirement for the provision of fire-fighting equipment in single family flats. It should, however, be recommended that families have some form of fire-fighting equipment, such as a fire blanket and/or suitable fire extinguisher.

In shared flats, it is recommended that a fire blanket is provided in the kitchen.

CATEGORY 5
SELF-CONTAINED FLATS AND MAISONETTES

Self-contained and open flats, incorporating drawing Nos. 16, 17, 18 and 19

C.5.1 Properties with self-contained flats present a different risk to the occupants from that of single family or shared accommodation. The approach to fire safety should, therefore, be assessed in a slightly different manner.

C.5.2 Purpose built flats/maisonettes and houses and other buildings converted into self contained flats/maisonettes that have been designed and constructed in accordance with the Building Regulations and guidance in Approved Document B will have adequate levels of fire separation and means of escape. Due to the high degree of compartmentation, the spread of fire from one dwelling to another dwelling would be unusual. In these circumstances, it can be assumed that there will be no requirement to evacuate the whole building in the event of a fire in any one dwelling.

C.5.3 It should, however, be ensured that a fire in one dwelling will not obstruct the common escape route/stair of the occupants of any other dwelling. In buildings with a single staircase, the guidance in Approved Document B recommends that each dwelling is separated from the common stair by a protected lobby or common corridor.

C.5.4 In other situations where the levels of fire separation and means of escape are not fully compliant with the Building Regulations, the occupants of individual flats should be warned of and protected from the effects of fire in other occupancies. To achieve this, an adequate means of warning is important and will be required to ensure occupants are given sufficient warning of a fire in other occupancies to enable them to use the means of escape to reach a place of safety.

C.5.5 The following guidance is therefore based on the need to provide fire safety provisions for the total evacuation of the flats/maisonettes.

C.5.6 The risk and means of escape can be considered in two distinct phases:

- The risk and means of escape within each flat; and
- The risk and means of escape from each flat to a final exit.

C.5.7 The means of escape from within the flats themselves should be relatively simple to achieve. An assessment will need to be made of the layout of each unit to ensure satisfactory arrangements for limits on travel distance, inner rooms, and/or any additional fire separation that may be required to protect the internal means of escape.

C.5.8 The common exit routes from the front door of each unit should be made a protected route to the final exit and be enclosed within construction affording a fire resistance of 30 minutes.

C.5.9 Adequate levels of fire separation will be required between floors and individual flats to limit the spread of fire and smoke.

C.5.10 If the flats are located over commercial premises, the additional risk from a fire in the commercial premises must be considered. The overall risk assessment should therefore take account of the potential for a fire in the commercial premises to affect the means of escape from the flat.

C.5.11 The level of separation will determine the need to consider the risk within the commercial premises. If separation is in accordance with the requirements of the Building Regulations 2000 and guidance in Approved Document B, the risk within the commercial premises can generally be disregarded.

C.5.12 If this is not the case, then it might be appropriate to provide additional heat detection in the commercial premises, linked into the flats' fire alarm system, to provide an early warning of a fire.

C.5.13 In most situations, little more will be required, providing the commercial premises are totally separated from the accommodation above with construction affording a fire resistance of 60 minutes. This can be reduced to 30 minutes, if the fire detection and fire alarm system is extended into the commercial premises by the installation of heat detectors in the commercial premises.

C.5.14 The provision of an early warning of fire in both the common areas and individual flats will be required. (Note: The provision of an early warning of fire in the common area can be omitted if the flats/maisonettes have been constructed in accordance with the Building Regulations and the guidance provided in Approved Document B.)

C.5.15 The use of mixed systems in accordance with BS 5839-6[31] is recommended.

C.5.16 The system should incorporate:

- A Category LD2 Grade A system with smoke and heat detectors to provide sufficient warning to all occupants of the building of a fire that might affect the common means of escape and to give them sufficient time to exit the building; and
- A Category LD3 Grade D system with smoke and heat alarms in each flat/maisonette to provide a warning to the individual occupants of a fire in their own accommodation.

[31] BS 5839-6: 2004. *Fire detection and fire alarm systems for buildings - Code of practice for the design, installation and maintenance of fire detection and fire alarm systems in dwellings.*

C.5.17 Emergency escape lighting should be provided to cover the common exit routes in accordance with the recommendations BS 5266-1[32] and requirements of BS 5266-7[33] and BS 5266-8[34].

C.5.18 Fire action notices detailing the action to take on discovering a fire and on hearing the fire alarm should be provided by each fire alarm call point and in each flat/maisonette.

[32] BS 5266-1: 2005. *Emergency lighting - Code of practice for the emergency lighting of premises.*
[33] BS 5266-7: 1999 (BS EN 1838: 1999). *Lighting applications - Emergency lighting.*
[34] BS 5266-8: 2004 (BS EN 50172: 2004). *Emergency escape lighting systems.*

Drawing No. 16

Premises

Two storey property with cellar. The property has self-contained flats on ground and first floors. The first floor flat has its own entrance door at ground floor level.

Evacuation Strategy

Total evacuation of flats.

Means of Escape

The exit route at ground floor should be enclosed within 30 minute fire resisting construction to form a protected route to the final exit door.

The ground floor entrance hall should be maintained clear of any combustible materials or storage.

It is recommended that all doors and windows providing means of escape should be capable of being opened from the inside, without the use of keys.

It is advisable that any security locks fitted to doors to individual flats should be capable of being opened from the inside without the use of a key.

Any security locks fitted to the common final exit doors from the premises, must have an internal thumb-turn or lever release mechanisms.

Fire Separation

All floors should achieve a fire resistance of 30 minutes.

The walls and partitions enclosing the exit route at ground floor should afford a fire resistance of 30 minutes.

Fire Doors

All doors opening into the protected route should be to FD30S standard and be fitted with a positive self-closing device.

The door to the cellar should be to FD20 standard.

Fire Detection and Fire Alarm System

A fire detection and fire alarm system in accordance with BS 5839-6[35] should be provided to give sufficient warning to all occupants of the building of a fire that might affect the means of escape and to give them sufficient time to exit the building.

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[35] BS 5839-6: 2004. *Fire detection and fire alarm systems for buildings - Code of practice for the design, installation and maintenance of fire detection and fire alarm systems in dwellings.*

In a two storey premises of limited size and only two units of accommodation, it should be possible to accept a slightly modified system to that recommended in BS 5839-6. In these circumstances, the system should incorporate:

- A Category LD2 Grade D system with:
  - Optical smoke alarms/sounders in the common entrance hall.
  - Heat alarm/sounders in the basement and ground floor flat to provide a warning to all occupants of the premises.
  - The alarms should be interlinked and be fitted to the landlord's electrical circuit.

  and
- Stand alone Grade D smoke alarms in the common areas of each flat, fitted to the independent flat electrical supply, to provide a warning to the individual occupants of the flats of a fire in their own accommodation.

Emergency Escape Lighting

Emergency escape lighting should be provided to cover the common escape routes. The emergency escape lighting should be installed in accordance with the recommendations of BS 5266-1[36] and the requirements of BS 5266-7[37] and BS 5266-8[38].

Signs

There is no requirement for exit signs.

Fire action notices should be provided by each call point and in each flat/maisonette.

Fire-fighting Equipment

Each flat/maisonette should be provided with a fire blanket to be located in the kitchen.

[36] BS 5266-1: 2005. *Emergency lighting - Code of practice for the emergency lighting of premises.*
[37] BS 5266-7: 1999 (BS EN 1838: 1999). *Lighting applications - Emergency lighting.*
[38] BS 5266-8: 2004 (BS EN 50172: 2004). *Emergency escape lighting systems.*

Drawing No. 17

Premises

Three storey property with cellar. The property has a self-contained flat on the ground floor and a maisonette on the first and second floors. The first floor maisonette has its own entrance door at ground floor level.

Evacuation Strategy

Total evacuation of flat/maisonette.

Means of Escape

The stairs and exit route at ground and first floor levels should be enclosed within 30 minute fire resisting construction to form a protected route to the final exit door.

The ground floor entrance hall should be maintained clear of any combustible materials or storage.

It is recommended that all doors and windows providing means of escape should be capable of being opened from the inside, without the use of keys.

It is advisable that any security locks fitted to doors to individual flats/maisonettes should be capable of being opened from the inside without the use of a key.

Any security locks fitted to the common final exit doors from the premises, must have an internal thumb-turn or lever release.

Fire Separation

All floors should achieve a fire resistance of 30 minutes.

The walls and partitions enclosing the exit route should afford a fire resistance of 30 minutes. It should be possible to relax the requirement for any fire resistance around the head of the stairs at second floor level, as both the first and second floors are in the same occupation.

Fire Doors

All doors opening into the protected route should be to FD30S standard and be fitted with positive self-closing devices. There should be no requirement for the door to the bedroom at second floor level to be fire resisting.

The door to the head of the stairs to the cellar should be to FD30S standard and be fitted with a positive self-closing device.

Fire Detection and Fire Alarm System

A mixed system in accordance with BS 5839-6[39] should be provided to give sufficient warning to all occupants of the building of a fire that might affect the means of escape and to give them sufficient time to exit from the building.

The system should incorporate:

- A Category LD2 Grade A system with:
  - Optical smoke detector in the common entrance hall.
  - Heat detectors in the basement and ground floor unit to provide a warning to all occupants of the premises.
  - A manual call point by the main entrance door at ground level.
  - Indicator panel located in entrance hall at ground level.
  - Fire alarm sounders provided in the ground floor flat and on first and second floor landings.

  and
- A Category LD3 Grade D system with smoke alarms in the common areas of each flat and maisonette to provide a warning to the individual occupants of the flats of a fire in their own accommodation.
- Consideration should be given to the provision of an additional heat alarm in each kitchen.

Emergency Escape Lighting

Emergency escape lighting should be provided to cover the common escape routes. The emergency escape lighting should be installed in accordance with the recommendations of BS 5266-1[40] and the requirements of BS 5266-7[41] and BS 5266-8[42].

Signs

There is no requirement for exit signs.

Fire action notices should be provided by each call point and in each flat/maisonette.

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[39] BS 5839-6: 2004. *Fire detection and fire alarm systems for buildings - Code of practice for the design, installation and maintenance of fire detection and fire alarm systems in dwellings.*
[40] BS 5266-1: 2005. *Emergency lighting - Code of practice for the emergency lighting of premises.*
[41] BS 5266-7: 1999 (BS EN 1838: 1999). *Lighting applications - Emergency lighting.*
[42] BS 5266-8: 2004 (BS EN 50172: 2004). *Emergency escape lighting systems.*

Fire-fighting Equipment

Each flat and maisonette should be provided with a fire blanket to be located in the kitchen.

Drawing No. 18

Premises

Three storey property over commercial premises. The property has an open flat at first floor level and a self-contained flat on the second floor. The second floor flat has its own entrance door at second floor level.

Evacuation Strategy

Evacuation of commercial premises and flats should be considered independently.

Total evacuation of flats.

The evacuation of the commercial premises is outside the scope of this guide.

Means of Escape

The additional risk from a fire in the commercial premises must be considered. The overall risk assessment should therefore take account of the potential for a fire in the commercial premises to affect the means of escape from the flat.

In most situations, little more will be required, providing the commercial premises are separated from the accommodation above with construction affording a fire resistance of 60 minutes.

If the commercial premises are considered to be a high fire risk or there is a possibility that a fire could affect the means of escape for the occupants of the accommodation, then an early warning should be provided.

In such circumstances, the fire detection and fire alarm system in the accommodation should be extended into the commercial premises.

The stairs and exit route should be enclosed within 30 minute fire resisting construction to form a protected route to the final exit door.

The ground floor entrance hall should be maintained clear of any combustible materials or storage.

It is recommended that all doors and windows providing means of escape should be capable of being opened from the inside, without the use of keys.

It is advisable that any security locks fitted to doors to individual flats should be capable of being opened from the inside without the use of a key.

Any security locks fitted to the final exit doors from the premises, must have an internal thumb-turn or lever release mechanisms.

Fire Separation

The floor between the commercial premises and the residential accommodation should afford a fire resistance of 60 minutes. Alternatively, a fire resistance of 30 minutes can be accepted if a heat detector is installed in the commercial premises.

All other floors should achieve a fire resistance of 30 minutes.

The walls and partitions enclosing the stairs and exit route should afford a fire resistance of 30 minutes.

Fire Doors

All doors opening into the protected route should be to FD30S standard and be fitted with a positive self-closing device.

Fire Detection and Fire Alarm System

A mixed system in accordance with BS 5839-6[43] should be provided to give sufficient warning to all occupants of the building of a fire that might affect the means of escape and to give them sufficient time to exit the building.

The system should incorporate:

- A Category LD2 Grade A system with:
  - Smoke detectors at ground, first and second floor landing levels.
  - Heat detectors in each room opening onto stairs at first floor level.
  - Manual call point by main entrance door at ground level.
  - Indicator panel located in entrance hall at ground level.
  - Fire alarm sounders provided on first floor landing and within landing of second floor flat.

  and
- A Category LD3 Grade D system with smoke alarms in the common area of the second floor flat to provide a warning to the individual occupants of the flat.

[43] BS 5839-6: 2004. *Fire detection and fire alarm systems for buildings - Code of practice for the design, installation and maintenance of fire detection and fire alarm systems in dwellings.*

Emergency Escape Lighting

Emergency escape lighting should be provided to cover the common escape routes. The emergency escape lighting should be installed in accordance with the recommendations of BS 5266-1[44] and the requirements of BS 5266-7[45] and BS 5266-8[46].

Signs

There is no requirement for exit signs.

Fire action notices should be provided by each call point and within each flat.

Fire-fighting Equipment

Each flat should be provided with a fire blanket to be located in the kitchen.

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[44] BS 5266-1: 2005. *Emergency lighting - Code of practice for the emergency lighting of premises.*
[45] BS 5266-7: 1999 (BS EN 1838: 1999). *Lighting applications - Emergency lighting.*
[46] BS 5266-8: 2004 (BS EN 50172: 2004). *Emergency escape lighting systems.*

Drawing No. 19

Premises

Three storey property over commercial premises. The property has two self-contained flats on the first and second floors.

Evacuation Strategy

Evacuation of commercial premises and flats should be considered independently.

Total evacuation of flats.

The evacuation of the commercial premises is outside the scope of this guide.

Means of Escape

The additional risk from a fire in the commercial premises must be considered. The overall risk assessment should therefore take account of the potential for a fire in the commercial premises to affect the means of escape from the flat.

In most situations, little more will be required providing the commercial premises are separated from the accommodation above with construction affording a fire resistance of 60 minutes.

If the commercial premises are considered to be a high fire risk, or there is a possibility that a fire could affect the means of escape for the occupants of the accommodation, then an early warning should be provided.

In such circumstances, the fire detection and fire alarm system in the accommodation should be extended into the commercial premises.

The kitchen off the internal lobby of the larger flats should be separated by fire resisting construction to protect the escape route for the occupants of the bed/living room in the event of fire in the kitchen.

The stairs and exit route should be enclosed within 30 minutes fire resisting construction to form a protected route to the final exit door.

The ground floor entrance hall should be maintained clear of any combustible materials or storage.

It is recommended that all doors and windows providing means of escape should be capable of being opened from the inside, without the use of keys.

It is advisable that any security locks fitted to doors to individual flats should be capable of being opened from the inside without the use of a key.

Any security locks fitted to the common final exit doors from the premises, must have an internal thumb-turn or lever release mechanisms.

The external escape stairs have not been incorporated into the means of escape provisions for these premises. However, the external stairs could be utilized as an additional means of escape from upper floors. If the occupants of the premises are allowed to use the external stairs, it should be ensured that the stairs and balcony are safe to use and comply with the standards detailed in the Building Regulations and guidance provided in Approved Documents to the Building Regulations.

Fire Separation

The floor between the commercial premises and the residential accommodation should afford a fire resistance of 60 minutes. Alternatively, a fire resistance of 30 minutes can be accepted if a heat detector is installed in the commercial premises.

All other floors should achieve a fire resistance of 30 minutes.

The walls and partitions enclosing the stairs and exit route should afford a fire resistance of 30 minutes.

Each flat should be separated from one another by walls affording a fire resistance of 30 minutes.

The kitchen off the internal lobby in the larger flats should be separated by 30 minutes fire resisting construction to protect the means of escape for the occupants of the bed/living room.

Fire Doors

All doors opening into the protected route should be to FD30S standard and be fitted with positive self-closing devices.

The door to the kitchen in the larger flats should be to FD20 standard.

Fire Detection and Fire Alarm System

A mixed system in accordance with BS 5839-6[47] should be provided to give sufficient warning to all occupants of the building of a fire that might affect the means of escape and to give them sufficient time to exit the building.

The system should incorporate:

- A Category LD2 Grade A system with:
  - Smoke detectors at ground, first and second floor landing levels.
  - Heat detectors in each room/lobby opening onto stairs at first and second floor levels.

[47] BS 5839-6: 2004. *Fire detection and fire alarm systems for buildings - Code of practice for the design, installation and maintenance of fire detection and fire alarm systems in dwellings.*

- Manual call point by main entrance door at ground level.
- Indicator panel located in entrance hall at ground level.
- Fire alarm sounders within the flats.

and

- A Category LD3 Grade D system with smoke alarms in the lobbies of the two largest flats to provide a warning to the individual occupants of the flats of a fire in their own accommodation.

Emergency Escape Lighting

Emergency escape lighting should be provided to cover the common escape routes. The emergency escape lighting should be installed in accordance with the recommendations of BS 5266-1[48] and the requirements of BS 5266-7[49] and BS 5266-8[50].

Signs

There is no requirement for exit signs.

Fire action notices should be provided by each call point and within each flat.

Fire-fighting Equipment

Each flat should be provided with a fire blanket to be located in the kitchen.

[48] BS 5266-1: 2005. *Emergency lighting - Code of practice for the emergency lighting of premises.*
[49] BS 5266-7: 1999 (BS EN 1838: 1999). *Lighting applications - Emergency lighting.*
[50] BS 5266-8: 2004 (BS EN 50172: 2004). *Emergency escape lighting systems.*

CATEGORY 6
MIXED OCCUPANCIES OF SELF-CONTAINED/OPEN FLATS AND BEDSITS

Mixed occupancy of self-contained flats and bedsits, incorporating drawing Nos. 20, 21, 22, 23 and 24.

C.6.1 The approach to fire safety in these properties should be similar to that adopted in the previous section on self-contained flats.

C.6.2 The occupants of individual flats and bedsits should be protected from the effects of fire in other occupancies. An adequate means of warning is important and will be required to ensure occupants are given sufficient warning of a fire in other occupancies to enable them to use the means of escape to reach a place of safety.

C.6.3 The risk and means of escape can be considered in two distinct phases:

- The risk and means of escape within each flat/bedsit; and
- The risk and means of escape from each flat/bedsit to a final exit.

C.6.4 The means of escape from within individual bedsits should be relatively simple to achieve, with the only possible constraint being placed on the positioning of any cooking facilities.

C.6.5 The means of escape from flats themselves should also be relatively simple to achieve. An assessment will need to be made of the layout of each unit to ensure satisfactory arrangements for limits on travel distance, inner rooms, and/or any additional fire separation that may be required to protect the internal means of escape.

C.6.6 The common exit routes from the front door of each unit should be made a protected route to the final exit and be enclosed within construction affording a fire resistance of 30 minutes.

C.6.7 Adequate levels of fire separation will be required between floors and individual flats to limit the spread of fire and smoke.

C.6.8 If the flats/bedsits are located over commercial premises, the additional risk from a fire in the commercial premises must be considered. The overall risk assessment should therefore take account of the potential for a fire in the commercial premises to affect the means of escape from the flat.

C.6.9 The level of separation will determine the need to consider the risk within the commercial premises. If separation is in accordance with the requirements of the Building Regulations and guidance in Approved Document B, the risk within the commercial premises can generally be disregarded.

C.6.10 If this is not the case, then it might be appropriate to provide additional heat detection linked into the fire alarm system to provide an early warning of a fire.

C.6.11 In most situations, little more will be required providing the commercial premises are totally separated from the accommodation above with construction affording a fire resistance of 60 minutes. This can be reduced to 30 minutes if the fire detection and fire alarm system is extended into the commercial premises by the installation of heat detectors in the commercial premises.

C.6.12 The provision of an early warning of fire in both the common areas and in the occupants' own flat will be required.

C.6.13 The use of mixed systems in accordance with BS 5839-6[51] is generally recommended.

C.6.14 The system should incorporate:

- A Category LD2 Grade A system with smoke and heat detectors to provide a sufficient warning to all occupants of the building of a fire that might affect the common means of escape and to give them sufficient time to exit the building; and
- A Category LD3 Grade D system with smoke and heat alarms in each flat to provide a warning to the individual occupants of a fire occurring in their own accommodation.

C.6.15 The need to protect the occupants of individual rooms from the effects of fire should be the subject of individual risk assessments. If the occupants are at increased risk from fire because of their health or lifestyle, or are considered to be particularly vulnerable because of their age, the provision of additional smoke alarms should be considered.

C.6.16 Emergency escape lighting should be provided to cover the common exit routes in accordance with the recommendations of BS 5266-1[52] and the requirements of BS 5266-7[53] and BS 5266-8[54].

C.6.17 Fire action notices detailing the action to take on discovering a fire and on hearing the fire alarm should be provided by each fire alarm call point and in each flat/bedsit.

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[51] BS 5839-6: 2004. *Fire detection and fire alarm systems for buildings - Code of practice for the design, installation and maintenance of fire detection and fire alarm systems in dwellings.*
[52] *BS 5266-1: 2005. Emergency lighting - Code of practice for the emergency lighting of premises.*
[53] BS 5266-7: 1999 (BS EN 1838: 1999). *Lighting applications - Emergency lighting.*
[54] BS 5266-8: 2004 (BS EN 50172: 2004). *Emergency escape lighting systems.*

Drawing No. 20

Premises

Three storey property with basement. The property has self-contained flats at basement, ground, first and second floor levels and a single bedsit at ground level.

Evacuation Strategy

Total evacuation of flats/bedsit.

Means of Escape

Both the living room in the ground floor flat and the lounge in the basement flat are inner rooms. Each should be provided with a suitable window exit leading to a place of safety.

Alternatively, as the access rooms are bedrooms, these rooms should be fitted with an interlinked smoke alarm to give the occupants of the inner room an early warning of a fire in the bedrooms. It should be ensured that the smoke alarm is clearly audible in the inner room.

The stairs and exit route should be enclosed within 30 minute fire resisting construction to form a protected route to the final exit door.

The ground floor entrance hall should be maintained clear of any combustible materials or storage.

It is recommended that all doors and windows providing means of escape should be capable of being opened from the inside, without the use of keys.

It is advisable that any security locks fitted to doors to individual flats/bedsits should be capable of being opened from the inside without the use of a key.

Any security locks fitted to the common final exit doors from the premises, must have an internal thumb-turn or lever release.

Any security devices fitted to escape windows should be provided with a suitable release mechanism.

Fire Separation

All floors should achieve a fire resistance of 30 minutes.

The walls and partitions enclosing the exit route should afford a fire resistance of 30 minutes.

The existing walls/partitions between units should be of sound construction and in a good state of repair.

Fire Doors

All doors opening into the protected route should be to FD30S standard and be fitted with positive self-closing devices.

Fire Detection and Fire Alarm System

A mixed system in accordance with BS 5839-6[55] should be provided incorporating:

- A Category LD2 Grade A system to provide sufficient warning to all occupants of the building of a fire that might affect the means of escape and to give them sufficient time to exit the building:
  - Optical smoke detectors in the common entrance hall and on the landings at first and second floor levels.
  - Heat detectors in the basement and in all flats/rooms opening onto the protected route at ground and first floor levels.
  - Manual call point by main entrance door at ground level.
  - Indicator panel located in entrance hall at ground level.
  - Fire alarm sounders provided in each flat and in the ground floor hall.

  and
- A Category LD3 Grade D system with smoke alarms in the common areas of each flat at first and second floors to provide a warning to the individual occupants of the flats of a fire occurring in their own accommodation.

The need to protect the occupants of individual rooms from the effects of fire should be the subject of individual risk assessments. If the occupants are at increased risk from fire because of their health or lifestyle, or are considered to be particularly vulnerable because of their age, the provision of additional smoke alarms should be considered.

Consideration should also be given to the provision of a smoke alarm in the bedrooms in the basement unit and the rear unit at ground floor level to provide an early warning to the occupants of the living rooms, which are inner rooms to the bedrooms.

[55] BS 5839-6: 2004. *Fire detection and fire alarm systems for buildings - Code of practice for the design, installation and maintenance of fire detection and fire alarm systems in dwellings.*

Emergency Escape Lighting

Emergency escape lighting should be provided to cover the common escape routes. The emergency escape lighting should be installed in accordance with the recommendations of BS 5266-1[56] and the requirements of BS 5266-7[57] and BS 5266-8[58].

Signs

There is no requirement for exit signs.

Fire action notices should be provided by each call point and in each flat/maisonette.

Fire-fighting Equipment

Each flat/bedsit should be provided with a fire blanket to be located in the kitchen.

[56] BS 5266-1: 2005. *Emergency lighting - Code of practice for the emergency lighting of premises.*
[57] BS 5266-7: 1999 (BS EN 1838: 1999). *Lighting applications - Emergency lighting.*
[58] BS 5266-8: 2004 (BS EN 50172: 2004). *Emergency escape lighting systems.*

Drawing No. 21

Premises

Three storey property with basement. The property has self-contained flats at basement, ground, first and second floor levels and a single bedsit at ground level.

Evacuation Strategy

Total evacuation of flats/bedsit.

Means of Escape

The kitchen/living room in the ground floor flat and the lounge in the basement flat, are inner rooms. Each should be provided with a suitable window exit leading to a place of safety.

Alternatively, as the access rooms are bedrooms, these rooms should be fitted with an interlinked smoke alarm to give the occupants of the inner room an early warning of a fire in the bedrooms. It should be ensured that the smoke alarm is clearly audible in the inner room.

The stairs and exit route should be enclosed within 30 minutes fire resisting construction to form a protected route to the final exit door.

The ground floor entrance hall should be maintained clear of any combustible materials or storage.

It is recommended that all doors and windows providing means of escape should be capable of being opened from the inside, without the use of keys.

It is advisable that any security locks fitted to doors to individual flats/bedsits should be capable of being opened from the inside without the use of a key.

Any security locks fitted to the common final exit doors from the premises, must have an internal thumb-turn or lever release.

Any security devices fitted to escape windows should be provided with a suitable release mechanism.

Fire Separation

All floors should achieve a fire resistance of 30 minutes.

The walls and partitions enclosing the exit route should afford a fire resistance of 30 minutes.

The existing walls/partitions between units should be of sound construction and in a good state of repair.

Fire Doors

All doors opening into the protected route should be to FD30S standard and be fitted with positive self-closing devices.

Fire Detection and Fire Alarm System

A mixed system in accordance with BS 5839-6[59] should be provided.

The system should incorporate:

- A Category LD2 Grade A system to provide sufficient warning to all occupants of the building of a fire that might affect the means of escape and to give them sufficient time to exit the building, with:
  - Optical smoke detectors in the common entrance hall and on the landings at first and second floor levels.
  - Heat detectors in the basement and in all flats/rooms opening onto the protected route at ground and first floor levels.
  - Manual call point by main entrance door at ground level.
  - Indicator panel located in entrance hall at ground level.
  - Fire alarm sounders provided in each flat and on the first floor landing.

  and
- A Category LD3 Grade D system with smoke alarms in the common areas of each flat at first and second floors to provide a warning to the individual occupants of the flats of a fire in their own accommodation.
- Consideration should also be given to the provision of a smoke alarm in the bedroom in the basement unit to provide an early warning to the occupants of the living room, which is an inner room to the bedroom.

The need to protect the occupants of individual rooms from the effects of fire should be the subject of individual risk assessments. If the occupants are at increased risk from fire because of their health or lifestyle, or are considered to be particularly vulnerable because of their age, the provision of additional smoke alarms should be considered.

Emergency Escape Lighting

Emergency escape lighting should be provided to cover the common escape routes. The emergency escape lighting should be installed in accordance with the recommendations of BS 5266-1[60] and the requirements of BS 5266-7[61] and BS 5266-8[62].

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[59] BS 5839-6: 2004. *Fire detection and fire alarm systems for buildings - Code of practice for the design, installation and maintenance of fire detection and fire alarm systems in dwellings.*
[60] BS 5266-1: 2005. *Emergency lighting - Code of practice for the emergency lighting of premises.*

Signs

There is no requirement for exit signs.

Fire action notices should be provided by each call point and in each flat/maisonette.

Fire-fighting Equipment

Each flat/bedsit should be provided with a fire blanket to be located in the kitchen.

[61] BS 5266-7: 1999 (BS EN 1838: 1999). *Lighting applications - Emergency lighting.*
[62] BS 5266-8: 2004 (BS EN 50172: 2004). *Emergency escape lighting systems.*

Drawing No. 22

Premises

Three storey property with basement. The property has self-contained flats at basement and second floor levels, an open flat on the first floor and two bedsits at ground level, and a further self-contained bedsit to the rear of the property at ground level.

Evacuation Strategy

Total evacuation of flats/bedsit.

The self-contained bedsit at ground level could be considered to be sufficiently separated from the main building for it not to be linked to the evacuation strategy for the remainder of the property. However, it might, for ease of application and management, be appropriate to include this unit in the total evacuation of the property.

Means of Escape

The lounge in the basement flat is an inner room and should be provided with a suitable window exit leading to a place of safety.

Alternatively, as the access room is a bedroom, the room should be fitted with an interlinked smoke alarm to give the occupants of the inner room an early warning of a fire in the bedroom. It should be ensured that the smoke alarm is clearly audible in the inner room

The stairs and exit route should be enclosed within 30 minutes fire resisting construction to form a protected route to the final exit door.

The ground floor entrance hall should be maintained clear of any combustible materials or storage.

It is recommended that all doors and windows providing means of escape should be capable of being opened from the inside, without the use of keys.

It is advisable that any security locks fitted to doors to individual flats/bedsits should be capable of being opened from the inside without the use of a key.

Any security locks fitted to the common final exit doors from the premises, must have an internal thumb-turn or lever release

Any security devices fitted to escape windows should be provided with a suitable release mechanism.

Fire Separation

All floors should achieve a fire resistance of 30 minutes

The walls and partitions enclosing the exit route should afford a fire resistance of 30 minutes.

The existing walls/partitions between units should be of sound construction and in a good state of repair.

Fire Doors

All doors opening into the protected route should be to FD30S standard and be fitted with positive self-closing devices.

Fire Detection and Fire Alarm System

A Category LD2 Grade A system in accordance with BS 5839-6[63] should be provided to give sufficient warning to all occupants of the building of a fire that might affect the means of escape and to give them sufficient time to exit the building.

The system should incorporate:

- Optical smoke detectors in the common entrance hall and on the landings at first and second floor levels.
- Heat detectors in the basement and in all flats/rooms opening onto the protected route at ground and first floor levels.
- Manual call point by main entrance door at ground level.
- Indicator panel located in entrance hall at ground level.
- Fire alarm sounders in the basement flat, ground floor hallway and on each upper floor.

The need to protect the occupants of individual rooms from the effects of fire should be the subject of individual risk assessments. If the occupants are at increased risk from fire because of their health or lifestyle, or are considered to be particularly vulnerable because of their age, the provision of additional smoke alarms should be considered.

Consideration should be given to the provision of a smoke alarm in the bedroom of the basement unit to provide an early warning to the occupants of the inner room.

[63] BS 5839-6: 2004. *Fire detection and fire alarm systems for buildings - Code of practice for the design, installation and maintenance of fire detection and fire alarm systems in dwellings.*

Emergency Escape Lighting

Emergency escape lighting should be provided to cover the common escape routes. The emergency escape lighting should be installed in accordance with the recommendations of BS 5266-1[64] and the requirements of BS 5266-7[65] and BS 5266-8[66].

Signs

There is no requirement for exit signs.

Fire action notices should be provided by each call point and in each flat/maisonette.

Fire-fighting Equipment

Each flat/bedsit should be provided with a fire blanket to be located in the kitchen.

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[64] BS 5266-1: 2005. *Emergency lighting - Code of practice for the emergency lighting of premises.*
[65] BS 5266-7: 1999 (BS EN 1838: 1999). *Lighting applications - Emergency lighting.*
[66] BS 5266-8: 2004 (BS EN 50172: 2004). *Emergency escape lighting systems.*

Drawing No. 23

Premises

Three storey property with cellar. The property has bedsits on the ground and first floor, and a self-contained flat on the second floor. The cellar is used as a residents' gym.

Evacuation Strategy

Total evacuation of flat and bedsits.

Means of Escape

The bedrooms in the self-contained flat on the second floor are inner rooms and an alternative means of escape is required. A pass door should be provided between the two main bedrooms to provide two alternative routes to the exit stairs.

The stairs and exit routes should be enclosed within 30 minutes fire resisting construction to form a protected route to the final exit door.

The ground floor entrance hall should be maintained clear of any combustible materials or storage.

It is recommended that all doors providing means of escape should be capable of being opened from the inside, without the use of keys.

It is advisable that any security locks fitted to doors to individual flats/bedsits should be capable of being opened from the inside without the use of a key.

Any security locks fitted to the common final exit doors from the premises, must have an internal thumb-turn or lever release.

The gym, situated in the cellar, is an inner room to a high risk area and should be provided with an alternative mean of escape.

The external stairs at first floor level could be utilized as an additional means of escape from upper floors. Although the external stairs will increase the options for, and improve the means of escape from upper floors, it would not, if it were not in place, be required.

Fire Separation

All floors should achieve a fire resistance of 30 minutes.

The walls and partitions enclosing the exit route should afford a fire resistance of 30 minutes.

The existing walls/partitions between units should be of sound construction and in a good state of repair.

The kitchen in the second floor flat should be enclosed within construction affording a fire resistance of 30 minutes.

The boiler room located in the ground floor kitchen should be enclosed within construction affording a fire resistance of 30 minutes.

The store room in the ground floor wc should not be used for the storage of combustibles or, alternatively, be enclosed within fire resisting construction.

Fire Doors

All doors opening into the protected route should be to FD30S standard and be fitted with positive self-closing devices.

The door to the boiler room should be to FD30 standard.

The door between the kitchen and the bedroom in the second floor flat should be to FD20 standard.

It is recommended that the door at the head of the stairs, from the ground floor, should be to FD30S standard to provide the occupants on upper floors with an alternative exit route via the external stairs.

Fire Detection and Fire Alarm System

A mixed system in accordance with BS 5839-6[67] should be provided.

The system should incorporate:

- A Category LD2 Grade A system to provide a sufficient warning to all occupants of the building of a fire that might affect the means of escape and to give them sufficient time to exit the building, with:
  - Optical smoke detectors in the common entrance hall and on the landings at first and second floor levels.
  - Heat detectors in the basement and in all flats/rooms opening onto the protected route at ground and first floor levels.
  - Manual call point by main entrance door at ground level.
  - Indicator panel located in entrance hall at ground level.
  - Fire alarm sounders provided in the ground floor hall and at first and second floor landing levels. Additional sounders should be provided in the second floor flat and the gym in the cellar.

  and

[67] BS 5839-6: 2004. *Fire detection and fire alarm systems for buildings - Code of practice for the design, installation and maintenance of fire detection and fire alarm systems in dwellings.*

- A Category LD3 Grade D system with a smoke alarm in each room, and a heat alarm in the kitchen, of the second floor flat to provide a warning to the individual occupants of the flat of a fire in their own accommodation.

The need to protect the occupants of individual rooms from the effects of fire should be the subject of individual risk assessments. If the occupants are at increased risk from fire because of their health or lifestyle, or are considered to be particularly vulnerable because of their age, the provision of additional smoke alarms should be considered.

Emergency Escape Lighting

Emergency escape lighting should be provided to cover the common escape routes. The emergency escape lighting should be installed in accordance with the recommendations of BS 5266-1[68] and the requirements of BS 5266-7[69] and BS 5266-8[70].

Signs

There is no requirement for exit signs.

Fire action notices should be provided by each call point, and in each bedsit and flat.

Fire-fighting Equipment

A fire blanket should be provided in the shared kitchen, and should also be recommended for the second floor flat.

[68] BS 5266-1: 2005. *Emergency lighting - Code of practice for the emergency lighting of premises.*
[69] BS 5266-7: 1999 (BS EN 1838: 1999). *Lighting applications - Emergency lighting.*
[70] BS 5266-8: 2004 (BS EN 50172: 2004). *Emergency escape lighting systems.*

Drawing No. 24

Premises

Three storey property with basement. The property has a self-contained flat in the basement and bedsits on, ground, first and second floor levels.

Evacuation Strategy

Total evacuation of flat and bedsits.

Means of Escape

Bedrooms 2 and 3 in the basement flat have alternative exit doors. In these circumstances, it should be possible to relax the need to provide an escape window in Bedroom 1, providing the occupants of this room have access to the exits in the other bedrooms. If this in not possible, Bedroom 1 should be provided with a suitable escape window leading to a place of safety, clear of the building.

The stairs and exit route should be enclosed within 30 minute fire resisting construction to form a protected route to the final exit door.

The ground floor entrance hall should be maintained clear of any combustible materials or storage.

It is recommended that all doors and windows providing means of escape should be capable of being opened from the inside, without the use of keys.

It is advisable that any security locks fitted to doors to individual flats/bedsits should be capable of being opened from the inside without the use of a key.

Any security locks fitted to the common final exit doors from the premises, must have an internal thumb-turn or lever release

Any security devices fitted to escape windows should be provided with a suitable release mechanism.

All doors providing means of escape must be capable of being opened from the inside, without the use of keys. It is advisable that any security locks fitted to entrance doors to individual units and, in particular, the final exit doors should have internal thumb-turn or lever release mechanisms.

Fire Separation

All floors should achieve a fire resistance of 30 minutes.

The walls and partitions enclosing the exit route should afford a fire resistance of 30 minutes.

Any storage cupboards in the protected route should be enclosed with walls and doors affording a fire resistance of 30 minutes

The existing walls/partitions between units/rooms should be of sound construction and in a good state of repair.

Fire Doors

All doors opening into the protected route at ground, first and second floors should be to FD30S standard and be fitted with positive self-closing devices.

Fire Detection and Fire Alarm System

A mixed system in accordance with BS 5839-6[71] should be provided incorporating a:

- Category LD2 Grade A system to provide sufficient warning to all occupants of the building of a fire that might affect the means of escape and to give them sufficient time to exit the building, with:
  - Optical smoke detectors in the common entrance hall and on the landings at first and second floor levels.
  - Heat detectors in the basement and in all rooms opening onto the protected route at ground, first and second floor levels.
  - Manual call points by the main entrance door at ground level and the entrance to the basement flat.
  - Indicator panel located in entrance hall at ground level.
  - Fire alarm sounders provided in the basement flat, ground floor hall, and first and second floor landings.

  and
- A Category LD3 Grade D system with smoke alarms in the common area of the flat in the basement to provide a warning to the occupants of the flat of a fire occurring in their own accommodation.

The need to protect the occupants of individual rooms from the effects of fire should be the subject of individual risk assessments. If the occupants are at increased risk from fire because of their health or lifestyle, or are considered to be particularly vulnerable because of their age, the provision of additional smoke alarms should be considered.

[71] BS 5839-6: 2004. *Fire detection and fire alarm systems for buildings - Code of practice for the design, installation and maintenance of fire detection and fire alarm systems in dwellings.*

Emergency Escape Lighting

Emergency escape lighting should be provided to cover the common escape routes. The emergency escape lighting should be installed in accordance with the recommendations of BS 5266-1[72] and the requirements of BS 5266-7[73] and BS 5266-8[74].

Signs

There is no requirement for exit signs.

Fire action notices should be provided by each call point and in each flat/bedsit.

Fire-fighting Equipment

Each kitchen should be provided with a fire blanket.

[72] BS 5266-1: 2005. *Emergency lighting - Code of practice for the emergency lighting of premises.*
[73] BS 5266-7: 1999 (BS EN 1838: 1999). *Lighting applications - Emergency lighting.*
[74] BS 5266-8: 2004 (BS EN 50172: 2004). *Emergency escape lighting systems.*

CATEGORY 7
BEDSITS

Bedsits, incorporating drawing Nos. 25, 26, 27, 28, 29 and 30.

C.7.1 The approach to fire safety in these properties should be similar to that adopted in the previous sections on mixed occupancies.

C.7.2 In these properties bedsits can either have their own facilities or they may share facilities, such as kitchens and/or bath/shower rooms.

C.7.3 The occupants of individual bedsits should be protected from the effects of fire in other occupancies. An adequate means of warning is important, and will be required to ensure occupants are given sufficient warning of a fire in other occupancies to enable them to use the means of escape to reach a place of safety.

C.7.4 The risk and means of escape can be considered in two distinct phases:

- The risk and means of escape within each bedsit; and
- The risk and means of escape from each bedsit to a final exit.

C.7.5 The means of escape from within individual bedsits should be relatively simple to achieve, with the only possible constraint being placed on the positioning of any cooking facilities.

C.7.6 The common exit routes from the front door of each unit should be made a protected route to the final exit and be enclosed within construction affording a fire resistance of 30 minutes.

C.7.7 Adequate levels of fire separation will be required between floors and individual units to limit the spread of fire and smoke.

C.7.8 If the bedsits are located over commercial premises, the additional risk from a fire in the commercial premises must be considered. The overall risk assessment should therefore take account of the potential for a fire in the commercial premises to affect the means of escape from the bedsits.

C.7.9 The level of separation will determine the need to consider the risk within the commercial premises. If separation is in accordance with the requirements of the Building Regulations and guidance in Approved Document B, the risk within the commercial premises can generally be disregarded.

C.7.10 If this is not the case, then it might be appropriate to provide additional heat detection linked into the fire alarm system to provide an early warning of a fire.

C.7.11 In most situations little more will be required, providing the commercial premises are totally separated from the accommodation above with construction affording a fire resistance of 60 minutes. This can be reduced to 30 minutes if the fire detection and fire alarm system is extended into the commercial premises by the installation of heat detectors in the commercial premises.

C.7.12 The provision of an early warning of fire in both the common areas and individual bedsits will be required.

C.7.13 A Category LD2 Grade A system in accordance with BS 5839-6[75] should be provided to give a sufficient warning to all occupants of the building of a fire that might affect the means of escape and to give them sufficient time to exit the building.

C.7.14 The need to protect the occupants of individual rooms from the effects of fire should be the subject of individual risk assessments. If the occupants are at increased risk from fire because of their health or lifestyle, or are considered to be particularly vulnerable because of their age, the provision of additional smoke alarms should be considered.

C.7.15 Emergency escape lighting should be provided to cover the common exit routes in accordance with the recommendations of BS 5266-1[76] and the requirements of BS 5266-7[77] and BS 5266-8[78].

C.7.16 Fire action notices detailing the action to take on discovering a fire and on hearing the fire alarm should be provided by each fire alarm call point and in each flat/bedsit.

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[75] BS 5839-6: 2004. *Fire detection and fire alarm systems for buildings - Code of practice for the design, installation and maintenance of fire detection and fire alarm systems in dwellings.*
[76] *BS 5266-1: 2005. Emergency lighting - Code of practice for the emergency lighting of premises.*
[77] BS 5266-7: 1999 (BS EN 1838: 1999). *Lighting applications - Emergency lighting.*
[78] BS 5266-8: 2004 (BS EN 50172: 2004). *Emergency escape lighting systems.*

Drawing No. 25

Premises

Three storey property comprising bedsits on each level.

Evacuation Strategy

Total evacuation of bedsits.

Means of Escape

The stairs and exit route should be enclosed within 30 minute fire resisting construction to form a protected route to the final exit door.

The ground floor entrance hall should be maintained clear of any combustible materials or storage.

It is recommended that all doors providing means of escape should be capable of being opened from the inside, without the use of keys.

It is advisable that any security locks fitted to doors to individual bedsits should be capable of being opened from the inside without the use of a key.

Any security locks fitted to the common final exit doors from the premises, must have an internal thumb-turn or lever release.

Fire Separation

All floors should achieve a fire resistance of 30 minutes.

The walls and partitions enclosing the exit route should afford a fire resistance of 30 minutes.

The existing walls/partitions between units should be of sound construction and in a good state of repair.

Fire Doors

All doors opening into the protected route should be to FD30S standard and be fitted with positive self-closing devices.

Fire Detection and Fire Alarm System

A Category LD2 Grade A system in accordance with BS 5839-6[79] should be provided to give a sufficient warning to all occupants of the building of a fire that might affect the means of escape and to give them sufficient time to exit the building.

The system should incorporate:

- Optical smoke detectors in the common entrance hall and on the landings at first and second floor levels.
- Heat detectors in all rooms opening onto the protected route at ground and first floor levels.
- Manual call point by main entrance door at ground level.
- Indicator panel located in entrance hall at ground level.
- Fire alarm sounders provided in the entrance hall and on each landing at first and second floor.

The need to protect the occupants of individual rooms from the effects of fire should be the subject of individual risk assessments. If the occupants are at increased risk from fire because of their health or lifestyle, or are considered to be particularly vulnerable because of their age, the provision of additional smoke alarms should be considered.

Emergency Escape Lighting

Emergency escape lighting should be provided to cover the common escape routes. The emergency escape lighting should be installed in accordance with the recommendations of BS 5266-1[80] and the requirements of BS 5266-7[81] and BS 5266-8[82].

Signs

There is no requirement for exit signs.

Fire action notices should be provided by each call point and in each bedsit.

Fire-fighting Equipment

Each bedsit should be provided with a fire blanket to be located in the kitchen.

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[79] BS 5839-6: 2004. *Fire detection and fire alarm systems for buildings - Code of practice for the design, installation and maintenance of fire detection and fire alarm systems in dwellings.*
[80] BS 5266-1: 2005. *Emergency lighting - Code of practice for the emergency lighting of premises.*
[81] BS 5266-7: 1999 (BS EN 1838: 1999). *Lighting applications - Emergency lighting.*
[82] BS 5266-8: 2004 (BS EN 50172: 2004). *Emergency escape lighting systems.*

Drawing No. 26

Premises

Three storey property comprising bedsits on each level.

Evacuation Strategy

Total evacuation of bedsits.

Means of Escape

The stairs and exit route should be enclosed within 30 minutes fire resisting construction to form a protected route to the final exit door.

The ground floor entrance hall should be maintained clear of any combustible materials or storage.

It is recommended that all doors providing means of escape should be capable of being opened from the inside, without the use of keys.

It is advisable that any security locks fitted to doors to individual bedsits should be capable of being opened from the inside without the use of a key.

Any security locks fitted to the common final exit doors from the premises, must have an internal thumb-turn or lever release.

Fire Separation

All floors should achieve a fire resistance of 30 minutes.

The walls and partitions enclosing the exit route should afford a fire resistance of 30 minutes.

The existing walls/partitions between units should be of sound construction and in a good state of repair.

Fire Doors

All doors opening into the protected route should be to FD30S standard and be fitted with positive self-closing devices.

Fire Detection and Fire Alarm System

A Category LD2 Grade A system in accordance with BS 5839-6[83] should be provided to give a sufficient warning to all occupants of the building of a fire that might affect the means of escape and to give them sufficient time to exit the building.

The system should incorporate:

- Optical smoke detectors in the common entrance hall and on the landings at first and second floor levels.
- Heat detectors in all rooms opening onto the protected route at ground and first floor levels.
- Manual call point by main entrance door at ground level.
- Indicator panel located in entrance hall at ground level.
- Fire alarm sounders provided in the entrance hall and on each landing at first and second floor.

The need to protect the occupants of individual rooms from the effects of fire should be the subject of individual risk assessments. If the occupants are at increased risk from fire because of their health or lifestyle, or are considered to be particularly vulnerable because of their age, the provision of additional smoke alarms should be considered.

Emergency Escape Lighting

Emergency escape lighting should be provided to cover the common escape routes. The emergency escape lighting should be installed in accordance with the recommendations of BS 5266-1[84] and the requirements of BS 5266-7[85] and BS 5266-8[86].

Signs

There is no requirement for exit signs.

Fire action notices should be provided by each call point and in each bedsit.

Fire-fighting Equipment

Each bedsit with cooking facilities and the shared kitchen should be provided with a fire blanket.

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[83] BS 5839-6: 2004. *Fire detection and fire alarm systems for buildings - Code of practice for the design, installation and maintenance of fire detection and fire alarm systems in dwellings.*
[84] BS 5266-1: 2005. *Emergency lighting - Code of practice for the emergency lighting of premises.*
[85] BS 5266-7: 1999 (BS EN 1838: 1999). *Lighting applications - Emergency lighting.*
[86] BS 5266-8: 2004 (BS EN 50172: 2004). *Emergency escape lighting systems.*

Drawing No. 27

Premises

Three storey property comprising kitchen dining room on ground floor and bedsits on first and second floors.

Evacuation Strategy

Total evacuation of bedsits.

Means of Escape

The stairs and exit route should be enclosed within 30 minutes fire resisting construction to form a protected route to the final exit door.

The ground floor entrance hall should be maintained clear of any combustible materials or storage.

It is recommended that all doors providing means of escape should be capable of being opened from the inside, without the use of keys.

It is advisable that any security locks fitted to doors to individual bedsits should be capable of being opened from the inside without the use of a key.

Any security locks fitted to the common final exit doors from the premises, must have an internal thumb-turn or lever release.

Fire Separation

All floors should achieve a fire resistance of 30 minutes.

The walls and partitions enclosing the exit route should afford a fire resistance of 30 minutes.

The existing walls/partitions between units should be of sound construction and in a good state of repair.

Fire Doors

All doors opening into the protected route should be to FD30S standard and be fitted with positive self-closing devices.

Fire Detection and Fire Alarm System

A Category LD2 Grade A system in accordance with BS 5839-6[87] should be provided to give a sufficient warning to all occupants of the building of a fire that might affect the means of escape and to give them sufficient time to exit the building.

The system should incorporate:

- Optical smoke detectors in the common entrance hall and on the landings at first and second floor levels.
- Heat detectors in all rooms opening onto the protected route at ground, first and second floor levels.
- Manual call point by main entrance door at ground level.
- Indicator panel located in entrance hall at ground level.
- Fire alarm sounders provided in the entrance hall and on each landing at first and second floor.

The need to protect the occupants of individual rooms from the effects of fire should be the subject of individual risk assessments. If the occupants are at increased risk from fire because of their health or lifestyle, or are considered to be particularly vulnerable because of their age, the provision of additional smoke alarms should be considered.

Emergency Escape Lighting

Emergency escape lighting should be provided to cover the common escape routes. The emergency escape lighting should be installed in accordance with the recommendations of BS 5266-1[88] and the requirements of BS 5266-7[89] and BS 5266-8[90].

Signs

There is no requirement for exit signs.

Fire action notices should be provided by each call point and in each bedsit.

Fire-fighting Equipment

The shared kitchen should be provided with a fire blanket.

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[87] BS 5839-6: 2004. *Fire detection and fire alarm systems for buildings - Code of practice for the design, installation and maintenance of fire detection and fire alarm systems in dwellings.*
[88] BS 5266-1: 2005. *Emergency lighting - Code of practice for the emergency lighting of premises.*
[89] BS 5266-7: 1999 (BS EN 1838: 1999). *Lighting applications - Emergency lighting.*
[90] BS 5266-8: 2004 (BS EN 50172: 2004). *Emergency escape lighting systems.*

Drawing No. 28

Premises

Three storey property with a cellar, comprising bedsits on all floors.

Evacuation Strategy

Total evacuation of bedsits.

Means of Escape

The stairs and exit route should be enclosed within 30 minutes fire resisting construction to form a protected route to the final exit door.

The ground floor entrance hall should be maintained clear of any combustible materials or storage.

It is recommended that all doors providing means of escape should be capable of being opened from the inside, without the use of keys.

It is advisable that any security locks fitted to doors to individual bedsits should be capable of being opened from the inside without the use of a key.

Any security locks fitted to the common final exit doors from the premises, must have an internal thumb-turn or lever release.

Fire Separation

All floors should achieve a fire resistance of 30 minutes.

The walls and partitions enclosing the exit route should afford a fire resistance of 30 minutes.

The stairs to the cellar should be enclosed within 30 minute fire resisting construction.

The existing walls/partitions between units should be of sound construction and in a good state of repair.

Fire Doors

All doors opening into the protected route should be to FD30S standard and be fitted with positive self-closing devices.

The door at the head of the stairs to the cellar should be to FD30S standard and be fitted with a positive self-closing device.

Fire Detection and Fire Alarm System

A Category LD2 Grade A system in accordance with BS 5839-6[91] should be provided to give a sufficient warning to all occupants of the building of a fire that might affect the means of escape and to give them sufficient time to exit the building.

The system should incorporate:

- Optical smoke detectors in the common entrance hall and on the landings at first and second floor levels. Additional smoke detectors should be provided in the cellar and in the store room on the second floor.
- Heat detectors in all rooms opening onto the protected route at ground and first floor levels.
- Manual call point by main entrance door at ground level.
- Indicator panel located in entrance hall at ground level.
- Fire alarm sounders provided in the entrance hall and on each landing at first and second floor.

The need to protect the occupants of individual rooms from the effects of fire should be the subject of individual risk assessments. If the occupants are at increased risk from fire because of their health or lifestyle, or are considered to be particularly vulnerable because of their age, the provision of additional smoke alarms should be considered.

Emergency Escape Lighting

Emergency escape lighting should be provided to cover the common escape routes. The emergency escape lighting should be installed in accordance with the recommendations of BS 5266-1[92] and the requirements of BS 5266-7[93] and BS 5266-8[94].

Signs

There is no requirement for exit signs.

Fire action notices should be provided by each call point and in each bedsit.

Fire-fighting Equipment

The shared kitchen should be provided with a fire blanket.

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[91] BS 5839-6: 2004. *Fire detection and fire alarm systems for buildings - Code of practice for the design, installation and maintenance of fire detection and fire alarm systems in dwellings.*
[92] BS 5266-1: 2005. *Emergency lighting - Code of practice for the emergency lighting of premises.*
[93] BS 5266-7: 1999 (BS EN 1838: 1999). *Lighting applications - Emergency lighting.*
[94] BS 5266-8: 2004 (BS EN 50172: 2004). *Emergency escape lighting systems.*

Drawing No. 29

Premises

Three storey property with a cellar, comprising bedsits on all floors and a bedsit and store room in the cellar.

Evacuation Strategy

Total evacuation of bedsits.

Means of Escape

The stairs to the cellar should be separated at ground floor level. A 30 minute fire resisting screen and door should be provided at the head of the stairs to the cellar, in the ground floor entrance hall.

The stairs and exit route should be enclosed within 30 minutes fire resisting construction to form a protected route to the final exit door.

The ground floor entrance hall should be maintained clear of any combustible materials or storage.

It is recommended that all doors providing means of escape should be capable of being opened from the inside, without the use of keys.

It is advisable that any security locks fitted to doors to individual bedsits should be capable of being opened from the inside without the use of a key.

Any security locks fitted to the common final exit doors from the premises, must have an internal thumb-turn or lever release.

Fire Separation

All floors should achieve a fire resistance of 30 minutes.

The walls and partitions enclosing the exit route should afford a fire resistance of 30 minutes.

The store room in the cellar should be separated with walls and door affording a fire resistance of 30 minutes.

The existing walls/partitions between units should be of sound construction and in a good state of repair.

Fire Doors

All doors opening into the protected route should be to FD30S standard and be fitted with positive self-closing devices.

Fire Detection and Fire Alarm System

A Category LD2 Grade A system in accordance with BS 5839-6[95] should be provided to give sufficient warning to all occupants of the building of a fire that might affect the means of escape and to give them sufficient time to exit the building.

The system should incorporate:

- Optical smoke detectors in the common entrance hall and on the landings at first and second floor levels. An additional smoke detector should be provided in the cellar store room.
- Heat detectors in all rooms opening onto the protected route at ground, first and second floor levels, including the bedsit situated in the cellar.
- Manual call point by main entrance door at ground level.
- Indicator panel located in entrance hall at ground level.
- Fire alarm sounders provided in the cellar, entrance hall and on each landing at first and second floor.

The need to protect the occupants of individual rooms from the effects of fire should be the subject of individual risk assessments. If the occupants are at increased risk from fire because of their health or lifestyle, or are considered to be particularly vulnerable because of their age, the provision of additional smoke alarms should be considered.

Emergency Escape Lighting

Emergency escape lighting should be provided to cover the common escape routes. The emergency escape lighting should be installed in accordance with the recommendations of BS 5266-1[96] and the requirements of BS 5266-7[97] and BS 5266-8[98].

Signs

There is no requirement for exit signs.

Fire action notices should be provided by each call point and in each bedsit.

Fire-fighting Equipment

The shared kitchens should be provided with a fire blanket.

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[95] BS 5839-6: 2004. *Fire detection and fire alarm systems for buildings - Code of practice for the design, installation and maintenance of fire detection and fire alarm systems in dwellings.*
[96] BS 5266-1: 2005. *Emergency lighting - Code of practice for the emergency lighting of premises.*
[97] BS 5266-7: 1999 (BS EN 1838: 1999). *Lighting applications - Emergency lighting.*
[98] BS 5266-8: 2004 (BS EN 50172: 2004). *Emergency escape lighting systems.*

Drawing No. 30

Premises

Three storey property comprising a single bedsit on ground floor with kitchen/dining room on first floor and bedsits on first and second floors.

Evacuation Strategy

Total evacuation of bedsits.

Means of Escape

The stairs and exit route should be enclosed within 30 minutes fire resisting construction to form a protected route to the final exit door.

The ground floor entrance hall should be maintained clear of any combustible materials or storage.

It is recommended that all doors providing means of escape should be capable of being opened from the inside, without the use of keys.

It is advisable that any security locks fitted to doors to individual bedsits should be capable of being opened from the inside without the use of a key.

Any security locks fitted to the common final exit doors from the premises, must have an internal thumb-turn or lever release.

Fire Separation

The garage should be separated from the accommodation with construction affording a fire resistance of 30 minutes.

All floors should achieve a fire resistance of 30 minutes.

The walls and partitions enclosing the exit route should afford a fire resistance of 30 minutes.

The existing walls/partitions between units should be of sound construction and in a good state of repair.

Fire Doors

All doors opening into the protected route should be to FD30S standard and be fitted with positive self-closing devices.

Fire Detection and Fire Alarm System

A Category LD2 Grade A system in accordance with BS 5839-6[99] should be provided to give a warning to all occupants of the building of fire that might affect the means of escape and to give them sufficient time to exit the building.

The system should incorporate:

- Optical smoke detectors in the common entrance hall and on the landings at first and second floor levels.
- Heat detectors in all rooms opening onto the protected route at ground, first and second floor levels. Consideration should also be given to an additional heat detector in the garage
- Manual call point by main entrance door at ground level.
- Indicator panel located in entrance hall at ground level.
- Fire alarm sounders provided in the entrance hall and on each landing at first and second floor.

The need to protect the occupants of individual rooms from the effects of fire should be the subject of individual risk assessments. If the occupants are at increased risk from fire because of their health or lifestyle, or are considered to be particularly vulnerable because of their age, the provision of additional smoke alarms should be considered.

Emergency Escape Lighting

Emergency escape lighting should be provided to cover the common escape routes. The emergency escape lighting should be installed in accordance with the recommendations of BS 5266-1[100] and the requirements of BS 5266-7[101] and BS 5266-8[102].

Signs

There is no requirement for exit signs.

Fire action notices should be provided by each call point and in each bedsit.

Fire-fighting Equipment

The shared kitchen should be provided with a fire blanket.

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[99] BS 5839-6: 2004. *Fire detection and fire alarm systems for buildings - Code of practice for the design, installation and maintenance of fire detection and fire alarm systems in dwellings.*
[100] BS 5266-1: 2005. *Emergency lighting - Code of practice for the emergency lighting of premises.*
[101] BS 5266-7: 1999 (BS EN 1838: 1999). *Lighting applications - Emergency lighting.*
[102] BS 5266-8: 2004 (BS EN 50172: 2004). *Emergency escape lighting systems.*