

Borough Council of
**King's Lynn &
West Norfolk**



Housing Standards Fire Safety Guidance

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Introduction

This guide is a summary of the fire safety standards used by the Borough Council of King's Lynn and West Norfolk when determining the appropriate fire safety requirements in residential properties. Although the principles expressed in this guidance will be used by Housing Standards when determining appropriate standards, the Council will also refer to other relevant standards and guidance.

This guidance is divided into sections describing general fire safety principles, with general advice on how to deal with fire safety for a variety of property types.

The guidance follows the assumptions adopted in the LACoRS document, in that any given property may have different risks associated with it depending on the nature of the occupancy. This may vary from 'low risk' (e.g. single household properties and small shared houses); 'normal risk' (e.g. small bedsit type accommodation or larger shared houses); to 'high risk' (larger bedsit type HMOs, those with cooking facilities in bedsits and those where the particular occupancy of the building may present a higher than normal risk).

Fire Risk Assessment

As a general principle, the person responsible for ensuring for the safety of the occupiers of a residential property should periodically undertake a fire risk assessment so as to establish what are the potential risks from fire. This should be an ongoing process as changes in occupiers or the deterioration of fire safety measures over time will have implications for this assessment. This assessment will inform the responsible person as to what measures or practices need to be in place in the circumstances.

Where it applies, the **Regulatory Reform (Fire Safety) Order 2005** (FSO) places a legal duty on the responsible person to take general fire precautions to ensure, as far as is reasonably practicable, the safety of the people on the premises and in the immediate vicinity. The responsible person must also carry out a fire risk assessment for the purpose of identifying the general fire precautions and other measures needed to comply with the FSO

Automatic Fire Detection (AFD) Types

British Standard BS5839-6:2019 covers specific recommendations for fire alarm systems in all domestic premises and covers both new-build and existing properties. The standard contains a large amount of detail on all aspects relating to the design and installation of fire alarm systems, but one area of it covers the type of alarm to install and the areas of the property to protect.

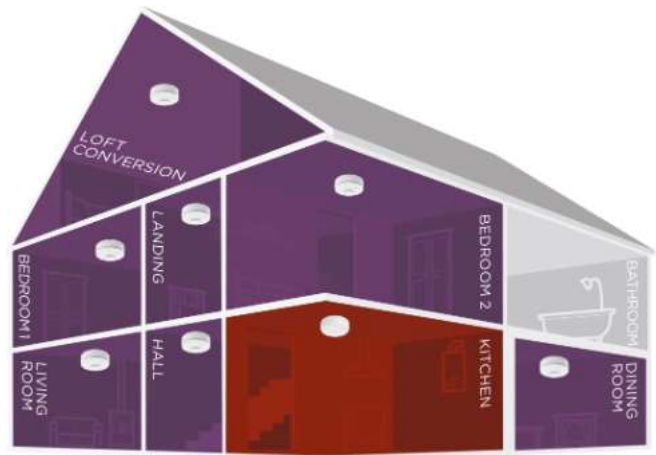
The Category of System

The standard states that the level of protection to the occupants needs to be directly related to the fire risk. However it does list three Categories of system to describe the level of protection the systems provide. Where and how many alarms are installed will affect how quickly a fire is detected – generally the higher the Category of system the higher the level of protection.

**LD1
High Protection**

All areas where a fire could start, e.g:

- Hallways
- Landings
- Living Room
- Kitchen
- Bedrooms
- Airing cupboards/ Meter cupboards



**LD2
Medium Protection**

Escape routes and high risk areas, e.g:

- Hallways
- Landings
- Kitchen
- Living Room

Note: Where bedrooms are let as bedsits they will be considered 'high risk' rooms for the purposes of designing an appropriate fire detection system.

**LD3
Minimum Protection**

Escape routes, e.g:

- Hallways
- Landings



The Alarm Grades

BS 5839-6:2019 includes grades covering the different types of alarm system:

Grade A: Separate detectors, sounders and central control and indicating equipment with back-up supply. Equipment must conform to other British Standards (BS EN 54)

Grade C: A system of fire detectors and alarm sounders (which may be combined in the form of smoke alarms) connected to a common power supply, comprising the normal mains and a standby supply, with central control equipment.

Grade D1: A system of one or more mains powered detectors, each with a tamper-proof standby supply consisting of a battery or batteries.

Grade D2: A system of one or more mains-powered detectors each with an integral standby supply consisting of a user-replaceable battery or batteries.

Grade F1: A system of one or more battery-powered detectors powered by a tamper-proof primary battery or batteries.

Grade F2: A system of one or more battery-powered detectors powered by a user-replaceable primary battery or batteries.

For example a two storey rented property;

Grade D1, LD2^D



Rented

New Build / Existing

Grade D1

A system of one or more mains powered detectors, each with a tamper-proof standby supply consisting of a battery or batteries.

Note D:

Heat detectors should be installed in every kitchen. A smoke detector should be installed in the principal habitable room. Where more than one room might be used as the principal habitable room, a smoke detector should be installed in each of these rooms.

The Building Regulations

England and Wales – Building Regulations Document B (Volume 1)

These regulations are the ideal standard and cover new builds, materially altered dwellings, loft conversions and certain building extensions for standard dwellings.

All dwellings should be provided with an alarm system to at least Grade D1/D2, Category LD3 – this means the installation of mains powered alarms with an integral back-up power supply within the escape routes of the property (i.e. hallways and landings).

In addition, the regulations also require a heat alarm to be installed in any kitchen areas where the kitchen is not separated from the circulation space or stairway by a door.

The regulations state that optical smoke alarms are generally more suitable for installation in circulation areas (hallways and landings) adjacent to kitchens. Heat alarms are recommended for kitchens.

All alarms should be interconnected to ensure audibility throughout the property in event of an alarm being triggered.

The regulations also reference the **British Standard BS 5839-6:2019** and recommend that an alarm system is installed in-line with this standard.

AFD Commissioning & Testing

Commissioning

The commissioning process involves the thorough testing of the installation to the recommendations of the Standard and to the designer's requirements (i.e. system specification). The work must be carried out by a "competent person", i.e. one who possesses the relevant current training, experience and capability to perform the task in accordance with all the relevant drawings and reference materials.

Documentation

Part of the commissioning process involves ensuring that adequate records and all other relevant documentation have been provided to the end user or purchaser of the fire detection and fire alarm system. Of particular importance are accurate "as-fitted" drawings of the installed system and system-specific operation and maintenance manuals. Other requisite documentation includes:

- Certificates for the design, installation and commissioning of the system;
- Any agreed variations on the original system design specifications;
- A logbook for recording all system events, e.g. fire alarm / fault signals, routine maintenance visits, etc. Annex F (p 144-146) of the Standard offers a useful logbook template while Annex G (p 147-155) contains model certificates

Testing of Alarm Systems

All testing and servicing of AFD should be in accordance with **BS5839 Part 6 2019, Table 3**.

All systems, other than Grade A systems, should be **tested at least every month by the user**. Grade A systems should be **tested by the user weekly** and serviced by a responsible/competent person every **6 months**. All tests and servicing should be recorded and certificates retained where issued.

Systems other than Grade A should be serviced every **12 months** and the relevant certification should be retained and recorded.

In the case of smoke alarms and any heat alarms, this test may be carried out by use of a test button on each of the smoke alarms, heat alarms and multi-sensor alarms installed in the premises.

If a fire alarm has no test button, assistance with testing should be sought from a suitably qualified and competent third party. In the case of linked alarms, the "one alarm, all alarm" feature must be verified. The alarm should be visually inspected and any defects should be noted for action.

Carbon Monoxide Alarm Interconnection

Mains powered Carbon Monoxide alarms conforming to BS EN 50219 and installed in compliance with BS EN 50292 may also be interlinked with the fire detection and alarm system if the manufacturer of the system permits.

Fire Doors

Fire doors to rooms off the means of escape (MOE) provide a means to ensure escape routes are available and free from smoke in the event of a fire (protected). Certified fire doors and frame sets are a requirement in higher risk properties (see specific guides).

Even in lower risk dwellings, a minimum provision of sound, conventional doors is beneficial as these can drastically enhance the fire safety if kept closed at night.

Whilst a protected MOE is the ideal for all residential properties, the requirement for fire resistance from doors otherwise is dependent on the risk associated with the property and the availability of an alternative means of escape.

Depending on the risk, the requirement will range from sound, well-constructed and close-fitting conventional doors, to doors certified to give 30/60 minutes fire resistance as a door and frame set. The latter will also be required to be fitted to the standards required by BS 8214 :2016 and be adequately self-closing.

Where fire doors are required, they must be certified fire doors - fitted (and maintained) as a door and frame set in accordance with BS 8214. Modified doors or fire doors fitted into existing door frames will not be acceptable in these circumstances unless they are certified as being able to provide the equivalent fire resistance by an appropriate third party (such as a NAFDI, FDIS, FIRAS or similarly UKAS accredited operator).

Locks

Ideally, final exit doors from all domestic premises should be fitted with locks/catches which are openable from the inside without the use of a removable key. This should always be the case in HMOs, including shared houses. Where security locks are fitted they should be of the type with a suitable internal thumb-turn to facilitate this.

Similar provision shall apply to the exit door from each unit of accommodation (bedsit or flat) or to any door separating these from the final exit door.

Electrically operated locks must 'fail to safety' (open) or have an adjacent manual over-ride in the event of power failure.

Mortice type locks incorporating a key hole should not be fitted to fire doors as to do so would be to compromise the effectiveness of the fire door by providing an aperture in the door for the passage of smoke and fire.

Traditional, rim cylinder, night latch locks ('Yale' type locks) are acceptable from a fire safety perspective. However, there are a number of alternative mechanisms that offer greater security and are ergonomically better suited to readily allow escape from bedsit rooms. Consideration should also be given to fitting locks that do not result in residents accidentally locking themselves out of bedrooms as this will encourage residents to occasionally leave doors ajar.

Windows serving as fire egress windows shall also be made (and maintained) such as to allow exit at all times.

Fire Fighting Equipment

In order to extinguish small fires in their early stages, a simple multi-purpose extinguisher should be provided on each floor in the common parts of buildings containing flats and in HMOs (all types).

In most circumstances it will be appropriate to provide a broad spectrum 6 litre 'water mist' type extinguisher rated as suitable for Class A, B, C, F and electrical fires.

A fire blanket and a smaller (1 litre) water-mist type extinguisher is recommended for a kitchen and, unless the property is low risk, shall be a requirement.

1. Where provided in dwellings, fire extinguishers should:
 - comply with BS EN 3-7;
 - be maintained in accordance with BS 5306-3; and
 - be appropriate to the risk.

2. Extinguishers should be located as follows:
 - on a dedicated stand or hung on wall brackets with the handle approximately 1.5m from floor level;
 - in a position such that they do not obstruct the escape route;
 - close to the exit position from each floor;
 - not obstructed by opening doors and not in recesses out of sight; and
 - away from heaters or areas where they may be subject to damage.

Those provided for kitchens shall be located near to an exit from the kitchen, in order to prevent persons becoming trapped behind a fire within the kitchen

Fire blankets must be provided in all kitchens in rented accommodation and should:

- comply with BS 6575 or equivalent;
- be of 'light duty' type which are capable of dealing with small fires such as cooking fires or fires involving clothing; and
- be mounted on the wall approximately 1.5m high and closer to the room exit than the cooking facility.

Fire Safety Signage

Where fire safety signs are necessary, they should accord to the requirements of BS 5499 and the Health and Safety (Safety Signs and Signals) Regulations 1996.

The need for signage will be dependent of the particular risks associated with the property concerned and this is indicated in the specific guidance. The number and types of signs will be determined by the installer with reference to BS 5499 and the fire risk assessment.

Flame Spread

When deciding on the correct coating system to provide Fire protection to a combustible material, it is essential that the products meet the standards set out by the new Euroclass System for the fire safety classification of building materials.

The test methods are totally new and involve exposing the product to direct flame and is called the Single Burn Test or SBI Test. This test is designed to simulate the flame exposure that would be experienced by material lining the walls of a room when a "wastepaper basket" ignites next to the wall in the corner of a room.

The test measures a Fire Growth Rate (FIGRA), the heat energy contribution to the fire from the product. The result is categorised on a Fire Growth Rate Index.

A second measurement is taken to calculate the volume of smoke produced by the fire and categorised according to a Smoke Growth Rate (SMOGRA) index.

Classification of individual products

To provide guidance to the user/specifier regarding the performance of a particular product under test. Information is provided by the following process:

There are seven Reaction to Fire classes.

A1	The Product is classed as a Non-Combustible
A2	Limited Combustibility
B	Combustible materials – Very Limited contribution to fire
C	Combustible materials – Limited contribution to fire
D	Combustible materials – Medium contribution to fire
E	Combustible materials – High contribution to fire
F	Combustible materials – Easily flammable

These classes are further divided to provide information on a product's tendency to produce smoke and flaming droplets / particles based on the results of the SBI Test.

Smoke Generation

Smoke generation is measured for Reaction to Fire classes A2 to D. Smoke emission classifications are not provided for products with an E or F overall rating.

There are three smoke intensity levels:

s1	Emissions absent or very little
s2	Emissions with average volume intensity
s3	Emissions with high volume intensity

Fire Generation

Burning droplets/particles can inflict skin burns and cause further spread of fire. Burning droplets/particles are measured for Reaction to Fire classes A2 to E. E-rated products receive a d2 flaming droplet classification. F-rated products receive none.

There are three classes of burning droplets:

d0	No burning droplets
d1	Slow dripping droplets
d2	High/Intense dripping droplets

As an example:

Envirograf Fire Protection Coatings have been tested to this new standard with the resulting classification B/S1/d0.

This translates to:

B - Combustible materials – Very Limited contribution to fire

s1 - Smoke emissions absent or very little

d0 - No burning droplets

Classification according to European Standard EN-13501-1

DEFINITION	CONSTRUCTION PRODUCTS		
Non-combustible materials: No contribution to fire	A1		
Limited combustibility	A2 - s1 d0	A2 - s1 d1	A2 - s1 d2
	A2 - s2 d0	A2 - s2 d1	A2 - s2 d2
	A2 - s3 d0	A2 - s3 d1	A2 - s3 d2
Combustible materials: Limited contribution to fire	B - s1 d0	B - s1 d1	B - s1 d2
	B - s2 d0	B - s2 d1	B - s2 d2
	B - s3 d0	B - s3 d1	B - s3 d2
Combustible materials: Minor contribution to fire	C - s1 d0	C - s1 d1	C - s1 d2
	C - s2 d0	C - s2 d1	C - s2 d2
	C - s3 d0	C - s3 d1	C - s2 d2
Combustible materials: Medium contribution to fire	D - s1 d0	D - s1 d1	D - s1 d2
	D - s2 d0	D - s2 d1	D - s2 d2
	D - s3 d0	D - s3 d1	D - s3 d2
Combustible materials: High contribution to fire	E	E - d2	
Combustible materials: Easily flammable	F		

Lighting

Provision

Adequate lighting of escape routes is necessary as part of an effective fire safety strategy and is generally required where the building exceeds two storeys. In smaller HMOs and single households emergency lighting may not be required if the escape routes are short and borrowed lighting is adequate.

The levels of artificial and emergency lighting required will depend on the risk*

Maximising natural lighting is also a useful adjunct to this provision and may negate the need for (or extent of) emergency lighting in some circumstances.

* risk factors that may contribute to this assessment will include factors such as:

- the presence of long escape routes
- the presence of complex layouts
- a high risk due to occupancy
- a lack of natural lighting to the escape route.

Conventional lighting should have the following characteristics:

- light switches and controls should be obvious, simple and visible under all conditions;
- switches should be located on every landing in a convenient and conventional position;
- in larger HMOs a dedicated lighting circuit should be installed so that the use of any one switch/control anywhere along the route will illuminate the entire escape route (or discrete part).
- Time delayed or automatically activated systems must be adequate to ensure the proper activation and continuation of the lighting as necessary.

Where considered necessary, emergency escape lighting must be designed to automatically illuminate upon the failure of the power supply to the conventional artificial lighting, when it must:

- illuminate the escape route to assist the occupants to move easily to exits and a place of safety;
- highlight any hazards such as stairs and changes in floor level or direction; and
- enable easy identification of any fire alarm call points and fire-fighting equipment throughout the escape route.

Emergency lighting must be to **BS 5266-1: 2016**

Luminaires (and ideally all lighting provision) should be sited in the following positions:

- near any intersection of corridors;
- above each final exit door;
- near each change of direction (other than on a stairway);
- within each stairway so that each flight of stairs receives direct light;
- near any change of floor level;
- outside any secondary escape exit if the street lighting is poor;
- near each fire alarm call point; and
- near fire-fighting equipment.

Testing of Lighting

1. Conventional lighting to the hallways and staircases must be working properly at all times. Any missing or blown bulbs should be replaced and all switches should be in working order. If timer switches are fitted then the duration should be checked and adjusted if necessary. Checks should be undertaken in conjunction with routine testing of systems otherwise (at least weekly).
2. Any emergency escape lighting should be serviced and maintained in accordance with BS 5266-1:2016. However, in most average sized premises with normal risk, the following regime with a procedure for responding to reports of defects should be adequate:
3. 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 the periodic inspection and test certificate issued.

Cupboards

Ideally, storage cupboards and those containing gas meters or electric meters/fuses should not be located in the means of escape (MOE) of any dwelling - and where possible their presence should be designed out at the construction or refurbishment stage.

Where they are retained, then there are a number of strategies that may be employed to minimise the hazard, depending on the assessed risk. These strategies include (in order of increasing risk) the following:

- Retained but combustible items not stored in them.
- Emptied of items and kept locked (under the control of the landlord).
- Modified in construction so as to be of sound construction (including a suitably robust door).
- Modified in construction so as to provide 30 minutes fire resistance (to include a certified FD30S fire door).
- As above but with additional fire detection.

Gas Meters

Gas meters should be protected from damage and where necessary, caging or similar approved housing should be provided to prevent mechanical damage. Where a construction giving fire protection is provided to any gas meter there must be strict adherence to the **Gas Safety (Installations and Use) Regulations** – including any necessary ventilation.

Electric Meters

It is always good practice to house electric meters in fire resistance cupboards if they are located in the means of escape. The extent to which it may be necessary to do so will depend on the same factors that determine the storage cupboards allowed and the types of doors necessary for the rooms off the MOE.

Proprietary automatic fire suppression systems may also be used in lieu of a full fire-resistant cupboard in some instances.

Management (all properties)

The Homes (Fitness for Human Habitation) Act 2018 places an obligation on all landlords to ensure that the property they let is safe, healthy and free from hazards that could cause serious harm. This inevitably necessitates proper management of properties by landlords.

Landlords will need to have in place proper testing and maintenance routines for fire safety critical features, such as fire alarms, fire precautions and electrical and gas installations if they wish to avoid possible litigation from tenants.

Additionally, persons managing properties that are defined as a house in multiple occupation (**HMO**) under **section 254, 255 or 257 of the Housing Act 2004**, must ensure that they manage the HMO in accordance with the requirements of any 'management regulations' provided relevant to those sections. Management obligations cover various matters including:

- giving information to occupiers - i.e. displaying the name, address, and telephone contact number of the manager;
- keeping the accommodation safe, clean and in good repair;
- making sure that fire safety measures and precautions are maintained;
- maintaining safe water, drainage, gas and electricity supplies;
- taking care of common parts, fixtures, fittings and appliances and;
- providing proper facilities for waste disposal

Failure to provide and maintain suitable fire precautions would be in breach of these regulations and may potentially result in a serious fine or penalty charge.

Where a HMO is required to be licenced with the council, additional requirements of management (or provision) may apply which similarly places a legal requirement on the licence holder to manage the HMO properly.

Inner Rooms

A room is termed an 'inner room' when the principal exit from the room is through another room, (commonly referred to as an access room). The user of the inner room can therefore be at risk from a fire occurring in the access room.

The risk to the user of an inner room will be lower if the inner room is a:

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

The risk is increased where the access room is risk room such as a:

- Kitchen, boiler-room or lounge.

An inner room used as a habitable room, (such as a lounge or bedroom), should only be considered acceptable where:

- it is a first floor, basement or ground floor situation and there is access to a suitable escape door or window leading to a place of safety. (Other rooms may require the same if the risk associated with the access room is high).

Where rooms contain kitchen facilities in addition to another use (as with some bedsits, flats or combined kitchen/lounges), the design of the room should always be such as to ensure that users do not pass through the kitchen area to exit to the escape route.

Means of Escape

Where a protected means of escape is required to a specific standard, all structural elements separating the means of escape from rooms or cupboards likely to give rise to a fire risk must perform to the required standard. This will include all structural elements including walls, doors and (where appropriate) floors and ceilings. Any ducting or similar perforation to structural elements must be so designed as to not compromise the fire separation.

The general requirement will be for 30 minutes fire protection and separation. However, where the protected route is adjacent to higher risk rooms or buildings, a higher standard of 60 minutes may be required. Examples of such situations will include:

- where parts of a building are used for commercial purposes,
- where there are cellars below a means of escape,
- where there are higher risk rooms such as commercial kitchens, boiler rooms or large stores, and
- the separation to adjacent properties is deemed inadequate

Solid masonry walls are likely to provide adequate fire resistance in all circumstances. Otherwise, either standard or proprietary constructions may be provided to give the required fire resistance.

Existing partitions and ceilings of traditional construction may be acceptable below the MOE if they can be determined as providing the required fire resistance. This may be the case, for instance,

where there are small areas of lath and plaster ceilings in pristine condition and the requirement is for 30 minutes only.

Traditional lath and plaster partitions are unlikely to provide 30 minutes fire separation and will not be acceptable where there is a requirement for a 30 minutes protected means of escape.

In lower risk properties a specific requirement for 30 minutes fire protection may not be required. In these circumstances existing traditional construction may be acceptable.

The design of the MOE must be such as to ensure that there is no likelihood of persons falling or tripping whilst attempting to exit in a fire emergency. Risk factors will include:

- loosely fixed carpet or other floor or stair covering;
- inappropriate floor coverings or finishes (including mats on polished floors);
- poorly sited or fixed fire extinguishers;
- lack of appropriate hand rails or poorly designed hand rails or banisters;
- poorly sited or otherwise inadequate lighting;
- insufficient signage where there is a complex escape route
- presence of items such as buggies, bicycles and other equipment

An alternative provision may be acceptable in some circumstances where the protected route terminates before the final exit door. It may be permissible for the escape route to pass through a risk room before exiting the building provided that an alternative similar route exists at that juncture. The likelihood of a fire arising in both routes (both risk rooms) is slight, so there will always be one escape route available. This is dependent on there being adequate compartmentation and protection of the protected route and will be subject to a risk assessment of the particular property.

Travel Distances (bedsits, bedrooms and other habitable rooms)

The travel distance from any point in a habitable room (including from any en-suite bathrooms) to the exit door from the room should not generally exceed 9 metres.

Doors from protected lobbies leading to habitable rooms may be considered as an exit for the purposes of the above.

Lobbies (as with flats) should similarly not allow for a travel distance in excess of 9 metres from the flat front door to any habitable room door.

The following should be considered:

- depending on the assessed risk, the maximum travel distances may vary slightly from the 9 metres recommended;
- lobbies as described above and where necessary to achieve acceptable travel distances to a relative place of safety should be a protected route and have appropriate fire doors (which are self-closing);
- where an adequate alternative exit exists (e.g. a fire egress escape window) travel distance requirements will be less crucial;
- where travel distances exceed 9 metres, the property will be assessed as higher risk and additional fire safety measures may be required.

Egress Windows

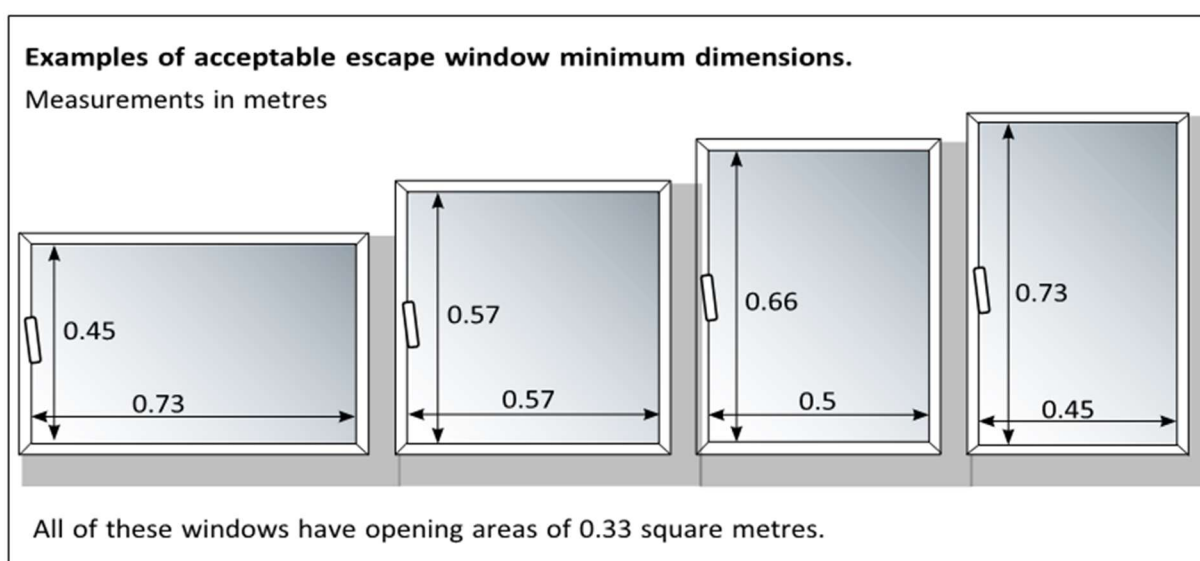
The use of windows as a means of escape from fire will always be a useful adjunct to the fire precautions otherwise present. However, significant use is generally limited to buildings of one or

two storeys (where they are termed egress windows). In these circumstances, fire precaution requirements otherwise may be significantly relaxed. In order to perform as egress windows in this context they should meet the following criteria:

- they serve rooms whose floor level is no more than 4.5m from the ground;
- egress windows must be available in all habitable rooms (an exception to this may be where doors to rooms are in close proximity to final exit doors).
- If allowed, and if it is necessary to pass through the common escape route to reach the escape window, consideration should be had to the travel distance involved.
- occupiers are able-bodied individuals with no specific high-risk characteristics and who can reasonably be expected to exit via the window unaided;
- there is no basement well or other encumbrance beneath the window such as railings or a conservatory;
- the escape window is openable from the inside without the use of a removable key; and the ground below is level and free of obstructions; and
- the window or door should lead to a place of ultimate safety, clear of the building, (however, if there is no practical way of avoiding escape into a courtyard or back garden from where there is no exit, it should be at least as deep as the building is high).

In addition, any egress window should meet the following dimensions:

- the window should have an unobstructed openable area that is at least 0.33m² and neither the width nor height should be less than 450mm (see below). The openable area will be affected by the particular hinge design.
- the bottom of the openable area should be not more than 1100 mm above the floor of the room.
- the window should not have a key operated locking system or reasonable provision shall be maintained for the retention of the key for use by the occupant.
- access to the window should ideally be available to the emergency services.



Habitable Basements

The following matters should be considered - especially where there is more than one unit of accommodation in the basement and/or if the property is high risk :

1. Each unit of accommodation should be provided with an egress window leading to a place of safety.

2. In addition to there being a suitable door at the head of the stairs to the basement, there should also be a lobby arrangement created at the base of the stair by the provision of suitable partitions and a fire door to each unit of accommodation. This is necessary in order to avoid occupiers having to escape through a trapped layer of smoke and heat.

Compartmentation

Compartmentation is the term used to describe the use of fire resisting construction to prevent the spread of fire through a building. This is an additional requirement to the provision of a protected means of escape. The general requirement is that partitions separating rooms are able to provide 30 minutes fire separation. This can usually be achieved by most masonry walls and also timber stud partitions comprising two layers of skimmed 12.5mm plasterboard.

In lower risk properties this requirement may be relaxed and traditional stud partition lined with lath and plaster may suffice in certain circumstances. There are also situations in which there may be a requirement for compartmentation of 60 minutes fire resistance - for example:

- walls, ceilings and doors separating commercial uses from residential parts;
- walls, ceilings and doors separating areas of high fire risk such as commercial kitchens, large boiler rooms or large stores; and
- separating walls between buildings.

Particular attention should be given to any ducting or similar passing through walls or partitions and any non-standard construction which may compromise the fire separation. An example of this would be a window vertically traversing two bedrooms.

Furnishings & Equipment

Items of furniture will make a major contribution to the development of any fire in a building. **The Furniture and Furnishings (Fire) (Safety) Regulations 1988 (as amended)** place responsibilities on persons supplying furniture as part of a rental agreement (or otherwise). In particular, any of the items covered by this legislation must meet a specific fire safety standard.

Furniture and upholstery covered by the regulation includes:

- beds, head-boards of beds, mattresses (of any size);
- sofa-beds, futons and other convertibles;
- nursery furniture;
- garden furniture which is suitable for use in a dwelling;
- scatter cushions and seat pads;
- pillows; and
- loose and stretch covers for furniture

Compliant furniture will be clearly marked as such and unless it is legitimately so labelled no assumption should be made as to its performance.

Similarly, electrical equipment supplied to tenants must be established as being safe to operate and not a likely source of fire. **The Electrical Equipment (Safety) Regulations 2016** place specific obligations on those supplying or manufacturing electrical equipment.

Where properties are let as a House in Multiple Occupation, there is a legal obligation that the manager of the HMO ensures that all fixtures, fittings or appliances supplied (either to be used in common by two or more households within the HMO or to be used in individual accommodation) are maintained in a good and safe repair and in clean working order.

“fixtures, fittings or appliances” include:

- lighting, space heating or water heating appliances;
- toilets, baths, showers, sinks, or wash basins or any cupboards, shelving or fittings supplied in a bathroom or lavatory;
- cupboards, shelving or appliances used for the storage, preparation or cooking of food; and
- washing machines or other laundry appliances;

Where HMOs are additionally required to be licenced with the council, any licence issued will be conditional upon the furniture, furnishings and equipment otherwise supplied is in a safe condition when supplied and subsequently is adequately maintained.

Garages

Where there are garages present in a residential building and this part of the building is directly attached and/or connected to the building, then certain provisions apply. Due to the likely presence of flammable materials in a garage, a garage will be considered an area of high fire risk and the considerations contained in this guidance with regard to such areas will apply.

In addition, where there may be the possibility of seepage of flammable liquids from the garage area into any residence, measures will have to be put in place to prevent this.

Roof Voids

Loft hatches

Loft hatches, whether above a landing or otherwise, should be such as to adequately resist the passage of fire (and heat) into the loft space. This may be readily achieved by having a hatch door of solid timber or plywood construction (of a suitable thickness) and which can be effectively secured shut and adequately sealed with proprietary draft proofing. The addition of a sealed blanket of 'rockwool' type insulation to the upper surface will help improve fire resistance as well as being necessary to prevent heat loss.

Separation between adjacent properties

Party walls separating properties from either commercial premises or any other residential properties must be such as to extend to the top of any roof space connecting the separate premises and there must be an adequate seal between the roof and party wall such as to prevent the passage of fire and smoke. The fire resistance of this construction must be appropriate to the risk associated with the adjacent property.

Fire Safety Terms & Abbreviations

30 minute fire separation	Created when a construction element delays the spread of fire by at least 30 minutes.
AFD	Automatic Fire Detection (and warning system). A system of interlinked smoke and heat detectors with integral or linked alarm sounders.
Area of high fire risk	Room or other area which, because of its function, use or contents, presents a greater risk of fire occurring and developing than a standard risk room or elsewhere – for example large kitchens, boiler rooms and large storerooms.
Bedsit	A room or rooms occupied by a single household on a separate tenancy in a building in which there are shared amenities with other households.
Bedsit HMO	A building which has been divided into individual non-self-contained lettings, each let to unconnected individuals on separate tenancies.
Call point	A device which enables the raising of an alarm in the event of a fire incident by pressing a frangible element to activate the alarm system. (also Manual Call Point).
Combined intumescent strip and smoke seal	Strip installed in either the door or frame of a door comprising a smoke seal and a thin strip of intumescent material so as to limit the initial spread of smoke and provide an effective seal in the event of a serious fire.
Compartmentation	Structural separation necessary to restrict the spread of fire and smoke from one unit of accommodation to another or from any risk room to an adjacent room or escape route.
Competent person	A person suitably trained and experienced so as to be able to properly examine, test and undertake any remedial action and to present the information in a report.
Egress window	Window meeting minimum specifications so as to be usable as a means of escape from fire. Such windows are described in Part B Volume 1 of the Building Regulations 2019 (para. 2.10).
FD30S fire door	Fire door certified to give 30 minutes fire resistance and having a smoke seal. Such doors may only be considered as certified where they are installed in a frame as supplied by the manufacturer or to the specification supplied by the manufacturer.
Final exit	The termination of an escape route from a building giving direct access to a place of safety such as a street.
Fire resisting glazing	Glazing manufactured to provide protection from fire for a specific time period.
Flat in multiple occupation	Flat occupied by more than two persons not of one household.
Floor covering	Carpet, vinyl, matting or similar floor covering.
HMO	House in Multiple Occupation - a property occupied by more than two persons not of one household who are sharing facilities.
Imperforate construction	A construction which has no holes or apertures allowing the passage of smoke or flames.
Intumescent strip	A strip applied to a door or door frame of a specific material which expands substantially when heated so as to create a permanent seal.

LACoRS	Local Authorities Coordinators of Regulatory Services (now defunct UK local government organization).
Lath and plaster ceiling	A ceiling of traditional construction comprising wooden strips (laths) fixed to joists and coated with a layer of lime based plaster.
Lobby	A sterile hallway to enable passage from rooms to an exit without traversing a risk room.
Means of escape	Principal or secondary escape route from fire.
MOE	Means of Escape
Multi-purpose fire extinguisher	A 'water-mist' type extinguisher suitable for most types of fire.
Place of relative safety	A protected stairway enclosure (storey exit) or separate fire compartment from which there is a final exit to a place of ultimate safety, or the nearest available final exit.
Protected route	An escape route which, due to its construction, guarantees protection from any fire arising in an adjacent room for a determined time period.
Risk room	A room with a function, use or contents presenting a risk of fire occurring and developing; typically kitchens, shared living rooms, bedsit rooms.
Secondary means of escape	An alternative and suitable means of escape from the principal means of escape from fire.
Self-contained flat	A part of a building (located at least partially above or below another part) which may be separately occupied and contains all necessary facilities for occupation.
Shared House type HMO	An HMO occupied by more than one household under a single tenancy agreement - e.g. a group of students.
Signage	Fire safety signs indicating such matters as the position of fire exit doors.
Single household	Persons living as a family and having relationships as would conventionally be considered family relations (or a single person).
Storey	A floor or level of a building - e.g. ground floor or first floor.
Surface finish	The material which is present on the surface of any building element - e.g. paint on wood.
Thumb-turn	A fixed locking mechanism (i.e. not door handle) allowing for locking of a door without the use of a detachable key.
Travel distance	The distance from a part of the building to a place of relative safety.
Two stage hydraulic self-closing device	A commonly used self-closing device that uses hydraulic fluid as a damping mechanism to a spring. The design is such as to divide the closing cycle into two stages so as to allow controlled and effective closure.
Underdrawn	Lined with a suitable material

Fire Safety Checklist

Note: The checklist below is a reminder of the elements that make up appropriate fire safety provision within a rented property. Not all elements will be relevant to every property and will depend upon the risk factors present.

- Automatic Fire Detection System (BS5839 Part 6)
- Fire Safety Log-Book Compliant*
- AFD Installation/Service Certification
- Emergency Lighting Certification*
- Fire Signage Compliant*
- Fire Doors Compliant*
- Fire Fighting Equipment Compliant*
- Egress Windows Compliant*
- Means of Escape Compliant
- Compartmentation Compliant
- Management Arrangements

**where required, see note above*