Appendix 5

Fire precautions

FIRE SAFETY IN HOUSES IN MULTIPLE OCCUPATION:

A GUIDE

ABOUT THIS DOCUMENT

This document is a guide to fire safety in the types of Houses in Multiple Occupation (HMOs) commonly found in Exeter. It is very much a **general guide:** the measures that the City Council would require in any specific case would depend upon the character and layout of the property concerned and the type of occupancy.

The Guide covers typical **existing HMOs.** If you intend to create a new HMO or carry out major works to an existing one, perhaps with the intention of increasing the level of occupancy, it would probably be necessary to seek approval for what you propose under the Town and Country Planning Acts and Building Regulations. Some parts of the city are the subject of a legal Direction made by the Council under Planning powers. This prohibits the conversion of existing dwelling houses into HMOs.

You should always check what permissions and consents are required before starting alteration work on any HMO or creating a new one. Remember, too, that the Council has standards for **amenities and facilities** – baths, WCs, wash hand basins and so on – in HMOs. Those standards are set out in separate guidance, also available from us.

This Guide covers:

- What constitutes a House in Multiple Occupation
- What makes an HMO licensable under the Housing Act 2004
- Why fire safety measures are needed in HMOs
- What the law says
- The fire safety measures that are commonly required in typical Exeter HMOs

The precise nature of the fire safety measures needing to be installed in any specific HMO is determined by a risk assessment. Many factors affect the assessment of risk. A general guide such as this cannot cover all the possible variations in layout, type of occupancy, standard of construction, etc. that play a part in determining the measures required in a specific property. It is always best, therefore, to consult us before carrying out works which may not necessarily cover all the fire safety needs in a particular HMO.

If you are being required to carry out work following an inspection by us you will find that the schedule and any drawing we send you will explain what needs to be done. This Guide should also be helpful. If, however, you remain in doubt, please ask us for clarification. We are always keen to assist.

PART 1

FIRE SAFETY IN HMOs: BACKGROUND

What is an HMO?

The Housing Act 2004 defines what constitutes an HMO.

A building or part of a building is an HMO if:

- the building or part consists of **living accommodation**; and
- the accommodation is occupied by **more than a single household**; and
- it is their **main residence**; and
- **rents are payable or other consideration is provided**; and
- the occupiers **share** one or more (or the accommodation **lacks** one or more) **toilet, personal washing or cooking facilities**.

A 'household' is where all the persons are members of the same family. A person is a member of the same family if:

- those persons are married to each other or live together as husband or wife (or in an equivalent relationship in the case of persons of the same sex); or
- one of them is a parent, grandparent, child, grandchild, brother, sister, uncle, aunt, nephew, niece or cousin of the other; or
- one of the persons is a relative of one of the couples.

A building or part of a building that contains **two persons sharing** is not an HMO. A building occupied by the owner's household plus **up to 2 lodgers** is also not an HMO.

A **self-contained flat** will be an HMO if it matches the criteria above, i.e. it is occupied by more than a single household, there are at least 3 unrelated people in it, rents are payable, etc.

A **purpose-built block of flats** is not an HMO. However, a **building converted into a block of flats** is an HMO if the following apply:

- the conversion was not done to the Building Regulations 1991 standard (or, if it was done when later Building Regulations were in force, to the standard laid down in them); and:
- less than two-thirds of the self-contained flats are owner-occupied.

Some common types of HMO:

- Houses divided into bedsits or flatlets
- Houses occupied by 3 or more students
- Bed and Breakfast establishments accommodating homeless people.

What is a *licensable* HMO?

An HMO is licensable under the **mandatory licensing provisions** in the Housing Act 2004 if:

- It, or any part of it, comprises 3 storeys or more; **and**:
- It is occupied by 5 or more persons; **and**:
- It is occupied by persons living in 2 or more households.

Business premises and self-contained flats in, but not connected with, parts of buildings containing HMOs, generally count as 'storeys' when determining whether the HMO is licensable.

The Act also enables councils to extend licensing to types of HMO not covered by the mandatory licensing scheme.

The licensing requirement is touched-upon in more detail later in this Guide.

So why do HMOs need fire safety measures?

When a property is in multiple occupation, the risk of fire breaking out is greater than in an ordinary single family home. Some of the reasons for this are:

- Portable heating appliances may be used
- There is often more than one kitchen present, and kitchens can be shared by a number of individual tenants. Kitchens are by definition high-risk areas
- Electrical circuits can become overloaded
- There are more people in the house who are living independently of, and having no real control over, each other's behaviour

The kind of fire safety measures set out later in this document seek in a number of different ways to reduce the level of risk that an HMO can pose to occupiers. **Fire safety measures make sense**: they reduce the risk of injury or death and can help to lessen the kinds of losses that can occur when fire-related incidents do happen.

What does the law say about HMOs and fire safety?

Anyone who lets property to others is under a general duty in law to provide accommodation that is fit for the purpose and safe. However, there is a body of legislation that relates specifically to fire safety in HMOs:

- The **Housing Act 2004** contains the powers which enable Councils to take action where a range of housing hazards, including the risk of fire, occur. The Act also lays down the licensing requirements for larger HMOs. It also enables Councils to take control of HMOs where they seriously threaten the health, safety or well-being of occupiers or people in the locality.

- The **HMO Management Regulations** place duties on the manager of an HMO to keep the fabric, fixtures and fittings in good order, ensure that occupiers are protected from injury, and supply and maintain gas, electricity and other services.

- The **Regulatory Reform (Fire Safety) Order 2005,** which requires any person with some level of control over an HMO to:

  - take reasonable steps to reduce the risk from fire;
  - make sure anyone in the property can safely escape if a fire occurs.

These pieces of legislation are now explained in a little more detail.

1. The Housing Act 2004

The Act lays down a Council's powers to tackle a wide range of housing hazards including inadequate fire safety provision. It enables a Council which finds a significant housing hazard to:

- Serve a notice requiring specified improvement works within a set time;
- Make an Order limiting or prohibiting occupation where that is appropriate;
- Take quick action itself to deal with a serious hazard;
- Serve a notice drawing attention to the existence of a hazard (but not requiring work to be done);
- Make a demolition order.

The action which a Council takes in any particular case will depend, amongst other things, on the nature of the hazard, the type of property, the effect of the hazard on occupiers and visitors, and any views expressed by the landlord or tenants as to what they think should be done.

The whole process of tackling a housing hazard begins with a **Health and Safety Risk Assessment.** This takes account of:

- The **likelihood** of a housing hazard leading to injury or ill-health;
- The kind of **health outcome** that could result.

The assessment involves applying chosen likelihood and health outcome values to a mathematical formula which gives a numerical rating to the hazard. This puts the hazard into one of two hazard categories.

Where the hazard is rated Category 1 the Council must by law take enforcement action. Where it is Category 2 the Council has the discretion as to whether or not to act.

In the case of fire safety hazards the Risk Assessment helps to determine what measures will be needed to reduce the risk to an acceptable level. Generally speaking, the measures required will be those shown in part 3 of this Guide as being appropriate to the type of HMO in question.

Where the HMO in question poses a more serious risk – for example, because the layout of the escape route is more complex than usual, or the occupiers are particularly vulnerable – more extensive measures may be required. Smaller HMOs, on the other hand, will usually require simpler measures.

The Housing Act 2004 also lays down the scheme for the **compulsory licensing of larger HMOs** (which are those described in '*What is a licensable HMO?'* earlier in the Guide).

There are substantial penalties for operating a licensable but unlicensed HMO. They can include the making of a legal order to repay rents. Applications for HMO licences should be made to the City Council's Private Sector Housing team.

2. The HMO Management Regulations

There are 2 sets of HMO Management Regulations.

Regulations dating from 2006 apply to the majority of HMOs and ones introduced in 2007 apply to the 'Converted block of flats' type of HMO ('Converted block of flats' HMOs required their own regulations because of the different tenure and control arrangements in place where flats can be held on leases and are a mixture of owner-occupied and tenanted).

The Regulations place a series of duties on **HMO managers** to maintain proper standards of **repair, management and cleanliness**. The key fire safety duties are:

- To provide the **manager's name, address and telephone number** to each household in the HMO and display the same information in a prominent position in it;
- To keep the **means of escape from fire** free of obstruction and in good order and repair;
- To keep **alarms, fire fighting equipment** and **emergency lighting systems** in good working order;
- To **protect occupiers from injury** with regard to the HMO's design, structural condition and number of occupiers;
- Where there are more than 4 occupiers, to display **notices** indicating the location of means of escape from fire, making them clearly visible to all occupiers;
- To ensure that all **fixed electrical installations** are inspected and tested by a qualified engineer at least once every 5 years and a results certificate obtained;
- To provide the Council with the latest **gas and electrical safety test results** within 7 days of the Council asking for them;
- To **maintain common parts, fixtures, fittings, etc**. clean, safe, in good decorative repair and working order and free from obstruction. Handrails and banisters must be provided and kept in good order, and any stair coverings securely fixed;
- To keep **any part of the HMO not in use** clean and free from litter.

HMO tenants are required:

- **Not to obstruct the manager** in the performance of his/her duties;
- To **avoid causing damage** to anything the manager is under a duty to supply, maintain or repair;
- To **store and dispose of refuse** as directed;
- To **comply with the manager's reasonable instructions** as regards any fire escape, fire prevention measures and fire equipment.

3. The Regulatory Reform (Fire Safety) Order 2005

This Order is enforced locally by Devon and Somerset Fire and Rescue. It requires any person who has some level of control of an HMO (the 'Responsible Person') to:-

- take reasonable steps to reduce the risk from fire;
- make sure anyone in the property can safely escape if a fire does occur.

The 'Responsible Person' can pass the task to some other competent person (although the 'Responsible Person' retains the duty to meet its requirements).

The first task in meeting the Order's requirements is to carry out a **Fire Safety Risk Assessment.** This identifies any possible dangers and risks in the HMO and forms the basis for action to improve fire safety.

The steps involved in carrying out a Fire Safety Risk Assessment are:

Step 1: Identify the hazards (e.g. sources of ignition such as naked flames or heaters and sources of ignition for a fire: accumulations of rubbish, furnishings, and so on).

Step 2: Identify people at risk (tenants in general, but particularly occupiers especially at risk: children; parents with babies; disabled people; the elderly or infirm).

Step 3: Evaluate, remove, reduce and protect from risk (look to remove/reduce any fire hazards, for instance by replacing highly flammable materials and having a safe smoking policy. Then assess any remaining risk and think about further steps to reduce it. Consider general fire precautions such as:

- maintaining fire detection and warning systems;
- facilities for tackling small fire, e.g. chip-pan fires;
- keeping protected escape routes clear and usable;
- ensuring the escape route leads to a safe exit point;
- providing and maintaining fire doors).

Step 4: Record, plan, instruct, inform and train (note down the dangers and people identified as being at risk and the actions taken under Step 3. Draw up an Emergency Plan and inform, instruct and train people such as residents and managers in what it says and what they need to do).

Step 5: Review (periodically check the assessment to make sure it is up to date and amend as needed).

Sources of further information about duties under the Fire Safety Order are given at the end of the Guide.

PART 2

FIRE SAFETY MEASURES IN HMOS

This part of the Guide is arranged in 2 sections.

The first section describes the **range** of fire safety measures that may be required in HMOs. The second section lists the **typical measures** that need to be provided in the different types of HMO covered.

As indicated previously, the Guide is intended as a general indication of what is required. The measures required in a particular HMO may differ from the Guide because of the way in which it is arranged or let.

If you are in any doubt as to the measures needed in an HMO for which you are responsible, please contact us and we will be glad to assist.

'Shared – house' HMOs

National statistics on fire incidents in HMOs indicate that 'Shared – house' HMOs pose less of a risk of fire than the traditional type of HMO (typically the bedsit or flatlet type). A different standard, reflecting the lower risk which exists in them, has therefore been developed for the 'Shared – house' HMO.

A 'Shared – house' HMO is one where, although they are unrelated to one another, the occupiers live in a similar way to a family. Typically:

- *the house has been rented by an identifiable group of sharers such as students or work colleagues;*
- *each occupant has his or her own bedroom but they share the other facilities of the house;*
- *all occupiers have exclusive legal possession and control of all parts of the house including all bedrooms;*
- *there is usually a significant level of social interaction;*
- *they have rented the house as one group;*
- *there is a single joint tenancy agreement*

We will usually apply the specific 'Shared – house' HMO standard to such properties (although if there are particular features which make it necessary we will ask for additional measures. This might be needed where, for example, the internal layout is especially complicated or numbers occupying are unusually high).

In the next section of the guide, variations from the normal fire safety standard that apply to 'Shared – house' HMOs are indicated in italics. The standard itself is shown in the section which sets out the requirements for specific HMO types.

The 3 key components of any package of fire safety measures are:

- the protected escape route
- separation between units of accommodation
- the fire warning system

(Supporting measures such as emergency escape lighting and fire fighting equipment are covered at the end of this section)

KEY FIRE SAFETY COMPONENTS:

1. THE PROTECTED ESCAPE ROUTE

The protected route is the normal route the occupants take from their accommodation to the final exit, and which is upgraded to provide 30 minutes fire protection from the rooms leading off it. It usually consists of the stairs, landings and hallway, often referred to as **the staircase enclosure**. Secondary or external staircases are normally only required where the house has more than five floors.

In any fire, smoke is the biggest danger. It spreads very quickly, reduces visibility and impedes escape. Most deaths in house fires are caused by smoke inhalation. For this reason, providing an adequate means of escape from fire includes controlling the spread of smoke.

Components of the Protected Route:

(i) Fire doors and frames

Doors and door frames giving 30 minutes' resistance to fire need to be fitted to rooms leading off the protected route. WC compartments and bathrooms where there is no source of ignition need not be fitted with fire doors. (A fire door will be needed where a bathroom contains an old – style electric bar heater or a particularly old gas boiler).

For a fire door to be effective it must be fitted in accordance with the Council's specification. Doors that do not fit properly, are damaged, have damaged or ill fitting linings or have the wrong fittings, will not meet the specification and will **not** be accepted.

Specification for fitting new doors to achieve 30 Minutes Fire Resistance (FD30(s) standard)

Some of these provisions do not apply to fire doors in 'Shared – house' HMOs. The box at the end of this section shows the differences.

- **Doors must be hung on 1½ pairs (i.e. 3 hinges) of 100mm pressed steel butt hinges.** The central hinge should be about 50cm down from the top of the door, i.e. closer to the top hinge than the bottom. Brass hinges cannot be used.

- **Doors must be self-closing.** Self-closing devices fitted to fire resisting doors must be positive in action and capable of closing and latching the door and holding it firmly against the rebates of the frame. Rising butt hinges and garden gate type coil springs are not acceptable. **Overhead hydraulic closers** are recommended as being the most effective and reliable type, allowing the door to close in a controlled manner. **Chain spring closers ['Perko' or similar]** can be used as an alternative, however the chain closer does not control the closing speed of the door, resulting in a tendency to slam.

- An **intumescent strip and smoke seal** must be fitted to the top and sides of the door or corresponding sections of the frame (shown in diagram at end of guide).

  The smoke seal (which consists of small brush hairs or flexible blades) prevents smoke escaping through the closed door, and if the fire develops, the heat will cause the intumescent strip to expand, holding the door in the frame to give 30 minutes fire resistance. The strip and smoke seal can be fitted as a combined unit. They must be fitted in accordance with the manufacturer's instructions.

  CLOSE ATTENTION MUST BE GIVEN TO THE GAP BETWEEN DOOR AND FRAME. As a guide it should not be more than 1 – 3 mm. A larger gap may render the intumescent strip ineffective in a fire. In addition you must ensure that if a door edge mounted smoke seal is being used it <u>brushes right up against the door lining.</u>

  It is important that you never paint or varnish over the smoke seal.

  Fire doors must not be cut down unless they are of solid construction. Solid fire doors must only be cut down in accordance with the manufacturer's instructions and the hardwood lipping must always be replaced on all edges.

- **The gap between the door and the finished threshold must be kept to a minimum, and must not exceed 10mm.** Where the gap exceeds 10mm or the floor is out of level, a hardwood threshold must be fitted.

- Locking Arrangements – Where a lock is to be fitted to the door it must be of a type that allows the door to be held shut but which does not lock unless a key is used on the outside, or a thumbturn used on the inside. The door, whether locked or not, must be openable from the room side without the use of a key.

  A cylinder rim dead lock with roller bolt is recommended e.g. Yale 81 or Union 1158 or the Euro Mortice Lock with thumb turn. Other locks may be acceptable, providing they meet with the same specification.

  Additional bolts, chains, etc must not be fitted. If you feel there is a need for greater security please discuss your concerns with us.

Fire doors in Shared-house HMOs

Smoke seals and intumescent strips will NOT be required to be fitted to fire doors in Shared-house HMOs. Likewise, a self-closer will only need to be fitted to the fire door serving the kitchen in this HMO type. We will tell you when your HMO comes into the 'Shared house'

Door Frames

These provisions apply to all fire door frames

In all openings where a fire door is fitted, or is to be fitted, existing linings and architraves must be thoroughly checked to see whether they provide sufficient fire resistance. In particular:

- If the existing frame is in **poor condition or warped** so that it will be difficult to achieve a proper, close fit and good smoke seal for the fire door, a **new fire**

resisting frame will be required. This will often be more cost/time effective than trying to patch up an old frame.

If the existing frame is to be retained it must be capable of supporting the additional weight of the new fire door and be of sound, well jointed timber.

- If new timbers are to be added to the frame to improve fit, they must be glued and screwed to the existing linings.

- Existing architraves must be removed on the risk side (i.e. the room side) and all gaps between the door lining, wall/partitioning and non-risk side architrave must be filled and sealed with fire resisting materials e.g. 12.5mm plasterboard with skim finish. Suitable architraves must be refitted to the risk side. The original architraves may be re-used if they are in sound condition. All new architraves must be a minimum of 15mm thick and 45mm wide.

Apertures in Fire Doors

Generally the fitting of standard letter boxes, door viewers, cat flaps etc will undermine the effectiveness of a fire door. It is possible to get products that will protect the integrity of the doors and which meet the relevant British Standards but the specification for installation must be closely followed.

Glazing in Fire Doors

Glazing can only be fitted to doors which are designed for the purpose and tested to the relevant BS. The doors are often sold without the glazing panel and glazing must be fitted in accordance with the manufacturer's instructions. If you install a door with glazing you will be required to demonstrate that it has been installed in accordance with the manufacturer's instructions.

Upgrading Existing Doors

In the past doors were routinely upgraded into fire doors, lining the door panels with fire resistant sheeting and fitting large door stops.

Previously upgraded doors are very unlikely to be accepted these days unless the paperwork is available to confirm the extent of works carried out and the degree of fire resistance achieved. Even if this is available it will still be necessary for intumescent strips and smoke seals to be fitted. Upgraded doors that are damaged or a poor fit to the frame will not be accepted under any circumstances.

In some circumstances, such as where a property is a listed building, the replacement of doors with fire doors may not be an option. In such circumstances the door must first be inspected by a specialist contractor to assess its suitability. Some doors will be in too poor a condition, or not thick enough to make upgrade possible in which case alternatives will have to be considered.

60 Minute Fire Resisting Doors and Frames

Where 60-minute fire doors are required the frame will **always** have to be replaced. The rating of the frame must equal that of the door and the frame must be able to support the weight of the door; therefore a purpose manufactured 60-minute fire door and frame set must be installed.

Components of the Protected Route:

(ii) Fire-resisting construction

This part applies to all HMO types including 'Shared – house' HMOs

All of the **internal walls** which separate rooms adjoining the protected escape route from the route itself need to offer 30 minutes' fire resistance.

Existing partition walls in good condition will usually be accepted as adequate to give 30-minute fire resistance. 'Good condition' means that the walls do not 'give' when subjected to hand pressure, that plaster is still firmly keyed to laths and there are no cracks, bulges or other defects.

Where it is necessary to **upgrade** internal walls, the following materials will give the required 30-minute resistance:

- **One layer of 12.5mm fire resistant plasterboard securely fixed to joists/studs with joints sealed with intumescent mastic, or joints taped and finished with plaster skim.**

- **One layer of 6mm rigid fire resisting board (e.g. Supalux or similar) securely fixed to joists/studs with joints sealed with intumescent mastic.**

Upgrading must be carried out on the <u>risk</u> side, i.e. inside the room/compartment where the fire is to be contained.

The partition walls separating understairs cupboards from the ground floor passage usually consist of single skins of tongue-and- groove boarding or similar. Where this is so, upgrading of the wall on the **inside** face to give 30 minutes' resistance will be required.

Other requirements for understairs and other cupboards appear below.

Sometimes it is necessary to upgrade internal walls to give **60 minutes' fire resistance** (we will let you know when this is needed)**.** When this is required the following materials will achieve the standard:

- **Two layers of 12.5mm fire resistant plasterboard securely fixed to joists/studs with joints staggered. Joints to be sealed with intumescent mastic, or taped and finished with plaster skim.**

- **Two layers of 6mm rigid fire resisting board (e.g. Supalux or similar) securely fixed to joists/studs with joints staggered. Joints to be sealed with intumescent mastic.**

Ceilings in the protected escape route will also need to be in sound condition to provide 30 minutes' fire resistance. This also applies to the underside of the staircase, including the portion usually found in the understairs cupboard off the ground floor passage. The materials described above give the necessary protection where upgrading is needed. Any recessed lighting units in these ceilings need to feature purpose-made 30 minute fire resistant hoods in the space immediately above them.

Any polystyrene or other inflammable tiles or decorations must be removed.

New or existing suspended ceilings will only be accepted as providing 30 - or 60 - minutes' fire resistance if appropriate paperwork or certificates are provided.

Loft hatches over the protected escape route need to be upgraded by fitting 6 mm Supalux or similar fire resisting board to their upper face. The hatch must fit into a

rebated opening and a combined smoke seal and intumescent strip fitted into the edge of the hatch. Alternatively, the loft can be cleared, the loft hatch securely locked and the key removed from the house.

Any roof void access doors in the protected route will require treating; we can advise.

(iii) Other aspects of the Protected Escape Route

- **Upgrading Cupboards (including understairs cupboards)**

This applies to built in cupboards only. Free standing cupboards are not permitted in the protected route.

If a cupboard is to be retained, it must be lined internally with materials which provide 30 minutes fire resistance, e.g. 12.5mm fire resisting plasterboard, or 6mm Supalux or similar rigid fire resisting board, joints to be sealed with intumescent mastic. The access door must meet the FD30(s) standard, either effectively self-closing or lockable and clearly indicated "KEEP LOCKED SHUT".

If you do not wish to use a cupboard and there are no gas or electrical fittings in it, the cupboard can be emptied and screwed shut to prevent use.

Where cupboards are removed from the protected route all surrounding areas must be made good and upgraded to give 30 minutes' fire resistance where necessary.

In 'Shared-house' HMOs, fire doors provided to cupboards located in the protected route do not require self-closers, smoke seals or intumescent strips. The measures to protect the staircase underside and wall separating the cupboard from the passage are still needed.

- **Borrowed Lights [for example glazed windows above doors]**

'Borrowed lights' are windows or glazed panels designed to allow daylight to penetrate into internal areas that cannot be served by windows of their own.

Fixed borrowed lights in the protected route or between a high risk room and another room must be fitted with glazing of fire resisting quality. Existing glazing not up to standard must be removed, and fire resisting glazing (i.e. tested to the relevant BS) fitted.

Great care must be exercised in preparing existing timber frames to achieve maximum fire resistance. Correct installation of fire resistant glazing is complicated and expensive. It must not be assumed that the use of specialist glass and glazing materials will compensate for an inadequate frame.

When possible, you might consider removing the existing glazing and constructing a partition to provide 30 minutes fire resistance. Clearly, this will not be possible where the borrowed light is essential for safe movement through the part of the property in question.

- **Stairway Lighting and Escape Lighting to the Stairway**

The standard stairway lighting system must be wired so that the whole of the staircase enclosure is illuminated by the operation of any one switch. Push button (timed) switches can be used but must be set to allow adequate time to reach the furthest unit of accommodation.

Separate Escape Lighting will be required in many HMOs. Escape Lighting systems are dealt with at the end of this part of the guide.

- **Final Exit Doors**

  In any HMO, any door which enables an occupier to leave the building in an emergency needs to be capable of being opened without the use of a key.

  Locks which enable a proper degree of domestic security to be maintained whilst making it possible to get outside quickly in an emergency are widely available. There is no reason, therefore, why your building's insurance should be compromised when seeking to provide safe means of escape from fire.

  We will accept the provision of spare keys in proper 'key boxes' (purpose-made key containers, finished in red and usually provided with a glass or perspex cover) fitted close to the doors they serve.

  Security chains and similar devices can impede escape in an emergency. They should not be fitted to exit doors.

- **Keeping the Protected Route clear**

  For obvious reasons it is essential that protected escape routes in all HMOs are kept completely clear of items of furniture, rubbish, clothes drying facilities, bicycles, trailing leads and so on. Nothing should be allowed to accumulate in the protected escape route.

  Stairs, handrails and floor coverings must be maintained in a good, serviceable and safe condition at all times.

KEY FIRE SAFETY COMPONENTS:

2. SEPARATION BETWEEN UNITS OF ACCOMMODATION

This section also covers 'inner room' arrangements within flats and flatlets and physical standards where minor internal alterations are proposed. It applies to all HMO types.

As already indicated, smoke is the biggest danger where a fire occurs. It is vitally important, therefore, that the spread of smoke as well as fire between dwelling units - in fact, between any area of a building and any other - is prevented for sufficient time to allow safe escape.

Walls, partitions and ceilings **between units of accommodation, and separating higher risk rooms (such as kitchens)** from the rest of the accommodation therefore need to provide 30 minute fire resistance.

Where a property has both commercial and residential occupation, for example, flats above a ground floor shop, a greater degree of separation is required between the two different parts. **Sixty minutes of fire resistance** is usually required and this will mean a higher specification for upgrading of ceilings and partitions. There will also need to be separate entrances for the commercial and residential parts of the building. Access to the residential part will not be permitted through the commercial unit.

Where **30 minute** separation is required:

- Existing walls and ceilings in **sound condition** (well-keyed to laths and/or joists, firm when hand pressure is applied, free of cracking or other deterioration) can be accepted;

- Walls and ceilings in **substandard condition** must be replaced by **12.5 mm fire resistant plasterboard** or **6 mm rigid fire resisting board** in the manner described in the section above relating to forming the protected escape route (page 14)

Where **60 minute** separation is required:

- **Two layers of 12.5 mm fire resistant plasterboard** or **two layers of 6 mm fire resisting board**, each fixed with staggered joints and the joints sealed with intumescent mastic or taped and finished with plaster skim, must be provided.

Where houses are provided with cellars, works to separate those areas from the occupied parts of the building will usually be required. A mixture of structural fire separation and smoke detection may be possible. We will advise you of what works are required in any particular case.

Service Ducts, Concealed Spaces and Voids

It is necessary to prevent the spread of fire, smoke or hot gases through service ducts in the building structure. In particular there must not be any apertures that would allow smoke to travel from rooms to the protected route, or from one unit of accommodation to another.

Effective fire/smoke stops must be provided where building services such as water supply pipes, drainage, ventilation ducts etc, penetrate floors or walls either between the protected route and a risk room, or between units of accommodation, by fitting purpose made intumescent seals or filling gaps with fire resisting materials such as intumescent paste.

Where provided, **ceiling recessed lighting** can only be fitted in association with a 30 minute fire resistant hood.

Ceiling Hatches and Roof Void Access Doors

Where a ceiling hatch or roof access door is present within a room its lower or room side must be lined with material affording 30 minutes fire resistance, e.g. 6mm Supalux or similar rigid fire resisting board. The hatch or door should be locked shut.

'Inner room' arrangements

It is important to ensure that all accommodation within HMOs has a **safe internal layout**, i.e. there is an adequate means of escape from all the rooms in the unit, regardless of where a fire breaks out. This can be a problem where there are **inner rooms**, i.e. where the only exit from a room is through a room of higher risk (e.g. a bedroom situated off a kitchen, or an upper floor landing kitchen which gives on to the rest of the flat it serves).

There are some circumstances where an inner room will be considered to meet an adequate standard of fire safety, although the Council will require the layout to be altered in most cases.

When assessing an inner room layout we will take into account:

- the level above ground of the accommodation;
- access arrangements;
- standard of fire resistance throughout the property;
- extent of the alarm system;
- usage of the rooms;
- style of occupation;
- management of the property; and
- what works can be done to minimise risk.

It is advisable to consult us where you have a property with inner rooms, especially where they are on upper floors.

Constructing new stud partitions or lobbies

Any new stud partitions or lobbies constructed in HMOs should be:

- **Constructed in a minimum of 75 mm by 50 mm timber;**
- **Provided with material giving 30- or 60-minute fire protection as required (see above);**
- **Fitted with 12.5 mm plasterboard with joints taped and finished with plaster skim on the 'non-risk' side.**

KEY FIRE SAFETY COMPONENTS:

3. THE FIRE WARNING SYSTEM

A properly-designed, installed and maintained automatic fire detection and warning system will alert occupiers to a fire in its early stages and enable them to evacuate to a place of total safety before the escape route becomes blocked by smoke or directly affected by fire. It should wake people who are sleeping. It should also give early warning of the presence of a fire developing in any hidden area such as a boiler room, storeroom or cellar.

This part of the guide covers the types of fire warning system usually required in traditional and 'Shared – house' HMOs of 2, 3 and 4-storeys. The systems required are based on British Standard 5839: Part 6 (2004).

The British Standard specifies 6 system types or 'grades' and 3 levels of system coverage. The type of system and degree of coverage depend on the type and size of HMO. Briefly, a large, traditional HMO will require an extensive system of mains-wired smoke and heat detectors and alarm 'sounders', all linked to a control panel usually located inside the main entrance to the HMO; and a small, 'Shared – house' HMO will need a system of mains-wired and interlinked smoke and heat alarms in communal rooms and circulation areas.

As a general rule:

- **Smoke detectors** (where required) have to conform to BS EN54-7: 2001 and operate on the optical or obscuration principle and not the ionisation principle.

- **Heat detectors** (where required) must conform to BS EN 54-5: 2001 (Heat sensitive detectors – Point detectors).

- **Sounders** must provide sound pressure levels of not less than 65dB (A), except in bedrooms where a level of 75dB (A) at the bed head must be achieved.

- **Either bells <u>or</u> sounders may be used;** mixed use is unacceptable.

- A person who designs the more complex fire warning system must forward a copy of the design together with the system specification to Private Sector Housing, Exeter City Council for examination prior to installation. The designer must complete a design certificate and provide us with a copy. Installation and Commissioning certificates are also required for whole-house systems (where fitted).

Some further points on fire warning systems:-

Power Supply: In an HMO there will usually be a landlord's supply for power and lighting in the common areas of the house with a separate quarterly meter. If not, such a meter needs to be provided. The supply to the alarm system and any escape lighting must be fed from that meter and be independent of any consumer unit supplying individual lettings. A coin, key or card meter is not acceptable.

The supply to the fire alarm must be labelled "FIRE ALARM DO NOT SWITCH OFF". The isolating protective device (landlord's consumer unit) must be secured from unauthorised access.

Contractors: Systems must be installed by a reputable fire alarm company or suitably qualified contractor (e.g. NICEIC registered electrician) who is experienced in this type of work. Please ensure that your contractor provides you with a commissioning certificate for the fire alarm and any escape lighting system. These will be checked by the Council on final inspection.

Log Book: The contractor should leave you with a log book for the alarm system. This is used to record daily, weekly and monthly checks that need to be carried out on the alarm system. It is also used to log any false alarms.

You must arrange for the contractor to carry out a maintenance check of the alarm and escape lighting system at least twice a year at six monthly intervals. He will look at the log book to see what problems have occurred. The Council may require sight of the log book at the time of any subsequent management inspections.

The fire warning systems required in the types of HMO commonly occurring in Exeter are shown in summary form in Part 3 of this Guide. As indicated previously, the Risk Assessment we carry out may lead to a requirement to exceed the normal standard.

There are other types of HMO besides these. If you need advice about the fire warning system standard which applies in an HMO not covered in this guide, contact us and we will happy to assist.

OTHER FIRE SAFETY MEASURES:

1. STAIRWAY LIGHTING AND EMERGENCY ESCAPE LIGHTING

In any HMO the day-to-day staircase lighting must be wired so that the whole of the staircase enclosure is illuminated by operating any one switch. Where push-button switches are used they must be set to give sufficient time to reach the most distant unit of accommodation.

Larger HMOs will require a system of **emergency escape** lighting in addition to the standard stairway lighting. Emergency escape lighting will be required in the case of:

- large buildings with long escape routes;
- buildings with complex layouts;
- buildings with no natural or borrowed lighting along the escape route;
- buildings with vulnerable occupiers.

We will advise you when emergency escape lighting is needed.

The escape lighting must come on in the event of a power failure of the normal lighting circuit and it must be capable of illuminating the escape route for at least 3 hours. This can be achieved by: -

- providing standard stairway lighting (with appropriate switching) and separate <u>non-maintained</u> escape lighting (i.e. the escape lighting only operates if the power fails).

- installing <u>maintained</u> escape lighting only (i.e. the escape lighting is on all the time with battery back-up for power failure).

- installing <u>switched maintained</u> escape lighting. The lighting is operable throughout the staircase from any one switch as standard lighting, <u>and</u> operates automatically in the event of a power failure.

The advantages of providing <u>maintained</u> **or** <u>switched maintained</u> **escape lighting are: -**

- The lighting units use fluorescent lamps which are more reliable than standard bulbs.
- The lighting units are less likely to be interfered with as the lamps will not fit standard light fittings in tenants' rooms.

If you opt for standard lighting and non-maintained escape lighting, it is a good idea to use screw fittings in the stairway so that the lamps cannot be used in units of accommodation. It is also worth using fluorescent lighting and/or permanent non-switched lighting or lighting operated from a light sensitive switch for the day-to-day staircase lighting in order to reduce the cost of installation and maintenance.

You should discuss with your contractor which is the best option for you in terms of cost and management.

Remember that you are responsible for ensuring that the stairway lighting is always fully operational. That includes the provision of working lamps.

The installation of the fittings required for emergency escape lighting and the fittings themselves must comply with the relevant British Standards.

2. FIRE FIGHTING EQUIPMENT

Fire blankets are required in all rooms in HMOs where cooking facilities are present. This includes cooking facilities in bedsits and flatlets.

Fire blankets must:

- comply with BS EN 1869:1997 or equivalent;
- be of 'light duty' type, capable of dealing with small fires such as cooking fires or fire involving clothing;
- be wall-mounted at about 1.5 m above floor level and closer to the room exit than the cooker.

Fire extinguishers will often be required. They should:

- comply with BS EN 3-7: 2004;
- be tested and maintained on an annual basis in accordance with BS 5306-3 and the manufacturer's instructions;
- be clearly visible, and located on a proper stand or on wall brackets with the handle roughly 1.5 m from floor level;
- not obstruct the escape route or be obstructed by opening doors;
- be close to the exit position from each floor;
- be away from heaters or places where they may be damaged.

PART 3

TYPICAL FIRE SAFETY MEASURES IN DIFFERENT TYPES OF HMO

This part of the guide shows the typical fire safety measures that will be required in the common types of HMO found in Exeter. The measures shown are the ***minimum*** *for the HMO types covered.*

As indicated elsewhere in the guide, the provision that will be required in any specific HMO may vary from the standard package of measures. The kinds of factors which make this necessary include:

- *unusually complicated or lengthy staircase or corridor arrangements in the intended protected escape route;*
- *potentially hazardous arrangements of rooms;*
- *tenants who are at particular risk, e.g. those with disabilities.*

The ***risk assessment*** *which we carry out will play a key part in determining the measures required in the HMO in question.*

It is always best, therefore, to ***consult us*** *before carrying out works which may not necessarily cover all the fire safety needs in a particular HMO.*

Standard of Work

Works must be carried out to a good standard in accordance with approved building practice and all appropriate British Standards and Codes of Practice. ***Please ensure that contractors have a copy of this document as well as any schedule of work and/or drawings we provide.***

'Shared-house' HMO of 2 storeys

- **Walls and floors between units and between rooms and the stairway to be of sound traditional construction**
- **30-minute fire separation between any basement/cellar and the ground floor escape route (if this required; depends on quality of individual property construction and its layout)**
- **Sound, well-constructed, close-fitting conventional room doors**
- Mains-powered, interlinked smoke alarms **in ground floor passage, on first floor landing, in lounge and any other communal room plus any cellar posing a risk.** Mains-powered, interlinked heat alarm **in kitchen. All alarms featuring** battery back-up.
- **Fire blanket in kitchen**
- **Simple multi-purpose fire extinguishers in ground floor and first floor circulation spaces**
- **Conventional artificial lighting in escape route; no requirement for emergency escape lighting**

Bedsit HMO of 2 storeys, cooking facilities in bedsits

- **Walls and floors between units and between rooms and the stairway to be of sound traditional construction**
- **30-minute fire resisting construction throughout the escape route**
- **30-minute fire doors to all 'risk' rooms (bedsits; communal rooms; rooms containing boilers). Fire doors fitted with smoke seals, intumescent strips and self-closers**
- Mains-powered, interlinked smoke alarms **in ground floor passage, on first floor landing and in any cellar posing a risk.** Mains-powered, interlinked heat alarms **in bedsits.** Stand-alone, mains-powered smoke alarm **in each bedsit (to protect sleeping occupants). All alarms featuring** battery back-up.
- **Fire blankets in rooms with cooking facilities, i.e. each bedsit**
- **Simple multi-purpose fire extinguishers in ground floor and first floor circulation spaces**
- **Conventional artificial lighting in escape route; emergency escape lighting not needed unless route is long, complex or there no proper borrowed light.**

Note: If cooking facilities in a 2-storey bedsit HMO are in **shared kitchens**, the fire warning system must comprise:

- interlinked smoke alarms with integral battery back-up in each bedsit;
- interlinked heat alarms with integral battery back-up in each communal kitchen;
- additional interlinked smoke alarms with integral battery back-up in any cellar.

Fire blanket and fire extinguisher specifications can be found at the very end of Part 2 of the guide.

'Shared-house' HMO of 3 or 4 storeys

- **Walls and floors between units and between rooms and stairway to be of sound traditional construction (If a cellar is present, 30-minute separation is required between the cellar and the ground floor escape route)**
- **30-minute fire doors required to all 'risk' rooms (kitchen; lounge; dining room; bedrooms; rooms containing boilers). Self-closer on kitchen door only. No smoke seals or intumescent strips to fire doors**
- **Mains-powered, interlinked smoke alarms** in ground floor passage, on each landing, in lounge and any other communal room plus any cellar. Mains-powered, interlinked heat alarm in kitchen. All alarms featuring battery back-up.
- **Fire blanket in shared kitchen**
- **Simple multi-purpose fire extinguisher on each landing and in ground floor passage**
- **Conventional artificial lighting in escape route; emergency escape lighting not needed unless escape route is long, complex or there is no proper borrowed light.**

Fire blanket and fire extinguisher specifications can be found at the very end of Part 2 of the guide.

Bedsit HMO of 3 or 4 storeys, cooking facilities in bedsits

- **Walls and floors between units and between rooms and stairway to be of sound traditional construction (If a cellar is present, 30-minute separation is required between the cellar and the ground floor escape route)**

- **30-minute fire doors to all 'risk' rooms (bedsits; communal rooms; rooms containing boilers). Fire doors fitted with smoke seals, intumescent strips and self-closers**

- **Comprehensive fire warning system comprising:**

    - Mains-wired, interlinked smoke detectors **at all levels in protected escape route including understairs cupboards plus any cellar;**
    - Mains-wired, interlinked heat detectors **in bedsits and any room containing a particularly old gas boiler;**
    - Break-glass alarm call points **at all levels in the protected escape route and at every final exit door;**
    - Fire warning system control panel **serving all of the above, situated inside the main entrance door;**
    - Stand-alone, mains-powered smoke alarm **in each bedsit (to protect sleeping occupants)**

        - **System to be fed from a separate, landlord's power supply;**
        - **All alarms to feature** battery back-up;
        - **Alarm signal to give sound level of** 65 dB in all areas**,** 75 dB at all bed-heads **when doors are closed;**
        - **System design to be submitted to us before installation gets under way.**

- **Fire blankets in rooms with cooking facilities, i.e. each bedsit**

- **Simple multi-purpose fire extinguisher on each landing and in ground floor passage**

- **Conventional artificial lighting in escape route; emergency escape lighting not needed unless escape route is long, complex or there is no proper borrowed light.**

Note: If cooking facilities in a 3 or 4 storey bedsit HMO are located in shared kitchens, not within bedsits:

- interlinked smoke detectors to be located in each bedsit (in addition to detectors in escape route);
- heat detectors in each kitchen;
- additional interlinked smoke detectors located in any cellar.

Fire blanket and fire extinguisher specifications can be found at the very end of Part 2 of the guide.

Buildings converted into self-contained flats

Many large, older houses in Exeter have been fully converted into self-contained flats. Typically, these are Victorian and Edwardian houses of three and four storeys (although we do encounter two-storey houses subdivided into self-contained flats).

Recent conversions- those done in accordance with the Building Regulations 1991- will meet current fire safety standards. Older conversions, however, will almost invariably require additional fire safety measures.

As indicated in Part 1 of this Guide, buildings fully converted into self-contained flats are HMOs if:

The conversion was not done to the standard in the Building Regulations 1991; and:

- Less than two-thirds of the flats in them are owner-occupied.

The following boxes cover fire safety standards applying to buildings which have been converted into self-contained flats. They are intended purely as a general guide. Some properties, for example those with particularly lengthy and/or complex escape routes, may require additional fire safety provision.

Two storey building converted into self-contained flats

- **Walls and floors separating flats from other flats and between flats and stairway to be of sound traditional construction**
- **Entrance doors of flats to be 30-minute fire doors, hung on 3 heat-resistant hinges, fitted with smoke seals, intumescent strips and self-closers. Locks not to be key-lockable from inside flat. No requirement for fire doors within flats, but existing doors must be sound, well-constructed and close-fitting**
- **Mains-powered smoke detectors in the ground floor passage and on the first floor landing (<u>not</u> in the flat), plus, in each flat, mains-powered heat detectors in the lobby or room entered directly off the escape route. All these detectors interlinked. Mains-wired smoke detectors in each flat, in the lobby or room entered directly off the escape route. These <u>not</u> interlinked.**
- **Fire blanket recommended to be fitted in each flat's kitchen**
- **Multi-purpose fire extinguisher recommended for each floor in the building's common parts (ground floor hallway only, where no first floor common parts)**
- **Conventional artificial lighting in the escape route; emergency escape lighting not needed unless escape route is long, complex or there is no proper borrowed light.**

3 or 4 storey building converted into self-contained flats

- **Walls and floors separating flats from other flats and between flats and stairway to be of sound traditional construction**
- **Entrance doors of flats to be 30-minute fire doors, hung on 3 heat-resistant hinges, fitted with smoke seals, intumescent strips and self-closers. Locks not to be key-lockable from inside flat. No requirement for fire doors within flats, but existing doors must be sound, well-constructed and close-fitting**
- **Mains-powered smoke detectors in the ground floor passage and on the first floor landing (<u>not</u> in the flat), plus, in each flat, mains-powered heat detectors in the lobby or room entered directly off the escape route. All these detectors interlinked. Mains-wired smoke detectors in each flat, in the lobby or room entered directly off the escape route. These <u>not</u> interlinked.**
- **Fire blanket recommended to be fitted in each flat's kitchen**
- **Multi-purpose fire extinguisher recommended for each floor in the building's common parts**
- **Conventional artificial lighting in the escape route; emergency escape lighting not needed unless escape route is long, complex or there is no proper borrowed light.**

Notes:

- We sometimes encounter flats in older converted buildings where living rooms and bedrooms have to be accessed through kitchens. In such cases it is necessary to alter the layout of the flat in order to make it possible to gain access to the living room and bedrooms independently of the kitchen- a ‘high risk’ room.

  Other, similar room arrangements may also require modifying. You will find more information in section 2 (“ ‘Inner room’ arrangements”) of Part 2 of this Guide.

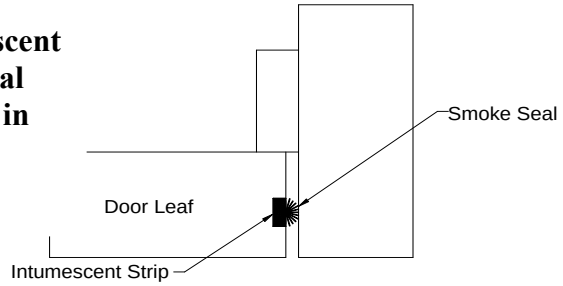
- We will not require the installation of the fire warning systems described above where converted buildings have previously been provided with comprehensive fire warning packages which go well beyond those systems. We will, however, require evidence that these existing systems are in proper working order and that a maintenance contract with a recognised alarm specialist is in place.

- An enhanced fire warning system will be required in any individual flat in a converted building which is in multiple occupation.

FIRE DOORS: Diagram Showing Details of Intumescent Strips and Smoke Seals

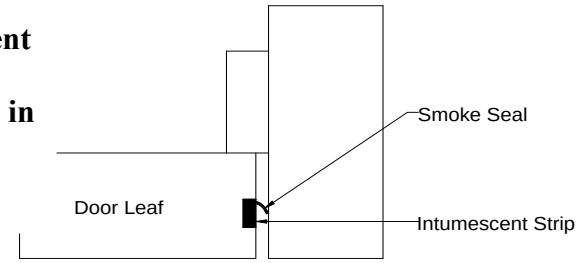
Cor
and
fitte

Combined intumescent strip and smoke seal (brush type) fitted in door leaf



Cor
and
fitte

Combined intumescent strip and smoke seal (flexible blade) fitted in door leaf



Per
to c
strij

Perimeter smoke seal fitted to door stop and intumescent strip fitted in door leaf