



NORWICH
City Council

FIRE PRECAUTIONS IN DWELLINGS

Private Sector Housing

Providing Homes Building Communities

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Introduction

The reason for insisting on fire precautions in houses in multiple occupation (HMO) is to save lives and prevent injury by:

- providing early warning in the event of fire
- stopping smoke and fire spreading before residents have a chance of escape
- ensuring residents have a protected means of escape.

In general terms a HMO means accommodation where two or more households share amenities where a household includes: families, single people and couples.

Fire guidance

This guidance sets out the fire precautions which the council would expect in different types of HMO properties. Each property is unique. It is therefore not possible to have prescribed standards.

However the guide and the chart in appendix 2 are aimed at providing an understanding of the minimum standards required.

The guidance has been drawn up with Norfolk Fire Service under the terms of the: **“Joint service level agreement between Norfolk Fire and Rescue Service and Norwich City Council.”**

Risk assessments

The fire precautions which are appropriate in a property will vary. They will depend on the circumstances at the property.

The circumstances taken into account include for example:

- Number of residents.
- Number of floors.
- Arrangements for cooking.
- Layout and ease of escape in the event of fire.
- The presence of fire egress windows.
- Construction of the building and flammability of building elements.
- Safety of appliances and services such as gas and electricity.
- Whether part of the building is used commercially.

The decisions concerning the standards which will be necessary are based on risk assessments carried out under:

- The Housing Health and Safety Rating Scheme under Part 1 Housing Act 2004.
- The Regulatory Reform Order (Fire Safety) Order 2005.

Housing Health and Safety Rating Scheme (HHSRS)

The HHSRS is a new tool for assessing the living conditions of a property. The system is based on 29 possible hazards to the most vulnerable occupiers.

The Housing Act 2004 requires local authorities to use the HHSRS to assess conditions in dwellings.

The HHSRS is therefore used to assess risk from fire in HMOs and single family dwellings.

Regulatory Reform Order (Fire Safety) Order 2005 (RRO)

Persons who are **responsible persons** under the terms of the RRO have a legal obligation to carry out risk assessments. **Responsible persons** include: owners and persons having control of the dwelling which can mean agents.

Failure to have a **fire risk assessment** is an offence enforced by the fire service who can ask to see a copy of your risk assessment at anytime.

You can either undertake a fire risk assessment yourself or pay a consultancy to carry it out.

The aims of the assessment are:

- to identify potential fire hazards.
- to detail options for reducing the risk from those hazards to as low a risk as possible.
- to decide what physical precautions and management arrangements are necessary to ensure the safety of people in your premises if the fire starts.

The assessment should also record any **significant findings** namely specific problems which need urgent attention.

General

This guide outlines the fire precautions which we would expect to find in an HMO. In appendix 2 there is a simplified flow chart of the standards expected in different types of HMO's.

In appendix 3 there is a specimen risk assessment form to guide landlords in their risk assessments.

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Shared houses, two storeys

These include houses where the residents live together as friends (such as a group of students or work mates).

The fire precautions required for this type of property depend upon the risks involved. Risks can depend on factors such as:

- the number of people sharing
- the stability of the group (do residents keep moving out and being replaced?)
- the vulnerability of the occupants (for example children or elderly persons, physically or mentally disabled persons)
- whether there are cooking facilities in the rooms
- whether the first floor windows are suitable for emergency egress
- whether all rooms have close fitting doors
- whether there is an adverse risk of arson (for instance is the property used for persons retreating from domestic violence).

A typical house would include one shared kitchen and there may also be a shared living room or dining room. There would be six or less occupants and no vulnerable persons.

Means of escape

'Means of escape' refers to the provision of a safe route of escape in the event of fire. Escape routes includes: the stairways, hallways, landing areas and corridors leading from each risk room to the final exit and place of safety.

The escape must usually be protected to a minimum level of 30 min fire protection. This will include fire doors opening out into escape routes.

However, in a typical low risk shared house a protected means of escape (fire doors etc) will not be required.

Fire detection

If emergency egress windows are fitted to the first floor a Grade D LD3 system (see appendix 3) is required. This means:

- Grade D** Mains powered interlinked detectors each with an integral standby supply (battery back up)
- LD3** The detectors are to be in all circulation spaces that form part of the escape route (typically in corridors and landings)

If the first floor windows are not suitable for emergency egress a Grade D LD2 system is required. This means:

- Grade D** Mains powered interlinked detectors each with an integral standby supply (battery back up)
- LD2** The detectors are to be in all circulation spaces that form part of the escape route (typically in corridors and landings) and in rooms or areas that present a high fire risk* to occupants

* **Risk rooms:** This includes all rooms used for living and/or sleeping accommodation and kitchens. It does not include bathrooms unless there is an ignition source (such as any electrical item other than fixed lighting).

Extinguishers and blankets

A 2kg multi purpose dry powder extinguisher to BS EN 3:1996 is required in each room with cooking facilities. All extinguishers are to be wall mounted on wall brackets in accordance with BS 5428: 1987, with carrying handle approximately 1m above ground level, maintained in good order and readily available for use at all times.

A wall mounted fire blanket situated approximately 1.5m above floor level to comply with BS.EN 1869:1997 is required in all rooms containing cooking facilities.

Fire fighting equipment must be maintained in accordance with BS5306:Part 3:1988.

Emergency lighting

Emergency lighting may be required if the protected escape route is not provided with adequate background light either natural or borrowed from street lighting to ensure the safe movement to the final exit door. Where emergency lighting is provided it must comply with BS5266 Part 1:1988.

Please note:

The exit from the building should not involve going through a risk room, such as a bedroom, living room or kitchen. The route out of a building has to be kept clear, free from ignition sources, free from furniture and stored goods. A bedroom or a living room would not be able to provide this protection. In situations where this does occur a satisfactory alternative route must be provided. Please refer to the floor plans in Appendix 1 for an example of how this can be carried out.

Shared houses, three or more storeys

This includes houses built with three storeys or houses with converted basements or attics. The type of resident will typically be the same as a two storey shared house (although there may be six or more persons).

Means of escape

A house with three or more storeys is considered higher risk. The means of escape needs protecting. The means of escape typically includes the main staircases and all corridors/landings that a person would have to travel through to reach the front door. The protected route means:

- that all walls between the escape route and risk rooms must be capable of giving half hour fire and smoke protection. Gaps in walls for pipes and cables must be filled to provide protection. Unkeyed plaster (particularly lath and plaster) will need to be upgraded (see appendix 3).
- that all ceilings between the route of escape and risk rooms* must be capable of giving half hour fire and smoke protection. Gaps for pipes and cables must be filled to provide protection. Unkeyed plaster (particularly lath and plaster) will need to be upgraded (see appendix 3).
- that cupboards leading onto the means of escape should be emptied of flammable goods and kept locked.
- that understairs soffits must be underlined to provide half hour fire protection.
- understairs cupboards must be emptied of flammable goods and kept locked.
- that all cupboards containing risk of ignition (such as electrical fuse boards or water heaters) must be half hour fire protected.
- that all doors leading from risk rooms* onto the means of escape must be half hour fire and smoke protected.
- that there is no storage on the means of escape.
- the final exit door should be capable of being opened from inside without the use of a key.
- walls and ceilings dividing risk rooms* must be half hour fire protected and capable of giving half hour fire and smoke protection. Gaps in walls for pipes and cables must be filled to provide protection. Unkeyed plaster (particularly lath and plaster) will need to be upgraded (see appendix 3).

Sprinkler systems

A domestic sprinkler system may be considered. In some cases where a domestic sprinkler system and an alarm system is installed it may not be necessary to provide certain structural features such as fire doors, fire extinguishers, or to upgrade walls and staircases.

Any installation must be installed in accordance with BS 9251:2005. If such a system is being considered this must be carried out in consultation with Private Sector Housing.

*** Risk rooms:** This includes all rooms used for living and/or sleeping accommodation and kitchens. It does not include bathrooms unless there is an ignition source (such as any electrical item except fixed lighting).

Fire detection

In most cases a Grade D LD2 system is required (see appendix 3). This means

Grade D Mains powered interlinked detectors each with an integral standby supply (battery back up)

LD2 The detectors are to be in all circulation spaces that form part of the escape route (typically in corridors and landings) and in rooms or areas that present a high fire risk* to occupants

* **Risk rooms:** This includes all rooms used for living and/or sleeping accommodation and kitchens. It does not include bathrooms unless there is an ignition source.

* **Any electrical item**

Extinguishers and blankets

A 2kg multi purpose dry powder extinguisher to BS EN 3:1996 is required in each room with cooking facilities. All extinguishers are to be wall mounted on wall brackets in accordance with BS 5428: 1987, with carrying handle approximately 1m above ground level, maintained in good order and readily available for use at all times.

A wall mounted fire blanket situated approximately 1.5m above floor level to comply with BS.EN 1869:1997 is required in all rooms containing cooking facilities.

Fire fighting equipment must be maintained in accordance with BS5306:Part 3:1988.

Emergency lighting

Emergency lighting may be required if the protected escape route is not provided with adequate background light either natural or borrowed from street lighting to ensure the safe movement to the final exit door. Where emergency lighting is provided it must comply with BS5266 Part 1:1988.

Bedsit type accommodation, two storeys

These are typically houses where the tenants have their own room/rooms but the units are not fully self contained (there is some sharing of either a kitchen or a bathroom).

Means of escape

The means of escape needs protecting. The means of escape typically includes the main staircases and all corridors/landings that a person would have to travel through to reach the front door. The protected route means:

- that all walls between the escape route and risk rooms must be capable of giving half hour fire and smoke protection. Gaps in walls for pipes and cables must be filled to provide protection. Unkeyed plaster (particularly lath and plaster) will need to be upgraded (see appendix 3).
- that all ceilings between the route of escape and risk rooms* must be capable of giving half hour fire and smoke protection. Gaps for pipes and cables must be filled to provide protection. Unkeyed plaster (particularly lath and plaster) will need to be upgraded (see appendix 3).
- that cupboards leading onto the means of escape should be emptied of flammable goods and kept locked.
- that understairs soffitts must be underlined to provide half hour fire protection.
- understairs cupboards must be emptied of flammable goods and kept locked.
- that all cupboards containing risk of ignition (such as electrical fuse boards or water heaters) must be half hour fire protected.
- that all doors leading from risk rooms* onto the means of escape must be half hour fire and smoke protected.
- that there is no storage on the means of escape.
- The final exit door should be capable of being opened from inside without the use of a key.
- Walls and ceilings dividing risk rooms* must be half hour fire protected and be capable of giving half hour fire and smoke protection. Gaps in walls for pipes and cables must be filled to provide protection. Unkeyed plaster (particularly lath and plaster) will need to be upgraded (see appendix 3).

Sprinkler systems

A domestic sprinkler system may be considered. In some cases where a domestic sprinkler system and an alarm system is installed it may not be necessary to provide certain structural features such as fire doors, fire extinguishers, or to upgrade walls and staircases. Any installation must be installed in accordance with BS 9251:2005. If such a system is being considered this must be carried out in consultation with Private Sector Housing.

*** Risk rooms:** This includes all rooms used for living and/or sleeping accommodation and kitchens. It does not include bathrooms unless there is an ignition source (such as any electrical item except fixed lighting).

Fire detection

In most cases a Grade D LD2 system is required (see appendix 3). This means:

Grade D Mains powered interlinked detectors each with an integral standby supply (battery back up)

LD2 The detectors are to be in all circulation spaces that form part of the escape route (typically in corridors and landings) and in rooms or areas that present a high fire risk* to occupants

Extinguishers and blankets

A 2kg multi purpose dry powder extinguisher to BS EN 3:1996 is required in each room with cooking facilities. All extinguishers are to be wall mounted on wall brackets in accordance with BS 5428: 1987, with carrying handle approximately 1m above ground level, maintained in good order and readily available for use at all times.

A wall mounted fire blanket situated approximately 1.5m above floor level to comply with BS.EN 1869:1997 is required in all rooms containing cooking facilities.

Fire fighting equipment must be maintained in accordance with BS5306:Part 3:1988.

Emergency lighting

Emergency lighting may be required if the protected escape route is not provided with adequate background light either natural or borrowed from street lighting to ensure the safe movement to the final exit door. Where emergency lighting is provided it must comply with BS5266 Part 1:1988.

* **Risk rooms:** This includes all rooms used for living and/or sleeping accommodation and kitchens. It does not include bathrooms unless there is an ignition source (such as a water heater).

Bedsit type accommodation, three or more storeys

Means of escape

A house with three or more storeys is considered higher risk. The means of escape needs protecting. The means of escape typically includes the main staircases and all corridors/landings that a person would have to travel through to reach the front door. The protected route means:

- that all walls between the escape route and risk rooms must be capable of giving half hour fire and smoke protection. Gaps in walls for pipes and cables must be filled to provide protection. Unkeyed plaster (particularly lath and plaster) will need to be upgraded (see appendix 3).
- that all ceilings between the route of escape and risk rooms* must be capable of giving half hour fire and smoke protection. Gaps for pipes and cables must be filled to provide protection. Unkeyed plaster (particularly lath and plaster) will need to be upgraded (see appendix 3).
- that cupboards leading onto the means of escape should be emptied of flammable goods and kept locked.
- that understairs soffits must be underlined to provide half hour fire protection.
- understairs cupboards must be emptied of flammable goods and kept locked.
- that all cupboards containing risk of ignition (such as electrical fuse boards or water heaters) must be half hour fire protected.
- that all doors leading from risk rooms* onto the means of escape must be half hour fire and smoke protected.
- that there is no storage on the means of escape.
- the final exit door should be capable of being opened from inside without the use of a key.
- walls and ceilings dividing risk rooms* must be half hour fire protected and be capable of giving half hour fire and smoke protection. Gaps in walls for pipes and cables must be filled to provide protection. Unkeyed plaster (particularly lath and plaster) will need to be upgraded (see appendix 3).

Sprinkler systems

A domestic sprinkler system may be considered. In some cases where a domestic sprinkler system and an alarm system is installed it may not be necessary to provide certain structural features such as fire doors, fire extinguishers, or to upgrade walls and staircases. Any installation must be installed in accordance with BS 9251:2005. If such a system is being considered this must be carried out in consultation with Private Sector Housing.

*** Risk rooms:** This includes all rooms used for living and/or sleeping accommodation and kitchens. It does not include bathrooms unless there is an ignition source (such as any electrical item except fixed lighting).

Fire detection

In most cases a Grade D LD2 system is required (see appendix 3). This means:

Grade D Mains powered interlinked detectors each with an integral standby supply (battery back up), with central control equipment.

LD2 The detectors are to be in all circulation spaces that form part of the escape route (typically in corridors and landings) and in rooms or areas that present a high fire risk* to occupants

When identified large, high risk HMOs will require a Grade D LD2 system in the individual dwelling units and a Grade A LD2 system in the communal areas.

* **Risk rooms:** This includes all rooms used for living and/or sleeping accommodation and kitchens. It does not include bathrooms unless there is an ignition source.

* **Any electrical item**

Extinguishers and blankets

A 2kg multi purpose dry powder extinguisher to BS EN 3:1996 is required in each room with cooking facilities. All extinguishers are to be wall mounted on wall brackets in accordance with BS 5428: 1987, with carrying handle approximately 1m above ground level, maintained in good order and readily available for use at all times.

A wall mounted fire blanket situated approximately 1.5m above floor level to comply with BS.EN 1869:1997 is required in all rooms containing cooking facilities.

Fire fighting equipment must be maintained in accordance with BS5306:Part 3:1988.

Emergency lighting

Emergency lighting may be required if the protected escape route is not provided with adequate background light either natural or borrowed from street lighting to ensure the safe movement to the final exit door. Where emergency lighting is provided it must comply with BS5266 Part 1:1988.

Converted flats

This category includes buildings converted into flats where the conversion was carried out before 1 June 1992, or if it has been converted since 1992 but does not meet standards set in the Building Regulations 1991.

Means of escape

The means of escape needs protecting. The means of escape typically includes the main staircases and all common corridors/landings that a person would have to travel through to reach the front door. The protected route means:

- that all walls between the escape route and risk rooms must be capable of giving half hour fire and smoke protection. Gaps in walls for pipes and cables must be filled to provide protection. Unkeyed plaster (particularly lath and plaster) will need to be upgraded (see appendix 3).
- that all ceilings between the route of escape and risk rooms* must be capable of giving half hour fire and smoke protection. Gaps for pipes and cables must be filled to provide protection. Unkeyed plaster (particularly lath and plaster) will need to be upgraded (see appendix 3).
- that cupboards leading onto the means of escape should be emptied of flammable goods and kept locked.
- that understairs soffits must be underlined to provide half hour fire protection.
- understairs cupboards must be emptied of flammable goods and kept locked.
- that all cupboards containing risk of ignition (such as electrical fuse boards or water heaters) must be half hour fire protected.
- that all doors leading from risk rooms* onto the means of escape must be half hour fire and smoke protected.
- That there is no storage on the means of escape.
- The final exit door should be capable of being opened from inside without the use of a key.
- Walls and ceilings dividing risk rooms* must be half hour fire protected can be capable of giving half hour fire and smoke protection. Gaps in walls for pipes and cables must be filled to provide protection. Unkeyed plaster (particularly lath and plaster) will need to be upgraded (see appendix 3).

Sprinkler systems

A domestic sprinkler system may be considered. In some cases where a domestic sprinkler system and an alarm system is installed it may not be necessary to provide certain structural features such as fire doors, fire extinguishers, or to upgrade walls and staircases. Any installation must be installed in accordance with BS 9251:2005. If such a system is being considered this must be carried out in consultation with Private Sector Housing.

* **Risk rooms:** This includes all rooms used for living and/or sleeping accommodation and kitchens. It does not include bathrooms unless there is an ignition source (such as any electrical item except fixed lighting).

Fire detection

In buildings where some or all of the flats are rented.

Grade D Mains powered interlinked detectors each with an integral standby supply (battery back up)

LD 2 The detectors should be sited:

- in all circulation spaces in the common areas (for example in all landings and in the entrance hall)
- in each flat. Situated in the room/lobby that leads onto the means of escape (ie near to the front door to the flat).

Extinguishers and blankets

A 2kg multi purpose dry powder extinguisher to BS EN 3:1996 is required in each room with cooking facilities. All extinguishers are to be wall mounted on wall brackets in accordance with BS 5428: 1987, with carrying handle approximately 1m above ground level, maintained in good order and readily available for use at all times.

A wall mounted fire blanket situated approximately 1.5m above floor level to comply with BS.EN 1869:1997 is required in all rooms containing cooking facilities.

Fire fighting equipment must be maintained in accordance with BS5306:Part 3:1988.

Emergency lighting

Emergency lighting may be required if the protected escape route is not provided with adequate background light either natural or borrowed from street lighting to ensure the safe movement to the final exit door. Where emergency lighting is provided it must comply with BS5266 Part 1:1988.

Single family dwellings

This category is typically a dwelling that is not an HMO. This would include a self contained flat or house occupied by either a family, a couple, a single person, two friends living together.

In a house of less than three storeys a Grade F system is required.

This means one or more battery-powered smoke alarms (usually in the entrance hall and first floor landing)

In a house of three or more storeys it is advisable to fit a LD3 Grade D system. This will ensure that any person who has the furthest distance to get to an exit, has an early warning of fire.

This means:

Grade D Mains powered interlinked detectors each with an integral standby supply (battery back up)

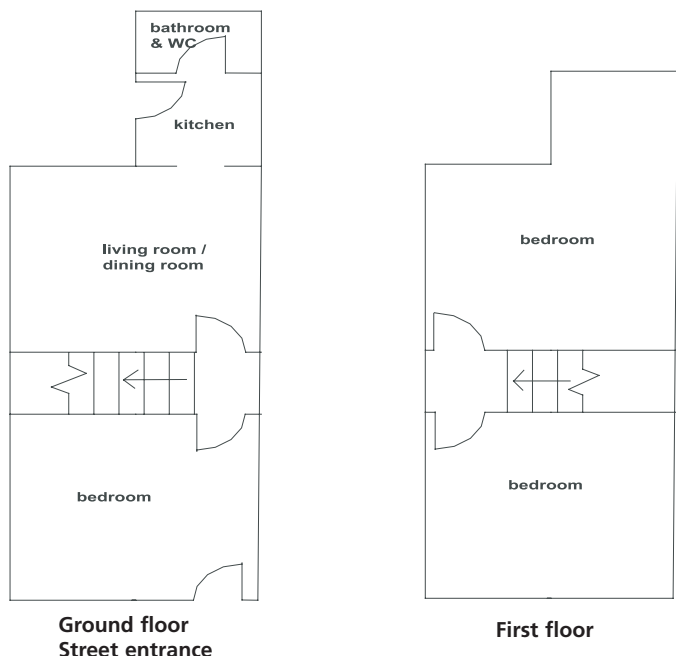
LD3 The detectors are to be in all circulation spaces that form part of the escape route (typically in corridors and landings)

Single family dwellings

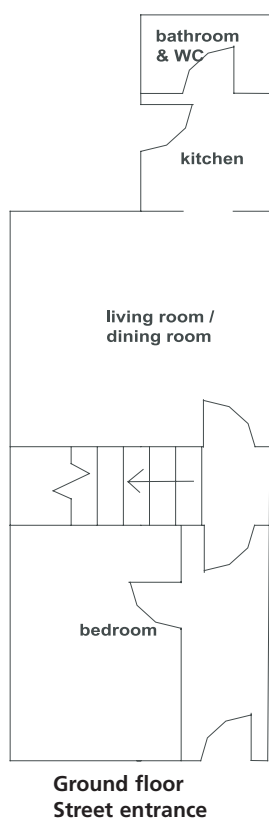
A wall mounted fire blanket, situated approximately 1.5m above floor level, to comply with BS.EN 1869:1997 is required in all rooms with cooking facilities.

Appendix 1 – guidance to precautions in two storey shared houses

A two storey terrace layout with a central staircase



The exit route is either via the ground floor living room and kitchen or through the ground floor bedroom. These rooms will contain furniture and stored goods and may not be kept clear. They are therefore not suitable as a route out in the event of a fire.

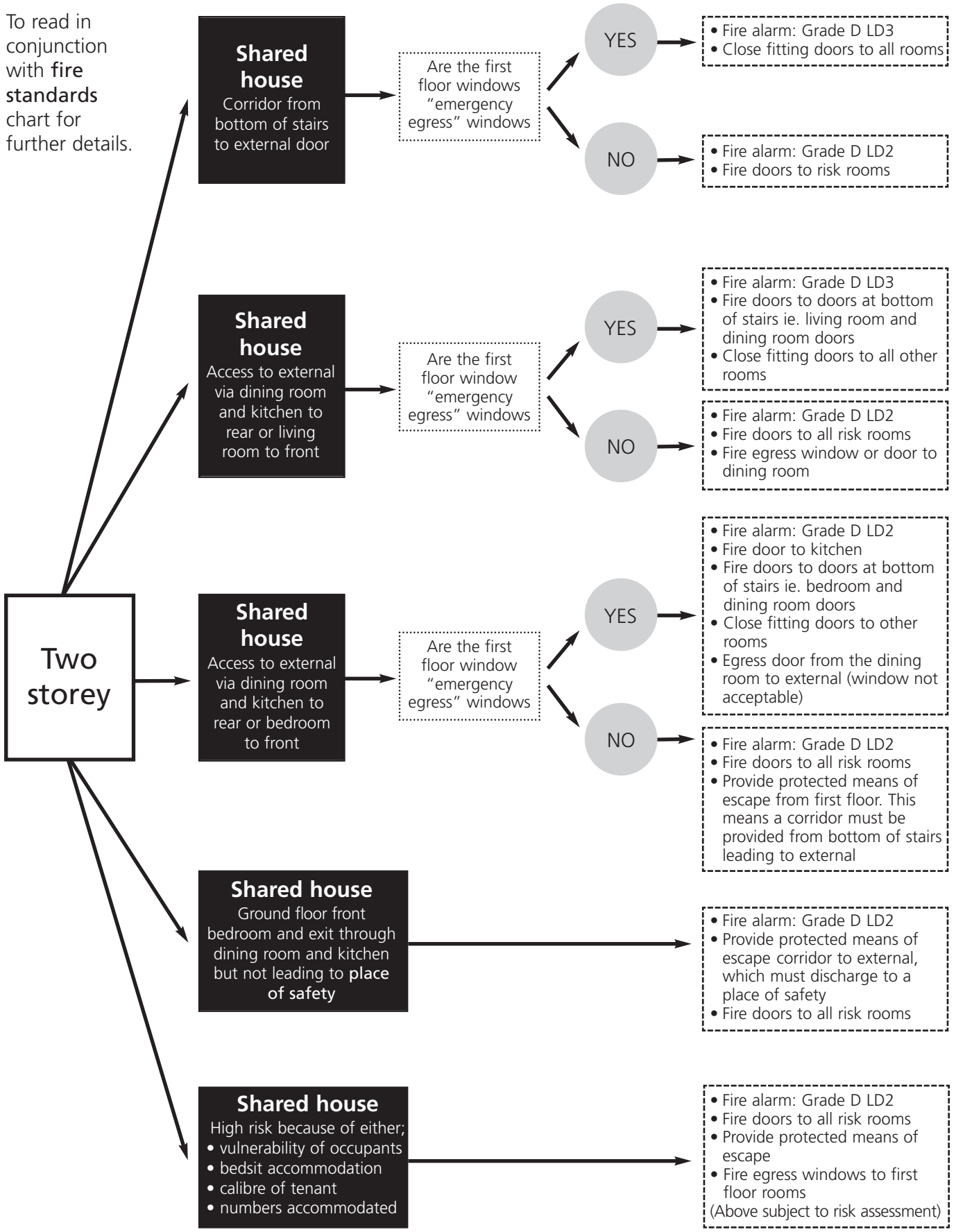


Adding a corridor from the staircase to the front door creates a suitable route.

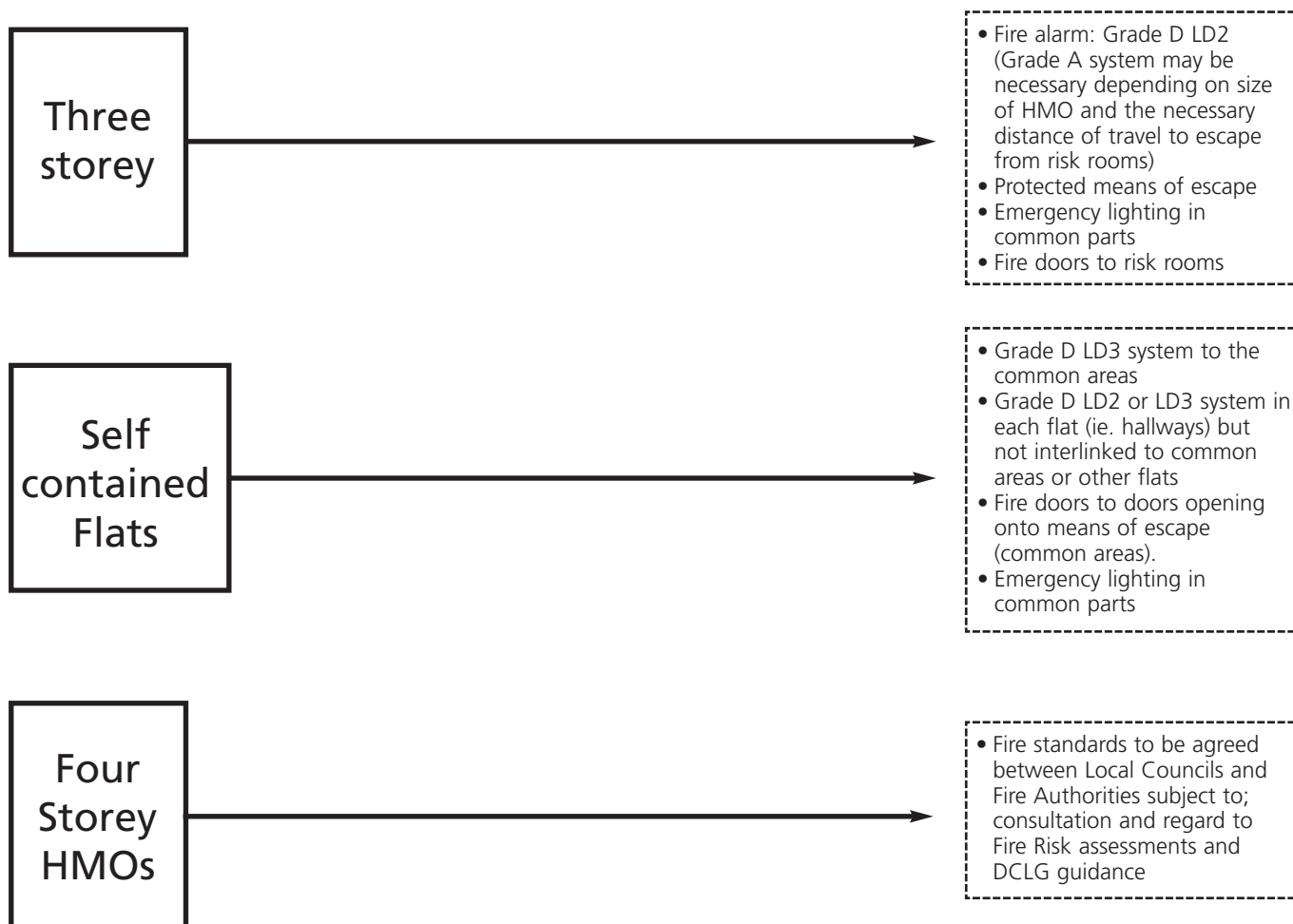
Alternatively a sprinkler system may prevent the need to provide a protected escape route. Any installation must be installed in accordance with BS 9251:2005. If such a system is being considered this must be carried out in consultation with Private Sector Housing.

Appendix 2 – fire standards flow chart

To read in conjunction with fire standards chart for further details.



Appendix 2 – fire standards flow chart *continued*



Notes

Standards The standards detailed in the chart are those which would "normally" be expected. Variations from the standard can occur depending on circumstances and the result of risk assessments.

General

Fire Alarm systems: Systems to be installed according to BS5839-6:2004.

Smoke Detectors: Ensure optical type detectors are installed to rooms and ionising type to: landings hallways and corridors.

Fire Doors: To FD30S (30 min fire resistance) incorporating intumescent strips, smoke seals and self closures.

Kitchens: All cases provision of fire blanket and 2kg dry powder fire extinguisher.

Construction: Generally there must be a 30 min fire resisting structure to walls and ceilings separating habitable rooms and other habitable rooms kitchens and the common escape routes. 60 min fire resistance may be needed such as for basements and properties above and adjoining commercial premises.

Appendix 2 – fire standards flow chart *notes continued*

Fire egress windows: To comply with current Building Regulations.

Place of safety: Enclosed courtyards and absence of rear exits which prevent escape from building area are considered not providing **place of safety**.

Place of safety (Alley Gates):

In properties where exit from the rear to the front is via a locked alley gate, arrangements need to be considered for ensuring that the gate can be easily opened particularly where a mortice lock is used. Keys need to be readily available in an emergency. Providing a key pad lock could be considered.

Emergency Lighting: To be installed according to BS 5266 where deemed necessary following risk assessment. However it would probably be judged as necessary in most instances.

Risk Assessments

The standards set out in the flow chart are guide standards and can be subject to variation depending on **risk assessments** undertaken under the **Housing Health and Safety Rating Scheme** by the council and **fire risk assessments** carried out by the landlord under the provisions of the **Regulatory Reform Order (Fire Safety) 2005**. Variations from the guide standard can arise because of particular circumstances and layout existing at the premises. Variations can follow from discussions between councils, fire service and landlords.

Fire Alarm Systems

See Appendix 3.

Fire Fighting Equipment

For each room with cooking facilities provide a 2kg multi purpose dry powder extinguisher to BS EN 3:1996. All extinguishers are to be wall mounted in accordance with BS 5428:1987 and a wall mounted fire blanket approximately 1.5m above floor level in accordance with BS EN 1869: 1997.

Appendix 3 – fire precaution guidance notes

Sprinkler systems

Owners may benefit from a range of accepted and established fire precautions design freedoms where they install a residential sprinkler system. These design freedoms can be applied on a risk-assessed basis and may actually allow HMO's to be used in a more user friendly and flexible manner appropriate to the home environment.

A residential sprinkler system installed and maintained in accordance with BS 9251:2005 can:

- actively save more lives and prevent more injuries in the event of a fire (especially in HMOs where the risk to occupants from fire is widely acknowledged to be disproportionately high);
- reduce property damage in the event of a fire;
- assist with business continuity by allowing speedy reoccupation of areas affected by a fire; and
- minimise the amount of water used to extinguish any fire that occurs by restricting the growth of that fire.

There are potential safety, economic and management reasons for installing a sprinkler system. Installation should be carried out by an experienced contractor suitably qualified and registered with the FIRAS / Fire Sprinkler Association 3rd Party Certification Scheme. Alternatively, installers may be certificated under the LPS 1048 Scheme "Requirements for Certified Sprinkler Installers, Supervising bodies and Supervised Installers".

Fire alarm systems

Grade A system

Fire alarm system to comply with current British Standard (BS) 5839 Part 6 Grade A.

This comprises a system of electrically operated smoke and/or heat detectors which are linked to a control panel to give information on the location of any fire or any fault which may develop.

The control panel must conform to current British Standard 5839 Part 4.

Grade D system

Fire alarm system to comply with current British Standard 5839 Part 6: Grade D

This comprises a system of one or more interlinked mains powered and/or heat detectors each with a standby battery and built in alarm.

LD 2: means

Detectors are to be in all circulation spaces that form part of the escape route (typically in corridors and landings) and in rooms or areas that present a high risk to occupants.

(High risk rooms include rooms used for living and/or sleeping and kitchens.

LD 3: means

The detectors are to be in all circulation spaces that form part of the escape route.

Installation of fire alarm system is to be in accordance with BS 5839-6:2004 and BS 5839-1:2002 and should ensure that the alarm signal gives a sound level of 75dB(A) in all rooms particularly in bedrooms.

Installation of detectors

Type

There are two types of detectors **optical** and **ionization**. It is better to install optical in most situations as these are less likely to cause false alarms.

Mounting position

Smoke and heat detectors should preferably be mounted on ceilings on a horizontal surface. Detectors should not be positioned at an angle.

The detectors should be placed at least 500mm horizontally from any wall/beam or light fitting.

Obstructions

The detector should be positioned either side of a ceiling obstruction such as beams or down-stands which are greater than 150mm depth.

Power supply

The detectors can be supplied from the lighting circuits. However if the tenant is on a payment meter the supply must be taken from the landlord's supply ie. the power supply will need to come from a dedicated circuit from the main consumer unit.

A competent installer should install the system in accordance with BS 7671. The installer should certify that the installation conforms to the recommendation of BS 5839 for the type LD2 Grade D.

Upon completion of the installation obtain and submit to private sector housing a completion certificate in a form which satisfies the requirements of BS 5839 and BS 5306.

Fire doors

Fire doors to provide a minimum of 30 minutes fire and smoke protection (FD30s) complying with BS 476: Part 22 1987 and Section 31.1:1983. The doors must be installed to satisfy the requirements of BS 8214:1990 as set out in the notes below:

Unless otherwise stated each fire door to meet the standards below:

- a To be fitted with plain steel butt hinges of not less 100mm x 75mm.
- b To be fitted with heat activated intumescent seals 4mm x 10 mm rebated in the head and sides of the doors or into the frame coincident with the closed position of the door sides and head. (The strip must not be rebated into the door stops or a coincident position with the stops on the door.)
- c To be fitted with a self closing device (preferably of the overhead hydraulic type) manufactured to satisfy the requirements of BS EN 1154:1997.
- d The self closing device to be capable of: closing the door positively onto the latch or where the latch is not required, of holding the door for not less than 30 mins.
- e The gap between the door and door lining (or frame) to be not more than 3mm.
- f All hinges and latch parts necessary for holding the door in place during a fire to have a melting point in excess of 8000 C and to comply with BS 8214:1990 and BS 5872:1980.
- g Where there are gaps between the door lining and the surrounding construction fill all voids with fire stopping material such as an intumescent foam or filler.
- h Where glazing is incorporated into the fire doors install 6mm Georgian wired glass or fire resistant glazing. The glazing to be fixed to BS 476 parts 20-23 requirements.

Emergency lighting

Emergency lighting systems must comply with the provisions of BS 5266-1:1999.

Upon completion of the installation obtain and submit to private sector housing a completion certificate in a form which satisfies the requirements of Appendix 1 to BS 5266 Part 1 1999.

Wall and ceiling finishes

Wall and ceiling finishes should provide 30 min fire resistance.

For new stud partitions this can be achieved by:

Constructing a frame of 75mm X 50mm timbers with head and sole plate and studs at 600mm centres. Providing 12.5mm plasterboard for each face, taping the joints and finishing with a top coat of 3mm multi finish plaster.

For existing wall and ceiling surfaces the appropriate construction standard to bring them up to 30 min standard will have to be agreed following the site inspection.

This may include the upgrading of unkeyed plaster (particularly lath and plaster) by fitting 9.5mm plasterboard on both faces. The scriming of joints and also junctions with ceilings with 75mm wide scrim tape and applying setting coat of multi finish plaster, finished flush with existing surfaces.

Wall and ceilings adjoining commercial premises should provide 60 min fire resistance.

Fire egress windows

Where windows are proposed to be used as a means of escape they must comply with the following:

The window must have an unobstructed openable window area of at least 0.33m² with the width and height dimension being a minimum of 450mm. Side hung opening lights are recommended.

The bottom of the openable area (window sill level) must be not more than 1100mm and not less than 800mm above floor level.

Windows are suitable for means of escape where the drop from the window to the ground level is one storey only (not exceeding 4.5m from first floor level to outside ground level).

Note: The ground below the windows must be flat and free from hazards (low walls and railings etc).

Norwich City Council

Fire safety in houses in multi occupation

Fire risk assessment form

Address of premises:	Owner of premises:

Size of premises:	Age of premises:
2 Storey <input type="checkbox"/> 3 Storey <input type="checkbox"/> 4+ Storeys <input type="checkbox"/>	

Name of person carrying out fire risk assessment:
Position / responsibility:

Fire risk assessment - key steps reviewed		Date of review:
Key steps	Assessment made?	
Fire hazards	Yes <input type="checkbox"/> No <input type="checkbox"/>	Signed:
People at risk	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Risk review	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Record keeping	Yes <input type="checkbox"/> No <input type="checkbox"/>	
Review and plan of action	Yes <input type="checkbox"/> No <input type="checkbox"/>	
		Dated:

Fire safety in houses in multi occupation. Regulatory Reform (Fire Safety) Order 2005 risk assessment form

Fire risk assessment for: _____

Address: _____ Postcode _____

To ensure the adequacy of existing fire precautions within a house in multi occupation (HMO), a risk assessment should be carried out: by or on the behalf of; the owner, the licensee/ prospective licensee to establish both the risk of a fire occurring and the risk to people in the event of fire.

Under the Regulatory Reform (Fire Safety) Order 2005 you must:

- Carry out a fire-risk assessment identifying any possible dangers and risks.
- Consider who may be especially at risk.
- Remove or reduce the risk of fire and provide general fire precautions to deal with any remaining risk.
- Create a plan to deal with any emergency and keep a record of your findings.
- Review your findings when necessary.

The risk assessment form below guides you in the steps you need to take in undertaking a risk assessment. It provides you with a series of questions, which you will need to consider in undertaking an assessment.

The checklist or something similar must be submitted to Norwich City Council.

The answer to all the questions should be "yes", "no" or "not applicable" (N/A). For those who are responsible for smaller HMO's you may think some of the questions are do not apply to you. However you should indicate this by marking the "not applicable" column. It is important for the council to see that you have considered all the questions.

In the "details/justification " column you should provide further information on:

- the deficiencies identified
- the arrangements in place which satisfy the question
- the justification for answering the question "not applicable"

Fire risk assessment

Key steps	Yes	No	N/A	Details/Justification	Action taken
Step one - Hazards					
1 Have the premises been recently modified as a result of: a Building control requirements and/or b A schedule issued by the council.					
2 Have flammable and combustible materials (eg. paints, cleaning agents, aerosols, stored furnishings etc) been identified and minimised where possible?					
3 Are all flammable substances and combustible materials stored safely?					
4 Are heating appliances fixed in a position at a safe distance from any combustible materials and suitably guarded? (eg. are curtains, drapes furniture too near heating appliances?)					
5 Have you a gas safety certificate issued in the past year by a Corgi registered engineer?					
6 Is the furniture upholstery made of fire resistant materials meeting the Furniture and Furnishings (Fire) (Safety) Regulations 1988?					
7 Has there been an electrical safety certificate issued for the premises in the past five years?					
8 Are all items of electrical equipment fitted with fuses of the correct rating?					
9 Are all lengths of flexible cable and multi-point adaptors kept to a minimum?					
10 Are cables run only where damage is unlikely and not under any floor coverings or through doorways?					
11 Have you had portable appliances tests on electrical equipment?					
12 Are the premises free from accumulations of: rubbish, waste-paper or other materials which could cause a fire if set alight?					
13 Have measures been taken to reduce the risk of either: accidental or deliberate fire?					
14 Are there suitable management procedures in place to ensure fire safety standards are maintained?					
15 Have you in place management arrangements for dealing with tenants whose behaviour might lead to a risk to other tenants?					
Step two - People at risk					
Have you made an assessment of risk to residents and visitors arising out of special needs such as; disability, mental health problems, behavioural problems, language difficulties? Regarding the above have you considered the following: 1 Are all your residents able to understand the fire safety measures you have put in place?					

Key steps	Yes	No	N/A	Details/Justification	Action taken
Step two - People at risk <i>continued</i>					
2 Have residents been given clear instruction on fire safety?					
3 Are all the residents in the property reasonably mobile?					
4 Are there suitable procedures in place for the evacuation of residents?					
5 Have you assessed whether any resident may present a particular fire risk?					
Step three - Reducing the risk					
A means of escape					
1 Is the fire detection system adequate for the size of property and the number of people accommodated? (See council guidance)					
2 Is the property of sound construction with suitable fire resistance to: walls, floors, landings, stairwells and ceilings?					
3 Are there sufficient exits for the number of people present?					
4 Do all residents have access to a protected means of escape in the event of a fire?					
5 Do all exits lead to a place of safety? (Enclosed rear gardens are not considered as a place of safety)					
6 Do residents have to go through a risk room as the means of escape? (Risk rooms include: bedrooms, living rooms, dining rooms and kitchens.)					
7 Are all corridors and escape routes free from obstruction?					
8 Are the floor surfaces on escape routes free from tripping and slipping hazards?					
9 Are all internal fire doors clearly labelled?					
10 Are all doors used as means of escape in good repair and can these doors be easily and immediately opened without the use of a key?					
11 Can all fire safety signs and exit notices be clearly seen? (Notices and signs should comply with BS 5499: Part 1 1990)					
12 Are self closing devices on fire doors in working order?					
13 Are all vents and service ducts, etc suitably protected where appropriate to prevent the spread of fire, heat or smoke?					
B Lighting					
1 Has the need for emergency lighting being considered?					
2 Are routes to a place of safety adequately lit?					
3 Is the emergency lighting in working order and maintained regularly?					

Fire precautions in dwellings

Key steps	Yes	No	N/A	Details/Justification	Action taken
C Fire alarm					
1 Is there an automatic fire alarm system ie. a system with mains power supply?					
2 Is the automatic fire alarm system in working order?					
3 Is the fire alarm system tested and maintained regularly?					
4 Has a test certificate for the alarm system been issued in the past year?					
D Fire fighting					
1 Is there sufficient fire fighting equipment of the correct type? (Each kitchen are should have a fire extinguisher and fire blanket)					
2 Are portable fire extinguishers, fire blankets etc, suitably located and available for use?					
3 Have portable fire extinguishers been serviced in the past year?					
4 Is the fire fighting equipment in working order?					
E Fire instructions / emergency plan					
1 Are fire instructions clearly displayed throughout the premises?					
2 Have steps been taken to plan what actions everyone should take if a fire starts?					
3 Have these steps been brought to the attention of all the residents?					
Step four - Record keeping					
1 Have you recorded the findings of your risk assessment?					
2 Has a procedure been established to review the fire risk periodically?					
3 Do you keep records of the routine testing of the fire alarms?					
4 Do you keep maintenance check records to monitor any defects or damage, which may arise, leading to a fire risk?					
5 Do you have records of the annual checks for the fire alarm system and fire fighting equipment?					

Note: Once completed, this checklist should help you to meet your responsibilities under the Regulatory Reform (Fire Safety) Order 2005 in that you have identified fire hazards in your HMO. What you must also do is reduce the risk of those hazards and decide what physical fire precautions and management requirements are required to ensure fire safety is achieved. Depending on your answers in the above checklist you should identify the risks on the sheet below and also detail the actions you will be taking to reduce the risk and set a date by which time the works are to be completed.

Note: You should list below those areas for attention identified both from the checklist above and any other investigations. You should list these in priority order under the headings **urgent attention** etc.

Record of significant findings	Actions to be taken	Completion date
Step five - Review and plan of action		

Signature: _____ Date: _____

Print name: _____

Appendix 4 – Risk assessment form notes

Step 1 - Question 5

You have duties under the Gas Safety (Installation and Use) Regulations 1998 to arrange maintenance by a CORGI-registered installer for all pipe work, appliances and flues, which you own and have provided for your tenants' use. You must also arrange for an annual gas safety check to be carried out every 12 months by a CORGI-registered installer. You must keep a record of the safety check for two years and issue a copy to each existing tenant within 28 days of the check being completed and issue a copy to any new tenants before they move in.

Step 1 - Question 6

Furniture and Furnishings Regulations (Fire) (Safety) Regulations 1988. Landlords and agents must ensure any furniture or furnishings they provided in the property meet appropriate safety standards. Under these regulations landlords must ensure their furniture and furnishings meet the following standard tests:

- Upholstered articles must have fire resistant material.
- Upholstered articles must pass the match resistance test.
- Combinations of cover material and filling material have passed the cigarette resistance test.

Step 1 - Question 7

Landlords should have electrical safety certificates issued on the premises every five years. The certificate should be issued by a competent electrician namely one who is a member of the following:

- NECEIC.
- Electrical Contractors Association
- CITB defined competency scheme.
- NAPIT Certification Scheme.

(You will need Building Regulation approval for electrical work unless it is carried out by a competent electrician).

Step 1 - Question 11

Since 1997 it has been mandatory under the Electrical Equipment (Safety) Regulations for all electrical appliances supplied with rented accommodation to be safe. This applies to both new and second hand equipment.

The best way to be sure that appliances are safe is to have a **portable appliance test** undertaken by a competent person.

Step 3 - All Questions

Please refer to the council's guidance *Fire precautions in dwellings* for the subsequent questions.



If you require this booklet in another format
or language please contact Norwich City Council
on 0800 731 4515 or email tst@norwich.gov.uk

Published by Norwich City Council January 2008
Norwich City Council, City Hall, Norwich, NR2 1NH

www.norwich.gov.uk