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# Private Sector Housing

Fire precautions in dwellings



**NORWICH**  
City Council

## Contents

<b>Introduction</b>	<b>3</b>
<b>How to use the standards</b>	<b>4</b>
<b>Minimum standards</b>	<b>5</b>
HMO 1 and 2 storeys	5
HMO 3 or 4 storeys built before 2002	6
HMO 3 or 4 storeys built after 2002	7
HMO buildings converted into flats	8
HMO 5 or more storeys	9
Single dwelling	9
<b>Appendix 1</b>	<b>10</b>
Table showing additional requirements	
<b>Appendix 2</b>	<b>12</b>
Definitions	
<b>Appendix 3</b>	<b>16</b>
Maintenance	

## Introduction

The standards detailed in this document have been designed to assist landlords and property managers in taking appropriate fire precautions to ensure the safety of residents living in private rented accommodation.

Providing early warning in the event of fire, stopping smoke and fire from spreading and ensuring all residents have a safe means of escape are essential precautions required to prevent injuries and save lives.

The level of precautions required will vary between property types. As every property is different it is not possible to have prescribed standards for each property type and decisions concerning fire precautions need to be based on the risk assessment of each individual dwelling.

This documents aims to provide an understanding of the minimum standards we expect for all private sector housing within our local authority area and to assist with risk assessing fire precaution requirements for various dwelling types.

Particular attention is given to Houses in Multiple Occupation (HMOs) as residents in HMOs are potentially at greater risk from fire.

We have produced these standards in close consultation with Norfolk Fire and Rescue Service and made frequent reference to the national fire guide; Housing – Fire Safety, published by LACORS (Local Authorities Coordinators of Regulatory Services).

The main legislation covering fire safety within private sector housing is:

- Housing Act 2004; Part 1 – (The Housing Health and Safety Rating System)
- The Regulatory Reform (Fire Safety) Order 2005; Part 2 – (Fire Safety Duties)
- The Management of Houses in Multiple Occupation (England) Regulations 2006
- The licence conditions for licensed HMOs section 67 Housing Act 2004.

Legislation may change from time to time and definitive interpretation of legislative requirements can only be made by a court of law. It is the responsibility of landlords and property managers to ensure compliance with the relevant legislation.

## **How to use the standards**

### **Step 1**

The first thing you need to establish is what type of property you manage?

Is the property an HMO?

How many storeys does it have?

The minimum standards for each property type are listed.

### **Step 2**

The next thing you need to establish is whether your property has any additional requirements. If it differs from the assumptions listed then additional precautions will be needed.

You will find the requirements matching your property listed in the fire precautions table in appendix 1, which has been colour-coded for easy reference.

### **Step 3**

You need to understand the terms used, use the definitions in appendix 2 for this.

### **Step 4**

Once the precautions are in place you will need to maintain fire safety in the building.

# Minimum standards

## HMOs – 1 and 2 storeys

This example makes the following assumptions:

- All kitchens are shared use
- There are six or less occupants
- All bedrooms in the property have a means of escape (as defined in appendix 2)
- The building is not used for commercial or retail purposes
- There is no basement/cellar

Additional precautions may be required if the above assumptions have not been met – please refer to appendix I.

The HMO must have close fitting doors to all risk rooms and a Grade D LD3 fire detection system with an additional Grade D interlinked heat detector to the kitchen(s). Emergency lighting is required if the means of escape does not have effective borrowed light.

The property must have either egress windows to all bedrooms or a FD 30s door to the kitchen.






A multi-purpose extinguisher and a fire blanket is required in each kitchen.

### Summary

Doors	Close fitting.
Detectors	Grade D LD3 fire detection systems with an additional Grade D interlinked heat detector to the kitchen(s).
Emergency Lighting	Emergency lighting is required if the protected escape route does not have effective borrowed light.
Egress	Egress windows to all bedrooms or a FD 30s door to the kitchen.
Extinguisher	Multi-purpose extinguisher and a fire blankets are required to the kitchen(s).

## HMOs – 3 or 4 storeys built before 2002

This example makes the following assumptions:

-  All kitchens are shared use
-  There are six or less occupants
-  All bedrooms in the property have a means of escape (as defined in appendix 2)
-  The building is not used for commercial or retail purposes
-  There is no basement/cellar

Additional precautions may be required if the above assumptions have not been met – please refer to appendix I.

The HMO must have a fully protected means of escape and a Grade D LD2 fire detection system. Emergency lighting is required if the fully protected means of escape does not have effective borrowed light.

A multi-purpose extinguisher and a fire blanket are required in each kitchen.

### Summary

Doors	FD30s to all risk rooms on the means of escape.
Detectors	Grade D LD2 fire detection system.
Emergency Lighting	Emergency lighting is required if the protected escape route does not have effective borrowed light.
Extinguisher	A multi-purpose extinguisher and a fire blankets are required to each kitchen.



## HMOs – 3 or 4 storeys built after 2002

This example makes the following assumptions:

- All kitchens are shared use
- There are six or less occupants
- All bedrooms in the property have a means of escape (as defined in appendix 2)
- The original layout has not been changed or altered.
- The building is not used for commercial or retail purposes
- There is no basement/cellar

Additional precautions may be required if the above assumptions have not been met – please refer to appendix 1.

The HMO must have FD30 doors to all risk rooms on the means of escape, FD30s doors to each kitchen and a Grade D LD3 fire detection system with an additional Grade D interlinked heat detector to each kitchen. Emergency lighting is required if the means of escape does not have effective borrowed light.

A multi-purpose extinguisher and a fire blanket are required in each kitchen.

### Summary

Doors	FD30s to all risk rooms on the means of escape and FD30s to each kitchen.
Detectors	Grade D LD3 fire detection system with an additional Grade D interlinked heat detector to each kitchen.
Emergency Lighting	Emergency lighting is required if the protected escape route does not have effective borrowed light.
Extinguisher	A multi-purpose extinguisher and a fire blanket is required in each kitchen.

## HMOs – buildings converted into flats

This example makes the following assumptions:

Each flat is self-contained

All flats are occupied as single dwellings

Additional precautions may be required if the above assumptions have not been met – please refer to appendix I.

The HMO must have a fully protected means of escape and a Grade D LD3 fire detection system. An additional Grade D interlinked heat detector must be placed in each flat, situated in the room/lobby that leads directly onto the means of escape (eg near to the front door to the flat).

In addition to this each flat must have a Grade F detection system.

Emergency lighting is required if the fully protected means of escape does not have effective borrowed light.

A multi-purpose extinguisher and a fire blanket is required in each kitchen.

### Summary

Doors	FD30s to all flats on the means of escape.
Detectors	Grade D LD3 fire detection system to communal areas with an additional Grade D interlinked heat detector to each flat.  Each flat must have a Grade F detection system.
Emergency Lighting	Emergency lighting is required if the fully protected means of escape does not have effective borrowed light.
Extinguisher	A multi-purpose extinguisher and a fire blanket is required to each kitchen.



## HMOs – 5 or more storeys

We require that properties with five or more storeys are fully compliant with the standards set in guidance to the Fire Safety Regulatory Reform Order 2005.

Guidance can be found on the government publication “Fire Safety Risk Assessment Sleeping Accommodation” which can be downloaded here: [https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/14884/fsra-sleeping-accommodation.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/14884/fsra-sleeping-accommodation.pdf)

Or ordered using ISBN: 978 1 85112 817 4

## Single dwelling

This example makes the following assumptions:

- There are no bedrooms with a door into a kitchen
- The building is not used for commercial or retail purposes

Additional precautions may be required if the above assumptions have not been met – please refer to appendix I.

A single family dwelling must have Grade F LD3 fire detection system.

## Summary

Detectors

Grade F LD3 fire detection system.

## Appendix 1 – Fire precautions table

Difference to assumption (refer to step 2)	Property type	Additional requirements
Bedrooms with no means of escape (see definitions)	HMOs – 1 & 2 stories with shared cooking facilities	FD30 doors to the kitchen Egress windows to all bedrooms
Bedrooms with no means of escape (see definitions)	HMOs – 3 stories and above	All bedrooms must have a fully protected means of escape
Inner room (Bedrooms off a risk room)	HMOs – 1 & 2 stories with shared cooking facilities	FD30s door between the risk room and the bedroom Grade D smoke detector to the bedroom An egress window to the bedroom
Inner room (bedrooms off a risk room)	HMOs – 3 stories and above	All bedrooms must have a fully protected means of escape
Kitchens within bedroom/unit	HMOs – 1 & 2 stories HMOs – 3 or more stories built after 2002	FD30s door. Grade D heat detection Grade F smoke detector in each bedroom/unit
Kitchens within bedroom/unit	HMOs – 3-4 stories built before 2002	FD30s doors A mixed Grade A and Grade D smoke and heat detection system. The licence holder should refer to BS5839 part 6 and is responsible for making sure that the detection system is appropriate for the design layout and use of the building
More than 6 people	HMOs – 1 & 2 stories with shared cooking facilities HMOs – 3 or more stories with shared cooking facilities built after 2002	Grade D LD2 system A fully protected means of escape
More than 6 people	HMOs – 3-4 stories with shared cooking facilities built before 2002	FD30s doors A mixed Grade A and Grade D smoke and heat detection system. The licence holder should refer to BS5839 part 6 and is responsible for making sure that the detection system is appropriate for the design layout and use of the building.
The original layout has been changed or altered.	HMOs – 3 or more stories with shared cooking facilities built after 2002	Any alterations made must be in full compliance with building regulations with building control informed in writing that the property was being used as a HMO.  A building control compliance certificate must have been awarded.
There is a mix of commercial and residential use in the same building.	All HMOs / All dwellings	There must be 60 minute fire separation between the commercial areas and the residential areas. There must be 'appropriate' fire detection. Please refer to the guidance for the Regulatory Reform (Fire Safety) Order 2005.

Difference to assumption	Property type	Additional requirements
There is a habitable basement	All HMOs	There must be 30 minutes fire separation between levels. There must be a FD30s fire door and the detection level in the rest of the building must also be provided in the basement. All habitable basement rooms must have egress windows. Any external light well must allow for escape.
There is a cellar which is not used for habitation.	HMO of 1 or 2 storeys	The cellar must not be used for storage. The door must be close fitting. The ceiling must be of sound construction. There must be a smoke detector which is linked to the system in the house.
There is a cellar which is not used for habitation.	HMOs of 3 or more storeys	The cellar must not be used for storage. There must be 30 minutes fire separation between levels. There must be a 30 minute fire door. There must be a smoke detector which is interlinked to the system in the house.
One or more bedroom(s) leading from the kitchen and no separate means of escape.	Single dwelling	If the bedroom is on a ground or first floor there must be an FD30s door between the bedroom and the kitchen, an egress window in the bedroom, a Grade D heat detector in the kitchen and a Grade D smoke detector in the bedroom.  Bedrooms leading from kitchens above ground floor are not accepted.
There is a flat in multiple occupation within a building which has been converted into flats	A building which has been converted into flats	For each individual flat used as an HMO see the standard for 1 or 2 storey HMOs.

## Appendix 2

### Definitions

#### Doors

**Close fitting doors:** This a door which is not a fire door but is of solid construction fitting into a solid frame with a gap of less than 3mm. It must be free from defects and in good state of repair. Doors which are cracked or of flimsy construction will not provide the required fire and smoke protection.

**FD30s:** Fire doors providing a minimum of 30 minutes fire and smoke protection. They must comply 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:

- Fitted with plain steel butt hinges of not less than 100mm x 75mm.
- Fitted with heat activated intumescent seals and cold smoke seals 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 co-incident position with the stops on the door).
- Fitted with a self-closing device manufactured to satisfy the requirements of BS EN 1154:1997. The self-closing device must 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 minutes.
- The gap between the door and the door lining (or frame) must not be more than 3mm.
- All hinges and latch parts necessary for holding the door in place during a fire must have a melting point in excess of 8000°C and to comply with BS 8214:1990 and BS 5872:1980.
- Where there are gaps between the door lining and the surrounding construction. All voids must be filled with fire stopping material such as an intumescent foam or filler.
- Where glazing is incorporated into the fire doors install 6mm Georgian wired glass or fire resistant glazing. The glazing must be fixed to BS 476 parts 20-23 requirements.

**FD30:** Fire doors providing a minimum of 30 minutes fire protection. They must comply 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:

- Fitted with plain steel butt hinges of not less 100mm x 75mm.
- Fitted with heat activated intumescent seals 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 seals must not be rebated into the door stops or a co-incident position with the stops on the door).
- Fitted with a self-closing device manufactured to satisfy the requirements of BS EN 1154:1997. The self-closing device must 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 minutes.

- The gap between the door and door lining (or frame) must be not more than 3mm.
- All hinges and latch parts necessary for holding the door in place during a fire must have a melting point in excess of 8000°C and to comply with BS 8214:1990 and BS 5872:1980.
- Where there are gaps between the door lining and the surrounding construction. All voids must be filled with fire stopping material such as an intumescent foam or filler.
- Where glazing is incorporated into the fire doors install 6mm Georgian wired glass or fire resistant glazing. The glazing must be fixed to BS 476 parts 20-23 requirements.

### **Effective borrowed light**

Adequate background light can be achieved via a window or a skylight. At night street lights can provide a light source. Emergency lighting is needed if there is no window or there are obstructions or there is no nearby street lighting.

### **Egress windows**

The window must have an unobstructed openable window area of at least 0.33m<sup>2</sup> 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 not be 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). The ground below the windows must be free from hazards (low walls, railings, bicycles etc.).

### **Emergency lighting**

A lighting system providing automatic illumination of the means of escape in the event of failure of the conventional lighting. Emergency lighting systems must comply with the provisions of BS 5266-1:1999.

### **Fire detection**

For full definitions please refer to BS5839 part 6 2004.

- **Grade D:**
  - **Grade D** Means mains powered interlinked detectors each with an integral standby supply (battery back-up).
- **Grade D LD3:**
  - **Grade D** Means mains powered interlinked detectors each with an integral standby supply (battery back-up)
  - **LD3** Means smoke detectors to all circulation spaces that form part of the escape route (typically in corridors and landings).
- **Grade D LD2:**
  - **Grade D** Means mains powered interlinked detectors each with an integral standby supply (battery back-up).
  - **LD2** Means smoke detectors to all circulation spaces that form part of the escape route (typically in corridors and landings) and in all risk rooms (heat detectors if there are cooking facilities in the risk room).

- **Grade F:**
  - **Grade F** means battery powered smoke alarms.
- **Grade F LD3:**
  - **Grade F** means battery powered smoke alarms
  - **LD3** Means smoke detectors to all circulation spaces that form part of the escape route (typically in corridors and landings).

## HMO

For a full definition please refer to section 254 of the Housing Act 2004. HMO stands for House in Multiple Occupation, which means a building or part of a building that:

- is occupied by more than one household and where more than one household shares – or lacks – an amenity, such as a bathroom, toilet or cooking facilities or
- is occupied by more than one household and which is a converted building – but not entirely self-contained flats (whether or not some amenities are shared or lacking) or

The 2004 Housing Act defines a household as:

- families, including single people and couples (including same sex couples)
- other relationships, such as foster families, carers and domestic staff.

### HMO (building converted into flats)

A property converted into self-contained flats, with at least one-third of the flats being occupied under short tenancies, but does not meet as a minimum standard the requirements of the 1991 Building Regulations.

### Inner room

A room where the only escape route is through another room is termed an 'inner room' and poses a risk to its occupier if a fire starts unnoticed in the outer room.

### Means of escape

A safe route out of the home in the event of fire. This typically includes; the stairways, hallways, landing areas and corridors leading from each risk room to the final exit and place of safety. A means of escape will not include travel through a risk room. The final exit doors must be capable of being opened from inside without use of a key.

**Fully protected escape route:** A fully protected escape route means:

- All walls and ceilings between the route of escape and risk rooms and all walls and ceilings dividing risk rooms, including converted basements, must be capable of giving 30 minutes fire and smoke protection. Gaps in walls for pipes and cables must be filled to provide protection. Un-keyed plaster (particularly lath and plaster) will need to be upgraded.
- All doors leading from a risk rooms onto means of escape must be FD30S.
- Under stairs soffits must be underlined to provide 30 minutes fire protection.
- All cupboards containing a risk of ignition (such as electrical fuse boards or water heaters) must be 30 minutes fire protected and contain and interlinked smoke detector.

- All cupboards leading on to the means of escape and under stairs cupboards must be clear of flammable goods and kept locked.
- There is no storage on the means of escape.
- Final exit doors must be capable of being opened from inside without use of a key.

**Single dwelling**

This is a house or flat which is not an HMO. Examples include families, single people and couples.

**Risk rooms**

This includes all rooms presenting a risk of fire occurring and developing. This is typically kitchens, shared living rooms, bedrooms, bedsit rooms and basements. It does not include bathrooms unless there is an ignition source (such as a boiler).



## Appendix 3

### Management and maintenance

#### Escape routes

- must be free from obstruction at all times, and regular checks must be made to guarantee this
- there must be no free storage on the escape routes
- there must be no trip hazards such as trailing electrical leads or worn carpets
- fire-resisting doors must be effectively self-closing to engage their latches with no obstructions or hindrances such as catching carpets
- all doors should be close fitting as designed. Fire doors should never be propped or wedged open
- any damage to fire doors must be noted and repaired. Any damaged or missing smoke seals must be replaced like-for-like.

#### Automatic fire detection (AFD) and warning systems

BS 5839: part 1, section 6 contains recommendations for regular, routine testing of AFD systems as follows:

##### Grade A systems

- Routine testing – at least one detector or call point in each zone must be tested weekly to ensure correct operation of the system. Any defect must be recorded in the log book and action taken to correct it.
- Routine maintenance – a six-monthly service must be carried out by a competent person, specialist alarm engineer, under a maintenance contract. It entails a full test to ensure compliance as specified in with BS 5839: part 1, section 6. It must be recorded in the log book and a periodic inspection and test certificate issued.

##### Grade D and E systems

- Routine testing – these systems must be tested every month by use of the test button on the smoke alarm. If it not possible for the landlord or manager to carry this out then tenants must be given clear written instruction on how to test the alarms using the test button. The tenants must be given clear recording instructions and details for reporting any faults or false alarms on the system.
- Routine maintenance – all alarms must be cleaned periodically in accordance with the manufacturer's recommendations.

##### All systems

- All detectors must be tested at least once a year to ensure that they respond to smoke. Tests should not involve the use of open flame or any form of smoke or non-specific aerosol that could contaminate the detection chamber or the electronics of the detector. Suitable specific test aerosols are available. The test must carried out by a specialist alarm engineer and must be recorded in the log book, with a periodic inspection and test certificate issued.

### **Fire blankets and extinguishers**

- Extinguishers must be tested and maintained on an annual basis in accordance with BS 5306-3 and with the manufacturer's instructions.

They must be in full working order and accessible at all times.

### **Artificial lighting**

- Conventional staircase lighting must be working properly at all times. Any blown bulbs must be replaced and all switches should be working. If timer switches are fitted then the duration must be checked and adjusted if necessary.
- any emergency escape lighting must be serviced and maintained in accordance with BS 5266-8: 2004 (BS EN 50172: 2004).

### **Emergency escape lighting systems**

- An annual discharge test in accordance with the requirements of BS 5266: part 8. This must be carried out by a competent person, usually a lighting engineer under a maintenance contract. It entails a full test to ensure compliance with the standard and should be recorded in the log book, with a periodic inspection and test certificate issued.

### **Fire doors**

Fire doors are to be maintained in accordance with BS8214:2008.

- Door leaves and door frames should be examined at six-monthly intervals for superficial damage, structural damage and excessive bowing or deformation.
- The condition of all intumescent and smoke seals should be examined at not more than six-monthly intervals. If a seal is missing in part or in total, it should be replaced immediately.



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