

# A guide to making your small block of flats safe from fire



A guide to compliance with Fire Safety Law for those responsible for safety in small blocks of flats

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## **Foreword**

## Information about this Guide

This Guide is published by the Welsh Government. The Guide is an "entry level" companion to guidance on *Fire Safety in Purpose-Built Blocks of Flats* <sup>1</sup> guide. Fire Safety in Purpose-Built Blocks of Flats should be used if your premises do not fall within the scope of this current guide.

### Status of this Guide

The Guide is intended to support the application of the Regulatory Reform (Fire Safety) Order 2005 (as amended) to the common parts of small blocks of flats (limited to 3 storeys) as well as the building's structure, external walls and the doors between the flats and common parts. This includes maisonettes and walk-up flats - premises in which each flat has its own private exit, and within which there are no internal spaces used by more than one household, such as common hallways, landings and stairwells. This Guide has been produced, in part, to satisfy the obligation of the Welsh Ministers to produce guidance to assist responsible persons to satisfy their duties under fire safety legislation. However, additional recommendations in Section 6 of the Guide go beyond the scope of that legislation and have the further objective of addressing fire safety in a resident's own flat.

This Guide takes the form of guidance and recommendations to support the application of fire safety legislation. However, it is your responsibility to ensure that you comply with the requirements set out in that legislation and to seek independent legal advice if necessary.

## Acknowledgements

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<sup>1</sup> Fire Safety in Purpose-Built Blocks of Flats. Home Office. 2021. Fire safety in purpose-built blocks of flats - GOV.UK (www.gov.uk)

## 1. Introduction

This Guide has been published to provide simple and practical advice to assist persons with responsibilities<sup>2</sup> for fire safety in small blocks of flats to comply with fire safety legislation<sup>3</sup> and make their premises safe from fire.

Such persons include:

- social housing providers
- private sector landlords
- freeholders
- resident management companies
- right to manage companies
- · managing agents.

The fire safety legislation also applies to the building's structure and external walls and all doors between the domestic premises and common parts,<sup>4</sup> and where this Guide refers to 'common parts' it should also be read as, where relevant, applying to these elements as well. This includes maisonettes or walk-up flats - some parts of such premises are within the scope of the Order as amended which includes the building structure, however, not all sections within the guide will necessarily apply to this type of premises. The scope of the main text in this Guide is limited to recommendations that support the requirements of the fire safety legislation. However, that legislation does not apply to the individual flats themselves, fire safety within individual flats is a matter for the Housing Act 2004 (as amended). Guidance on fire safety within individual flats is given within Section 6.

The Guide is designed to ensure that the common parts of blocks of flats are safe. This includes ensuring that common fire protection measures incorporated in the design of the building when it was constructed or converted remain in place and in good condition, such that a 'stay put' strategy continues to be appropriate.

It should be noted that, as fire safety legislation applies to flat entrance doors, individual leaseholders or tenants may have a duty to ensure that the fire performance of their flat entrance doors is adequate if their lease or tenancy agreement makes them responsible for the maintenance or repair of these doors; otherwise, the duty to ensure adequate fire performance of the doors may rest with the freeholder and/or managing agent.

The fire and rescue service within your area are normally responsible for the enforcement of fire safety legislation and may carry out audits of the common parts to determine compliance with the legislation. You can also receive advice on the legislation from your local fire and rescue service. Although fire and rescue services cannot undertake a fire risk assessment for you, many services do provide advice and support for small businesses. Additional information can be found online at your local fire and rescue service website.

This short Guide is not intended to provide a detailed interpretation of fire safety legislation or the Housing Act 2004. For the exact requirements imposed by the legislation, legal terminology and its definitions, reference should be made to the legislation itself.

<sup>2</sup> Fire Safety Act 2021 And Guide for Persons with Responsibilities Under the Fire Safety Order [HTML] | GOV.WALES.

<sup>3</sup> The Regulatory Reform (Fire Safety) Order 2005 (as amended).

<sup>4</sup> This includes communal lobbies, corridors and stairways, flat entrance doors and anything attached to external walls, such as balconies.

This Guide largely avoids the use of legal terminology, but provides practical guidance on actions that should be taken to comply with the legislation.

Various measures that might be identified as necessary by application of this Guide might need the services of third parties, such as contractors who install and maintain fire detection and alarm systems, fire-resisting doors and other fire protection systems.

It is important that you ensure that such contractors are competent to carry out the work for which they are engaged, as the ultimate responsibility for compliance of their work with fire safety legislation rests with you. Use of contractors that are certificated under relevant industry approval or certification schemes assists in verification of competence.

## Scope of this Guide

This Guide is intended to cover small, general needs blocks of flats that:

- were constructed as a purpose-built block of flats; or
- were converted into a block of flats in accordance with the 1991, or later, versions of the Building Regulations; and
- were, in either case, designed, constructed or converted on the basis of a 'stay put' strategy, whereby, in the event of a fire in one flat, occupants of other flats are normally safe to remain within their own flats.

The scope of this Guide is further limited to three storey blocks, comprising not more than a ground, first and second floor and containing no more than six flats (see Figures 1 and 2).

Figure 1

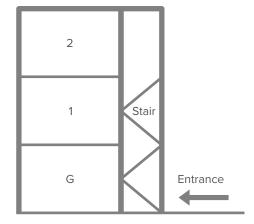
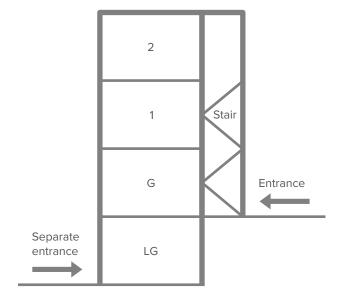


Figure 2



**Note:** The above blocks may, in addition, incorporate additional flats on a lower ground floor, provided that any lower ground floor flats are entered directly from open air and do not open into any common parts (see Figure 2). The stairway may be external, with flats approached via balconies, rather than internal.

This Guide is not appropriate if:

- your block falls outside the scope described above; or
- the design of fire precautions in your block differs materially from those recommended in this Guide.

Under either of the above circumstances, you should base the fire precautions in your block, and your fire risk assessment, on the guidance in Fire Safety in Purpose-Built Blocks of Flats.

In the case of buildings converted into blocks of flats prior to 1991, reference should be made to alternative guidance<sup>5</sup>.

This Guide applies only to premises in Wales. Separate but similar guidance is applicable in England. The Guide is not intended for use in Scotland or Northern Ireland because the fire safety legislation (as referred to above) only extends to England and Wales.

<sup>5</sup> Guidance on fire safety provisions for certain types of existing housing. Local Authority Coordinators of Regulatory Services (LACoRS). August 2008. Available for download from: <a href="https://www.cieh.org/media/1244/guidance-on-fire-safety-provisions-for-certain-types-of-existing-housing.pdf">https://www.cieh.org/media/1244/guidance-on-fire-safety-provisions-for-certain-types-of-existing-housing.pdf</a>

## 2. Your responsibilities

If you are a person with responsibility for the building under fire safety legislation, you must:

- carry out a fire risk assessment
- ensure that adequate fire safety precautions are taken in the common parts
- maintain those fire safety precautions (keeping records of such maintenance is good practice)
- engage with residents to ensure that they are aware of what to do in the event of fire, and that they understand the fire safety measures within the building
- co-operate with any other person who has duties under fire safety legislation to co-ordinate the fire safety measures for which each of you is responsible
- keep your fire risk assessment and fire safety precautions under regular review.

## 3. Fire risk assessment

You are required under fire safety legislation to conduct a fire risk assessment of the premises. The fire risk assessment involves an inspection of the common areas to identify potential fire hazards, to ensure that there are adequate measures to prevent fire starting and that there are adequate fire safety measures to keep residents (and anyone else who is lawfully on the premises and in the immediate vicinity of the premises, such as visitors, contractors, etc.) safe from fire.

In the case of maisonettes or walk-up flats often only a simple and straightforward assessment is required, covering only the structure of the building. This is unless the building is more complex in its structure, or has external cladding, balconies or any external material fitted that might present a risk of external fire spread as mentioned above.

The person conducting the fire risk assessment should determine if a fire risk appraisal of the external wall construction and any cladding is required by a specialist fire risk assessor and should record it within the fire risk assessment. If there is no internal common escape route in a block of maisonettes or walk-up flats, the issues in this guide regarding the protection of that route will not be relevant.

This "entry level" guide is intended, in part, to assist you with carrying out the fire risk assessment required by law and to help keep residents safe from fire. If you choose to carry out the fire risk assessment, it is important that, after studying this Guide, you feel able to interpret and apply the guidance and recommendations to your building. If you do not feel able to do so, you should engage the services of a competent fire risk assessor<sup>6</sup>.

A suitable checklist template for recording the findings of your fire risk assessment is given in Section 8.

<sup>6</sup> A Guide to choosing a Competent Fire Risk Assessor. Version 3. 01/10/20. Fire Sector Federation. Available for download from: <a href="https://www.nationalfirechiefs.org.uk/write/MediaUploads/Grenfell/FSF\_Guide\_October\_20.pdf">https://www.nationalfirechiefs.org.uk/write/MediaUploads/Grenfell/FSF\_Guide\_October\_20.pdf</a>

## 4. Fire hazards

A fire hazard is anything that has the potential to start a fire, or to contribute to a fire, such as ignition sources or combustible materials in the common parts. If you identify any fire hazards in the common parts, you should either remove the hazard or, if this is not feasible, take measures to reduce the risk to people.

The following sub-sections discuss fire hazards that are commonly found within the common parts and provide examples of control measures that can be used to reduce the risk. Some of these sub-sections may not be applicable where there are no internal common areas to a building, for example, in a block of maisonettes or walk-up flats.

## Electrical installations and equipment

Electrical equipment and wiring are common causes of fire. The electrical installation in the common parts should be subject to inspection and test by a competent person<sup>7</sup> at least every five years. Any work on the electrical installation should be carried out only by a competent person.

Rooms and cupboards containing electrical intake or electrical distribution equipment should have fire-resisting doors that are either kept locked or are self-closing.

## **Smoking**

Smoking in the common parts of blocks of flats is prohibited by law. You should ensure that residents, visitors and anyone working in the common parts are aware of this. There must be at least one 'No smoking' sign displayed in the common parts.

In carrying out regular inspections of the block, you should look for any signs of smoking in the common parts, ancillary rooms (e.g. plant rooms, storerooms, etc.) and other "hidden" areas. If breaches of policies are observed, appropriate action should be taken to prevent reoccurrence.

<sup>7</sup> An example of a competent person in this case would be an electrical contractor certificated by the National Inspection Council for Electrical Installation Contracting (NICEIC) or a member of the Electrical Contractors Association (ECA).

### Arson

Good physical security and vigilance by Good physical security and vigilance by both management and residents are important to reduce the risk of arson. In carrying out regular inspections of the block, you should make sure that main entrance doors self-close effectively.

All access doors to the block should be adequately secured to prevent unauthorised access. Typically, this will comprise electronic access control, requiring a fob (or similar) to gain access to the block (but with



a lever handle, or similar, on the inside to enable egress from the block).

The electronic locks should "fail safe", so that the locks release automatically in the event of total power failure to the locks.

You should make sure that refuse and recycling bins are kept clear of the block (particularly any windows or openings by which fire could spread into the block) and/ or are kept in a secure store or compound.

Further guidance on security is produced by Secured by Design<sup>8</sup>.



Fire hazard of bin storage

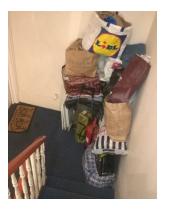
## Heating

If there is any form of heating system, such as central heating from a communal boiler, it should be subject to annual maintenance by a competent person.

## Housekeeping

Good housekeeping is fundamental to reducing the risk from fire in the common parts. The common parts should be kept clear of any combustible materials or storage.

A zero-tolerance approach, in which residents are not permitted to use the common parts to store any belongings or dispose of rubbish, is recommended.





However, in well-managed, secure blocks, it is often acceptable to permit items of lower risk in the common parts, such as doormats, pot plants and pictures on walls. If this is permitted, these items will need to be factored in as part of the fire risk assessment and blocks would need to be subject to regular checks to ensure that residents do not store additional items in the common parts.

<sup>8</sup> Secured by Design Homes. Version 2. Secured by Design. March 2019. https://www.securedbydesign.com/images/downloads/HOMES\_BROCHURE\_2019\_update\_May.pdf

Electricity meter cupboards, service riser cupboards, ancillary rooms, etc, should be kept free of any combustible materials, waste, residents' belongings, etc, and the doors should either be kept locked or should be self-closing.

Storage of mobility scooters and similar powered mobility aids (such as e-scooters and e-bikes) should generally be prohibited in common areas. In no circumstances should charging be permitted in common areas, as they can obstruct people who need to escape from fire. For more information on mobility scooters, see "Fire safety in purpose-built blocks of flats".



## 5. Fire safety measures

Provisions within The Building Regulations for the design and construction of fire safety measures in blocks of flats are based on the assumption that:

- any fire will normally be within a flat;
- flats are constructed such that there is a low probability of fire spread beyond the flat of fire origin;
- in the event of a fire in one flat, full evacuation of the block is unlikely to be necessary;
- there is a low probability that a fire will occur in the common parts;
- any fire within the common parts will be very limited in extent and not threaten occupants of the flats.

The recommendations of this Guide are based on the same principles. Thus, it is assumed that a 'stay put' strategy has been adopted and remains appropriate, such that, when a fire occurs in a flat:

- only the occupants of that flat need to evacuate;
- occupants of other flats are normally safe to remain in their flats, unless:
  - their flat is affected by fire or smoke;
  - they are instructed to leave by the fire and rescue service.

**Note:** A 'stay put' strategy does not mean that occupants cannot leave their flat if they wish to do so and can do so safely. However, this may put them at greater risk, as there may be smoke in the common parts (e.g. during firefighting operations).

## Compartmentation

Compartmentation is a principle whereby each flat is designed to be a fire-resisting 'box' enclosed by fire-resisting walls and floors, so that fire should not be able to spread beyond a flat in which it starts. Adequate compartmentation is essential for support of the 'stay put' strategy.

Compartmentation is a long-standing design principle in blocks of flats; it can normally be assumed that the standard of compartmentation in a purpose-built block of flats, at the time of original construction, if properly maintained, is adequate to satisfy the requirements of fire safety legislation. However, it remains your responsibility to ensure there is compliance with fire safety legislation. Care needs to be taken that the integrity of the compartmentation is not breached by contractors when making holes for services to pass through etc.

In purpose-built blocks, the walls and ceilings will most commonly be of masonry construction, which is inherently fire resisting.

In the case of buildings converted into blocks of flats after 1992, it is common to find timber walls, with two layers of skimmed plasterboard, and timber floors, with skimmed plasterboard ceilings. This construction should provide adequate compartmentation for blocks covered by this guide.

Lath and plaster construction is also likely to be acceptable, provided it remains in good condition. If the lath and plaster is in poor condition (e.g. severe cracking or exposure of the timber laths), it would need to be replaced with plasterboard or other fire-resisting boards. Lath and plaster in poor condition is normally readily identifiable.

If you are uncertain as to the construction of the ceilings within flats, you should carry out a sample check of one or more flats.

In carrying out your fire risk assessment, you should carry out a thorough visual inspection of the walls that enclose the common parts (i.e. the walls that separate the common parts from flats and from ancillary rooms, etc.). It is vital to make sure that there are no holes in these walls (e.g. around cables and pipes that pass from the common parts into the flats). Fire and smoke can spread through even the smallest of such penetrations, unless the holes are "fire stopped" (i.e. filled with fire-resisting material).

Standard builders' foam, which is sometimes used to fill gaps around service penetrations, will not provide adequate fire resistance, but there are proprietary fire-resisting products that can be used. Care must always be taken to ensure that the product is being used as the manufacturer intended and is suitable for the particular application to which it is put.

Particular attention should be given to service risers, within which pipes and cables pass vertically through the building. It is common to find that there is inadequate fire stopping where services pass from a riser into the flats. The same consideration applies to meter cupboards.

The risers themselves should either be:

- separated from the common parts by fire-resisting construction (e.g. substantial timber construction, with plasterboard linings on the inside, but not thin plywood); or
- should be sealed with fire-resisting materials at each floor level (so that, in effect, they become cupboards, rather than shafts).

## Example of openings around services and poor fire stopping





Note that walls and floors separating one flat from another are covered by fire safety legislation and must equally provide sufficient compartmentation to resist the spread of fire and smoke. This applies both to blocks of flats with internal common parts and to maisonettes or walk-up flats.

As responsible persons may not have rights of access to individual flats (especially leasehold flats), it may be possible instead to inspect such walls and floors when a flat becomes vacant, or when contractors are engaged to carry out works that will penetrate them. Only if there are known grounds for concern (e.g. complaints from residents, problems with a contractor's quality of work or an actual fire that spreads between two flats) should the responsible person make efforts to gain access to an occupied flat to conduct an inspection.

In blocks with a roof void (the space between the roof and the ceiling of the top floor) it is important that the compartment walls that separate flats, and that separate the flats from the common parts, are carried up through the roof void. This is essential to ensure that a fire in one flat cannot spread through the roof void to affect another flat or the common areas (see Figures 3 and 4).

Figure 3

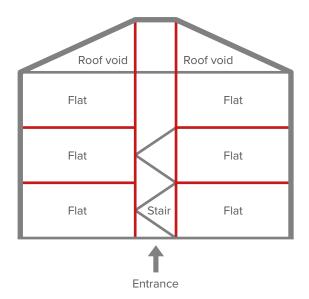
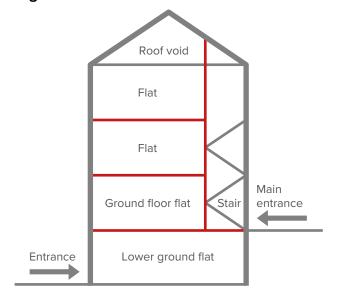


Figure 4



In some older blocks, there may be an open void over top floor flats. Access into roof voids to check the compartmentation is essential as part of your fire risk assessment. Any openings in these compartment walls need to be able to prevent the spread of fire adequately.

If you are uncertain about the standard of compartmentation, the materials of construction, etc., you should seek the advice of a competent person (such as a fire safety consultant or a building surveyor).

## **Sprinklers**

Automatic fire suppression systems installed in buildings can reduce the risk to life and significantly reduce the degree of damage caused from fire by operating at a predetermined temperature to discharge water over a known area below. Only heads/nozzles individually heated above their operating temperature by the heat from the fire operate to discharge water. The provision of an automatic fire suppression system within blocks of flats and other residential premises is seen as a preventative measure to reduce the incidence of death and injury from fires by detecting and controlling a fire at an early stage of development and on most occasions extinguishing it. Since 2016 it has been a requirement under building regulations in Wales for all new blocks of flats either newly constructed or converted from other types of buildings to be provided with automatic fire suppression systems. In older blocks of flats, it is however unusual to find an automatic fire suppression system installed unless used as a compensatory feature to meet the provisions of building regulations in some way.

 Fire-resisting compartment wall and floor

## Means of escape

The means of escape from fire for occupants normally involves travelling through the common parts (common corridors, stairways or balconies). It is essential that these common parts are protected from fire and smoke within any flat. This is largely achieved by the compartmentation described above. The flat entrance doors (and, sometimes, doors to ancillary rooms, meter cupboards, etc.) are the greatest potential weakness in this respect (see below).

Flat entrance doors will often either:

- open directly onto a single stairway (this will be the most common situation); or
- open into a lobby, corridor or access balcony, from which a further door passes into a stairway;

In the first case, to prevent spread of fire from a room within a flat to the common parts, there is normally an internal hallway within each flat (see Figures 5 and 6), with fire-resisting timber doors separating the hallway from each room. (These doors do not need to be self-closing, but residents should be advised to keep all doors closed during the night.) Any glazing in, or above, these doors should be fire resisting (e.g. Georgian wired glass).

Figure 5 – Internal flat layout

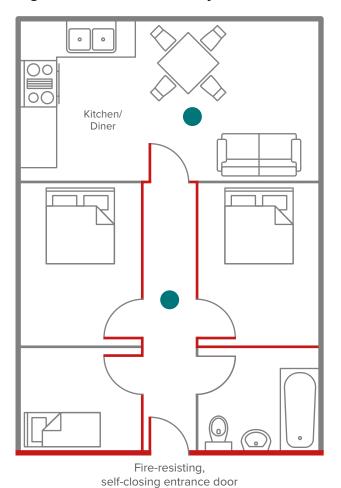
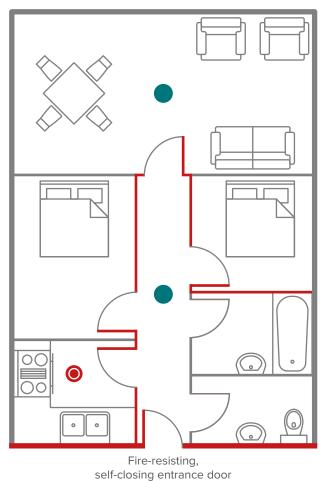


Figure 6 – Internal flat layout



Fire-resisting protected entrance hall
Fire-resisting door

Smoke alarm

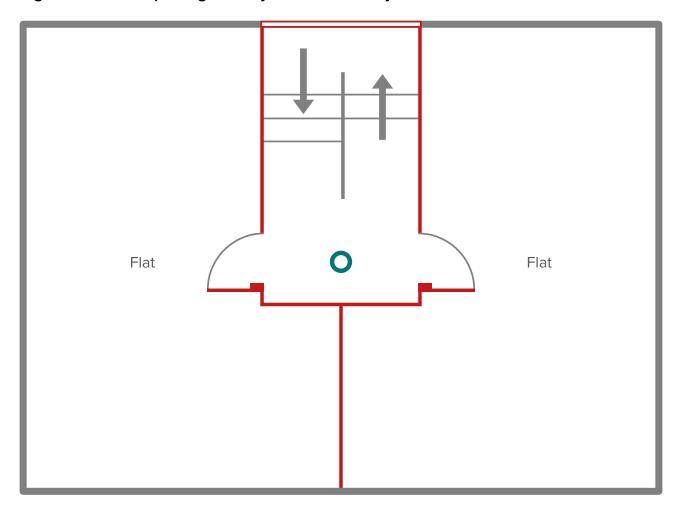


In the case of some small flats, internal doors might not have been required to be fire-resisting by Building Regulations. However, original fire-resisting doors should not have been replaced with non-fire-resisting doors.

Similarly, some flats without internal hallways may have been approved under the Building Regulations, in which case the fire resistance of flat entrance doors is particularly important, as is the provision of self-closing devices. In case of doubt, it might be appropriate to confirm that, for example, alterations to remove the hallway of the flat have been approved under the Building Regulations.

All stairways and corridors in the common parts should be enclosed in fire-resisting construction, the integrity of which should be checked in your fire risk assessment (see Figures 7 and 8 below). Doors opening onto stairways and corridors should be fire resisting and self-closing. When carrying out routine inspections of the block (and carrying out your fire risk assessment), you should check that the stairway doors are effectively self-closing and that any gaps between the door and frame are no greater than 4mm (see further information below).

Figure 7 – Flats opening directly onto a stairway



Flat Flat Flat Fire-resisting wall Smoke control openable window or vent Fire-resisting door with self closer Emergency lighting

Figure 8 – Lobby access to flats onto stairs

### Fire Doors

Checking the adequacy of the fire performance of flat entrance doors (and doors to stairways, ancillary rooms, etc.) is one of the most important parts of your fire risk assessment. To check flat entrance doors properly, access to as many flats as practicable is necessary, but at least two flat entrance doors should be checked (on both sides of the door) during every fire risk assessment. Accordingly, this section contains quite detailed information on the matter of fire doors.

In checking each door, the most important thing to check is that the door self-closes effectively from any angle, overcoming the resistance of any latch. This is essential so as to ensure that, if, for example, residents leave a flat that is on fire without closing the door themselves, the door closes automatically, containing smoke and fire within the flat. (Self-closing devices may be omitted from doors to ancillary rooms or meter cupboards that will always be kept locked and are not accessible by residents.)

To check the self-closing action, open the door to a small angle (say, 15 degrees approximately), then let it go; it should fully close and latch without any assistance. Occasionally, older blocks of flats (typically constructed before the mid-1980s) relied on rising butt hinges to close the door (see photograph). These are no longer acceptable for flat entrance doors and should be replaced with an overhead self-closing device (see photograph). Existing concealed jamb self-closing devices (comprising a chain connected between the door and the frame) are acceptable, provided they effectively close the door against the resistance of any latch. In both cases, the door should fully close into the frame, overcoming the resistance of any latch or friction with the floor.

#### Rising butt hinge



#### Overhead self-closing device



A common problem is that leaseholders replace an original fire-resisting door with a new, non-fire resisting door, so look out for doors that are of a different style or pattern to the other doors in the block. Often, such new doors are not fire resisting. It is also common for self-closing devices to be omitted from the new doors.

It is also important to check that any glazing within, or surrounding, the door is fire resisting. Although there are quite expensive clear forms of fire-resisting glass, the most common fire-resisting glazing is Georgian wired glass, which is easily identifiable from the wires within the glass.

Non-wired fire resisting glass is always marked in a corner to show the manufacturer's name and the fire performance (by reference to the standard to which it was tested). It can be assumed that any non-wired glass that is not marked in this way is not fire resisting and needs to be replaced or protected inside the flat by a layer of fire-resisting glass; in these cases, the advice of a specialist (such as a building surveyor) should be obtained.

Gaps between a door and frame permit smoke to spread. Gap size should never be more than 4mm, except at the bottom of the door, where the gap should be as small as practicable, with best practice being a maximum gap of 4mm, while ensuring that the door is unlikely to snag on the floor even if the door drops slightly on the hinges.

Ideally the frame should be to the same standard as the door, purchased together as a doorset. Door closer. See BS EN 1154. Hinges - see BS EN 1935 annex B. Hinges should be tested as part of the doorset - see BS EN 1634-2 Securing device lock, emergency exit device or panic exit device to be BS EN 12209, BS EN 179 or BS EN 1125 respectively for further information Infumescent strip and cold smoke seal to resist the passage of smoke and fire.

Figure 9 – A modern fire-resisting and smoke stopping door

All residents should be informed about the importance of maintaining fire doors in good condition. It should be stressed to them that all flat entrance doors are kept shut when not in use and they should not remove the self-closing device. They should also be advised not to alter doors or replace existing doors without seeking professional advice, and not to replace a fire-resisting door with a non-fire-resisting door. They should be told to report any faults or damage to flat entrance doors to their landlord or the freeholder immediately.

The above information should be provided to residents as soon as reasonably practicable after they move into their flat, and at periods of no greater than 12 months thereafter.

Fire resistance is expressed in units of minutes. Modern fire doors have a fire resistance of at least 30 minutes when subjected to the relevant fire test (but often hold back a real fire for a longer period of time). To prevent the passage of smoke, they are also fitted with smoke seals to prevent the passage of smoke through the gaps between the door and frame; these look like draught seals. These doors are known as FD30S doors, the number representing the period of fire resistance in minutes and the S suffix indicating the presence of a smoke seal.

Any new flat entrance doors, stairway doors and doors to ancillary rooms, meter cupboards, etc. that open into common parts should be FD30S doors.

To achieve 30 minutes' fire resistance, modern fire doors are fitted in the edges and top of the doors or frames with intumescent strips, which swell when subjected to fire and seal the gaps around the doors. These are normally combined with the smoke seals.





Intumescent strip and smoke seal in leading edge of fire door and in frame

In older blocks of flats (usually constructed before the 1980s), the original fire doors were not fitted with intumescent strips and so would not achieve the 30 minutes' fire resistance required under modern building regulations (and under current fire resistance test standards), nor were they fitted with smoke seals. However, if blocks were built after the mid-1960s, it is likely that, even without intumescent strips and smoke seals, the original fire doors (and any glazing) will provide adequate fire resistance, provided the other recommendations of this Guide are satisfied.

Letterboxes in flat entrance doors should be such that they do not impair the fire resistance of the door (i.e. in modern doors, they should ideally provide 30 minutes' fire resistance, which is achieved by fitting the opening with intumescent liners; the intumescent material then expands to seal the opening when exposed to fire). This form of protection should be provided in all new flat entrance doors and when new letterboxes are fitted.

The effect of a letterbox on the fire resistance of the door depends on the location of the letterbox. A letterbox in the middle or lower half of the door will have less detrimental effect than one in the top half of the door, where the pressure of smoke and fire gases on the letterbox is greater.

The majority of older flat entrance doors do not have fire-resisting letterboxes. This is normally acceptable, provided that the existing letterboxes are:

- constructed of non-combustible, high melting point materials such as steel or brass; and
- fitted with letterplates both internally and externally, and that at least one of the letterplates is spring loaded.

Flat entrance doors and doors to ancillary rooms will normally be either timber doors or composite doors. The approach you take in your risk assessment will be different depending on which type of door is present in your block.

### Timber doors and frames

As discussed above, it is accepted that, in older blocks, fire doors, particularly flat entrance doors, do not meet current test standards for FD30S doors. However, these doors may still be acceptable if the doors remain in good condition, and they met the relevant standards at the time of construction of the block.

It will not be practicable to test existing doors to confirm their actual fire resistance. For the purpose of your fire risk assessment, original fire doors will normally be acceptable if the following is taken into account:

- The doors should comprise solid material throughout the depth of the door (e.g. 44mm thick solid timber or timber doors with a chipboard or flaxboard core)
- Doors should close onto substantial doorstops (typically, 25mm). In the case of older doors, the presence of a 25mm stop is usually an indication that the original door and frame were designed to be fire resisting
- Hollow core doors, and doors fitted with thin panels, are unlikely to provide adequate fire resistance
- Doors should be in sound condition with no damage, splits or gaps



### A typical timber flat entrance door

Existing timber fire doors can be upgraded to improve their fire resistance by, for example, fitting intumescent strips and smoke seals and reducing the gaps around the door leaf. However, before undertaking such work, you should seek advice on the measures necessary from a competent person experienced in undertaking work on fire doors.

If there is any doubt that doors will provide an adequate level of fire resistance, advice should be sought from a competent person, such as a third-party certificated fire risk assessor, building surveyor or similar professional person.

## Composite flat entrance doors

Composite flat entrance doors are a relatively modern innovation (dating from the 1980s onwards) and have become popular because of their attractive appearance and low maintenance.

A typical composite door comprises a thin layer of glass reinforced plastic (GRP), or thermoplastic material, with a core (which can comprise various materials, such as phenolic foam) to provide the fire resistance. In older blocks of flats, they will be found only as replacements for original timber doors.

However, composite fire doors should not be confused with non-fire resisting uPVC doors, which have no fire-resisting core, but are sometimes installed by leaseholders. These doors need to be replaced with fire-resisting doors and frames to ensure adequate protection.



#### A typical composite flat entrance door

It is reasonable to assume that composite flat entrance doors manufactured after late 2018 have adequate fire resistance. However, this might not be the case if the doors were manufactured before this time. After the Grenfell Tower fire in 2017, a composite flat entrance door installed at Grenfell Tower achieved only 15 minutes' fire resistance when tested. The door was manufactured by Manse Masterdor (a company that no longer exists), and a number of the company's composite flat entrance doors, although designed to provide 30 minutes' fire resistance, failed to do so when tested.

This led to tests of a range of manufacturers' composite fire doors by the UK Government. It was found that, depending on the manufacturer and the model of door, the fire resistance of these doors ranged from eight minutes to over 30 minutes. Common points of failure were letterboxes and glazing (e.g. as a result of manufacturing defects, such as in the means of securing the glazing). Where the point of failure was the letterbox, remedial work can often be carried out by the manufacturer or a specialist contactor on site. This might also be possible in the case of the glazing. In case of doubt, advice of the manufacturer should be sought.

A further issue is that the fire resistance of many composite doors was found to be different according to whether the door was tested from what would be the "common parts side" or the "flat side"; this was because, when originally tested, the doors were only tested from the "flat side".

If it can be confirmed (e.g. from documentation or liaison with the manufacturer/supplier) that the doors were supplied after late 2018, there should not be an issue, as the doors are now tested from both sides. In the case of doors manufactured before 2018, you should seek further information regarding their likely fire resistance. The UK Government have published the results of their tests on specific manufacturers' products<sup>9</sup>, and information can be sought from the manufacturer or supplier of the doors. In the case of these "legacy" doors, it is normally acceptable for adequate fire resistance to be provided from the "flat side", as it is not expected that there will be a serious fire, of the severity used in fire resistance testing, within the common parts.

Provided that the doors would have been purchased as 30 minute fire-resisting doors, from the perspective of risk and compliance with fire safety legislation, no immediate action is normally necessary, provided the fire resistance of the doors is, at least, around 15-20 minutes; the doors should be replaced over time as part of routine maintenance.

If you are in doubt regarding the adequacy of the fire resistance of composite flat entrance doors, you should seek the advice of a specialist, such as a third-party certificated fire risk assessor or fire safety consultant.

### Maintenance of all fire doors

It is important that all fire doors and their self-closing devices are checked on a regular basis (at least every six months in the case of fire doors within common parts, and preferably annually in the case of flat entrance doors) to make sure that they maintain the protection to escape routes.

You should check that:

- doors are fitted with self-closing devices and that, when the door is opened at any angle, they close the doors against the resistance of any latch
- doors are not damaged and are of good fit in their frames
- any glazing is undamaged, and has not been replaced with non-fire resisting glazing
- intumescent strips and smoke seals, where fitted, are in place and in good condition

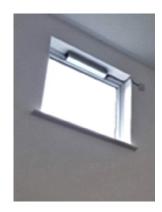
 gaps at the top and edges of the doors should never be more than 4mm; gaps at the bottom of the doors should be as small as practicable, with best practice being a maximum gap of 4mm, while ensuring that the door is unlikely to snag on the floor even if the door drops slightly on the hinges.

Checking flat entrance doors does not normally need specialist expertise. It may be possible to conduct such checks as part of any other visit to the premises, for instance to collect rent or to carry out a gas safety check.

### Smoke Control

There should be a suitable means of venting smoke from the common parts. In more modern blocks of flats, this will commonly comprise an automatically opening vent(s) (AOVs), operation of which is triggered by smoke detectors within the common parts. These smoke detectors should not trigger any form of fire alarm warning signal (e.g. by bells or electronic sounders), as this would conflict with the 'stay put' strategy.





### Automatically-opening windows and vents

Where there are no AOVs (which is common in older blocks), it is acceptable for means of venting smoke to comprise windows or vents that can be opened by the fire and rescue service. (While these should, ideally, be provided even in a two storey block, their provision in two storey blocks is not normally essential).

If there are no suitable means of venting smoke from the common parts, and it is impracticable to provide such ventilation, consideration might be given to the installation of a communal fire alarm system if it is appropriate for ensuring the safety of occupants (fire safety specialists can provide advice on whether such an approach is appropriate).

## **Lighting on Escape Routes**

Adequate artificial lighting should be provided in the common escape routes to enable people to leave the block safely in the event of fire.

Emergency escape lighting is unnecessary in blocks of only two floors, providing there is adequate borrowed light through windows (e.g. from street lighting). Nevertheless, where borrowed lighting is not reliable (e.g. street lighting is switched off during parts of the night), emergency escape lighting must be provided.

A test switch(es) should be provided so that the emergency escape lighting can be tested every month.

## Fire Safety Signs

There will normally be no requirement for fire exit signs, unless (unusually) there are alternative escape routes, one of which is not in normal use.

With the exception of flat entrance doors, any self-closing fire doors, or doors that must be kept locked shut, within the common parts should be fitted on both sides with "Fire door keep shut" signs, or (on the common parts side only) with "Fire door keep locked shut" signs, as appropriate.

## Fire Action Notices and Information to Residents

A fire action notice, providing information on the action to take in the event of a fire, should be prominently sited in the building's communal areas such as the building's lobby or any other clearly visible part of the building.

The notice should provide information on the 'stay put' strategy applicable to blocks within the scope of this Guide. Specific information should be provided on the following:

- action that a resident should take if fire breaks out in their flat;
- action to take on seeing, or becoming aware of, a fire in another flat or another part of the block;
- the route to take in order to evacuate the building (evacuation plan);
- how to report a fire to the fire and rescue service.

Sample wording for a fire action notice is given in Section 7.

The above information should be given to every resident in a comprehensible form that they can reasonably be expected to understand. This could be in a format to be posted through their door. The above information should be provided to residents as soon as reasonably practicable after they move into the premises, and at periods of no greater than 12 months thereafter. This information should also be reviewed at least every 12 months or when there is reason to suspect that it is no longer valid; it should also be reviewed if there are significant changes, such as extensions or alterations to the building. After any material changes to the instructions, the amended instructions should be displayed and a copy should be provided to residents.

## Fire Alarm Systems

Fire alarm systems are not appropriate in the common parts of blocks that have adequate compartmentation to support a 'stay put' strategy. Such a system contradicts the principles of the 'stay put' strategy and can, in some instances, actually place residents at greater risk by encouraging them evacuate the building when there is no need to do so.

If your block has a 'stay put' strategy, but is already fitted with a common area fire alarm system, you should seek advice from a competent person, such as a fire risk assessor or fire safety specialist, as it may be appropriate to remove the system or change the evacuation strategy.

If you decide that a 'stay put' strategy is not appropriate, then a communal fire alarm system will be necessary. This is outside the scope of this Guide and will require the advice of specialists in fire safety.

## Fire Extinguishers

Fire extinguishers are not required in the common escape routes of small blocks of flats. However, suitable fire extinguishers should be provided in ancillary rooms such as boiler rooms or plant rooms if particular hazards have been identified.

## Automatic Fire Suppression Systems

If an automatic fire suppression system is provided and you are unsure of the type of system, you should seek advice from a competent person such as an automatic fire suppression system specialist. The system should be subject to annual maintenance by a competent contractor.

## Managing Fire Risk

## **Engagement with residents**

Engagement with residents is an essential part of fire safety management. Information that residents should be given includes:

- advice on how to prevent fires in their own flats. The Fire and Rescue Service can help with this, whether by providing leaflets or offering more tailored advice for those at particular risk such as older residents and those with impaired mobility;
- instructions on how to keep common areas clear of obstructions, combustible materials or storage;
- being made aware of the importance of maintaining their flat entrance doors and their self-closing devices where appropriate;
- understand the 'stay put' policy and the action to take should they discover a fire in their own flat or in the common areas;
- be aware of how to report any defects in fire safety measures.

## Inspection, testing and maintenance

The fire protection measures provided in your block need to be maintained in good condition and efficient working order. It is therefore necessary to have in place arrangements for routine inspection, testing and maintenance. It is good practice to keep a record of all testing and maintenance.

A typical check list for this work is set out below.

### Monthly:

- Carry out a routine inspection of the common areas;
- Check escape routes are clear of any storage or obstructions (you must however do what you can to keep these routes clear at all times);
- Check that exit doors can be easily opened from the inside;
- Check that the block entrance door(s) is adequately secured to prevent unauthorised access;
- Carry out a visual external check of flat entrance doors to confirm they remain in good condition, are not damaged and have not been replaced or modified;
- Check that doors to ancillary rooms, meter cupboards, etc. are secure or are effectively self-closing;
- Check that windows or vents used for ventilation of smoke can be easily opened;
- Carry out a short functional test of the emergency lighting.

#### Six-monthly:

- Check all fire doors, other than flat entrance doors, to ensure that they are undamaged and are effectively self-closing;
- Arrange for maintenance of any fire detection in the common areas (e.g. to operate AOVs) by a competent contractor.

## Annually:

- Check all fire doors in the common areas to ensure that they remain in good condition and fit well in their frames;
- Ensure that self-closing devices fitted to flat entrance doors and doors in common areas remain in working order and close the doors effectively in their frames;
- Engage competent contractors to carry out a full (three hours) duration test on the emergency lighting;
- If fire extinguishers are provided, they should be subject to maintenance by a competent contractor;
- If automatic opening smoke vents are fitted, engage competent contractors to test their operation.
- Arrange for maintenance of any fire suppression system.

## 6. Home Fire Safety Advice

This section provides advice on the practical measures you can take to prevent fires in your own home together with the actions to take in the event of a fire if you live in a small block of flats. Complying with this chapter is simply a good idea – it is not required by law.

More comprehensive advice on fire safety in the home can be found on the Welsh Fire and Rescue Services' websites – Find your local fire and rescue service | GOV.WALES You can also arrange for the fire and rescue service to visit your home and provide you with more tailored advice and fire safety equipment (like smoke alarms) free of charge.

**Note:** If you rent your flat to other persons or you have paying guests in your flat, you will be subject to the additional fire safety requirements set out under the Housing Act 2004, the Renting Homes Act 2016, and/or the Regulatory Reform (Fire Safety) Order 2005. This legislation places additional legal responsibilities on those responsible, to ensure flats have a minimum standard of fire safety. This includes the provision of smoke and heat alarms within the flats themselves, and adequate means of escape. If you are in any doubt about your responsibilities, you are advised to seek further advice. Information is available at: Fire and rescue | Sub-topic | GOV.WALES or Renting a property | Sub-topic | GOV.WALES.

### **Smoke Alarms**

- A fire can start anywhere in your home, and the easiest way to protect you and your family is to have working smoke alarms fitted. Smoke alarms provide an early warning of a fire and give you time to make your escape.
- It's important to ensure smoke alarms are fitted in the right place, and you should always follow the manufacturer's fitting instructions.
- Make sure you have a working smoke alarm in your main circulation area hallway/landing; if not, fit one as soon as possible.
- To fully protect you and your family, it is recommended that smoke alarms are also fitted in the lounge and a heat alarm is fitted in your kitchen.
- If your flat is on more than one level, you should fit smoke alarms on every level.
- Test your smoke alarms monthly.
- Never cover your alarms, and never disconnect or remove the batteries from your alarms.
- Ideally, smoke alarms should be mains powered and interlinked, so that if one activates, they all do. If you live in a rented property, the law in Wales requires your landlord to install such alarms.

## **Stop Fires From Happening**

By taking a few simple steps, you can stop fires from happening in your home.

### Smoking:

 Ideally, smoke outside in fresh air, clear of the building, and dispose of cigarettes safely.



- Do not smoke in bed or anywhere you could fall asleep.
- Make sure cigarettes are put out properly and use a proper ashtray.
- Keep matches and lighters out of reach and sight of children.
- If you use e-cigarettes, follow the manufacturer's instructions and use the correct charger.

### Cooking:

 Never leave pans unattended when cooking.



- Never overfill chip pans.
   Never throw water on a chip pan fire; you should turn off the heat and close the door to the kitchen.
- Never leave children alone in the kitchen whilst cooking.
- If you have a balcony, don't use it to have a barbecue.
- Don't cook when you are under the influence of alcohol.

#### **Electrics:**

 Never overload electrical sockets.



- If you use extension cables, then choose ones with a built-in fuse

   and only use them for low-current appliances, like lamps, radios, TVs and phone chargers. Never plug more than one high-current appliance like a washing machine, heater, iron or kettle into the same extension lead.
- Do not leave items on continuous charge.
- Turn off electrical appliances when not in use, and don't leave them on standby (except for appliances designed to be left on, like fridges and freezers).
- Follow safety guidance issued on product recalls, such as tumble dryers, washing machines, fridges, freezers, and other appliances.
- Regularly remove fluff from tumble dryers.

#### Candles:

 Candles, tea lights and incense burners should only be placed in stable, heat resistant holders.



- Keep them clear of any materials that may catch fire, such as curtains, fabrics, furniture and clothes.
- Never leave children alone with lit candles.

#### Heating:

 Keep portable heaters well away from anything that can catch alight, such as furniture and bedding.



 Never use damaged or defective heaters, and always follow the manufacturer's safety advice.

#### Housekeeping:

 Never leave rubbish, waste or any belongings in the common stairways or corridors; this could affect you and your neighbour's safety.

## Stay safe when you go to bed

- Close all doors, as this helps to prevent fire and smoke spreading.
- Switch off and unplug electrical appliances, such as TVs.
- Check that cookers and heaters are turned off.
- Make sure candles and tea lights are extinguished.
- Avoid charging mobile phones, e-cigarettes, etc. overnight.
- Don't store or charge mobility scooters,
   e-scooters, or e-bikes on the only route out of your flat, such as the hallway. Overnight, scooters or bikes should be kept in a separate room, such



as the lounge or a second bedroom.

## What to do in the event of a fire in your own flat

- Make an escape plan, be prepared, don't wait until it happens, and make sure everyone knows how to get out safely.
- Always make sure doors and any escape windows can be easily opened in an emergency. Make sure any keys are available and kept where everyone can find them.
- Don't store combustible materials in hallways, landings or balconies which could obstruct your escape.
- If your smoke alarms operate or you discover a fire, follow your escape plan.
- Don't attempt to fight the fire yourself leave that to the professionals
- Close the door of the room where the fire is.
- Make sure everyone is alerted and leave the building as quickly as possible.
- Make sure your flat entrance door is closed behind you.
- Make your way out of the building, and never go back in for any reason, until the firefighters tell you it's safe to do so.
- Call the fire and rescue service by dialing 999 or 112. Give them your address and flat number and wait until they confirm this back to you.

## What to do in the event of a fire in another flat or other part of the building (where a 'stay put' policy is in force)

- Your building is designed and constructed to restrict the spread of fire. Therefore, a fire should not spread from one flat to another. Stairways and corridors are also constructed of fire-resisting materials, which makes then safe to use in the event of a fire elsewhere in the building.
- If you become aware of a fire in another flat or elsewhere in the building, you should be safe to remain in your flat while the fire and rescue service deal with the fire.
- However, you should always leave your flat if it becomes affected by smoke or fire, and if told to leave by the fire and rescue service. If you are in any doubt and feel unsafe in your flat, and it's safe to use the common escape stairway, you should make your way out of the building.
- If you are in the common parts of the building and you become aware of a fire, leave the building immediately and phone the fire and rescue service.

## 7. Sample Fire Action Notice

Where a stay put strategy is in place

## **FIRE ACTION NOTICE**

## **FIRE IN YOUR FLAT:**

- Alert everyone in your flat. Close the door to the room where the fire is located.
- Ensure everyone in the flat leaves as quickly as possible. Close the front door to your flat.
- Make your way out of the building, using the common escape route.
- Once you are outside the building, call the fire and rescue service and await their arrival in a safe place.

### FIRE ELSEWHERE IN THE BUILDING:

- The building is designed to contain a fire and allow you to remain in your flat in relative safety if the fire is in another flat or elsewhere in the building.
- If your flat is not affected by fire, you will be safe to remain in your flat.
- If your flat becomes affected by smoke or fire or you are in any doubt and it is safe to use the common escape routes leave the building as quickly as possible.

## TO CALL THE FIRE AND RESCUE SERVICE:

- Dial 999 (or 112). When the operator answers, give your telephone number and ask for FIRE.
- When the fire and rescue service answers, give them your address and the location of the fire
- Do not end the call until the fire and rescue service have confirmed the address.

## 8. Fire risk assessment checklist

Address of premises:			
Number of floors:	Num	ber of flats	
Construction:			
Assessor:			
Date of fire risk assessment:			
Responsibile person:			
Electrical installations and	equipment		
Are fixed installations periodically inspected and tested?		Yes	No
Smoking			
Is it confirmed that there is no sign communal areas?	f smoking in the	Yes	No 🗌
Are 'No smoking' signs provided?		Yes	No 🗌
Arson			
Are the premises adequately secure unauthorised access?	ed to prevent	Yes	No 🗌
Are refuse bins and other combustil stored in a safe place, clear of the b		Yes	No 🗍

## **Fixed Heating** Are fixed heating installations in the common areas subject to regular maintenance? N/A Yes No Housekeeping Are common areas (stairs, corridors, etc.) kept clear of combustible materials, waste and Yes No residents' belongings? Are meter/riser cupboards and ancillary rooms kept N/A Yes No clear of combustible materials and waste? Record brief details of the above measures in the box below. If the answer to any question is no, include suitable action within the Action Plan. Means of escape Does the existing compartmentation (fire resistance of floors and walls) appear adequate to support a 'stay put' strategy? Yes No Are all openings, where services pass through fire-resisting walls and floors, adequately fire stopped? No Is the compartmentation in roof voids adequate? N/A No Are all escape routes kept clear and are all fire exits Yes No easily and immediately openable? Do the walls and structures protecting the common Yes No escape routes provide an adequate level of fire resistance? Is the fire resistance of doors to staircases/corridors in the common areas considered adequate and are these doors fitted with suitable self-closing devices? N/A Yes No Is the fire resistance of doors to meter/riser cupboards and ancillary rooms in the common areas considered adequate? Are they adequately secured and/or fitted with suitable self-closing devices? N/A Yes No

Is the fire resistance of flat entrance doors considered adequate, and are doors maintained in sound condition?		Yes	No 🗌
Are suitable self-closing devices fitted to flat entrance doors and maintained in good working order?		Yes	No 🗌
Are there adequate means of venting smoke from the common escape routes, i.e. openable windows or vents?	N/A	Yes	No 🗌
Has the combustibility of external walls and any balconies been considered?		Yes	No 🗌
Are there adequate levels of artificial lighting provided in the common escape routes?		Yes	No 🗌
Has a reasonable standard of emergency escape lighting been provided?	N/A	Yes	No 🗌
Where necessary, is a reasonable standard of fire exit and safety signs provided?	N/A	Yes	No 🗌
Have suitable fire action notices been provided in the common areas?		Yes	No 🗌
Are procedures in the event of fire appropriate and properly documented?		Yes	No 🗌
Is information on fire safety and the action to take in the event of a fire given to residents?		Yes	No 🗌
Record brief details of the above measures in the box below. If the answer to any question is no, include suitable action within the Action Plan.			

## Testing and maintenance

Are all fire-resisting doors in the common areas, including flat entrance doors, subject to periodic inspection and maintenance?		Yes	No 🗌
Where fitted, are monthly and annual testing routines in place for the emergency escape lighting?	N/A	Yes	No 🗌
Where fitted, are automatically opening vents, etc. subject to a suitable system of maintenance and testing?	N/A	Yes	No 🗌
Are any other fire protection systems (e.g. sprinklers) suitably maintained?	N/A	Yes	No
Record brief details of the above measures in the box below. If the answer to any question is no, include suitable action within the Action Plan.			

## Action plan

If any of the above boxes are ticked with a 'No', the deficiencies should be described below, along with proposed action for rectification.

Item	Deficiency	Proposed action	Timescale	Person responsible
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				