Prepared for
Decent & Safe Homes East Midlands

FIRE SAFETY PLANS

FOR HOUSES IN MULTIPLE OCCUPATION

AND OTHER DWELLINGS

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The full titles of British Standards and other references quoted in the report are given on the last pages.

1. INTRODUCTION

There have been considerable changes to the mandatory requirements for protection from fire in dwellings. There was, until recently, limited guidance available to assist local authorities to indicate whether a dwelling would comply with all these requirements. The general guidance available at the time dealt mostly with principles, and was 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 commissioned a project, to consider the requirements of the new legislation and provide practical guidance for compliance and the reduction of risk from fire.

A guidance document was consequently prepared by C.S. Todd & Associates Ltd, on behalf of DASH, to provide persons responsible for fire safety in houses with a reference to assist in the application of National Standards and good practices. The first version of the DASH Fire Safety Guide provided practical advice on the application of fire safety standards in certain houses in multiple occupation and other dwellings.

However, following changes to guidance provided under the Building Regulations and the Regulatory Reform (Fire Safety) Order, and, equally important, the publication of a national guidance document by LACORS on Housing – Fire Safety, it was considered appropriate to review and update our position with the DASH guide to reflect current best practice advice.

As the LACORS Guide provides a national benchmark standard for housing fire safety, it is considered appropriate to follow the general recommendations contained within this guide in the East Midlands.

DASH was fully involved in the consultation process for the new guide, and many of the existing principles and recommendations of the original DASH guide have been incorporated in the LACORS Guide.

It was, therefore, considered appropriate to review the DASH guide and to follow the general recommendations of the national guide.

To avoid confusion with having two almost identical guides, it has been decided to retain only those parts of the DASH guide applicable to the floor plans which are typical of premises throughout the East Midlands.

A fire safety solution, in line with the recommendations of the national LACORS Guide, has been applied to the 31 floor plans.

The fire safety scheme for each plan offers a fire safety solution which could be applied to achieve a reasonable standard of fire safety.

If the recommendations and risk methodology of the LACORS Guide are applied, no additional works should be necessary to meet any of the requirements.

However, the fire safety solutions provided here and in the LACORS Guide are not meant to be prescriptive, ‘off the peg’ solutions.

Fire safety solutions should be based on the level of risk presented by an individual property and its mode and level of occupation.

Often alternative solutions are available, which will provide an equally acceptable level of fire safety. Sometimes, identical properties may need different approaches due to differences in the types of occupation or the needs of the occupants.

It is important that the reader understands and follows the general principles and methodology of risk assessment, and principles of fire safety contained within the LACORS Guide, prior to adopting any particular fire safety solution detailed in this document and/or the LACORS Guide.

In some cases, the same floor plan has been assessed with different occupancies, e.g. single family and shared houses. This is to give an indication of the different risks that accompany different types of occupancy. The categories used for occupancy are:

- Single family houses and flats.
- Shared houses and flats.
- Self-contained and open flats.
- Mixed occupancies of flats and bedsits.
- HMO type bedsits.

Any text in italics presents an alternative solution, or optional additional requirement, to that detailed in the LACORS Guide. However, it should be noted that the LACORS Guide is not prescriptive, and any alternative solution offered here is, in our opinion, equivalent to the standard recommended in the LACORS Guide.

2. CATEGORIES OF PREMISES AND PLANS

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

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

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

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

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

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

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

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

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

g. Bedsits, incorporating drawing Nos. 24, 25, 26, 27, 28, 29, 30 and 31.

CATEGORY 1
SINGLE FAMILY HOUSES

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

C.1.1 A single family house is defined as being occupied by persons living together as a single household. This refers to a single person, a couple or members of the same family living together.

C.1.2 The risk from fire in a typical single family property would generally be considered to be low, dependent on the risk presented by the occupants.

C.1.3 Consequently the fire safety measures required should be relatively simple to achieve.

C.1.4 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 and the LACORS Guide.

C.1.5 Existing properties should be provided with similar fire safety measures with suitable emergency egress from each storey, and with a means of giving early warning in the event of fire.

C.1.6 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.1.7 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.1.8 In properties up to four storeys in height, there should be no requirement for full 30 minutes fire resisting protection to the escape routes or additional fire separation. It should be possible to accept existing walls and floors of conventional or traditional construction, providing they are in sound condition and in a good state of repair. It should also be possible to accept existing well fitted and constructed substantial doors, providing they are in a good state of repair and are a good fit in their frames. In these premises, there will be no requirement for doors opening onto the escape stairway to be fitted with self-closing devices and cold smoke seals.

C.1.9 In properties over four storeys, typically five and six storey buildings, there would be a need to provide a full 30 minute protected route and 30 minute fire separation. In these circumstances an additional exit route would be required from the upper floors, and the level of the fire detection and fire alarm system would need to be increased. Further guidance on premises over four storeys can be found in the LACORS Guide, Housing - Fire Safety, or Approved Document B.

C.1.10 In normal risk properties of up to four storeys, a Grade D: LD3 fire detection and alarm system, provided in accordance with BS 5839-6 should be adequate.

C.1.11 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.1.12 In most residential premises of average size and normal risk, there will be no requirement for emergency escape lighting or fire safety signs or notices.

C.1.13 It is recommended good practice to provide a fire blanket in the kitchen.

Drawing No. 1: Two storey – single family house with cellar

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

There are generally two acceptable alternatives to provide adequate means of escape from the first floor:

(1) Provide a protected route (stairway) to the final exit, or

(2) Provide emergency escape windows to habitable rooms.

(1) Protected route (stairway) to exit
No requirement for a 30 minute fire resisting protected stairway. However, the stairway should be fully enclosed and existing walls and partitions should be of sound traditional construction and be in a good state of repair. Existing substantial solid doors would be considered acceptable, providing they are in a good state of repair and are a good fit in their frames.

(2) Emergency Escape Windows
Each bedroom on the first floor should preferably have access to an emergency escape window. However, 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 degree of fire protection to the stairs and the travel distance between rooms is limited. 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, and 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.

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 there will generally be no requirement for the provision of additional fire resistance to walls and floors.

Existing floors and walls of sound traditional construction can be accepted.

The floor between the cellar and the ground floor escape route should achieve a fire resistance of 30 minutes. *However, existing ceilings and floors of sound traditional*

construction could be accepted, providing additional automatic detection is provided in the cellar.

Fire Doors
The door at the head of the stairs to the cellar should be a substantial well fitting solid door.

If emergency window escape is adopted from the first floor, there will no requirement for any of the doors opening onto the stairway to be fire resisting.

If a protected route is adopted, existing substantial solid doors would be considered acceptable, providing they are in a good state of repair and are a good fit in their frames. There is no requirement for the doors to be fitted with self- closing devices or cold smoke seals.

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.

An additional smoke alarm should be provided in the cellar if the cellar contains a fire risk.

Consideration should be given to the provision of an additional heat alarm in the kitchen, dependent on an individual risk assessment.

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 and Notices
There is no requirement for fire exit signs or notices.

Emergency Escape Lighting
No requirement for emergency escape lighting, but adequate conventional lighting is required.

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 in the kitchen.

OPTION 1

Protected Route

OPTION 2

Escape windows from bedrooms on first floor

DRAWING NO. 1

2 Storey plus cellar.
Single family house

January 2009

KEY

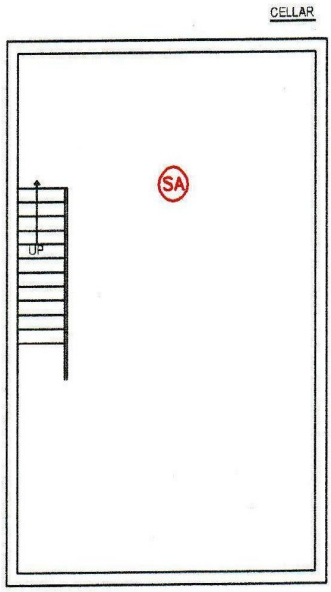
SA Smoke alarm with internal sounder – linked

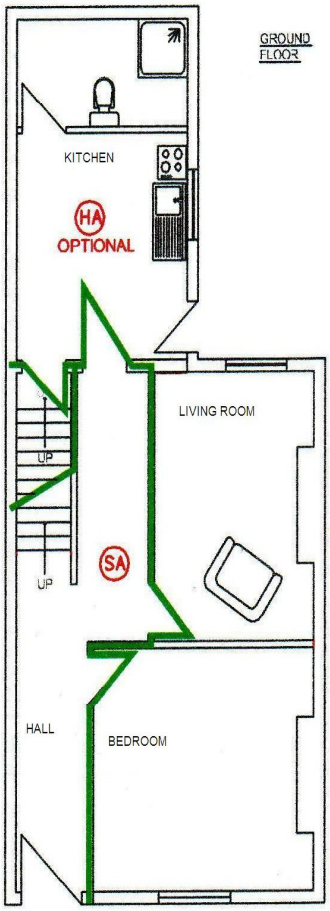
HA Optional heat alarm with internal sounder – linked

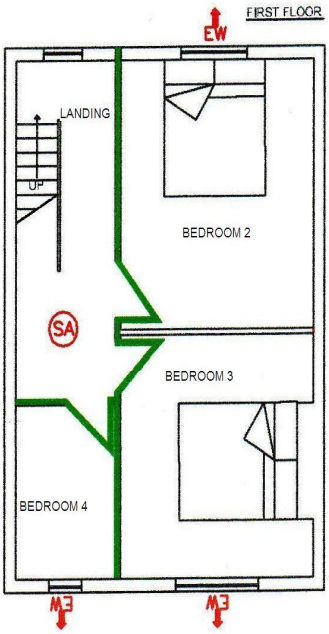
Substantial solid doors (1)

Sound traditional construction (1)

EW Escape window (2)







Drawing No. 2: Two storey – single family house

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

There are generally two acceptable alternatives to provide adequate means of escape from the first floor:

(1) Provide a protected route (stairway) to the final exit, or

(2) Provide emergency escape windows to habitable rooms.

1) Protected route (stairway) to exit
No requirement for a 30 minute fire resisting protected stairway. However, the stairway should be fully enclosed and existing walls and partitions should be of sound traditional construction and be in a good state of repair. Existing substantial solid doors would be considered acceptable, providing they are in a good state of repair and are a good fit in their frames.

(2) Emergency Escape Windows
Each bedroom on the first floor should preferably have access to an emergency escape window. However, 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 degree of fire protection to the stairs and the travel distance between rooms is limited. 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 and 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.

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 there will generally be no requirement for the provision of additional fire resistance to walls and floors.

Existing floors and walls of sound traditional construction and in a good state of repair can be accepted.

Fire Doors
If emergency window escape is adopted from the first floor there will no requirement for any of the doors opening onto the stairway to be fire resisting.

If a protected route is adopted, existing substantial solid doors would be considered acceptable, providing they are in a good state of repair and are a good fit in their frames. There is no requirement for the doors to be fitted with self- closing devices or cold smoke seals.

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, dependent on an individual risk assessment.

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 and Notices
There is no requirement for fire exit signs or notices.

Emergency Escape Lighting
No requirement for emergency escape lighting, but adequate conventional lighting is required.

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 in the kitchen.

OPTION 1

Protected Route

OPTION 2

Escape windows from bedrooms on first floor

DRAWING NO. 2

2 Storey.
Single family house.

January 2009

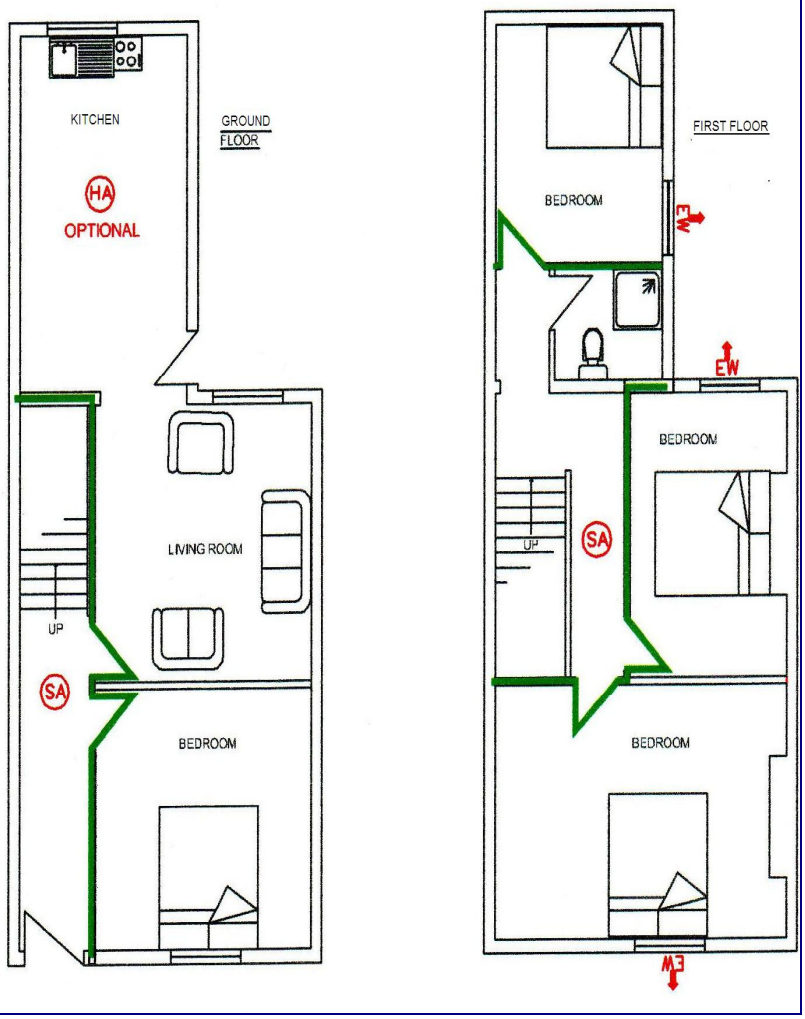
SA Smoke alarm with internal sounder – linked

HA Optional heat alarm with internal sounder – linked

Substantial solid doors (1)

Sound traditional construction (1)

EW Escape window (2)



Drawing No. 3: Two storey – single family house

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

There are generally two acceptable alternatives to provide adequate means of escape from the first floor:

(1) Provide a protected route (stairway) leading to the alternative exits from the base of the stairway through the living and dining rooms, or

(2) Provide emergency escape windows to habitable rooms.

1) Protected route (stairway) to exit
No requirement for a 30 minute fire resisting protected stairway. However, the stairway should be fully enclosed and existing walls and partitions should be of sound traditional construction and be in a good state of repair. Existing substantial solid doors would be considered acceptable, providing they are in a good state of repair and are a good fit in their frames.

(2) Emergency Escape Windows
Each bedroom on the first floor should preferably have access to an emergency escape window. However, 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 degree of fire protection to the stairs and the travel distance between rooms is limited. 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 and 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.

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 there will generally be no requirement for the provision of additional fire resistance to walls and floors.

Existing floors and walls of sound traditional construction and in a good state of repair could be accepted.

Fire Doors
If emergency window escape is adopted from the first floor, there will no requirement for any of the doors opening onto the stairway to be fire resisting.

If a protected route is adopted, existing substantial solid doors would be considered acceptable, providing they are in a good state of repair and are a good fit in their frames. There is no requirement for the doors to be fitted with self- closing devices or cold smoke seals.

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 living and dining rooms on the ground floor and on the first floor landing.

Consideration should be given to the provision of an additional heat alarm in the kitchen, dependent on an individual risk assessment.

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 and Notices
There is no requirement for fire exit signs or notices.

Emergency Escape Lighting
No requirement for emergency escape lighting, but adequate conventional lighting is required.

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 in the kitchen.

OPTION 1

Protected Route

OPTION 2

Escape windows from bedrooms on first floor

DRAWING NO. 3

2 Storey.
Single family house.

January 2009

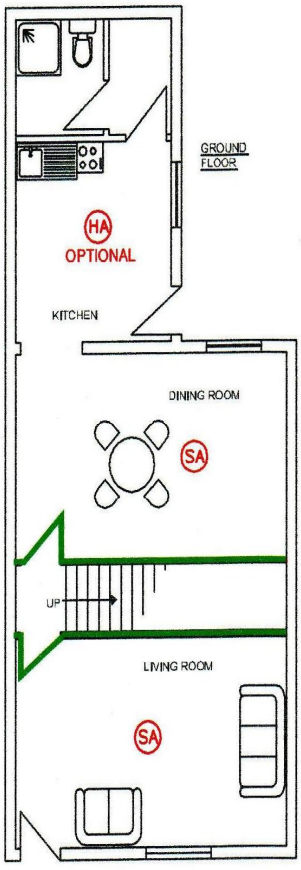
SA Smoke alarm with internal sounder – linked

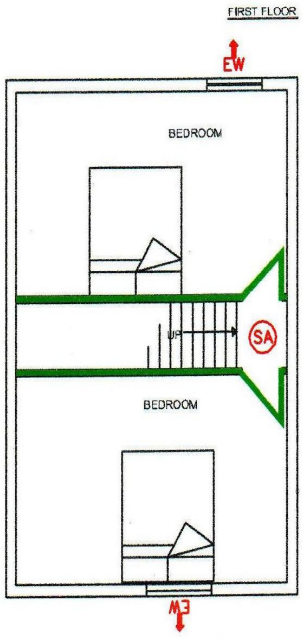
HA Optional heat alarm with internal sounder – linked

Substantial solid doors (1)

Sound traditional construction (1)

EW Escape window (2)





Drawing No. 4: Two storey – single family house

Means of Escape
The ground storey should be provided with suitable doors or windows for emergency egress in the event of fire.

In this layout, the stairway is 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 direct access to 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 and 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.

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 there will generally be no requirement for the provision of additional fire resistance to walls and floors.

Existing floors and walls of sound traditional construction can be accepted.

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 living and dining room 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, dependent on an individual risk assessment.

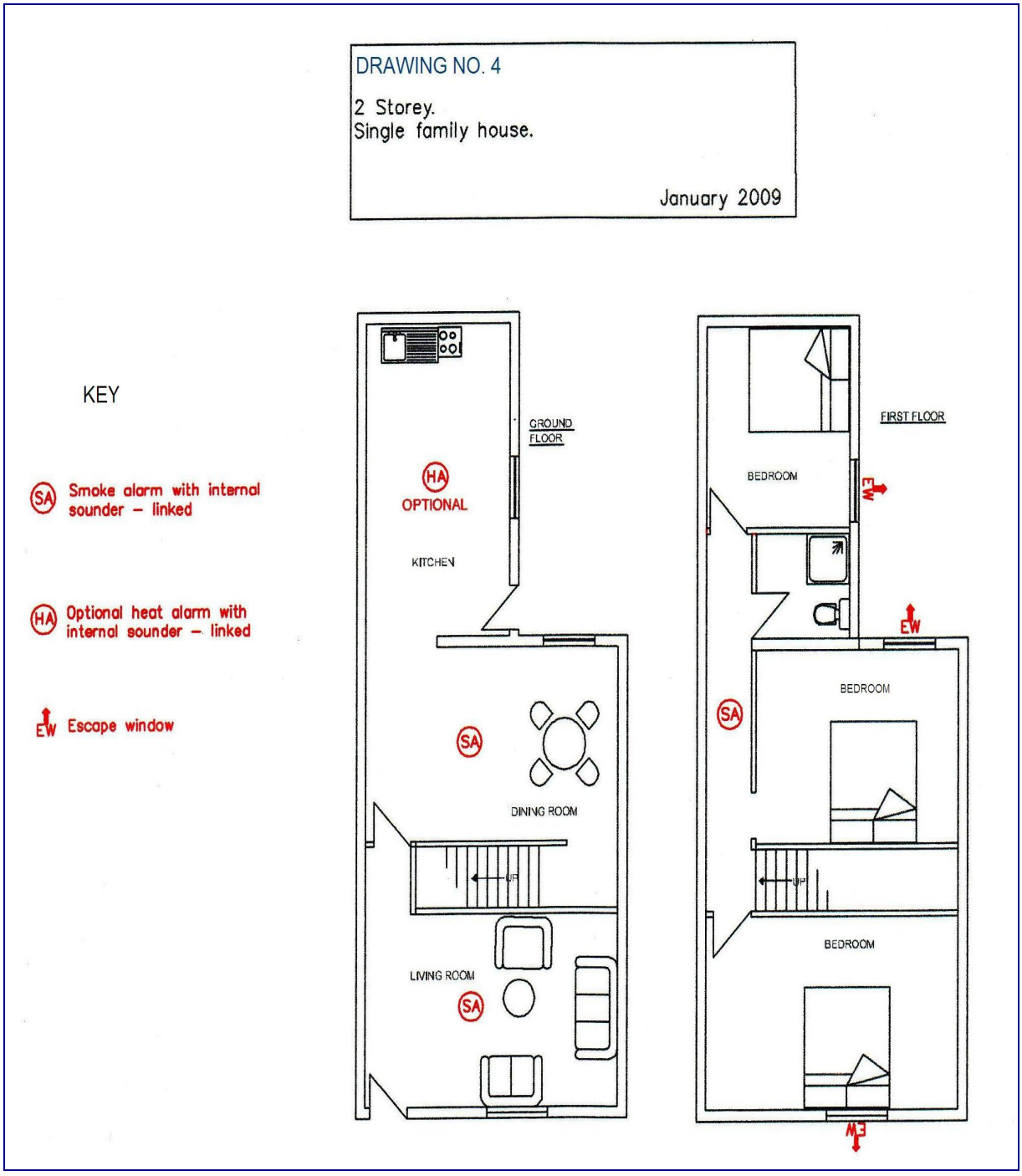
The need to protect the occupants of individual rooms from the effects of fire should be the subject of individual risk assessments. If the occupants are at increased risk from fire because of their health or lifestyle, or are considered to be particularly vulnerable because of their age, the provision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

Signs and Notices
There is no requirement for fire exit signs or notices.

Emergency Escape Lighting
No requirement for emergency escape lighting, but adequate conventional lighting is required.

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 in the kitchen.



Drawing No. 5: Three storey – single family house with cellar

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 stairway should be made a protected route to the final exit door. However, in lower risk premises, it should be possible to accept existing traditional construction, provided it is in sound condition and in a good state of repair. Existing substantial solid doors would be considered acceptable, providing they are in a good state of repair.

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

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 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, there will be no requirement for additional fire separation. Existing floors and walls of sound traditional construction can be accepted.

The fire separation between cellar and ground floor escape route should achieve a fire resistance of 30 minutes. *However, existing ceilings and floors of sound traditional construction could possibly be accepted, providing additional detection is provided in the cellar.*

Fire Doors
Existing substantial solid doors would be considered acceptable, providing they are in a good state of repair and are a good fit in their frames.

There is no requirement for the doors to be fitted with self-closing devices or cold smoke seals. The door at the head of the stairs to the cellar should be a substantial well fitting solid door.

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. An additional smoke alarm should be provided in the cellar, if the cellar contains a fire risk.

Consideration should be given to the provision of an additional heat alarm in the kitchen, dependent on an individual risk assessment.

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 and Notices
There is no requirement for fire exit signs or notices.

Emergency Escape Lighting
No requirement for emergency escape lighting, but adequate conventional lighting is required.

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 in the kitchen.

DRAWING NO. 5

3 Storey plus cellar.
Single family house.

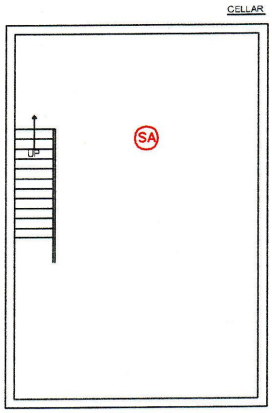
January 2009

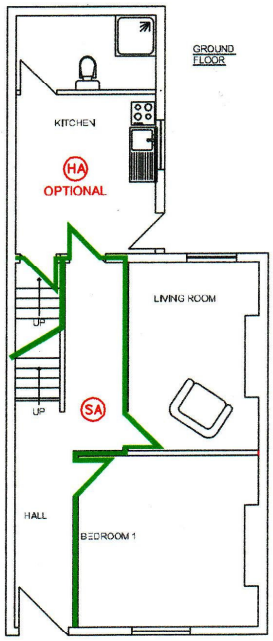
SA Smoke alarm with internal sounder – linked

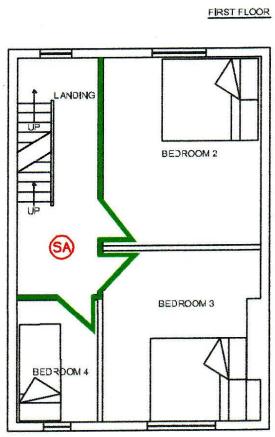
HA Optional heat alarm with internal sounder – linked

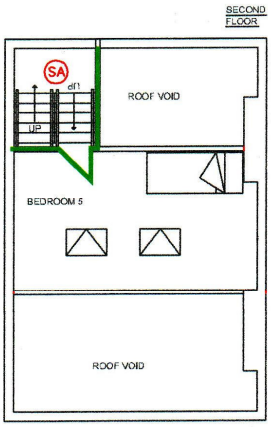
Substantial solid doors

Sound traditional construction









CATEGORY 2
SHARED HOUSING

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

C.2.1 A shared house is defined as an HMO where the whole property is rented by an identifiable group, such as students, friends or other individuals who share the premises on a joint tenancy. Each person will generally have their own bedroom and will share all other facilities such as kitchen, lounge and generally, but not always, bathroom and toilet facilities. There is normally a significant degree of social interaction between occupants. In these circumstances the occupation, use and risks presented in the premises will be similar to a single family house.

C.2.2 The fire risk in shared housing can therefore, in the majority of situations, be considered to be similar to that in a single family house of the same type and layout of property.

C.2.3 Individuals will share the same facilities and live together in much the same way as single family.

C.2.4 This arrangement is particularly suited to students or similar groups, but can also include families that may rent out one or two rooms.

C.2.5 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.2.6 The risk from fire in a typical two to three storey property would generally be considered to be low.

C.2.7 Consequently the fire safety measures required should be relatively simple to achieve.

C.2.8 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 and the LACORS Guide.

C.2.9 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.2.10 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.2.11 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. 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 In properties up to two storeys in height, and in lower risk premises of up to three storeys, there should be no requirement for 30 minutes fire resistance to any protected escape route. It should be possible to accept existing traditional construction, providing walls and floors are in sound condition and doors are substantial solid doors. In low risk premises there would, generally, be no requirement for doors opening onto the escape route to be fitted with self-closing devices. However, individual risk assessments should be carried out to determine the need for self-closing devices on risk rooms, such as living rooms or kitchens.

C.2.13 In higher risk properties of three storeys and properties of four storeys, there would be a need to provide a 30 minute fire resisting protected route, with FD30 doors. It should be possible to accept most existing walls and floors constructed of traditional materials, providing they are in sound condition. In general, fire doors to higher risk rooms such as kitchens and lounges should be fitted with self- closing devices. The requirement to fit self-closing devices to other fire resisting doors, such as bedrooms, would need to be the subject of individual risk assessment. There would be no requirement to fit doors with cold smoke seals.

C.2.14 In properties over four storeys, typically five and six storey buildings, there would be a need to provide a 30 minute protected route. In these circumstances, an additional exit route would be required from the upper floors, and the level of the fire detection and fire alarm system would need to be increased. Further guidance on premises over four storeys can be found in the LACORS Guide, Housing - Fire Safety, and Approved Documents B.

C.2. 15 In normal risk shared properties of up to four storeys, a Grade D: LD2 fire detection and alarm system, provided in accordance with BS 5839-6 should be adequate. Additional detection should be provided to the kitchen, lounge and in any cellar with a fire risk.

C.2.16 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.

C2.17 In most premises of average size and normal risk there will be no requirement for emergency escape lighting or fire safety signs or notices.

C.2.18 A fire blanket should be provided in the kitchen, and it is recommended that a simple multi-purpose fire extinguisher is provided on each floor level.

Drawing No. 6: Two storey – shared house with cellar

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

There are generally two acceptable alternatives to provide adequate means of escape from the first floor:

(1) Provide a protected route (stairway) to the final exit, or

(2) Provide emergency escape windows to habitable rooms.

(1) Protected route (stairway) to exit
No requirement for a 30 minute fire resisting protected stairway. However, the stairway should be fully enclosed and existing walls and partitions should be of sound traditional construction and be in a good state of repair. Existing substantial solid doors would be considered acceptable, providing they are in a good state of repair.

(2) Emergency Escape Windows
Each bedroom on the first floor should preferably be provided with access to an emergency escape window. However, 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 degree of fire protection to the stairs and the travel distance between rooms is limited. Providing the doors are closed, it will give the occupants the opportunity to move between rooms to access the escape window. However, it should be ensured that access is freely available into the room provided with the escape window, and the door to the room should not be fitted with any security locks.

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, and 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.
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.

It is good practice 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.

Fire Separation
In existing properties there will generally be no requirement for the provision of additional fire resistance to walls and floors.

Floors and walls should be of sound traditional construction and be in a good state of repair.

The floor between the cellar and ground floor should afford a fire resistance of 30 minutes. *A reduced level of fire resistance could be accepted, providing the ceiling is constructed of traditional materials and is in sound condition and additional detection is fitted in the cellar*.

Fire Doors
The door at the head of the stairs to the cellar should be a substantial well-fitting solid door.

If emergency window escape is adopted from the first floor there will no requirement for any of the doors opening onto the stairway to be fire resisting.

If a protected route is adopted, existing substantial solid doors would be considered acceptable, providing they are in a good state of repair and are a good fit in their frames.

In general, in smaller low risk premises, there will no requirement for doors to be fitted with self-closing devices. However, individual risk assessments should be carried out to determine the need for self-closing devices on risk rooms such as the living room or kitchen.

Occupants should, however, be advised to close doors at night.

Fire Detection and Fire Alarm System
A Category LD2 Grade D system with interlinked optical smoke alarms in the circulation areas at ground and first floor level.

An additional smoke alarm should be provided in the lounge, and an additional heat alarm provided in the kitchen. If the cellar contains a fire risk, an additional smoke alarm should be provided in 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 and Notices
There is no requirement for fire exit signs or notices.

Emergency Escape Lighting
No requirement for emergency escape lighting, but adequate conventional lighting is required.

Fire-Fighting Equipment
It is recommended that a fire blanket is provided in the kitchen, and simple multi-purpose fire extinguisher is provided in the hallway.

OPTION 1

Protected Route

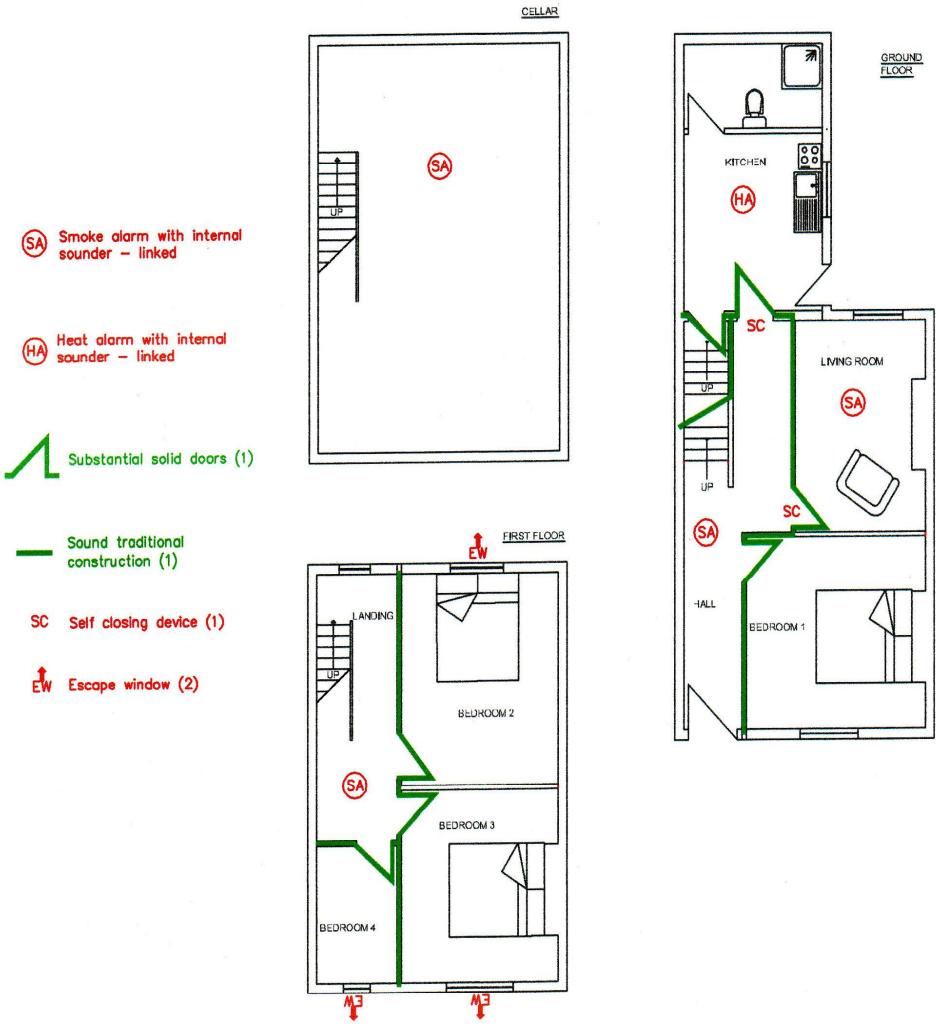
OPTION 2

Escape windows from bedrooms on first floor

DRAWING NO. 6

2 Storey plus cellar.
Shared house HMO

January 2009



SA Smoke alarm with internal sounder – linked

HA Heat alarm with internal sounder – linked

Substantial solid doors (1)

Sound traditional construction (1)

SC Self closing device (1)

EW Escape window (2)

Drawing No. 7: Two storey – shared house

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

There are generally two acceptable alternatives to provide adequate means of escape from the first floor:

(1) Provide a protected route (stairway) to the final exit, or

(2) Provide emergency escape windows to habitable rooms.

(1) Protected route (stairway) to exit
No requirement for a 30 minute fire resisting protected stairway. However, the stairway should be fully enclosed and existing walls and partitions should be of sound traditional construction and be in a good state of repair. Existing substantial solid doors would be considered acceptable, providing they are in a good state of repair.

(2) Emergency Escape Windows
Each bedroom on the first floor should preferably be provided with access to an emergency escape window. However, 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 degree of fire protection to the stairs and the travel distance between rooms is limited. Providing the doors are closed, it will give the occupants the opportunity to move between rooms to access the escape window. However, it should be ensured that access is freely available into the room provided with the escape window, and the door to the room should not be fitted with any security locks.

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 and 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.
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.

It is good practice 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.

Fire Separation
In existing properties there will generally be no requirement for the provision of additional fire resistance to walls and floors.

Floors and walls should be of sound traditional construction and be in a good state of repair.

Fire Doors
If emergency window escape is adopted from the first floor there will no requirement for any of the other doors opening onto the stairway to be fire resisting.

If a protected route is adopted, existing substantial solid doors would be considered acceptable, providing they are in a good state of repair and a good fit in their frames. There would be no requirement for cold smoke seals.

In general, in smaller low risk premises there will no requirement for doors to be fitted with self-closing devices. However, individual risk assessments should be carried out to determine the need for self-closing devices on risk rooms, such as the living room or kitchen.

Occupants should, however, be advised to close doors at night.

Fire Detection and Fire Alarm System
A Category LD2 Grade D system with interlinked optical smoke alarms in the circulation areas at ground and first floor level.

An additional heat alarm should be provided in the kitchen and an additional smoke alarm provided in the lounge.

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 and Notices
There is no requirement for fire exit signs or notices.

Emergency Escape Lighting
No requirement for emergency escape lighting, but adequate conventional lighting is required.

Fire-Fighting Equipment
It is recommended that a fire blanket is provided in the kitchen, and a simple multi-purpose fire extinguisher is provided in the hallway.

OPTION 1

Protected Route

OPTION 2

Escape windows from bedrooms on first floor

DRAWING NO.7

2 Storey.
Shared house HMO

January 2009

SA Smoke alarm with internal sounder – linked

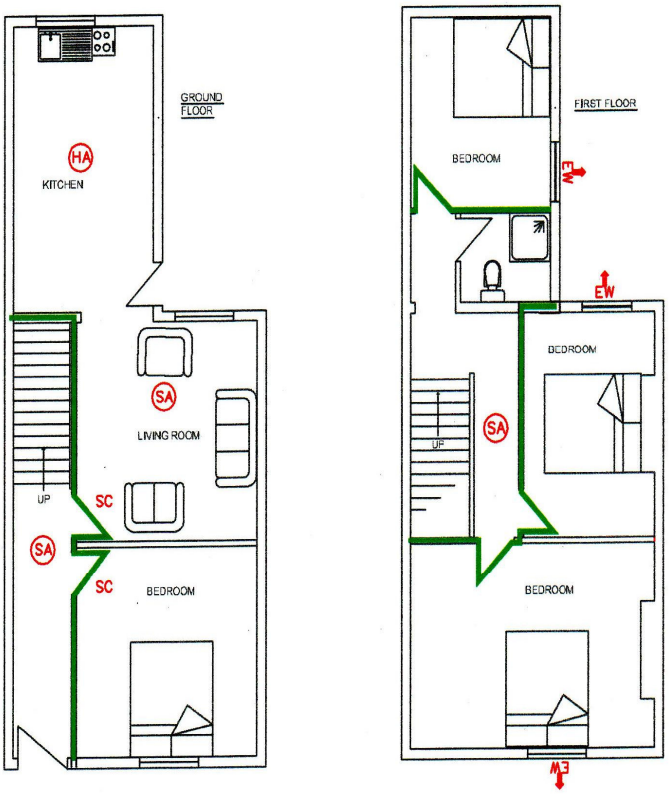
HA Heat alarm with internal sounder – linked

Substantial solid doors (1)

Sound traditional construction (1)

SC Self closing device (1)

EW Escape window (2)



Drawing No. 8: Two storey – shared house

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

There are generally two acceptable alternatives to provide adequate means of escape from the first floor:

(1) Provide a protected route (stairway) leading to the alternative exits from the base of the stairway through the living and dining rooms, or

(2) Provide emergency escape windows.

(1) Protected route (stairway) to the alternative exits
No requirement for a 30 minute fire resisting protected stairway. However, the stairway should be fully enclosed and existing walls and partitions should be of sound traditional construction and be in a good state of repair. Existing substantial solid doors would be considered acceptable, providing they are in a good state of repair.

(2) Emergency Escape Windows
Each bedroom on the first floor should preferably be provided with access to an emergency escape window. However, 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 degree of fire protection to the stairs and the travel distance between rooms is limited. Providing the doors are closed, it will give the occupants the opportunity to move between rooms to access the escape window. However, it should be ensured that access is freely available into the room provided with the escape window, and the door to the room should not be fitted with any security locks.

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 and 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.

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.

It is good practice 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.

Fire Separation
In existing properties there will generally be no requirement for the provision of additional fire resistance to walls and floors.

Floors and walls should be of sound traditional construction and be in a good state of repair.

Fire Doors
If emergency window escape is adopted from the first floor there will no requirement for any of the doors opening onto the stairway to be fire resisting.

If a protected route is adopted, existing substantial solid doors would be considered acceptable, providing they are in a good state of repair and are a good fit in their frames. There would be no requirement for cold smoke seals.

In general, in smaller low risk premises there will no requirement for doors to be fitted with self-closing devices; however, individual risk assessments should be carried out to determine the need for self-closing devices on risk rooms, such as the living or dining room.

Occupants should, however, always be advised to close doors at night.

Fire Detection and Fire Alarm System
A Category LD2 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.

An additional heat alarm should be provided 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 and Notices
There is no requirement for fire exit signs or notices.

Emergency Escape Lighting
No requirement for emergency escape lighting, but adequate conventional lighting is required.

Fire-Fighting Equipment
It is recommended that a fire blanket is provided in the kitchen, and a simple multi-purpose fire extinguisher is provided on the ground floor.

OPTION 1

Protected Route

OPTION 2

Escape windows from bedrooms on first floor

DRAWING NO. 8

2 Storey.
Shared house HMO

January 2009

SA Smoke alarm with internal sounder – linked

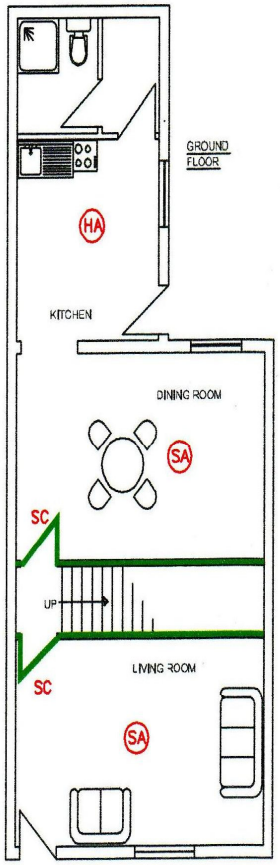
HA Heat alarm with internal sounder – linked

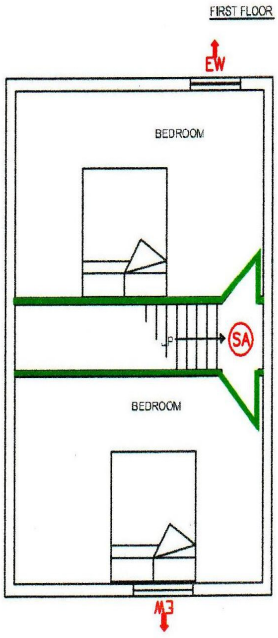
Substantial solid doors (1)

Sound traditional construction (1)

SC Self closing device (1)

EW Escape window (2)





Drawing No. 9: Two storey – shared house

Means of Escape
The ground storey should be provided with suitable doors or windows for emergency egress in the event of fire.

In this layout, the stairway is 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, and 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.

In particular, 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.

It is good practice 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.

Fire Separation
In existing properties there will generally be no requirement for the provision of additional fire resistance to walls and floors.

Floors and walls should be of sound traditional construction and be in a good state of repair.

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 LD2 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.

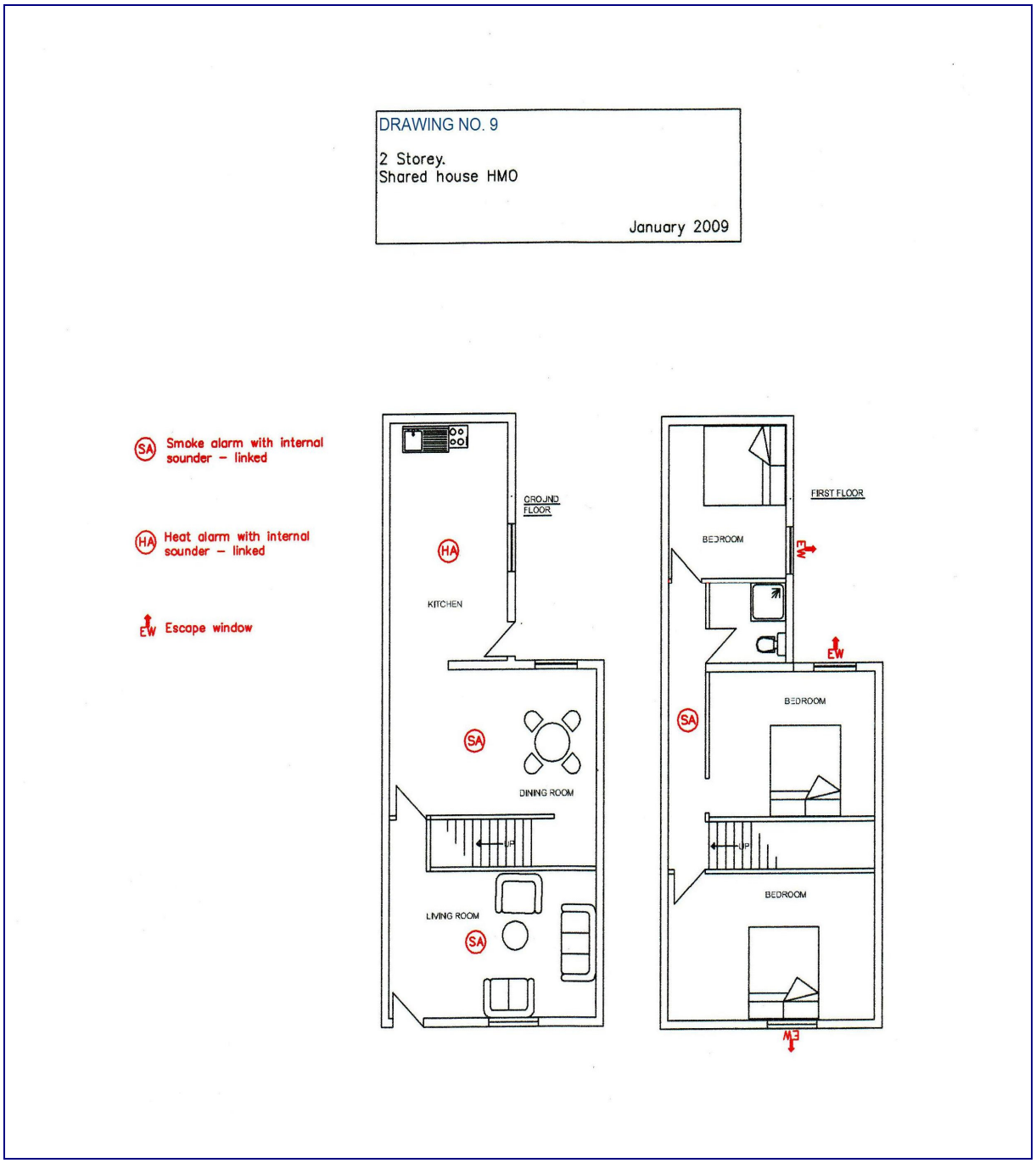
An additional heat alarm should be provided in the kitchen area.

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 and Notices
There is no requirement for fire exit signs or notices.

Emergency Escape Lighting
No requirement for emergency escape lighting, but adequate conventional lighting is required.

Fire-Fighting Equipment
It is recommended that a fire blanket is provided in the kitchen, and a simple multi-purpose fire extinguisher is provided on the ground floor.



Drawing No. 10: Three storey – shared house with cellar

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

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

The stairway should be made a protected route to the final exit door, with 30 minute fire resisting construction and FD30 doors.

However, in lower risk premises it should be possible to accept existing traditional construction, provided it is in sound condition and in a good state of repair. Existing substantial solid doors would be considered acceptable, providing they are in a good state of repair.

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 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.

It is good practice 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.

Fire Separation
In general, there will be no requirement for additional fire separation.

Existing floors and walls of sound traditional construction in a good state of repair can be accepted, and would generally provide an acceptable level of fire resistance.

The fire separation between the cellar and ground floor escape route should achieve a fire resistance of 30 minutes. *However, a reduced level of fire resistance could possibly be accepted, providing additional detection is provided in the cellar.*

Fire Doors
Doors from risk rooms opening onto the protected escape stairway should generally be FD30.

However, in lower risk premises it should be possible to accept substantial solid doors providing they are in a good state of repair and are a good fit in their frames.

There is no requirement for doors to be fitted with cold smoke seals.

The door at the head of the stairs to the cellar should be FD30 standard. *This could be relaxed to a substantial solid door if additional detection is provided in the cellar*.

The doors to higher risk rooms, such as the kitchen and the lounge, should be fitted with a self-closing device. An individual risk assessment should be carried out to determine the need for self-closing devices on other fire resisting doors, such as bedrooms.

Occupants should, however, be advised to close doors at night.

Fire Detection and Fire Alarm System
A Category LD2 Grade D system with interlinked optical smoke alarms in the circulation areas at ground, first and second floor levels.

An additional smoke alarm should be provided in the lounge, and an additional heat alarm should be provided in the kitchen. If the cellar contains a fire risk, an additional smoke alarm should be provided in 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 and Notices
There is no requirement for fire exit signs or notices.

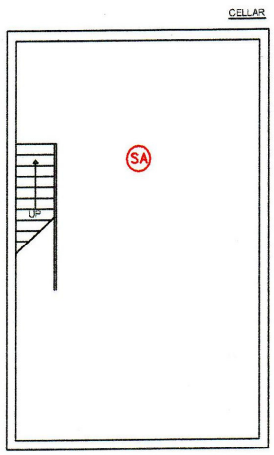
Emergency Escape Lighting
No requirement for emergency escape lighting, but adequate conventional lighting is required.

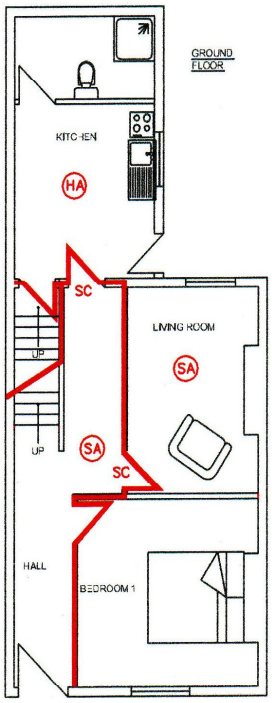
Fire-Fighting Equipment
It is recommended that a fire blanket is provided in the kitchen, and a simple multi-purpose fire extinguisher is provided on the ground and first floors.

DRAWING NO. 10

3 Storey plus cellar.
Shared house – HMO

January 2009





SA Smoke alarm with internal sounder – linked

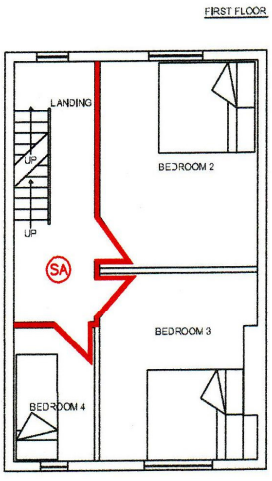
HA Heat alarm with internal sounder – linked

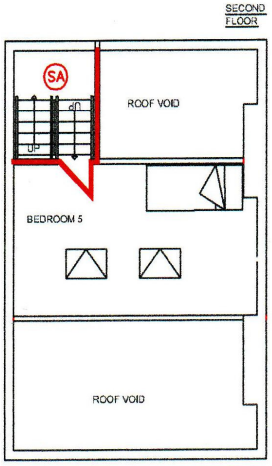
FD30 doors

30 Minute fire resistance

SC Self closing device

In lower risk premises of 3 storeys it should be possible to accept substantial solid doors & sound traditional construction





CATEGORY 3
SHARED HOUSES PROVIDING SUPPORTED LODGING

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

Please note that the LACORS Guide does not specifically cover shared houses providing supported lodgings. The recommendations detailed below and the fire safety schemes adopted for the plans are additional to the LACORS Guide.

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

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 requires that all habitable rooms open directly onto a final exit or into a hallway or stairway, which leads to a final exit.

C.3.7 The stairway should 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 be in accordance with the recommendations of BS 5839-6 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 and the requirements of BS 5266-7 and BS 5266-8.

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.

C.3.12 In most premises up to three storeys there should be no requirement for fire exit signs or notices.

C.3.13 It is recommended that some form of fire-fighting equipment, such as a fire blanket and/or simple multi-purpose fire extinguisher, be provided in the shared kitchen.

Drawing No. 11: Two storey house with cellar - shared house providing supported lodgings

Means of Escape
The stairway should be made a 30 minute fire resisting protected route leading to a final exit.

There should be no cupboards located within the stairway, 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 stairway should afford a fire resistance of 30 minutes. This should include the underside of the stairway 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 traditionally constructed walls and partitions between individual rooms, and ceilings between the ground and first floor, providing they are in a sound condition, could be accepted because of the high level of fire detection provided throughout the premises.

Fire Doors
All doors opening into the protected stairway should be to FD30S standard and be fitted with self-closing devices.

The door to the cellar should be FD30S and be fitted with a self-closing device, or, alternatively, should be kept locked shut.

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.

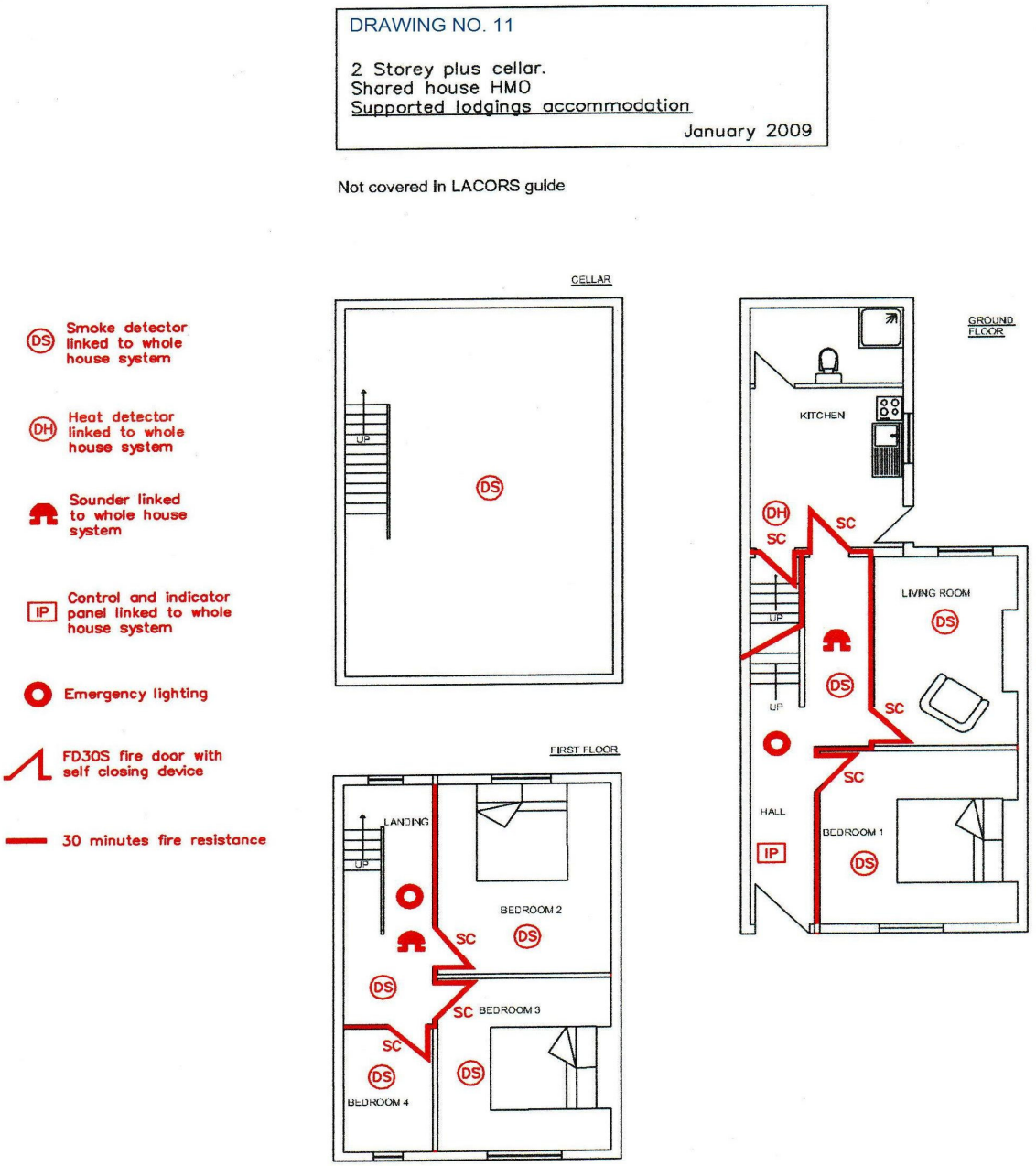
The recommended sound pressure level of 65dB(A) in general areas is considered to be too high for supported living. It is recommended that this is reduced to around 55dB(A) in general areas of the home, and 75dB(A) at the bedhead in all bedrooms.

Consideration can be given to the relaxation of the requirement to provide manual call points.
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 and the requirements of BS 5266-7 and BS 5266-8.

Signs and Notices
There should be no requirement for fire exit signs or notices.

Fire-Fighting Equipment
It is recommended that some form of fire-fighting equipment, such as a fire blanket and/or simple multi-purpose fire extinguisher, be provided in the shared kitchen.



Drawing No. 12: Two storey - shared house providing supported lodgings

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:

(1) The stairway should be made a protected route to a final exit; or

(2) 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 stairway is to be made a protected route, then the walls and partitions enclosing the stairway 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 traditionally constructed 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 the protected route/stairway should be to FD30S standard and be fitted with self-closing devices.

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.

Emergency Escape Lighting

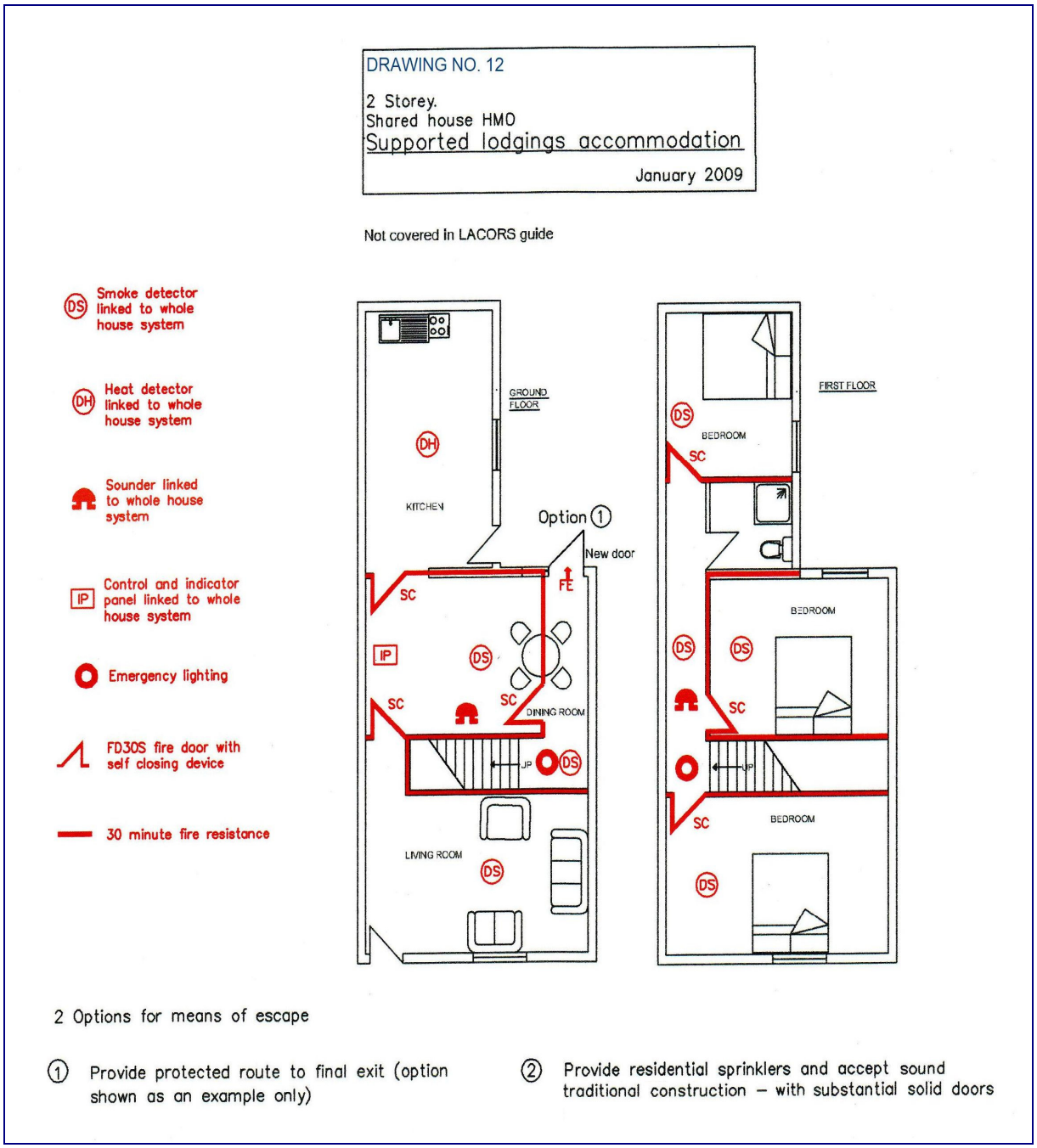
Emergency escape lighting should be provided to cover the common escape routes. The emergency escape lighting should be installed in accordance with the recommendations of BS 5266-1 and the requirements of BS 5266-7 and BS 5266-8.

Signs and Notices

There should be no requirement for fire exit signs or notices.

Fire-Fighting Equipment

It is recommended that some form of fire-fighting equipment, such as a fire blanket and/or simple multi-purpose fire extinguisher, be provided in the shared kitchen.



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 however, 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. 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.4.11 Properties with any floor over 7.5m above ground will need to be provided with additional fire safety measures. In a typical three or four storey property, there may 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 larger premises, of five and six storeys, additional fire safety measures will be required, and consideration should be given to the provision of an alternative means of escape from the upper floors. Further guidance on premises over four storeys can be found in the LACORS Guide, Housing - Fire Safety, and Approved Document B.

C.4.12 There will generally be no requirement for emergency escape lighting in premises of this size and layout.

C.4.13 There will generally be no requirement for signs and notices as the layout and means of escape will be relatively simple.

C.4.14 A fire blanket and/or a simple multi-purpose fire extinguisher should be recommended.

Drawing No. 13: 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
There are generally two acceptable alternatives to provide adequate means of escape from the first floor:

(1) Provide a protected route (stairway) to the final exit at ground floor, or

(2) Provide emergency escape windows to habitable rooms.

(1) Protected route (stairway) to exit
It should be ensured that adequate fire separation of 60 minutes is provided, at ground floor between the stairway and the commercial premises, to protect the escape route from the first floor.

The hall should be fully enclosed and existing walls and partitions should be of sound traditional construction and be in a good state of repair. Existing substantial doors would be considered acceptable, providing they are in a good state of repair.

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

(2) Emergency Escape Windows
Each bedroom on the first floor should preferably be provided with an emergency escape window. However, 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 and the travel distance between rooms is limited. 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 and 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.

In particular, any security locks fitted to the final exit door 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
The floor and separating wall 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(s) is installed in the commercial premises.

Walls and partitions at first floor level should be of sound traditional construction and be in a good state of repair.

Fire Doors
If emergency window escape is adopted from the first floor, there will no requirement for any of the doors opening onto the stairway to be fire resisting.

Existing substantial doors would be considered acceptable, providing they are in a good state of repair and a good fit in their frames. There is no requirement for the doors to be fitted with self-closing devices.

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 interlinked heat alarm in the kitchen, dependent on an individual risk assessment.

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 and Notices
There is no requirement for fire exit signs or notices.

Emergency Escape Lighting
No requirement for emergency escape lighting, but adequate conventional lighting is required.

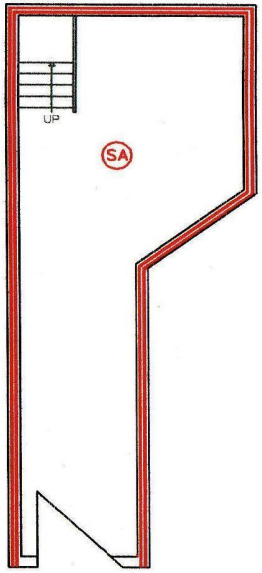
Fire-Fighting Equipment
There is no compelling requirement for the provision of fire-fighting equipment in this type of property. It should, however, be recommended that families have some form of fire-fighting equipment, such as a fire blanket in the kitchen.

DRAWING NO. 13

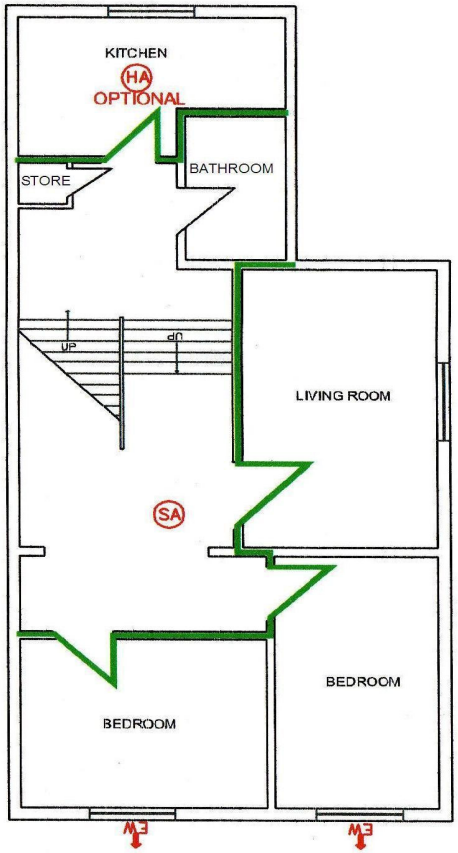
2 Storey property
GF - Commercial
FF - single family flat

January 2009

Provide 1 hour fire resisting seperation to commercial premises



GROUND FLOOR
COMMERCIAL



FIRST FLOOR
RESIDENTIAL

OPTION 1

Protected Route

OPTION 2

Escape windows from bedrooms on first floor

KEY

SA Smoke alarm with internal sounder–linked

HA Optional Heat alarm with internal sounder –linked

60 minutes fire resistance

Substantial solid doors (1)

Sound traditional construction (1)

EW Escape window (2)

Drawing Nos. 14: Three storey – single family flat over commercial premises

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

The stairway should be made a protected route to the final exit door. However, it should be possible to accept existing walls and partitions of sound traditional construction. It should also be possible to accept existing substantial solid doors which are in a good state of repair.

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

The final exit door should be capable of being opened from the inside, without the use of keys. Any security locks fitted to the final exit door from the premises should have an internal thumb-turn or lever release mechanisms.

Fire Separation
The floor and separating wall 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(s) is installed in the commercial premises.

Existing floors and walls of sound traditional construction and in a good state of repair can be accepted, and would generally provide an acceptable level of fire resistance.

Fire Doors
Existing substantial solid doors would be considered acceptable, providing they are in a good state of repair and are a good fit in their frames. There is no requirement for the doors to be fitted with self-closing devices or cold smoke seals.

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, dependent on an individual risk assessment.

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 fire exit signs or notices.

Emergency Escape Lighting
No requirement for emergency escape lighting, but adequate conventional lighting is required.

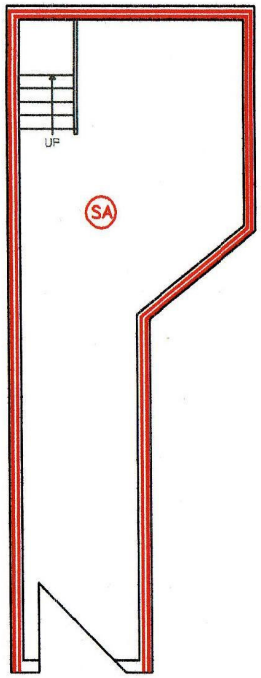
Fire-fighting Equipment
There is no compelling requirement for the provision of fire-fighting equipment in single family flats. It should, however, be recommended that families have some form of fire-fighting equipment, such as a fire blanket in the kitchen.

DRAWING NO. 14

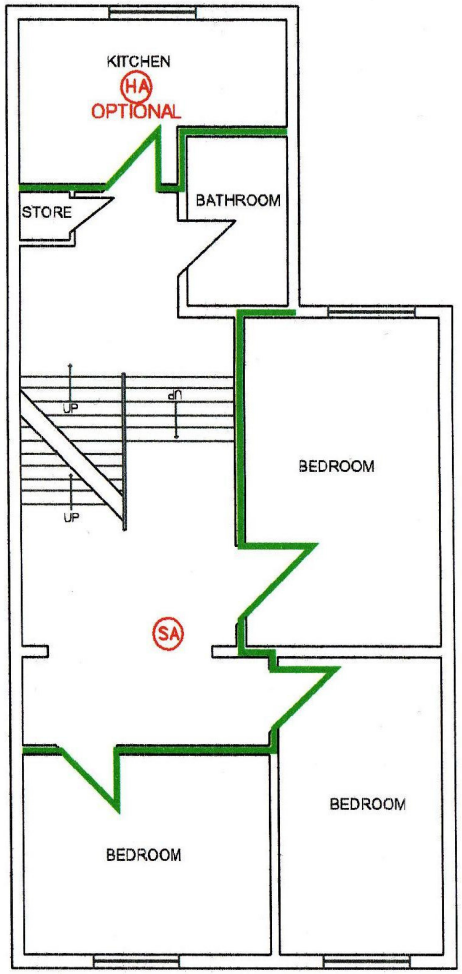
3 Storey Property
GF - Commercial
FF/SF - Single family flat

January 2009

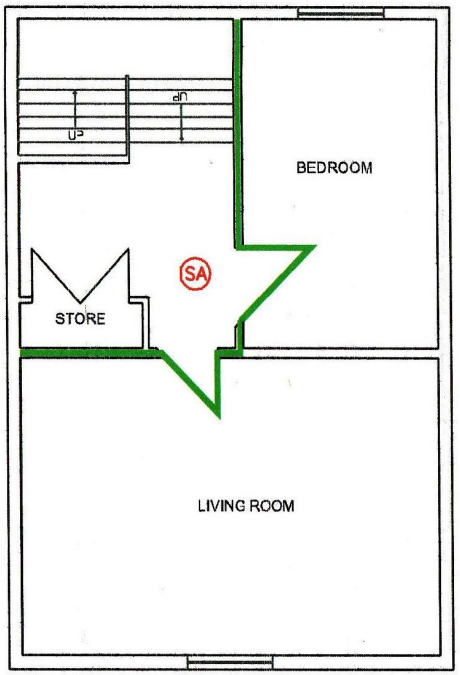
Provide 1 hour fire resisting separation to commercial premises



GROUND FLOOR
COMMERCIAL



FIRST FLOOR
RESIDENTIAL



SECOND FLOOR
RESIDENTIAL

KEY

SA Smoke alarm with internal sounder–linked

HA Optional Heat alarm with internal sounder –linked

60 minutes fire resistance

Substantial solid doors

Sound traditional construction

Drawing No. 15: Three storey – shared flat over commercial premises

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

The stairway should be made a 30 minute fire resisting protected route to the final exit door. However, in lower risk premises it should be possible to accept existing traditional construction, provided it is in sound condition and in a good state of repair.

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

It is recommended that doors providing means of escape should be capable of being opened from the inside, without the use of keys. Any security locks fitted to the final exit door from the premises should have internal thumb-turn or lever release mechanisms.

In shared flats it is good practice 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.

Fire Separation
The floor and separating wall 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(s) is installed in the commercial premises.

Existing floors and walls of sound traditional construction that are in sound condition and in a good state of repair can be accepted, and would generally achieve an acceptable level of fire resistance.

Fire Doors
Doors from risk rooms opening onto the protected escape route should be FD30 doors. However, in lower risk premises it should be possible to accept existing substantial, well fitting, solid doors. There is no requirement for the doors to be fitted with smoke seals.
Doors to higher risk rooms, such as kitchens and lounges should be fitted with a suitable self-closing device. An individual risk assessment should be carried out to determine the need for self-closing devices on doors to other rooms, such as bedrooms.

Occupants should, however, be advised to close doors at night.

Fire Detection and Fire Alarm System
A Category LD2 Grade D system with interlinked optical smoke alarms in the circulation areas at ground, first and second floor levels.

An additional heat alarm should be provided in the kitchen and an additional smoke alarm in the living room.

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 and Notices
There is no requirement for fire exit signs or notices.

Emergency Escape Lighting
No requirement for emergency escape lighting, but adequate conventional lighting is required.

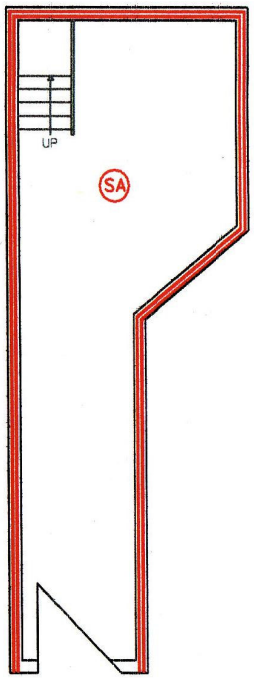
Fire-fighting Equipment
It is recommended that a fire blanket is provided in the shared kitchen and a simple multi-purpose fire extinguisher is provided on the first floor.

DRAWING NO. 15

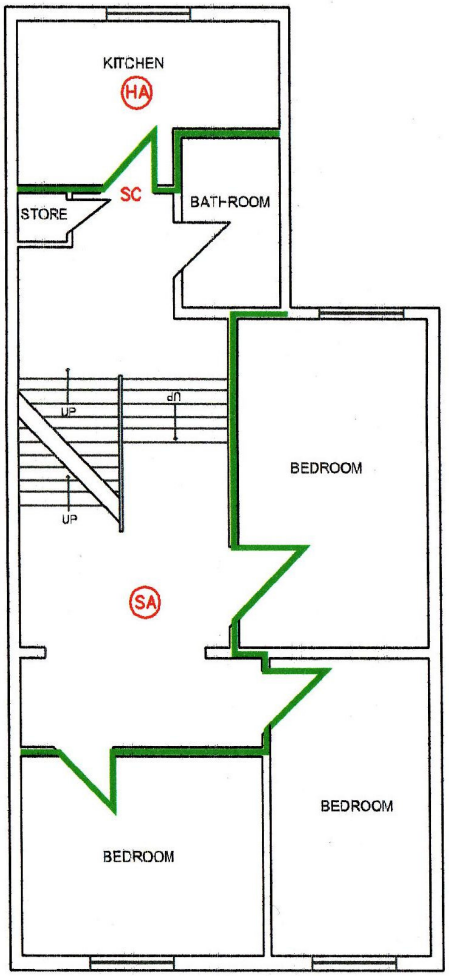
3 Storey Property
GF - Commercial
FF/SF - Shared flat

January 2009

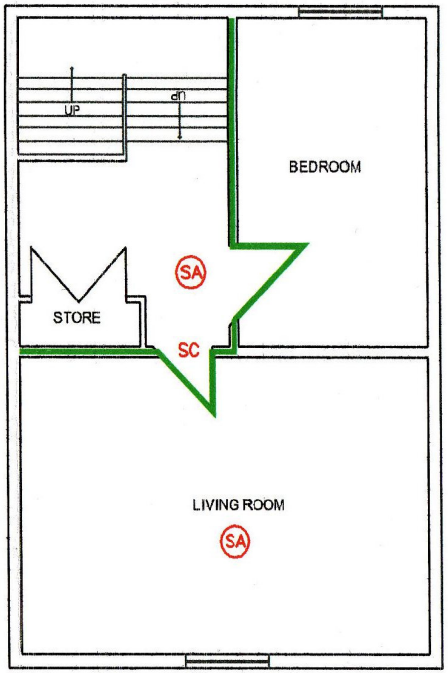
Provide 1 hour fire resisting seperation to commercial premisses



GROUND FLOOR
COMMERCIAL



FIRST FLOOR
RESIDENTIAL



SECOND FLOOR
RESIDENTIAL

KEY

SA Smoke alarm with internal sounder-linked

HA Heat alarm with internal sounder-linked

Substantial solid doors

Sound traditional construction

60 minutes fire resistance

SC Self closing device

CATEGORY 5
SELF-CONTAINED AND OPEN FLATS

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 1991 (or later) and guidance in Approved Document B should 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 and there will be no requirement for a common fire detection and alarm system.

C.5.3 It should, however, be ensured that a fire in one dwelling will not affect the common escape stairway. In the majority of situations, the guidance in Approved Document B, for new buildings with a single staircase, recommends that each dwelling is separated from the common stairway by a protected lobby or common corridor, other than for small premises.

C.5.4 In other situations, in properties constructed and/or converted to a standard not in accordance with the Building Regulations 1991, additional measures may be required. In these situations it is likely that the occupants of individual flats will need to be warned of, and protected from, the effects of a fire in other flats. To achieve this, a fire detection and fire alarm system will be required, to ensure occupants are given an early warning of a fire in the building, to enable them to use the common 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 all flats within the building.

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 in the common areas and the means of escape from each flat to a final exit using the common escape stairway.

C.5.7 The means of escape 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 fire exit route from the front door of each flat should be made a protected route to the final exit and be enclosed within construction affording a fire resistance of 30 minutes. Flat entrance doors should be FD30S and be fitted with a suitable self-closing device.

C.5.9 Adequate levels of fire separation will be required between floors and individual flats to limit the spread of fire and smoke. However, in normal risk premises of up to three or four storeys it should be possible to accept existing sound traditional construction, providing it is in a good state of repair.

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 common means of escape from the flat.

C.5.11 The level of separation between the premises will determine the need to consider the risk within the commercial premises. If separation is in accordance with the requirements of the Building Regulations 1991 (or later) and guidance in Approved Document B, and the flats above, or below, have an independent escape stairway, the risk within the commercial premises can generally be disregarded.

C.5.12 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 in the flat(s) above is extended into the commercial premises by the installation of heat detector(s) in the commercial premises.

C.5.13 The provision of an early warning of a fire in both the common areas and individual flats will be required.

C.5.14 The use of mixed systems in accordance with BS 5839-6 is recommended.

C.5.15 The system should incorporate:

- A Category LD2 Grade A or D system with manual break glass alarm call point, and smoke/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 separate Category LD3 Grade D system in each flat, to provide a warning to the individual occupants of a fire in their own accommodation.

C.5.16 In all but the simplest of premises, emergency escape lighting should be provided to cover the common exit routes in accordance with the recommendations BS 5266-1 and requirements of BS 5266-7 and BS 5266-8.

C.5.17 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.

C.5.18 There will generally be no requirement for 'FIRE EXIT' signs in the common stairway, as the layout and means of escape will generally be relatively simple.

C.5.19 A fire blanket should be recommended in each flat and a simple multi-purpose extinguisher provided on each floor in the common stairway.

Drawing No. 16: Two storey property with cellar.

The property has self-contained flats on ground and first floors, access to each flat is via the common entrance hall at ground level.

Means of Escape

The ground floor should be provided with suitable doors and/or windows for emergency egress in the event of a fire.

There are generally two acceptable alternatives to provide adequate means of escape from the first floor:

(1) Provide a protected route (stairway) to the final exit.

(2) Provide emergency escape windows to habitable rooms.

(1) Protected route (stairway) to exit

The ground floor hall and stairway should be enclosed with fire resisting walls and partitions to form a protected route to exit. The doors to each flat, opening onto the stairway, should be FD30S.

(2) Emergency Escape Windows

The lounge and bedroom on the first floor should preferably be provided with an emergency escape window. However, a single window exit might be acceptable in this particular layout, as all rooms opening onto the stairs/landing are fitted with doors and the travel distance between rooms is limited. Providing the doors are closed, it will give the occupants the opportunity to move between rooms to access the 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.

Although, in this option, there will be no requirement for a protected route, the hall and stairway at ground level should be fully enclosed, and the existing walls/partitions should be of sound traditional construction and in a good state of repair. It is recommended that the entrance doors to the flats should be substantial solid doors and be fitted with self-closing devices.

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 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

Existing floors and walls of sound traditional construction and in a good state of repair will generally provide an acceptable level of fire resistance and can be accepted.

The floor between the cellar and ground floor, including the underside of the stairs, should afford a fire resistance of 30 minutes. *A reduced level of fire resistance could be*

accepted, providing the ceiling is of traditional construction and in sound condition and additional detection is fitted in the cellar.

Fire Doors
If emergency window escape is adopted from the first floor, the entrance doors to the flats should be substantial doors and be fitted with suitable self-closing devices. The doors should be a good fit in their frames and be in a good state of repair.

If a protected route/stairway is adopted, the entrance doors to each flat should be FD30S and be fitted with suitable self-closing devices**.**

The door at the head of the stairs to the cellar should be to FD30 standard. *However, a well fitting substantial solid door, providing it is in a good state of repair, would be acceptable in this situation, if additional detection is fitted in the cellar.*

There is no requirement for internal doors within the flats to be fire resisting or be fitted with self-closing devices.

Occupants should, however, always be advised to close doors at night.

Fire Detection and Fire Alarm System
A mixed system in accordance with BS 5839-6 is recommended. However, in small lower risk premises of limited size it should be possible to accept a slightly modified system, utilising two separate Grade D systems. In this situation, the system(s) should incorporate:

- A Category LD2 Grade D system with:
  - Optical smoke alarm in the common entrance hall.
  - Heat alarm in the ground and first floor flats, (the heat alarm in the first floor flat is only required to act as an alarm sounder).
  - Smoke alarm in the cellar, (if there is a fire risk in the cellar)
  - The alarms should be interlinked and be fitted to the landlord's electrical circuit.

  and
- Stand alone LD3 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 a fire in their own accommodation.
- *Consideration should be given to the provision of an additional heat alarm in the kitchen in the ground floor flat.*
- *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 in the ground floor common hall. The emergency escape lighting should be installed in accordance with the recommendations of BS 5266-1 and the requirements of BS 5266-7 and BS 5266-8.

Signs
There is no requirement for fire exit signs.

Fire action notices should be provided in each flat

Fire-Fighting Equipment
It is recommended that a fire blanket is provided in each kitchen and a simple multi-purpose fire extinguisher is provided in the ground floor hall.

OPTION 1

Protected Route

OPTION 2

Escape windows from bedrooms on first floor

DRAWING NO. 16

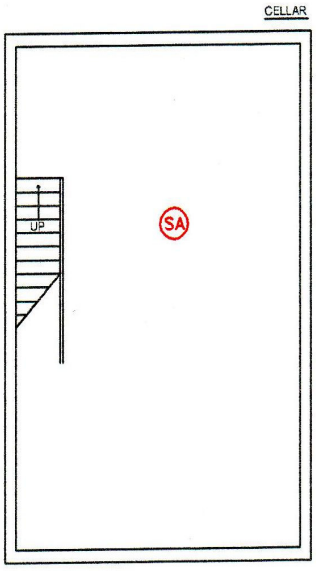
2 Storey plus cellar.
SC flats to GF and FF.
FF flat has entrance door at foot of GF stairs.

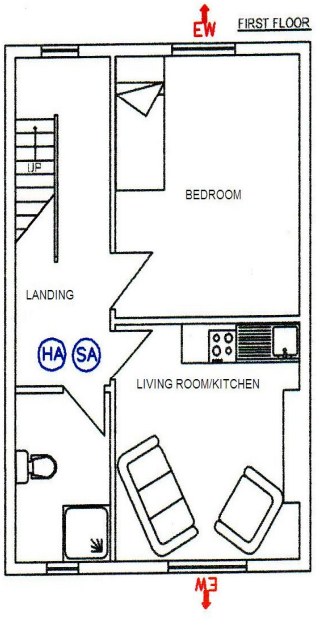
January 2009

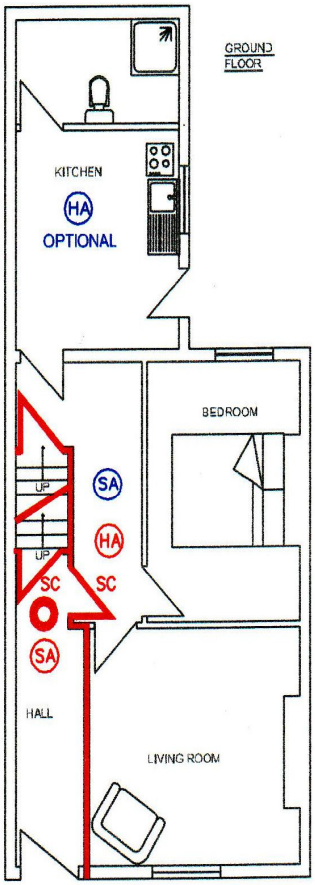
KEY

- (SA) Smoke alarm with internal sounder linked to whole house system.
- (HA) Heat alarm with internal sounder linked to whole house system
- (SA) Smoke alarm with internal sounder – stand alone.
- (HA) Heat alarm with internal sounder – stand alone
- Emergency lighting
- FD30S fire door (1)
- SC Self closing device (1)
- 30 minutes fire resistance (1)
- EW Escape window (2)

The heat alarm in first floor flat is provided to act as a sounder only







Drawing No. 17: Three storey property with a cellar

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

Means of Escape

The stairway at ground level should be enclosed with 30 minute fire resisting construction to form a protected route to the final exit door. The entrance doors to the flats should be FD30S and be fitted with suitable self closing devices.

The internal stairway within the first and second floor flat should be enclosed to form a protected route to the entrance door of the flat. Existing walls and partitions of sound traditional construction should provide a suitable level of fire resistance. Existing substantial solid doors in a good state of repair could be accepted.

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 door from the premises should have an internal thumb-turn or lever release.

Fire Separation

In general, floors and walls should achieve a fire resistance of 30 minutes. However, it should be possible to accept existing floors and walls of sound traditional construction, providing they are in a good state of repair.

The floor between the ground floor escape route, including the underside of the stairs, and the cellar should achieve a fire resistance of 30 minutes.

Fire Doors

The two entrance doors to the flats at ground level should be FD30S and be fitted with suitable self-closing devices.

The door to the head of the stairs to the cellar should be to FD30 standard and be fitted with a suitable self-closing device and/or kept closed. *However, a substantial solid door would be acceptable in this situation, if smoke detection is fitted in the cellar.*

There is no requirement for internal flat doors within the ground floor flat to be fire resisting or be fitted with self-closing devices.

The internal doors within the two storey flat should be FD20 doors, however existing substantial solid doors could be accepted, providing they are in a good state of repair and a good fit in their frames. *The requirement to fit high risk rooms, such as the kitchen, with a self-closing device should be subject to an individual risk assessment.*

Fire Detection and Fire Alarm System
A mixed system in accordance with BS 5839-6 should be provided to give sufficient warning to all occupants of the building of a fire that might affect the means of escape. The system should incorporate:

- A Category LD2 Grade A system with:
  - Smoke detector in the common entrance hall.
  - Heat detector in the ground floor flat.
  - Smoke detector in the cellar, (if there is a fire risk in the cellar)
  - A manual call point by the main entrance door at ground level.
  - Control and 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, (these could be integral within the detectors).

  and
- A Category LD3 Grade D system with smoke alarms in the common areas of each flat 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 interlinked heat alarm in each 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.*

Emergency Escape Lighting
Emergency escape lighting should be provided to cover the common corridor at ground level. The emergency escape lighting should be installed in accordance with the recommendations of BS 5266-1 and the requirements of BS 5266-7 and BS 5266-8.

Signs
There is no requirement for fire exit signs.

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

Fire-Fighting Equipment
It is recommended that a fire blanket be provided in each kitchen and a simple multi-purpose fire extinguisher provided in the ground floor hallway.

DS Smoke detector linked to whole house system

DH Heat detector linked to whole house system

Manual call point linked to whole house system

Sounder linked to whole house system

IP Control and indicator panel linked to whole house system

Emergency lighting

HA Optional heat alarm – with internal sounder not linked to whole house system

SA Smoke alarm with internal sounder not linked to whole house system

Entrance door FD30S fire door with self closing device

30 minutes fire resistance

Substantial solid doors in two storey flat

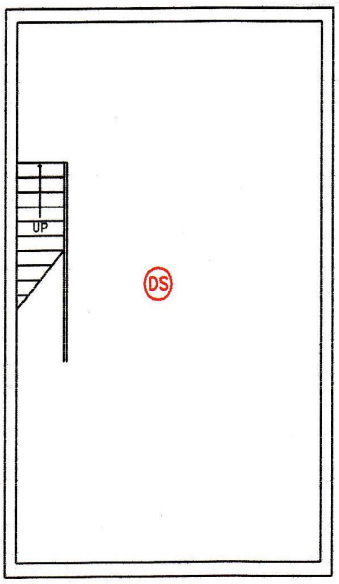
Sound traditional construction in two storey flat

DRAWING NO. 17

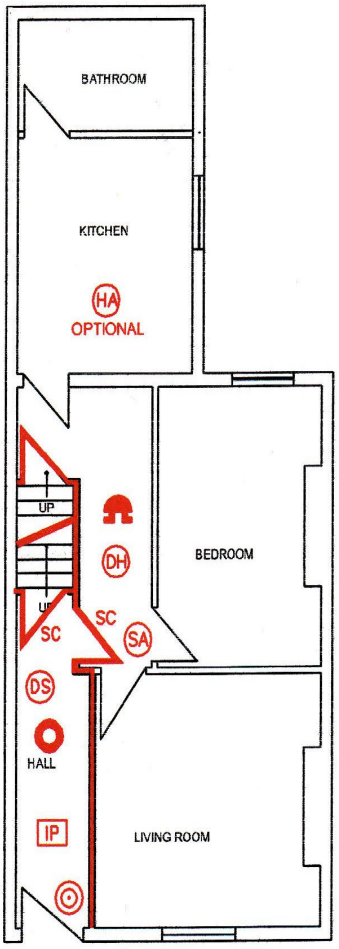
3 Storey plus cellar.

GF Flat
FF/2F Flat.

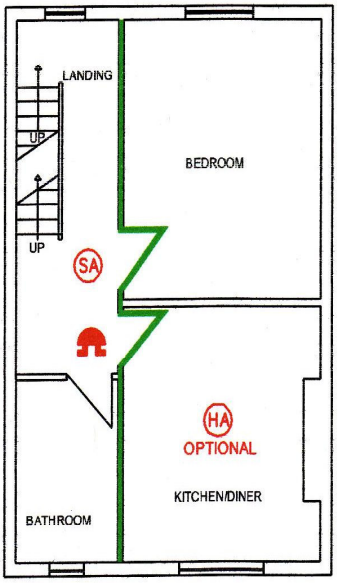
January 2009



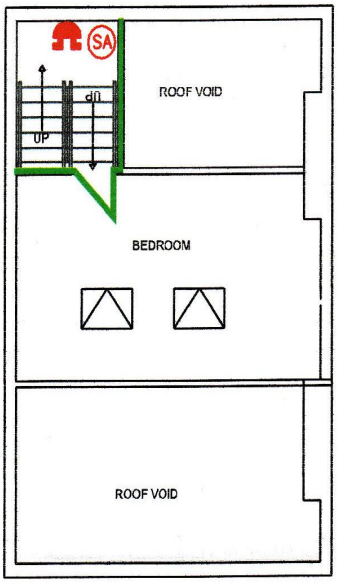
CELLAR



GROUND FLOOR



FIRST FLOOR



SECOND FLOOR

Drawing No. 18: 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.

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 that might 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.

The stairway should be fully enclosed with 30 minute fire resisting construction to form a protected route to the final exit door. The flat entrance doors should be FD30S and be fitted with suitable self-closing devices.

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 should have an internal thumb-turn or lever release mechanisms.

Fire Separation

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

All other floors should achieve a fire resistance of 30 minutes. However, it should be possible to accept existing floor and walls of sound traditional construction, provided they are in a good state of repair.

The walls and partitions enclosing the protected stairway at first and second floor levels should afford a fire resistance of 30 minutes.

Fire Doors

All doors opening into the protected stairway should be FD30S standard and be fitted with a suitable self-closing device.

There is no requirement for the internal doors within the second floor flat to be fire resisting or be fitted with self-closing devices.

Fire Detection and Fire Alarm System
A mixed system in accordance with BS 5839-6 should be provided to give sufficient warning to all occupants of the building of a fire that might affect the means of escape to, 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.
  - Control and 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 a smoke alarm in the common area of the second floor flat to provide a warning to the individual occupants of a fire in their own flat.
- *Consideration should be given to the provision of an additional heat alarm in the living room/kitchen in the second floor flat.*
- *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 and the requirements of BS 5266-7 and BS 5266-8.

Signs
There is no requirement for fire exit signs.

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

Fire-Fighting Equipment
It is recommended that a fire blanket is provided in each kitchen, and a simple multi-purpose fire extinguisher is provided on the first floor landing.

DRAWING NO. 18

3 Storey
GF = Commercial
FF = Open flat
2F = SC flat

January 2009

DS Smoke detector linked to whole house system

DH Heat detector linked to whole house system

Manual call point linked to whole house system

Sounder linked to whole house system

IP Control and indicator panel linked to whole house system

Emergency lighting

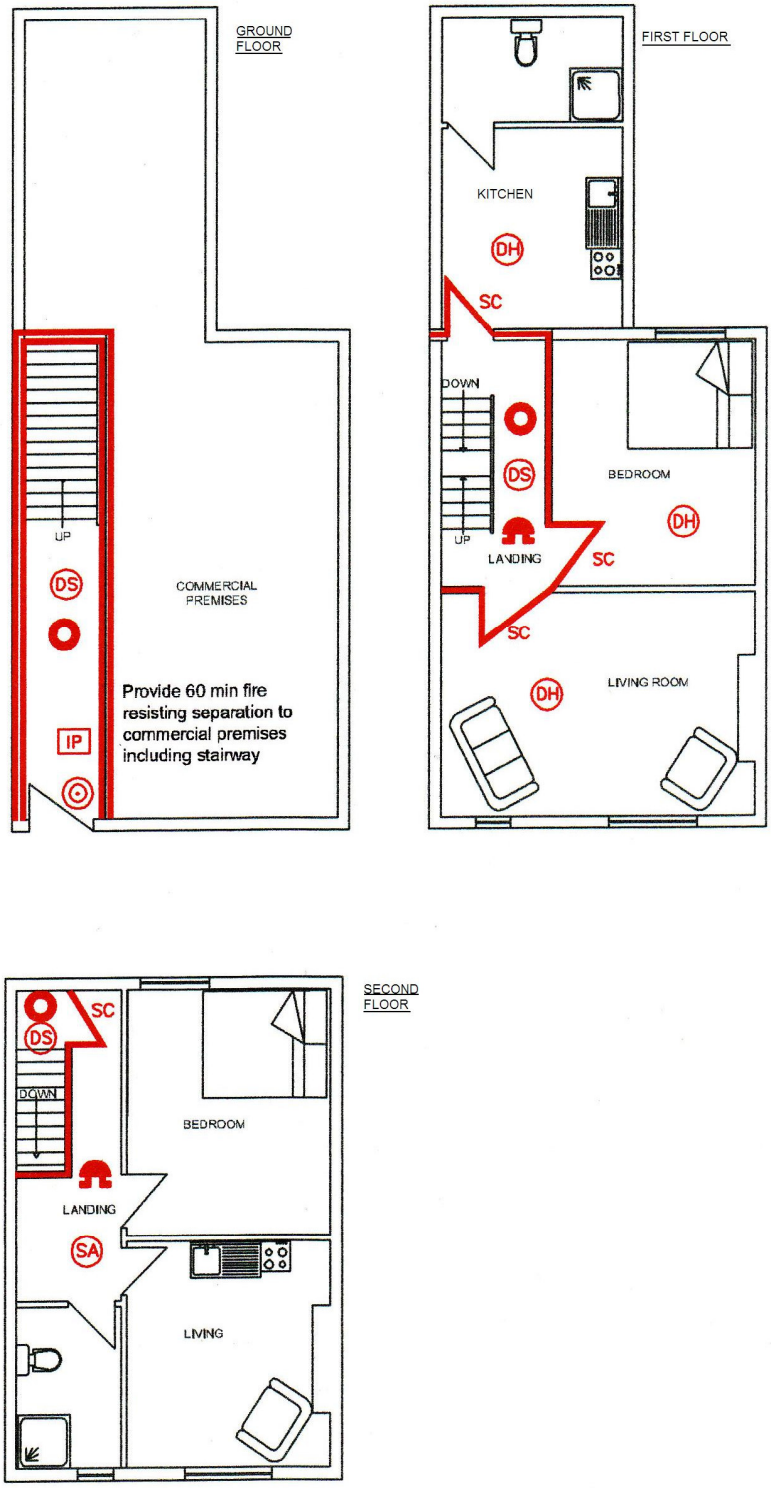
SA Smoke alarm with internal sounder – not linked to whole house system

FD30S fire door with self closing device

30 minutes fire resistance

60 minutes fire resistance

SC Self closing device



Drawing No. 19: 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.

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.

The stairway should be enclosed with 30 minute fire resisting construction to form a protected route to the final exit door. The flat entrance doors should be FD30S and be fitted with suitable self-closing devices.

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

The kitchen, off the internal hall of the larger flats, should be separated by fire resisting construction and a FD20 door to protect the escape route for the occupants of the bed/living room, who have to pass the kitchen, in the event of fire in the kitchen. However, it should be possible to accept existing traditional construction and an existing substantial door in this situation.

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 door from the premises must have an internal thumb-turn or lever release mechanisms.

The external escape stairway has not been incorporated into the means of escape solution 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.

If the external escape stairway is utilized as an alternative means of escape, it should be possible to accept a reduced level of fire resistance to the existing partitions and walls enclosing the protected routes, and the existing doors opening onto the escape stairs.

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 linked heat detector(s) is installed in the commercial premises.

All other floors should achieve a fire resistance of 30 minutes. However, it should be possible to accept existing sound traditional construction, provided it is in a good state of repair.

The walls and partitions enclosing the stairway should afford a full fire resistance of 30 minutes.

Each flat should be separated from one another by walls affording a fire resistance of 30 minutes. However, it should be possible to accept existing sound traditional construction, provided it is in a good state of repair.

Fire Doors
Flat entrance doors opening into the protected stairway should be FD30S standard and be fitted with suitable self-closing devices.

The door to the kitchen in the larger flats should be FD20. However, it should be possible to accept an existing substantial door, providing it is in a good state of repair and a good fit in its frame. There would be no requirement to fit a self-closing device.

Fire Detection and Fire Alarm System
A mixed system in accordance with BS 5839-6 should be provided to give sufficient warning to all occupants of the building of a fire that might affect the means of escape, 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 or hall opening onto stairs at first and second floor levels.
  - Manual call point by main entrance door at ground level.
  - Control and Indicator panel located in entrance hall at ground level.
  - Fire alarm sounders in the common stairway and within each flat.

  and
- A Category LD3 Grade D system with smoke alarms in each flat 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 the kitchen of the larger flats.*
- *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.*

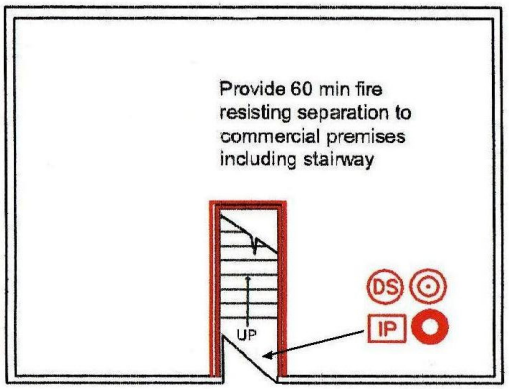
Emergency Escape Lighting

Emergency escape lighting should be provided to cover the common escape stairway. The emergency escape lighting should be installed in accordance with the recommendations of BS 5266-1 and the requirements of BS 5266-7 and BS 5266-8.

Signs
There is no requirement for fire exit signs.

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

Fire-Fighting Equipment
It is recommended that a fire blanket is provided in each kitchen, and a simple multi-purpose extinguisher is provided on the first and second floor landings.



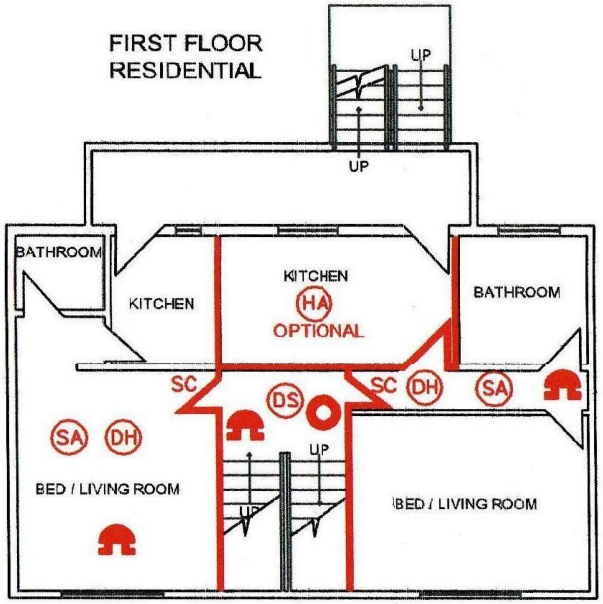
GROUND FLOOR
COMMERCIAL

DIAGRAM NO. 19

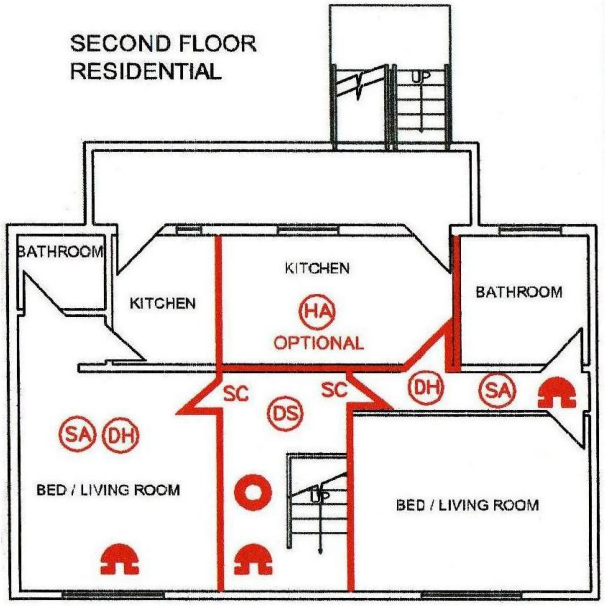
3 Storey Property
GF - Commercial
FF - 2 x SC Flatlets
SF - 2 x SC Flatlets

January 2009

FIRST FLOOR
RESIDENTIAL



SECOND FLOOR
RESIDENTIAL



KEY

- IP — Control and indicator panel linked to whole house system
- Manual call point linked to whole house system
- DS — Smoke detector linked to whole house system
- DH — Heat detector linked to whole house system
- Sounder linked to whole house system
- Emergency lighting
- SA — Smoke alarm with internal sounder—not linked to whole house system
- HA — Optional heat alarm – with internal sounder not linked to whole house system
- FD30S fire door
- 30 minutes fire resistance
- 60 minutes fire resistance
- SC Self closing device

CATEGORY 6
MIXED OCCUPANCIES OF FLATS AND BEDSITS

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

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 their own and other occupancies in the building. 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 common 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 or bedsit; and
- The risk in the common areas and means of escape from each flat and bedsit to a final exit using the common escape route.

C.6.4 The means of escape 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 within individual flats themselves should also be relatively simple to achieve. An assessment will need to be made of the layout of each flat to ensure satisfactory arrangements for limits on travel distance, inner rooms, and 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 flat and bedsit should be made a protected route to the final exit, and be enclosed with construction affording a fire resistance of 30 minutes. Flat and bedsit entrance doors should be FD30S and be fitted with a suitable self-closing device.

C.6.7 Adequate levels of fire separation will be required between floors and individual flats and bedsits to limit the spread of fire and smoke. However, in normal risk premises of up to three or four storeys, it should be possible to accept existing sound traditional construction, providing it is in a good state of repair.

C.6.8 If the flats and 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 1991 (or later versions) and guidance in Approved Document B, the risk within the commercial premises can generally be disregarded.

C.6.10 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 in the accommodation is extended into the commercial premises by the installation of heat detector(s) in the commercial premises.

C.6.11 The provision of an early warning of fire in the common stairway and within the occupants' own flats and bedsits will generally be required.

C.6.12 The use of mixed systems in accordance with BS 5839-6 is recommended.

C.6.13 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. *Note that the LACORS Guide recommends smoke detectors, as opposed to heat detectors, in bedsits without cooking facilities. However, in this guide, heat detectors are recommended, in conjunction with stand alone smoke alarms, to reduce the potential for false alarms.*
- A Category LD3 Grade D system in the hallway of each flat and in bedsits, to provide a warning to the individual occupants of a fire occurring in their own accommodation.

C.6.14 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 stand alone smoke alarms should be considered.

C.6.15 Emergency escape lighting should be provided to cover the common exit routes in accordance with the recommendations of BS 5266-1 and the requirements of BS 5266-7 and BS 5266-8.

C.6.16 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.

C.6.17 There will generally be no requirement for 'FIRE EXIT' signs in the common stairs as the layout and means of escape will be relatively simple.

C.6.18 A fire blanket should be recommended for each flat and bedsit with cooking facilities, and a simple multi-purpose fire extinguisher provided on each floor in the common stairway.

Drawing No. 20: 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.

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 a 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 stairway should be enclosed with fire resisting construction to form a protected exit 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

Generally, all floors should achieve a fire resistance of 30 minutes. The floor between the basement and the protected stairway at ground floor, including the underside of the stairway, should be 30 minute fire resisting. However, it should be possible to accept existing floors between other storeys, providing they are of sound traditional construction and are in a good state of repair.

The walls and partitions enclosing the protected stairway should achieve a fire resistance of 30 minutes.

It should be possible to accept existing walls and partitions, between flats and bedsits, of sound traditional construction which are in a good state of repair.

Fire Doors

All flat and bedsit entrance doors opening onto the protected stairway should be FD30S and be fitted with suitable self-closing devices.

There is no requirement for the internal doors within the flats to be fire resisting or be fitted with self-closing devices.

Fire Detection and Fire Alarm System

A mixed system in accordance with BS 5839-6 is recommended, 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 common means of escape:
  - Smoke detectors in the common entrance hall and on the landings at first and second floor levels.
  - Heat detectors in all flats and bedsits opening onto the protected stairway at ground and first floor levels.
  - Heat detector in the basement flat and in the living room/kitchen in the ground floor flat.
  - Manual call point by main entrance door at ground level.
  - Control and Indicator panel located in entrance hall at ground level.
  - Fire alarm sounders provided in each flat, bedsit and in the ground floor hall.

  and
- A Category LD3 Grade D system with smoke alarms in each flat and in the bedsit to provide a warning to the individual occupants 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.

Emergency Escape Lighting
Emergency escape lighting should be provided to cover the common escape stairway. The emergency escape lighting should be installed in accordance with the recommendations of BS 5266-1 and the requirements of BS 5266-7 and BS 5266-8.

Signs
There is no requirement for fire exit signs.

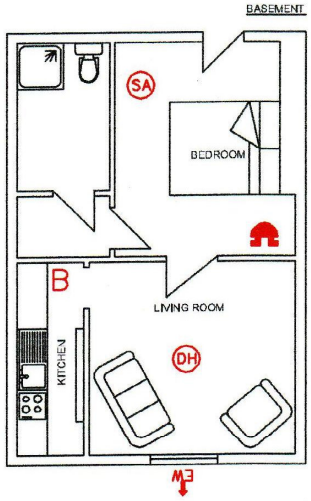
Fire action notices should be provided by each call point and in each flat/bedsit.

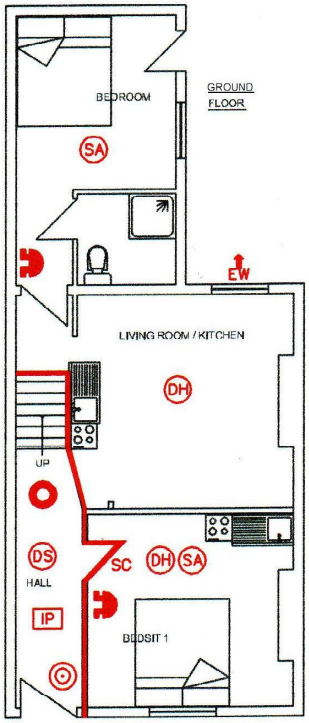
Fire-Fighting Equipment
A fire blanket is recommended for the kitchens in each flat and bedsit, and a simple multi-purpose fire extinguisher should be provided in the ground floor hall and on the first floor landing.

DRAWING NO. 20

3 Storey plus basement.
SC flats to basement, GFl, 1stFl & 2ndFl.
Bedsit to GFl with bathroom at 1stFl.

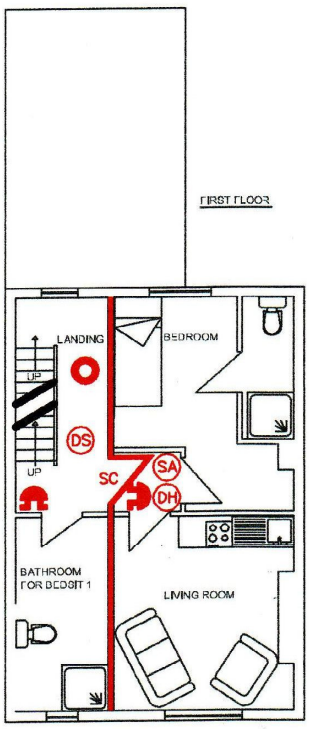
January 2009

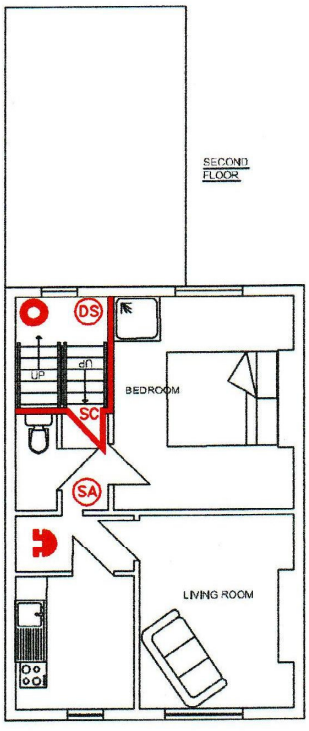




KEY

- DS — Smoke detector linked to whole house system
- DH — Heat detector linked to whole house system
- Manual call point linked to whole house system
- Sounder linked to whole house system
- IP — Control and indicator panel linked to whole house system
- Emergency lighting
- SA — Smoke alarm with internal sounder – not linked to whole house system
- FD30S fire door with self closing device
- 30 minutes fire resistance
- EW — Escape window





Drawing No. 21: 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.

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 smoke alarms 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 stairway should be enclosed with 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 final exit door from the premises should 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

Generally, all floors should achieve a fire resistance of 30 minutes. The floor between the basement and the protected stairway at ground floor, including the underside of the stair, should be 30 minute fire resisting. However, it should be possible to accept existing floors between other storeys, providing they are of sound traditional construction and are in a good state of repair.

The walls and partitions enclosing the protected stairway should afford a full fire resistance of 30 minutes.

It should be possible to accept existing walls and partitions between flats and bedsit of sound traditional construction which are in a good state of repair.

Fire Doors

All flat and bedsit entrance doors opening onto the protected stairway should be FD30S and be fitted with suitable self-closing devices.

There is no requirement for the internal doors within the flats to be fire resisting or be fitted with self-closing devices.

Fire Detection and Fire Alarm System
A mixed system in accordance with BS 5839-6 is recommended, 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:
  - Smoke detectors in the common entrance hall and on the landings at first and second floor levels.
  - Heat detectors in each flat and bedsit opening onto the protected stairway at ground and first floor levels.
  - Heat detector in basement flat.
  - Manual call point by main entrance door at ground level.
  - Control and 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 basement, ground and first floor flats and the bedsit to provide a warning to the individual occupants 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 stairway. The emergency escape lighting should be installed in accordance with the recommendations of BS 5266-1 and the requirements of BS 5266-7 and BS 5266-8.

Signs
There is no requirement for fire exit signs.

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

Fire-Fighting Equipment
A fire blanket should be provided in each kitchen, and a simple multi-purpose fire extinguisher should be provided in the common stairway on the ground and first floor.

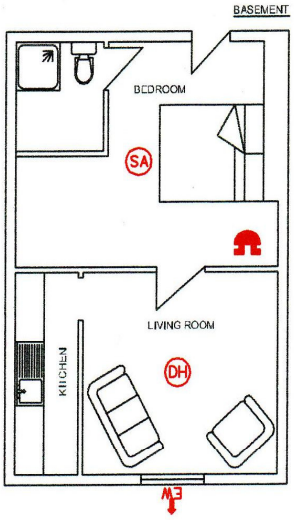
DRAWING NO. 21

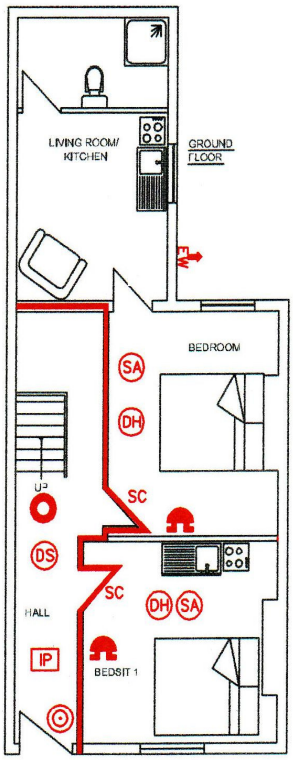
3 storey plus basement.
SC flats to basement, GFl, 1stFl and 2ndFl.
Bedsit to GFl with bathroom at 1stFl.

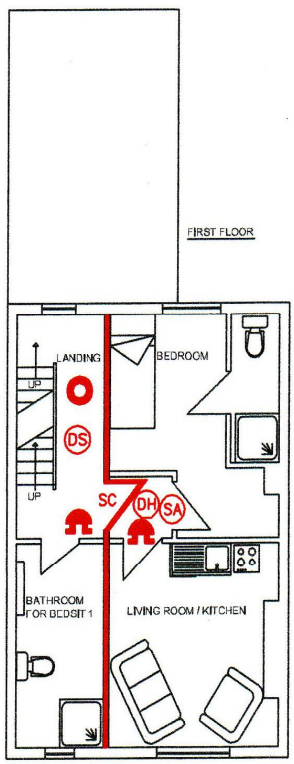
January 2009

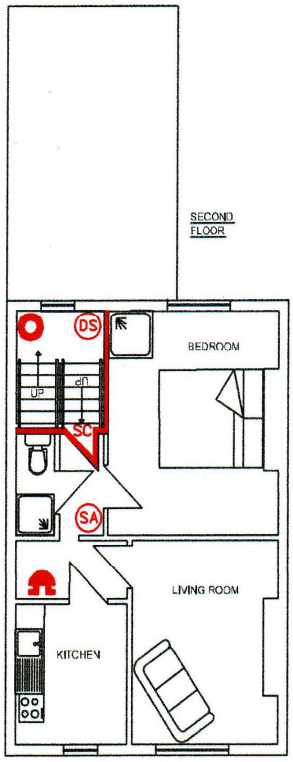
KEY

- (DS) Smoke detector linked to whole house system
- (DH) Heat detector linked to whole house system
- Manual call point linked to whole house system
- Sounder linked to whole house system
- (IP) Control and indicator panel linked to whole house system
- Emergency lighting
- (SA) Smoke alarm with internal sounder – not linked to whole house system
- FD30S fire door with self closing device
- 30 minutes fire resistance
- EW Escape window









Drawing No. 22: 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

The rear self-contained bedsit at ground level could be considered to be sufficiently separate 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 a 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 stairway should be enclosed with 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 final exit doors from the premises should 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

Generally, all floors should achieve a fire resistance of 30 minutes. The floor between the basement and the protected stairway at ground floor, including the underside of the stairway, should be 30 minute fire resisting. However, it should be possible to accept existing floors between other storeys, providing they are of sound traditional construction and are in a good state of repair.

The walls and partitions enclosing the protected stairway should afford a fire resistance of 30 minutes.

It should be possible to accept existing walls and partitions between flats and bedsits of sound traditional construction which are in a good state of repair.

Fire Doors
All doors to flats and bedsit doors opening onto the protected stairway should be FD30S and be fitted with suitable self-closing devices.

There is no requirement for the internal doors within the flats to be fire resisting or be fitted with self-closing devices.

Fire Detection and Fire Alarm System
A mixed system in accordance with BS 5839-6 is recommended, the system should incorporate:

A Category LD2 Grade A system to give 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 with:

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

A Category LD3 Grade D system, with smoke alarms in the basement flat and the bedsits on ground floor, to provide a warning to the individual occupants 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 and the requirements of BS 5266-7 and BS 5266-8.

Signs
There is no requirement for fire exit signs.

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

Fire-Fighting Equipment
A fire blanket should be provided in each kitchen, and a simple multi-purpose extinguisher provided in the common stairway on the ground, first and second floors.

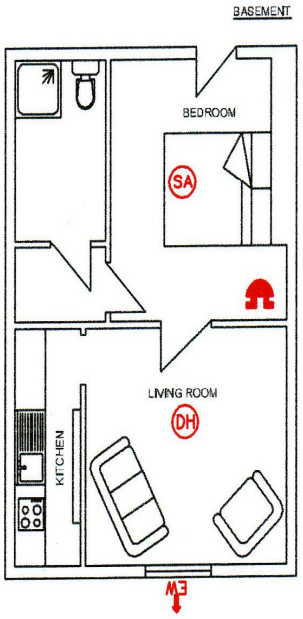
DRAWING NO. 22

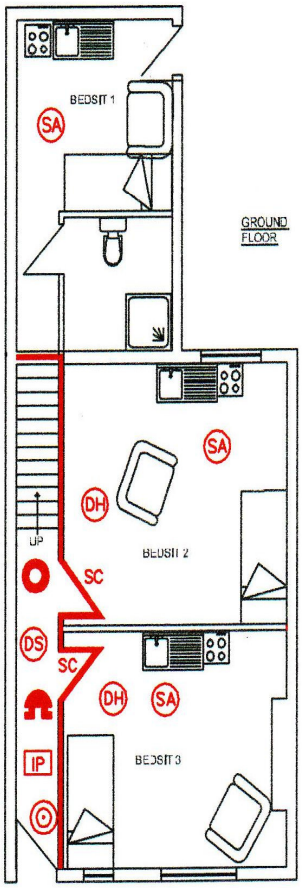
3 Storey plus basement.
Basement = SC flat.
GFl = 1 X Rear SC bedsit
2 X Bedsits sharing 1stFl bathroom.
1stFl = Rear right bedroom & front right living room is one letting.
2ndFl = SC flat.

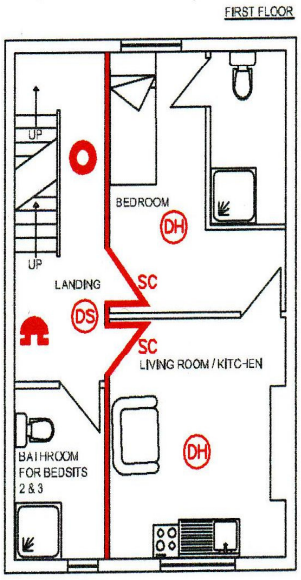
January 2009

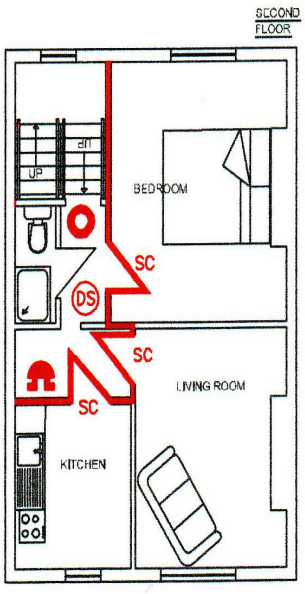
KEY

- (DS) Smoke detector linked to whole house system
- (DH) Heat detector linked to whole house system
- Manual call point linked to whole house system
- Sounder linked to whole house system
- IP Control and indicator panel linked to whole house system
- Emergency lighting
- (SA) Smoke alarm with internal sounder – not linked to whole house system
- FD30S fire door with self closing device
- 30 minutes fire resistance
- EW Escape window









Drawing No. 23: 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.

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 alternative routes to the stairway.

The common stairway should be enclosed with 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 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, or alternatively used for storage only.

The external stairway at first floor level could be utilized as an additional means of escape from upper floors. The use of the external stairs will increase the options for, and improve the means of, escape from upper floors, and may allow a reduction in fire resistance to floors, walls and doors within the overall risk assessment.

Fire Separation

Generally, all floors should achieve a fire resistance of 30 minutes. The floor between the cellar and the ground floor should be 30 minute fire resisting. It should be possible to accept existing floors between other storeys, providing they are of sound traditional construction and they are in a good state of repair.

The walls and partitions enclosing the protected stairway should afford a fire resistance of 30 minutes.

It should be possible to accept existing walls and/or partitions between bedsits providing they are of sound traditional construction and in a good state of repair.

The kitchen in the second floor flat should be enclosed with fire resisting construction. However, it should be possible to accept existing partitions, providing they are of sound traditional construction and in a good state of repair.

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

Fire Doors

All doors from risk rooms such as bedsits, kitchen, office and the flat on the second floor opening into the protected stairway should be FD30S, and be fitted with suitable self-closing devices.

The door between the kitchen and the bedroom in the second floor flat should be a substantial solid door and be a good fit in its frame.

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, if this is utilized as an alternative means of escape.

Fire Detection and Fire Alarm System
A mixed system in accordance with BS 5839-6 is recommended, 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:
  - Smoke detectors in the common entrance hall and on the landings at first and second floor levels and in the cellar.
  - *Heat detectors in all bedsits and risk rooms opening onto the protected route at ground and first floor levels. Note that the LACORS Guide recommends smoke detectors as opposed to heat detectors in bedsits without cooking facilities. However, heat detectors are recommended in this guide, in conjunction with stand alone smoke alarms, because of the possibility of increased false alarms.*
  - Manual call point by main entrance door at ground level.
  - Control and 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
- A Category LD2 Grade D system in the second floor flat, with a smoke alarm in each room and a heat alarm in the kitchen, to provide a warning to the individual occupants of the flat of a fire in their own accommodation.
- *A Category LD3 Grade D system with smoke alarms in each bedsit to provide a warning to the individual occupants of a fire in their own accommodation.*

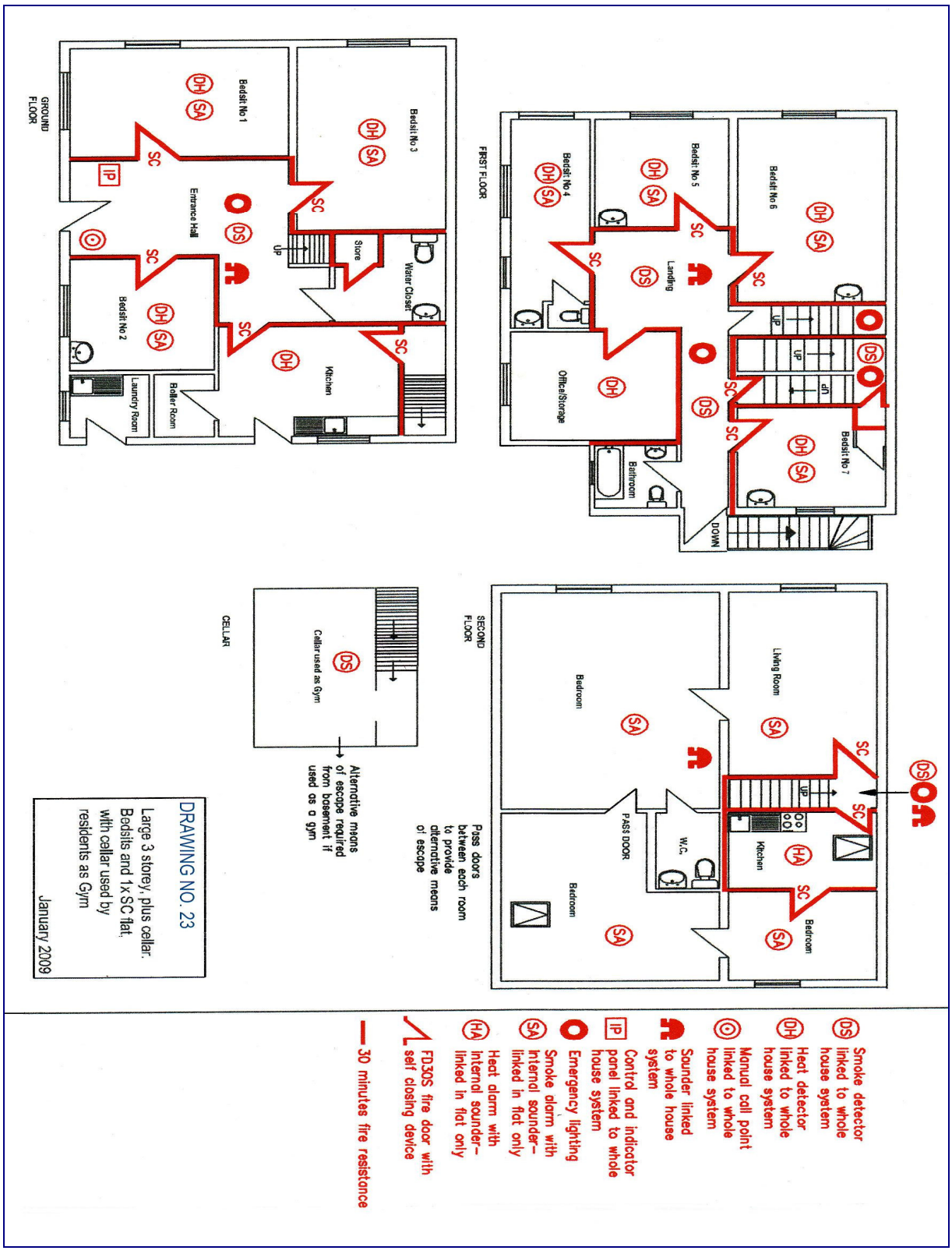
Emergency Escape Lighting
Emergency escape lighting should be provided to cover the common escape routes. The emergency escape lighting should be installed in accordance with the recommendations of BS 5266-1 and the requirements of BS 5266-7 and BS 5266-8.

Signs
There is no requirement for fire 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 the kitchen in the second floor flat, and simple multi-purpose fire extinguisher provided in the common areas at ground and first floor levels.



CATEGORY 7
BEDSITS

Bedsits, incorporating drawing Nos. 24, 25, 26, 27, 28, 29, 30 and 31.

C.7.1 The approach to fire safety in these properties should be similar to that adopted in the previous sections on flats and 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 or shower rooms.

C.7.3 The occupants of individual bedsits should be protected from the effects of fire in their own, and 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 common 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 in the common areas and means of escape from each bedsit to a final exit using the common escape route.

C.7.5 The means of escape 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 route from the front door of each bedsit should be made a protected route and be enclosed with construction affording a fire resistance of 30 minutes. Bedsit entrance doors should be FD30S and be fitted with a suitable self-closing device.

C.7.7 Adequate levels of fire separation will be required between floors and individual units to limit the spread of fire and smoke. However, in lower risk premises of up to three or four storeys it should be possible to accept existing sound traditional construction, providing it is in a good state of repair.

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 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 detector(s) in the commercial premises.

C.7.10 The provision of an early warning of fire in both the common areas and individual bedsits will be required.

C.7.11 A Category LD2 Grade A system in accordance with BS 5839-6 should be provided to give a sufficient warning to all occupants of the building of a fire that might affect the common means of escape to provide sufficient time to escape*. Note that the LACORS Guide recommends smoke detectors as opposed to heat detectors in bedsits without cooking facilities. However, heat detectors are recommended in this guide, in conjunction with stand alone smoke alarms to reduce the possibility of increased false alarms.*

C.7.12 A Category LD3 Grade D system should be provided in each bedsit to protect the occupants from the effects of fire in their own accommodation. Note; please refer to C.7.11 above for bedsits without cooking facilities.

C.7.13 Emergency escape lighting should be provided to cover the common exit routes in accordance with the recommendations of BS 5266-1 and the requirements of BS 5266-7 and BS 5266-8.

C.7.14 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 bedsit.

C.7.15 There will generally be no requirement for 'FIRE EXIT' signs in the common stairs as the layout and means of escape will be relatively simple.

C.7.16 A fire blanket should be recommended in each bedsit, with cooking facilities, and a simple multi-purpose fire extinguisher provided in the common areas on each floor.

Drawing No. 24: Three storey property with basement

A self-contained unit, with three bedsits sharing kitchen, in the basement, and bedsits on, ground, first and second floor levels sharing lounge, kitchen and bathroom facilities.

Means of Escape

Bedsits 2 and 3 in the basement flat have exit doors leading direct to the open yard, with access to an external escape stairway. Bedsit 1 should be provided with a suitable escape window leading to a place of safety, clear of the building.

The stairway between the ground floor and the upper floors should be enclosed with 30 minute fire resisting construction to form a protected exit 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 bedsits should be capable of being opened from the inside without the use of a key.

Any security locks fitted to final exit doors from the building should 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

Generally, all floors should achieve a fire resistance of 30 minutes. The floor between the basement and the ground floor should be 30 minute fire resisting. However, it should be possible to accept existing floors between other storeys, providing they are of sound traditional construction and are in a good state of repair.

The walls and partitions enclosing the protected stairway should afford a fire resistance of 30 minutes.

It should be possible to accept existing walls and partitions between bedsits of sound traditional construction which are in a good state of repair.

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

Fire Doors

All doors from risk rooms, such as bedsits and kitchens opening into the protected stairway, should be FD30S standard and be fitted with suitable self-closing devices.

There is no requirement for the doors to the bedsits in the basement to be fire resisting, as each bedsit has an alternative means of escape. However, it is recommended that the door to each bedsit should be a substantial solid door and is fitted with a suitable self-closing device.

Fire Detection and Fire Alarm System
A mixed system in accordance with BS 5839-6 is recommended; the system should incorporate:

- 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:
  - Smoke detectors in the common entrance hall and on the landings at first and second floor levels.
  - Heat detector in the basement.
  - *Heat detectors in all bedsits and risk rooms opening onto the protected route at ground, first and second floor levels. Note that the LACORS Guide recommends smoke detectors as opposed to heat detectors in bedsits without cooking facilities. However, heat detectors are recommended in this guide, in conjunction with stand alone smoke alarms, because of the possibility of increased false alarms.*
  - Manual call points by the main entrance door at ground level and the entrance to the basement flat.
  - Control and Indicator panel located in entrance hall at ground level.
  - Fire alarm sounders provided in the basement, ground floor hall, and first and second floor landings.

  and

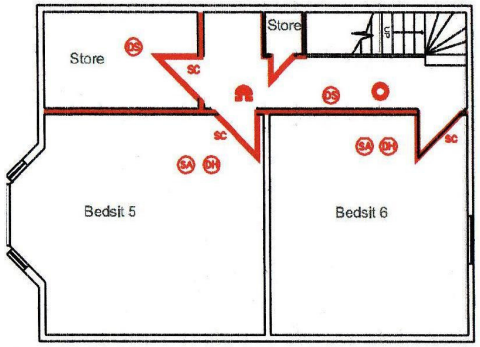
- A separate Category LD3 Grade D system in the basement, with a smoke alarm in the common lobby and smoke alarms in each bedsit (interlinked), to provide a warning to the occupants of the bedsits in the event of a fire, in the lobby, and in their own bedsit.
- *A Category LD3 Grade D system, with smoke alarms in each bedsit, on the ground, first and second floors, to provide a warning to the occupants of a fire occurring 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 and the requirements of BS 5266-7 and BS 5266-8.

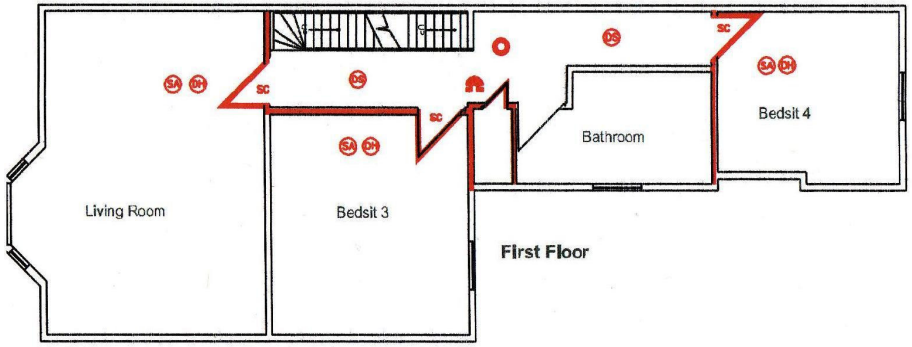
Signs
There is no requirement for fire exit signs.

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

Fire-Fighting Equipment
A fire blanket should be recommended in each kitchen, and a simple multi-purpose fire extinguisher should be recommended and provided in the common areas on each floor.



Second Floor



First Floor

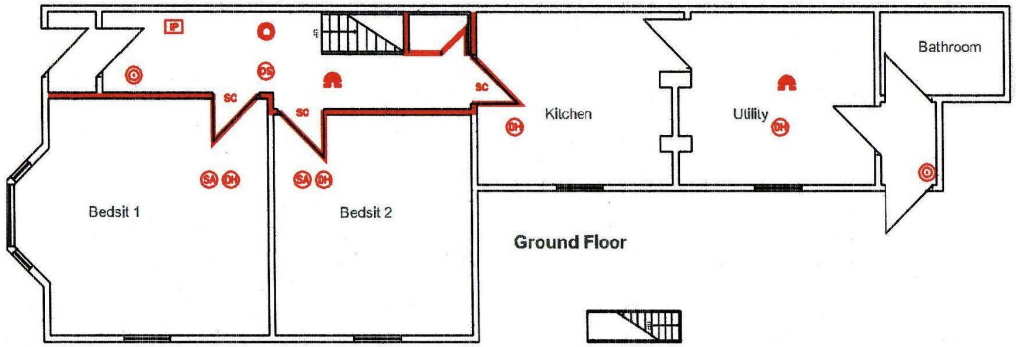
DRAWING NO. 24

3 Storey property and basement
Self contained Bedsits in basement
Bedsits on all other floors

January 2009

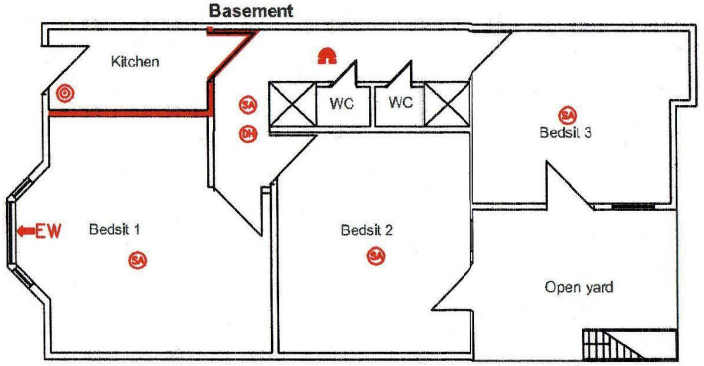
KEY

- DS — Smoke detector linked to whole house system
- DH — Heat detector linked to whole house system
- Manual call point linked to whole house system
- Sounder linked to whole house system
- IP — Control and indicator panel linked to whole house system
- Emergency lighting
- FD30S fire door with self closing device
- 30 minutes fire resistance
- SA — Smoke alarm with internal sounder– not linked to whole house system
- EW — Escape window



Ground Floor

Basement



Drawing No. 25: Three storey property comprising, bedsits on each floor, sharing toilet and bathroom facilities

Means of Escape
The stairway should be enclosed with 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 should have an internal thumb-turn or lever release.

Fire Separation
Generally, all floors should achieve a fire resistance of 30 minutes. However, it should be possible to accept existing floors of sound traditional construction which are in a good state of repair.

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

It should be possible to accept existing walls and partitions between bedsits of sound traditional construction which are in a good state of repair.

Fire Doors
All doors from bedsits opening into the protected stairway should be FD30S and be fitted with suitable self-closing devices.

Fire Detection and Fire Alarm System
A mixed system in accordance with BS 5839-6 is recommended; the system should incorporate:

A Category LD2 Grade A system should be provided to give a sufficient warning to all occupants of the building of a fire that might affect the means of escape:

- Smoke detectors in the common entrance hall and on the landings at first and second floor levels.
- Heat detectors in all bedsits opening onto the protected stairway at ground and first floor levels.
- Manual call point by main entrance door at ground level.
- Control and 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 floors.

  and

- A Category LD3 Grade D system with smoke alarms in each bedsit to provide a warning to the occupants of a fire occurring 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 and the requirements of BS 5266-7 and BS 5266-8.

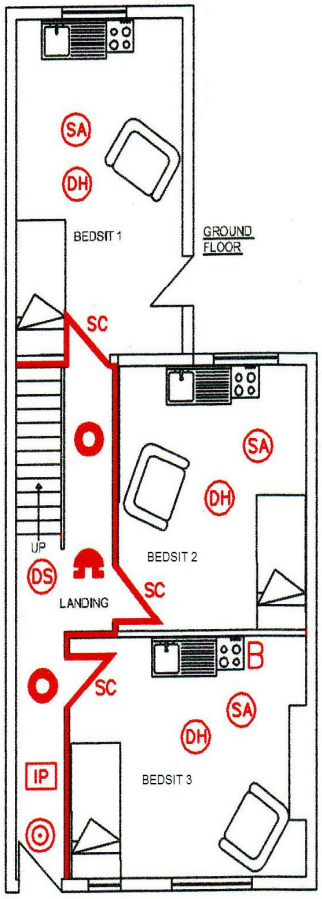
Signs
There is no requirement for fire exit signs.

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

Fire-Fighting Equipment
A fire blanket should be recommended for each bedsit, with cooking facilities, and a simple multi-purpose fire extinguisher should be recommended and provided in the ground floor hall and on the first floor landing.

KEY

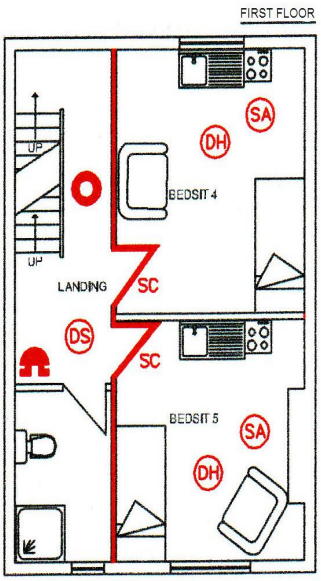
- (SA) Smoke alarm with internal sounder – not linked to whole house system
- (DS) Smoke detector linked to whole house system
- (DH) Heat detector linked to whole house system
- Manual call point linked to whole house system
- Sounder linked to whole house system
- (IP) Control and indicator panel linked to whole house system
- Emergency lighting
- FD30S fire door with self closing device
- 30 minutes fire resistance

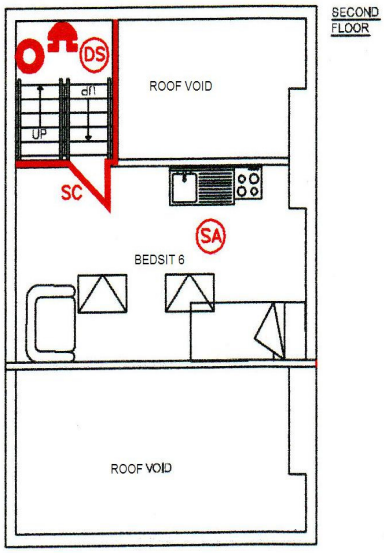


DRAWING NO. 25

3 STOREY
6 x SINGLE PERSON BEDSITS
SHARING FF BATHROOM

January 2009





Drawing No. 26: Three storey property comprising bedsits on each level. Bedsits on ground floor share a kitchen. Bedsits on first and second floor have their own cooking facilities.

Means of Escape

The stairway should be enclosed with 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 final exit door from the premises should have an internal thumb-turn or lever release.

Fire Separation

Generally, all floors should achieve a fire resistance of 30 minutes. However, it should be possible to accept existing floors of sound traditional construction which are in a good state of repair.

The walls and partitions enclosing the protected stairway should afford a fire resistance of 30 minutes.

It should be possible to accept existing walls and partitions between bedsits of sound traditional construction which are in a good state of repair.

Fire Doors

All doors from risk rooms, such as bedsits and the kitchen, opening into the protected stairway should be FD30S standard and be fitted with suitable self-closing devices.

Fire Detection and Fire Alarm System

A mixed system in accordance with BS 5839-6 is recommended; the system should incorporate:

A Category LD2 Grade A system should be provided to give a sufficient warning to all occupants of the building of a fire that might affect the common means of escape to give them sufficient time to exit the building, with:

- Smoke detectors in the common entrance hall and on the landings at first and second floor levels.
- *Heat detectors in all bedsits opening onto the protected stairway at ground and first floor levels. Note that the LACORS Guide recommends smoke detectors as opposed to heat detectors in bedsits without cooking facilities. However, heat detectors are recommended in this guide, in conjunction with stand alone smoke alarms because of the possibility of increased false alarms.*

- Manual call point by main entrance door at ground level.
- Control and 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 floors.

  and

- *A Category LD3 Grade D system with smoke alarms in each bedsit to provide a warning to the occupants of a fire occurring 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 and the requirements of BS 5266-7 and BS 5266-8.

Signs
There is no requirement for fire exit signs.

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

Fire-Fighting Equipment
A fire blanket should be recommended for each bedsit, with cooking facilities and in the shared kitchen. It is recommended that a simple multi-purpose fire extinguisher is provided in the ground floor hall and on the first floor landing.

KEY

- (SA) Smoke alarm with internal sounder – not linked to whole house system
- (DS) Smoke detector linked to whole house system
- (DH) Heat detector linked to whole house system
- Manual call point linked to whole house system
- Sounder linked to whole house system
- IP Control and indicator panel linked to whole house system
- Emergency lighting
- FD30S fire door with self closing device
- 30 minutes fire resistance

DRAWING NO. 26

3 Storey.
5 x Single person bedsits, of which:
3 Bedsits have own cooking facilities
2 Bedsits have shared facilities.

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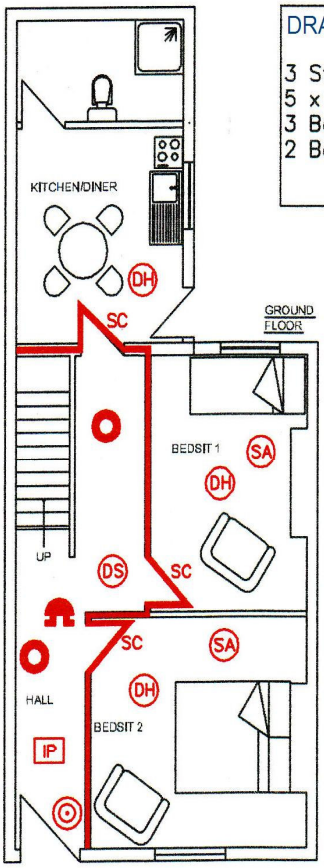
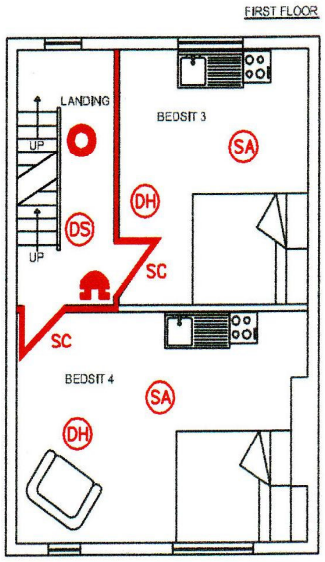
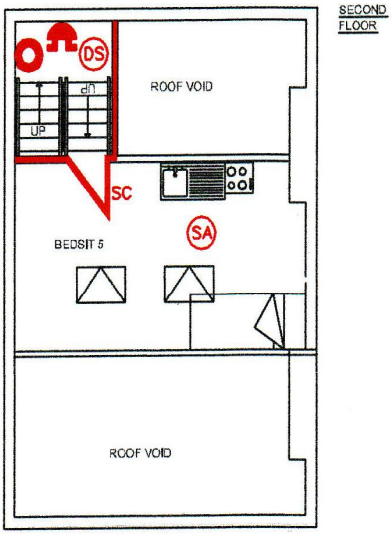






Drawing No. 27: Three storey property comprising, individual bedsits on first and second floors. Occupants share kitchen, dining room and living room

Means of Escape
The stairway should be enclosed with 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 final exit door from the premises should have an internal thumb-turn or lever release.

Fire Separation
Generally, all floors should achieve a fire resistance of 30 minutes. However, it should be possible to accept existing floors of sound traditional construction which are in a good state of repair.

The walls and partitions enclosing the protected stairway should afford a fire resistance of 30 minutes.

It should be possible to accept existing walls and partitions between bedsits and other rooms of sound traditional construction which are in a good state of repair.

Fire Doors
All doors from risk rooms, such as bedsits and the kitchen, opening into the protected stairway should be FD30S standard and be fitted with suitable self-closing devices.

Fire Detection and Fire Alarm System
A mixed system in accordance with BS 5839-6 is recommended; the system should incorporate:

- A Category LD2 Grade A to give a sufficient warning to all occupants of the building of a fire that might affect the common means of escape.
- Smoke detectors in the common entrance hall and on the landings at first and second floor levels.
- *Heat detectors in all risk rooms opening onto the protected stairway at ground, first and second floor levels. Note that the LACORS Guide recommends smoke detectors as opposed to heat detectors in bedsits without cooking facilities. However, heat detectors are recommended in this guide, in conjunction with stand alone smoke alarms to reduce the possibility of increased false alarms.*
- Manual call point by main entrance door at ground level.

- Control and 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 floors.

  and

- *A Category LD3 Grade D system with smoke alarms in each bedsit to provide a warning to the occupants of a fire occurring 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 and the requirements of BS 5266-7 and BS 5266-8.

Signs
There is no requirement for fire exit signs.

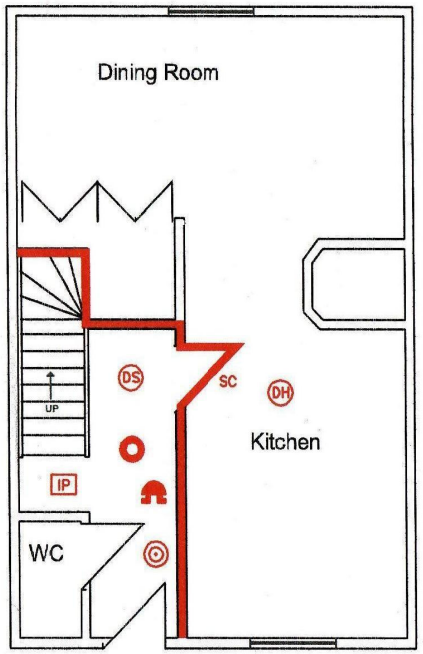
Fire action notices should be provided by each call point and in each bedsit.

Fire-Fighting Equipment
A fire blanket should be recommended for the shared kitchen, and a simple multi-purpose fire extinguisher should be recommended and provided in the ground floor hall and first floor landing.

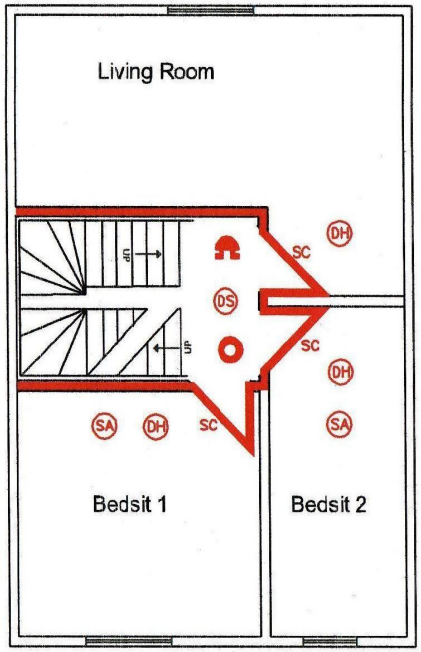
DRAWING NO. 27

3 Storey property
Kitchen/Dining room on Ground floor
Bedsits on First and Second floor

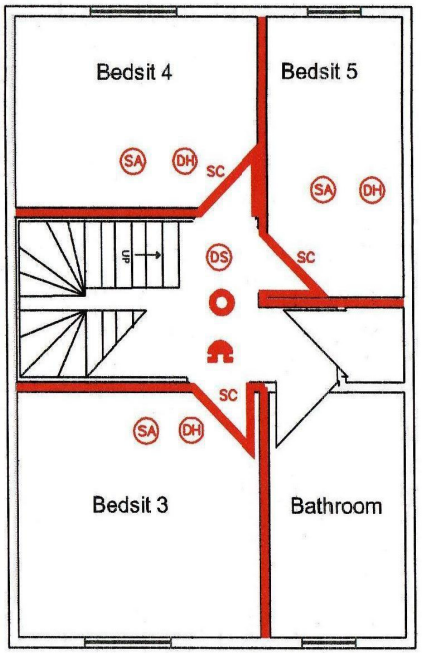
January 2009



Ground Floor



First Floor



Second Floor

KEY

- SA — Smoke alarm with internal sounder – not linked to whole house system
- DS — Smoke detector linked to whole house system
- DH — Heat detector linked to whole house system
- Manual call point linked to whole house system
- Sounder linked to whole house system
- IP — Control and indicator panel linked to whole house system
- Emergency lighting
- FD30S fire door with self closing device
- 30 minutes fire resistance

Drawing No. 28: Three storey property with a cellar, comprising bedsits on all floors, with shared kitchen and bathroom facilities.

Means of Escape
The stairway should be enclosed with 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
Generally, all floors should achieve a fire resistance of 30 minutes.

The floor between the cellar and the ground floor, including the underside of the stairway, should be 30 minute fire resisting.

However, it should be possible to accept existing floors between other storeys, providing they are of sound traditional construction and in a good state of repair.

The walls and partitions enclosing the protected stairway should afford a fire resistance of 30 minutes.

It should be possible to accept existing walls and partitions between bedsits and other rooms of sound traditional construction which are in a good state of repair.

Fire Doors
All doors from risk rooms, such as bedsits, the kitchen and the store, opening into the protected stairway, should be FD30S standard and be fitted with suitable self-closing devices.

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

Fire Detection and Fire Alarm System
A mixed system in accordance with BS 5839-6 is recommended, the system should incorporate:

- A Category LD2 Grade A system to give 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.

- 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 store room on the second floor and in the cellar.
- *Heat detectors in all rooms opening onto the protected route at ground and first floor levels. Note that the LACORS Guide recommends smoke detectors as opposed to heat detectors in bedsits without cooking facilities. However, heat detectors are recommended in this guide, in conjunction with stand alone smoke alarms to reduce the possibility of increased false alarms.*
- Manual call point by main entrance door at ground level.
- Control and 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.

  and

- *A Category LD3 Grade D system with smoke alarms in each bedsit to protect the occupants from 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 and the requirements of BS 5266-7 and BS 5266-8.

Signs
There is no requirement for fire exit signs.

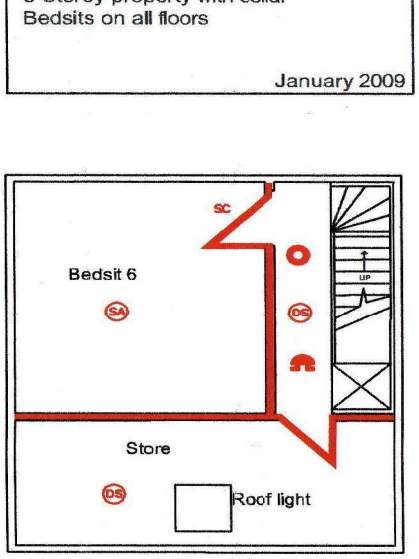
Fire action notices should be provided by each call point and in each bedsit.

Fire-Fighting Equipment
A fire blanket should be recommended for the shared kitchen, and a simple multi-purpose fire extinguisher should be recommended and provided in the ground floor hall and on the landings at first and second floor levels.

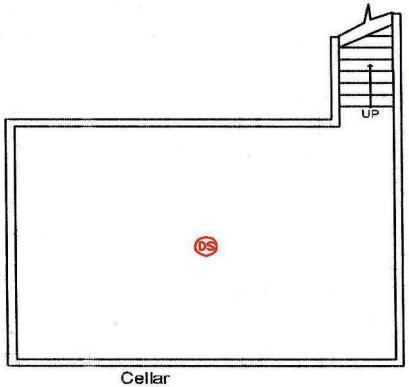
DRAWING NO. 28

3 Storey property with cellar
Bedsits on all floors

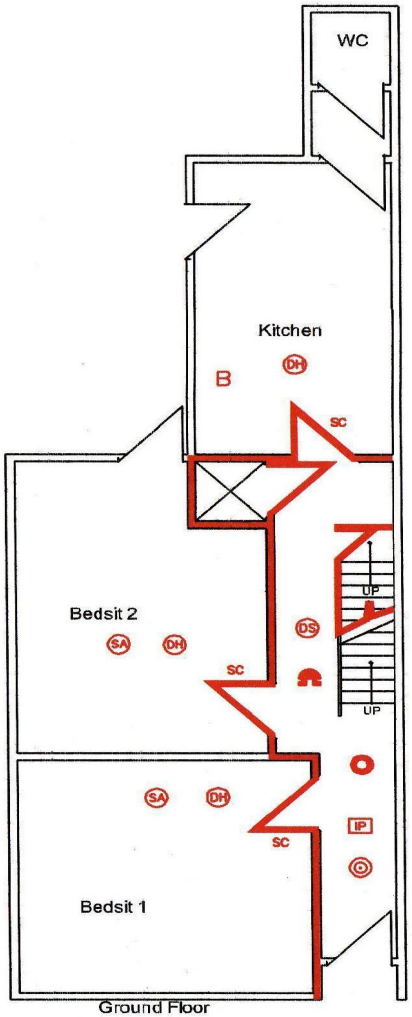
January 2009



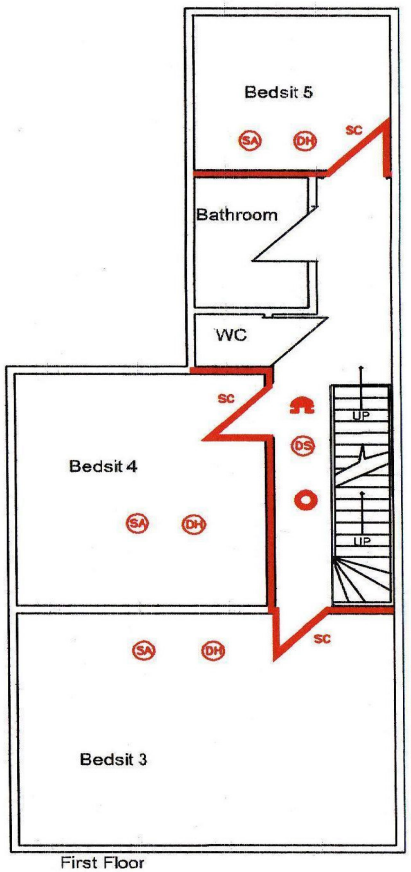
Second Floor



Cellar



Ground Floor



First Floor

KEY

- SA — Smoke alarm with internal sounder — not linked to whole house system
- DS — Smoke detector linked to whole house system
- DH — Heat detector linked to whole house system
- Manual call point linked to whole house system
- Sounder linked to whole house system
- IP — Control and indicator panel linked to whole house system
- Emergency lighting
- FD30S fire door with self closing device
- 30 minutes fire resistance

Drawing No. 29: Three storey property, with a cellar, comprising bedsits on all floors. Occupants share kitchen and bathroom facilities

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

The stairways should be enclosed with 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
Generally all floors should achieve a fire resistance of 30 minutes.

The floor between the cellar and the ground floor should be 30 minute fire resisting,

However, it should be possible to accept existing floors between other storeys, providing they are of sound traditional construction and in a good state of repair.

The walls and partitions enclosing the protected stairways should afford a full 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.

It should be possible to accept existing walls and partitions between bedsits and other rooms of sound traditional construction which are in a good state of repair.

Fire Doors
All doors from risk rooms, such as bedsits, kitchens and the store, opening into the protected stairways should be to FD30S standard and be fitted with suitable self-closing devices.

Fire Detection and Fire Alarm System
A mixed system in accordance with the recommendations of BS 5839-6 is recommended; the system should incorporate:

- A Category LD2 Grade A system should be provided to give sufficient warning to all occupants of the building of a fire that might affect the common means of escape to give them sufficient time to exit the building.
- Smoke detectors in the cellar, the common entrance hall and on the landings at first and second floor levels.
- Smoke detector in the store room in the cellar.
- *Heat detectors in all bedsits and the kitchen opening onto the protected stairway at ground, first and second floor levels* and the cellar. *Note that the LACORS Guide recommends smoke detectors as opposed to heat detectors in bedsits without cooking facilities. However, heat detectors are recommended in this guide, in conjunction with stand alone smoke alarms to reduce the possibility of increased false alarms.*
- Manual call point by main entrance door at ground level.
- Control and 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.

  and

- *A Category LD3 Grade D system with smoke alarms in each bedsit to protect the occupants from a fire in their own bedsits*.

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 and the requirements of BS 5266-7 and BS 5266-8.

Signs
There is no requirement for fire exit signs.

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

Fire-Fighting Equipment
A fire blanket should be recommended for the shared kitchens, and a simple multi-purpose fire extinguisher recommended and provided in the common areas on each floor.

DRAWING N0. 29

3 Storey property with cellar
Bedsits on all floors

January 2009

Drawing No. 30: Three storey property comprising a single bedsit on ground floor with kitchen/dining room on first floor and bedsits on first and second floors

Means of Escape
The stairway should be enclosed with 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 final exit door from the premises should 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, including the floor over the garage.

Generally, all floors should achieve a fire resistance of 30 minutes. However, it should be possible to accept existing floors, providing they are of sound traditional construction and in a good state of repair.

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

It should be possible to accept existing walls and partitions between bedsits and rooms of sound traditional construction which are in a good state of repair.

Fire Doors
All doors from risk rooms, such as bedsits and the kitchen, opening into the protected stairway should be FD30S and be fitted with suitable self-closing devices.

Fire Detection and Fire Alarm System
A mixed system in accordance with the recommendations of BS 5839-6 is recommended; the system should incorporate:

- A Category LD2 Grade A system should be provided to give a warning to all occupants of the building of fire that might affect the means of escape.
- Smoke detectors in the common entrance hall and on the landings at first and second floor levels.
- *Heat detectors in all risk rooms opening onto the protected route at ground, first and second floor levels. Note that the LACORS Guide recommends smoke detectors as opposed to heat detectors in bedsits without cooking facilities.*

However, heat detectors are recommended in this guide, in conjunction with stand alone smoke alarms to reduce the possibility of increased false alarms.

- *Consideration should also be given to the provision of an additional heat detector in the garage.*
- Manual call point by main entrance door at ground level.
- Control and 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.

  and

- *A Category LD3 Grade D system with smoke alarms in each bedsit to protect the occupants from a fire in their own bedsit.*

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 and the requirements of BS 5266-7 and BS 5266-8.

Signs
There is no requirement for fire exit signs.

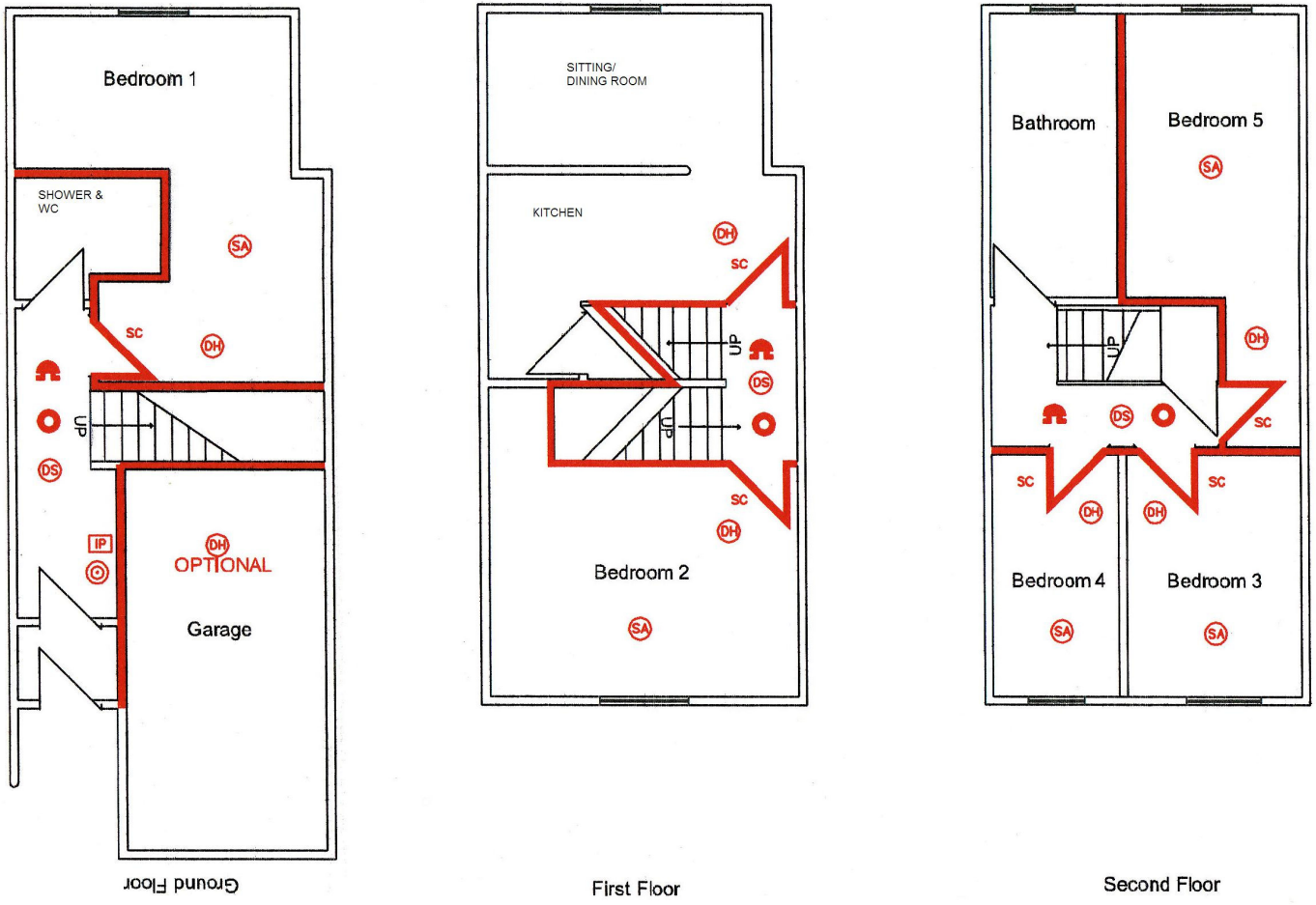
Fire action notices should be provided by each call point and in each bedsit.

Fire-fighting Equipment
A fire blanket should be recommended for the shared kitchen and a simple multi-purpose fire extinguisher should be recommended and provided in the common areas on each floor.

DRAWING NO. 30

3 Storey property
Bedsits on each floor

January 2009



KEY

- DS — Smoke detector linked to whole house system
- DH — Heat detector linked to whole house system
- Manual call point linked to whole house system
- Sounder linked to whole house system
- IP — Control and indicator panel linked to whole house system
- Emergency lighting
- FD30S fire door with self closing device
- 30 minutes fire resistance
- SA — Smoke alarm with internal sounder

DRAWING No 31: Two storey house, with bedsits on the ground and first floor, and shared kitchen, living room, and bathroom facilities

Means of Escape
The main entrance door and door from the kitchen on the ground floor should be made available for emergency egress in the event of fire.

There are generally two acceptable alternatives to provide adequate means of escape from the first floor:

(1) Provide a protected route (stairway) to the final exit, or

(2) Provide emergency escape windows to habitable rooms.

(1) Protected route (stairway) to exit
No requirement for a 30 minute fire resisting protected route. However, the route should be fully enclosed and existing walls and partitions should be of sound traditional construction and be in a good state of repair. Existing substantial solid doors would be considered acceptable, providing they are in a good state of repair and a good fit in their frames. Doors opening onto the stairway from risk rooms should be fitted with suitable self-closing devices.

(2) Emergency Escape Windows.
Each bedsit 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 bedsits 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.

Fire Separation
In existing properties of two floors there will generally be no requirement for the provision of additional fire resistance to walls and floors.

Floors and walls should be of sound traditional construction and in a good state of repair should be accepted.

Fire Doors

If emergency window escape is adopted from the first floor, there will no requirement for any of the doors opening onto the stairway to be fire resisting. However, it is recommended that the door to the living room should be a substantial solid door.

If a protected route is adopted, existing substantial solid doors would be considered acceptable, providing they are in a good state of repair and a good fit in their frames.

It is recommended that all doors from risk rooms, such as bedsits and the living room, should be fitted with suitable self-closing devices.

Fire Detection and Fire Alarm System
A mixed system in accordance with the recommendations of BS 5839-6 is recommended. However, in small lower risk premises of limited size it should be possible to accept a slightly modified system, utilising two separate Grade D systems. In this situation, the system should incorporate:

- A Category LD2 Grade D system should be provided to give a warning to all occupants with optical smoke alarms in the ground floor hall, and on the first floor landing. An additional smoke alarm should be provided in the living room, and a heat alarm in the kitchen.

- Separate Grade D smoke alarms should be provided in each bedsit to protect the occupants from a fire in their own accommodation.

Signs
There is no requirement for fire exit signs or notices.

Fire-Fighting Equipment
A fire blanket should be recommended and provided in the shared kitchen, and a simple multi-purpose fire extinguisher recommended and provided in the ground floor hall and first floor landing.

DRAWING NO. 31

2 Storey Property.
Bedsits on ground and first floor

January 2009

OPTION 1

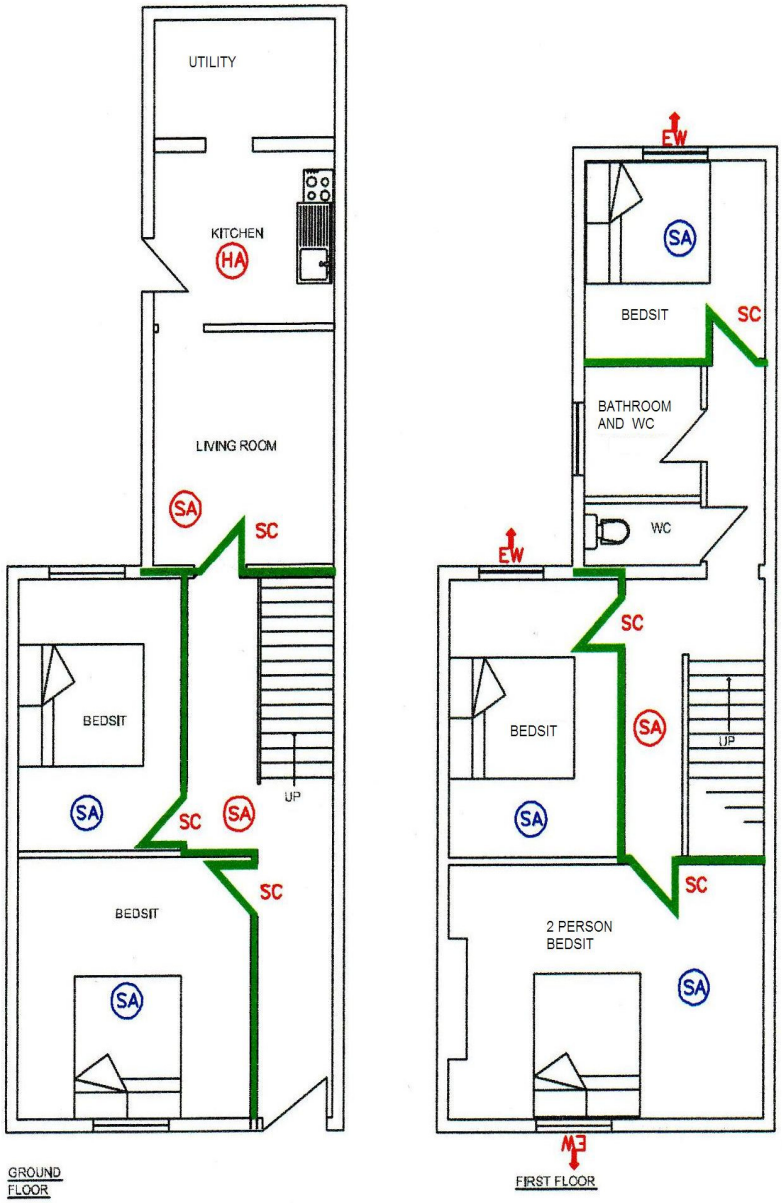
Protected Route

OPTION 2

Escape windows to bedsits on first floor

KEY

- B — Fire blanket
- SA — Smoke alarm linked to whole house system
- HA — Heat alarm linked to whole house system
- SA — Smoke alarm with internal sounder – stand alone
- Substantial solid doors with self closing device (1)
- Sound traditional construction (1)
- EW — Escape windows (2)



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