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National Directorate for Fire & Emergency Management

Fire Safety Guide for Building Owners and Operators

Guide for persons having control under
Section 18(2) of the Fire Services Acts 1981
and 2003

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1 Introduction

The purpose of this guide is to assist the person having control of premises in discharging their statutory fire safety responsibilities under section 18(2) of the Fire Services Acts 1981 and 2003. Section 18(2) places a duty on persons having control over a wide range of premises types, but excluding premises consisting of a dwelling house occupied as a single dwelling.

Additionally in the case of places of assembly, The Fire Safety in Places of Assembly (Ease of Escape), Regulations, 1985 apply (see Section 5.4.1 below).

While the guidance in this document is relevant to the management of fire safety in all premises (including buildings containing flats/apartments) covered by section 18, additional specific guidance regarding buildings containing flats/apartments is provided in Section 7.0 of this document.

Fire precautions are generally classified into three broad areas:

- Fire Safety Management:
- Passive Fire Protection:
- Active Fire Protection:

This guide is intended to assist every person having control over premises in the practical understanding and effective management of the fire safety requirements, and in discharging their statutory responsibilities for fire safety in premises. The text of the relevant section of the legislation is given in Section 4.0.

In general, the person having control is required to guard against the outbreak of fire on the premises and to ensure as far as reasonably practicable the safety of persons on the premises in the event of an outbreak of fire. If a fire emergency occurs in a premises, it is imperative to respond effectively by evacuating the premises, and calling the fire service.

The person having control is legally required to make provision for fire safety on the premises; this includes providing a premises that is safe including structural fire precautions, such as fire resistance of elements of structure, protection of escape routes and compartmentation appropriate to the building.

Additionally, management of fire safety should ensure that all necessary reasonable fire safety measures and procedures are in place. This may include ensuring all fire safety systems are regularly checked, inspected and maintained (see section 6.0), ensuring suitable provision of fire safety within the premises and carrying out repair works, as and when necessary. If the person having control requires advice with respect to such matters, they should engage competent persons.

This guide sets out general management practices for fire safety which should be applied, having regard to the individual circumstances of each premises

On-going, routine and planned testing and servicing of fire safety equipment and systems is an essential part of the process to ensure fire safety in buildings or premises.

Additionally, section 18(3) places a duty on every person on such premises, including buildings containing flat/apartments, to conduct themselves in such a way as to – "ensure that as far as is reasonably practicable any person on the premises is not exposed to danger from fire as a consequence of any act or omission of his". In this regard, it would be useful to inform the relevant persons of these duties.

Where any works are proposed in buildings they should be carried out by competent persons, and where necessary, designed, specified, supervised and certified by a competent professional.

Where necessary, a full fire safety assessment of the provisions for fire safety in a premises may be undertaken. Guidance on fire safety assessment, and suitable qualifications for those engaged by the person having control to carry out such an assessment, is available in the "Code of Practice for fire Safety Assessment of Premises and Buildings" published by Department of Housing Local Government and Heritage. (See Other Publications, below.)

Users of this guide are advised that the interpretation and application of the more complex technical information contained in this document should be entrusted to competent persons.

It is recognised that, as there are many types of premises and as there are differences in the types of buildings, there may be a need for flexibility in the implementation of this guide in particular cases.

Guides and codes of practice, relevant for a range of existing buildings, have been issued by the Department of Housing, Local Government and Heritage –these documents provide guidance specific to the type of premises concerned, on compliance with Section 18(2) and, in the case of places of assembly, compliance with the Fire Safety in Places of Assembly (Ease of Escape), Regulations 1985.

They are available at the Department’s website (www.gov.ie/housing), and are listed here in Other Publications, below.

A local fire authority may give advice in relation to fire safety to the owner or occupier of any premises or to any person having control over any premises.

1.1 Special Hazards

This guide provides guidance in respect of the majority of fire safety issues expected to arise in buildings generally. Additional considerations may be required where flammable, explosive, or potentially explosive materials are stored or deposited in buildings.

Reference may be made to other published guidance in relation to these premises types, for example: “Guidance document on fire safety in stores for explosives” published by Department of Housing Local Government and Heritage (2008), see other publications below.

Some premises may contain specific hazards such as:

- magazines or explosive stores
- petroleum stores
- oil jetties

In addition to the Fire Services Acts 1981 and 2003, other legislation may apply at these premises:

- Dangerous Substances Act, 1972
- Explosives Act, 1875
- Safety Health and Welfare at Work Act, 200

2 Interpretation

This guide is an aid to, and not a substitute for, professional judgement and/or common sense, and accordingly:

- It should be noted that this guide does not purport to be a statement or legal interpretation of the relevant sections of the Acts or of any of the Regulations made under the Acts. It is not intended as a substitute for professional legal advice.
- This guide is not a legal interpretation of, or substitution for, the legislation and is non-exhaustive.
- The recommendations in this guide are advisory only and are not statutory requirements. Compliance with them does not confer immunity from statutory obligations nor exempt a person from the need to ensure that any relevant statutory requirements are complied with.

3 Persons Having Control (PHC)

The person having control may be an individual person, a number of persons or an organisation such as those indicated in Figure.1. In other circumstances, some or all these parties could share the responsibility of the person having control, depending on tenancy agreements and/or other arrangements. The level of responsibility may depend on the amount of control a person or an organisation (such as an owners' management company, approved housing body, real estate investment trust or property services company) exercises over the premises and its operation.

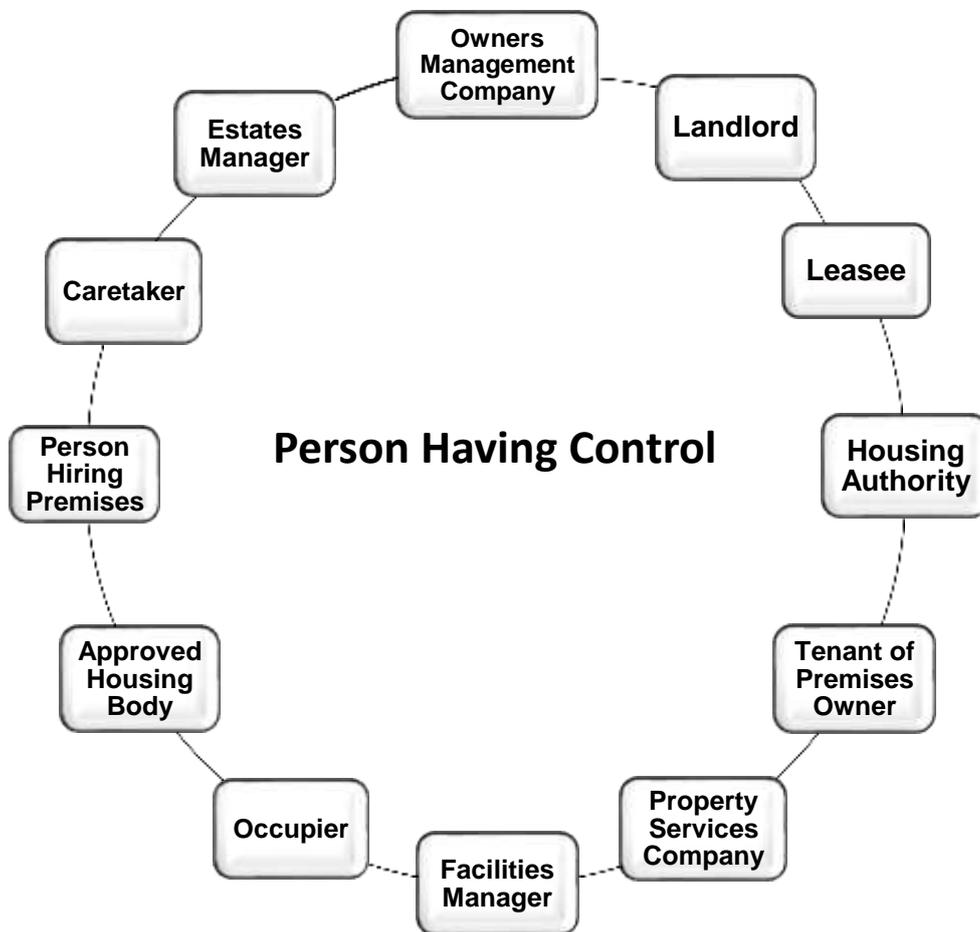


Figure 1 Diagram to illustrate the parties that may hold or share in section 18(2) responsibilities

It is the responsibility of the person having control to ensure that all necessary and appropriate arrangements are in place to deal with the safety of persons on the premises in the event of fire. In small premises, this role might only be a part of the

person's job/tasks. This responsibility may be shared amongst a number of parties. (see Figure 1)

The level of responsibility placed on a person may, to an extent, depend on the level of control they exercises over the premises. For example, the owner of premises might normally be expected to ensure that the structural fire safety of the premises is adequate, while, in addition to the owner, a person hiring the premises for a period, might normally be expected ensure fire safety in the operation of the premises – for example: to prevent overcrowding, to check that the fire exits are unlocked and clear, and that any decorations introduced on a temporary basis do not present a fire hazard.

Where section 18(2) responsibilities are shared between a number of parties – for example, between landlord and tenant(s), a property manager, or between occupiers of different parts of a building – allocation of responsibility for management of fire safety (including maintenance of the premises, maintenance of active fire safety systems such as fire detection and alarm systems, emergency lighting systems, evacuation procedures, etc.) should be clear to all parties involved. The lease – the contract between the parties – should clearly identify where responsibility lies.

The person having control may delegate specific fire safety duties to members of staff or members of an organisation; however, the person having control should retain overall responsibility for ensuring delegated tasks are carried out.

3.1 Competent Persons

For the majority of premises owners /operators, fulfilling their section 18(2) responsibilities may not require specialist knowledge or expertise. There are general daily routines, such as checking the fire alarm panels and ensuring that escape routes are available for egress, and doors on escape routes are in working order, which can be undertaken by persons who have received a suitable level of training see Section 8, Table 2 Maintenance Programme Schedule, below.

For the planned periodic maintenance of fire protection systems, such as fire detection and alarm systems, emergency lighting systems, etc., or for repairs to fire protection systems, the person having control should engage competent persons.

Where the person having control is considering any building works that may impact fire safety, or requires advice on the suite of technical provisions for fire safety in a premises, they should engage persons with appropriate qualifications and experience who are in one of the following categories to design, specify and supervise any works:

- Registered Architects that are on the register maintained by the RIAI under Part 3 of the Building Control Act 2007,
- Building Surveyors that are on the register maintained by the SCSi under Part 5 of the Building Control Act 2007,
- Chartered Engineers on the register maintained by Engineers Ireland under section 7 of the Institution of Civil Engineers of Ireland (Charter Amendment) Act 1969, or,
- Members of the Institution of Fire Engineers who hold the title Chartered Engineer.

As noted above, the local fire authority may give advice on fire safety to the owner or occupier of any premises or to any person having control over any premises.

4 Requirements under the Fire Services Acts 1981 and 2003

The person having control is legally required to provide a property / premises that is safe and all necessary reasonable fire safety measures and procedures are in place. This may mean oversight and implementation of the fire safety features, measures and procedures within the premises, and carrying out remedial works and maintenance as and when necessary. There are different duties which apply to two different sets of persons -

- (a) Owners, occupiers, etc.
- (b) Visitors to premises, customers, contractors, residents etc.

4.1 Section 18(1)

An extract from the Fire Services Acts 1981 and 203 is as follows

Section 18 - General obligations with regard to fire safety Section 18(1)

“This section applies to premises or any part thereof put to any of the following uses

- (a) Use as, or for any purpose involving the provision of, sleeping accommodation, excluding premises consisting of a dwelling house occupied as a single dwelling;
- (b) Use as, or as part of, an institution providing treatment or care;
- (c) Use for purposes of entertainment, recreation or instruction or for the purpose of any club, society or association;
- (d) Use for the purpose of teaching, training or research;
- (e) Use for any purpose involving access to the premises by members of the public, whether on payment or otherwise,

Amendments made in 2003 brought the following premises into the scope of the Acts:

- i. premises used as a factory within the meaning of the Safety in Industry Acts 1955 and 1980;
- ii. premises used as a store and subject to licencing under regulations made under the Dangerous Substances Act 1972:
- iii. a magazine, store or registered premises within the meaning of the Explosives Act 1875:
- iv. an oil jetty within the meaning of regulations under the Dangerous Substances Act, 1972:
- v. any workplace.

4.2 Section 18(2)

Section 18(2) sets out duties which are which are placed on the person(s) having control of premises to which Section 18 applies.

Section 18(2)

“It shall be the duty of every person having control over premises to which this section applies to –

- a)** take all reasonable measures to guard against the outbreak of fire on such premises;
- b)** provide reasonable fire safety measures for such premises and prepare and provide appropriate fire safety procedures for ensuring the safety of persons on such premises;
- c)** ensure that the fire safety measures and procedures referred to in paragraph (b) are applied at all times; and
- d)** ensure, as far as is reasonably practicable, the safety of persons on the premises in the event of an outbreak of fire whether such outbreak has occurred or not.

Table 1 below illustrates an example of measures and actions that may apply in the case of a building with a licenced premises with flat above, to comply with the requirements of section 18(2) of the Fire Services Acts. (This is illustrative only, and should not be regarded as covering the complete range of measures and actions that may be required in every premises.)



Figure 2 Public Licensed Premises with Accommodation Above (separate tenancy)
(Generic) Management Responsibilities.

Table 1

Section 18(2)

2) It shall be the duty of every person having control over premises to which this section applies to –

- (a) Take all **reasonable measures** to guard against the outbreak of fire on such premises,
- (b) Provide **reasonable fire safety measures** for such premises and **prepare and provide appropriate fire safety procedures** for ensuring the safety of persons on such premises,
- (c) Ensure that the **fire safety measures and procedures** referred to in paragraph (b) are **applied at all times**, and
- (d) Ensure, as far as is **reasonably practicable, the safety of persons on the premises** in the event of an outbreak of fire whether such outbreak has occurred or not.

- Maintain a Fire safety register
 - Identify person(s) having control over premises, and allocate duties and responsibilities
 - schedule and record routine fire safety visual checks/inspections, training, fire drills, servicing and systems maintenance
- Put in place a fire safety programme to include the following:
 - Carry out fire safety duties and responsibilities of the person having control – or assign some or all to responsible staff members
 - Periodic inspection of electrical installation
 - Periodic inspection of gas and oil installations
 - Control of other sources of ignition – such as matches, candles, smokers' materials, overloaded electrics, open fires
 - Regular removal of waste – to avoid build-up of combustible materials
 - Control of readily combustible materials, such as decorations or displays
 - Safe storage of flammable liquids – in limited amounts and in suitable containers
 - Closing procedure: making premises safe, Isolating and unplugging electrical equipment
- Provide a property / premises that is safe
 - Robust building structure and fabric
 - Fire resisting construction to separate commercial premises from living accommodation, and contain a fire event
 - Provision for early warning - fire detection and alarm system (typically, category L3X)

| | |
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| | <ul style="list-style-type: none"> – 'X' for interlinking between commercial premises and living accommodation) ○ Emergency lighting, to facilitate escape ○ Sufficient number of suitable escape routes ○ Maintenance and repair as required ● Provide fire extinguishing equipment ● Provide training for staff – at recruitment, and at regular periods – housekeeping, control of ignition sources, waste removal, procedure on discovering a fire or hearing fire alarm, ensuring people evacuate the building promptly and safely, calling the fire service, safe use of fire extinguishers, assisting the fire service on arrival, visual inspection of fire alarm panel, emergency lighting, fire doors, opening up of premises procedure (see 5.3.2 below) ● Notices for procedure in the event of fire or alarm: <ul style="list-style-type: none"> ○ for commercial premises, and ○ for flat above ● Signs for escape routes ● Provide fire safety information to occupants of living accommodation ● Routine visual check of fire alarm panel, emergency lighting luminaires, fire extinguishers, signage visibility ● Routine check on operation of fire doors, escape routes, doors on escape routes, exit doors ● Regular maintenance (by competent persons) of fire alarm system, emergency lighting, fire doors, fire extinguishers (see Section 8 Table 2 Routine Maintenance below) |
|--|---|

4.3 Section 18(3)

The section 18(3) of the Fire Services Acts 1981 and 2003 also places a duty of care on every person being on the premises. Any person on any premises covered by the Act – they could be a tenant, living or working there, just visiting, attending a show or meeting, etc. – is under an obligation to conduct themselves properly.

Section 18(3)

“It shall be the duty of every person, being on premises to which this section applies, to conduct himself in such a way as to ensure that as far as is reasonably practicable any person on the premises is not exposed to danger from fire as a consequence of any act or omission of his”

There are two sides to this obligation, referred to in the legislation as an act or an omission. To do anything which would expose anyone to danger from fire (an act) may be a breach of Section 18(3). In addition, failure to do something which would prevent people from being exposed to danger from fire (an omission) may be a breach of Section 18(3).

4.4 Inspection and Enforcement

While fire safety on premises is the responsibility of the person having control, fire services have powers of inspection, and may take enforcement action where necessary to deal with unsatisfactory provision for fire safety on premises.

Enforcement powers include:

- provision of advice in relation to fire safety
- service of notice requiring steps to be taken in relation to fire safety on premises,
- service of notice requiring closure of premises,
- seeking an order of the High Court, prohibiting or restricting use of premises, or part thereof.

The Fire Services Acts also provide for penalties for contravention of Part III of the Acts, of regulations made under the Acts, or of notices to which the Acts apply.

Penalties on conviction can include fines and/or imprisonment – potentially up to 2 years imprisonment, fine up to €130,000, or both.

4.5 Section 20(5)

The aforementioned requirements of Section 18(1), (2) and (3) of the Fire Services Acts 1981 and 2003 address requirements with regard of ensuring the safety of occupants within buildings. Section 20(5) additionally, places a duty of care on the person having control of buildings where flammable, explosive or potentially explosive substance is used, stored or deposited adjacent to buildings.

Section 20(5)

“Where a fire authority is of the opinion that a flammable, explosive or potentially explosive substance is used, stored or deposited adjacent to buildings in such a manner as to represent a serious danger to life, the authority may serve a fire safety notice on the owner or occupier of the land on which the substance is used, stored or deposited requiring the taking of specified measures to reduce the danger to a reasonable level.”

5 Main Duties for Persons having Control

Every person having control, as outlined above, has a statutory responsibility in relation to fire safety. This section provides standardised procedures for the development and implementation of a fire safety programme which should be an integral part of the day-to-day management and operation of premises.

There should be clear understanding on the subject of fire safety measures and emergency procedures, to ensure that no element of fire safety is neglected, and no element is unreasonably duplicated, where this could cause confusion in an emergency.

5.1 Fire Safety Programme

A fire safety programme incorporating arrangements for the following should be prepared for each individual premises:

- prevention of outbreaks of fire, through the establishment of day-to-day fire prevention practices;
- instruction and training of staff on all matters relating to fire safety;
- emergency fire procedures and evacuation drills;
- provision of fire safety notices/instructions to people on the premises;
- routine check of fire alarm panels, emergency lighting, portable fire extinguishers, etc.
- routine check of operation of fire doors, doors on escape routes, exit doors
- periodic maintenance of fire protection equipment: fire detection and alarm systems, emergency lighting, fire doors, etc.
- maintenance of the building, and its fittings and services;
- maintenance of escape routes;
- liaison with the fire authority and assisting the fire service ; and

- keeping of fire safety records (Fire Safety Register)

A fire safety programme will be effective only if it is implemented in total, and monitored on a day-to-day basis by the persons having control. Most of the areas covered in this section are matters of good housekeeping and can contribute to the maintenance of fire safety standards in a premises.

5.2 Fire Prevention

Fire prevention measures are a key element in the fire safety management of premises. This involves the identification and elimination of potential fire hazards, both inside and outside the premises/building, and the establishment of good housekeeping practices, periodic inspections, and the diligent application of safety rules. The following fire prevention measures are recommended for adoption in the day-to-day running of the premises.

5.2.1 Rubbish and Waste

Arrangements should be made for collection and removal of waste at regular intervals. Pending removal, rubbish and waste should be stored in suitable containers at a designated location, away from sources of ignition. Staff should be made aware of the importance of keeping all areas of the premises clean and tidy. Rubbish and waste should never be allowed to accumulate in stairways or escape routes.

5.2.2 Smoking

Smoking and careless disposal of smokers' materials is a common potential cause of accidental fires. Where permitted, smoking should be restricted to approved areas. In smoking areas, suitable ashtrays should be provided. Ashtrays should be emptied frequently into metal bins, with any smouldering material being extinguished beforehand.

5.2.3 Storage of Gas Cylinders/Cartridges

Where pressurised gas cylinders are stored in buildings, storage should be in accordance with relevant standards. Cylinders and cartridges containing liquefied petroleum gas should be stored in accordance with Irish Standard I.S. 3213:2020, Code of Practice for the storage of Liquid Petroleum Gas Cylinders and cartridges.

Other gas cylinders should be stored in accordance with the British Compressed Gases Association: CP44. The storage of gas cylinders. Revision1:2022.

5.2.4 Storage of flammable, explosive or potentially explosive substance Gas Cylinders/Cartridges

Flammable, explosive or potentially explosive substance should not be used, stored or deposited adjacent to buildings in such a manner as to represent a serious danger to life.

5.2.5 Electrical Installations and Appliances

(a) Installations

Inspection and testing of the electrical installation should be carried out by a competent registered electrical contractor in accordance with Irish Standard 10101. The Health and Safety Authority has issued a Guidance Note giving practical advice which can assist every person having control to put in place a suitable regime for periodic inspection and testing of electrical installations. (See [other publications](#), below.)

(b) Appliances

Staff should be trained to use electrical equipment correctly and safely, and to report defective electrical equipment. Defective equipment should not be used; repairs as appropriate should be carried out only by competent persons. Equipment should be switched off when not in use.

5.2.6 Heating and Ventilation Systems

All ventilation and heating systems in buildings – including air conditioning systems – should be maintained in accordance with the manufacturer’s recommendation. Any filters, vents, access points, fans, etc. should be regularly cleaned of oil, grease and dust.

5.2.7 Kitchens

Good housekeeping practices are essential for fire safety in kitchens. Cookers, extract fans, extraction hoods, filters, ducts and ancillary equipment should be regularly cleaned of oil, grease and dust. Equipment should be serviced regularly.

Precautions should be observed in kitchens – for example:

- do not leave cooking operations unattended;
- take care not to overheat fats/oils;
- do not over-fill cooking pans; and
- do not leave combustible materials (for example, towels, etc.) over stoves.

Staff should also be familiar with the location, and receive training in the safe and correct use, of available first aid fire-fighting equipment and procedures – for example, portable fire extinguishers, fire blankets and any fixed fire suppression systems – and use of emergency shut-off switches.

5.2.8 Laundries

Rooms used as laundries should be separate rooms. Such rooms may pose particular fire hazards as detailed below.

- (a) spontaneous combustion of compacted fabrics which have been tumble dried. Tumble dryers should have automatic cooling at the end of the drying cycle. Fabrics should not be over-dried, and tumble dryers should be unloaded immediately after use and left empty. Tumble-dried fabrics should be loosened to dissipate heat on being taken from the machine.
- (b) Fluff or lint, which is readily flammable, can accumulate in laundries. Such materials should be removed on a regular basis – especially from hot areas, such as electric motors, tumble dryers, and other hidden locations. Filters should be regularly inspected and cleaned.
- (c) Ironing equipment should be switched off when not in use.
- (d) Solvents which are highly flammable are sometimes used for spot cleaning in laundries. Only small quantities needed for immediate use should be kept in the laundry. The main bulk of this type of liquid and general cleaning solvents should be stored in a suitable lockable metal cabinet. Containers

for solvents should be kept closed, to prevent vapours leaking.

- (e) Smoking should be prohibited in laundries, and signs to this effect should be displayed.

5.2.9 Flammable Liquids

Where flammable liquids are used in buildings, quantities should be limited to those needed for immediate use. If larger quantities are stored, they should be in a suitable lockable metal cabinet. Containers for flammable liquids should be kept closed, to prevent vapours leaking.

5.2.10 Hot Work

Adequate fire precautions should be taken when any hot work – such as soldering, welding, etc. – is undertaken, and the work should be carefully supervised. The activities carried out by outside contractors may introduce additional fire risks. They may not be as familiar with the premises as those normally present.

The person having control should ensure that all necessary precautions against fire are taken – including engaging only competent contractors.

The person having control should ensure that escape routes are not blocked or obstructed. Access by the occupants to areas of hot work should be restricted. Where work involves removing or switching off fire protection facilities, alternative arrangements to maintain safety levels should be made.

Hazardous equipment and materials should be removed from the building at the end of each working day, and a final check should be made to ensure that no fire danger remains after work finishes.

5.3 Staff Training

For a fire safety programme to be effective, staff should be familiar with the parts of the fire safety programme in which they have a role. Instruction and training on the relevant areas should be given to all staff, including part-time and temporary staff. A record of the training undertaken by the staff should be kept in the Fire Safety Register (see Section 5.7).

Staff should receive training and instruction in relation to the following, where relevant to their duties and roles:

- the fire prevention measures indicated in Section 5.2 above;
- the action to be taken on hearing the fire alarm;
- the action to be taken on discovering a fire;
- the evacuation procedure for the premises;
- the layout of the building, including escape routes;
- the role of fire doors in controlling fire and smoke spread, and protecting escape routes;
- the location of manual fire alarm call points and fire-fighting equipment;
- the location of the main fire alarm control and indicating panel and any associated alarm panels and their operation;
- the procedure for calling the fire service;
- arrangements for assisting the fire service;
- fire control techniques, including the safe use of first aid fire-fighting equipment;
- the operation of building services (for example, shutting down air conditioning systems) to minimise fire and smoke spread;
- action to be taken where fault, damage or ineffective operation of fire protection systems (for example, fire detection and alarm systems, emergency lighting) or elements (for example, fire resisting doors) is noticed

5.3.1 Fire Emergency Plan

If a fire emergency occurs in a premises, it is imperative to respond effectively by evacuating the premises, and calling the fire service. Accordingly, a predetermined plan should be put in place, outlining the procedures to be adopted:

- a procedure for raising the alarm;
- an evacuation procedure for the occupants, including persons with disabilities
- a procedure for calling the fire service;
- a procedure for reporting to pre-determined assembly point(s) and informing designated person(s) of the situation;
- a procedure for accounting for each person on the premises;
- a procedure for assisting the fire service on their arrival.

5.3.2 Evacuation Drills

To assess the effectiveness of the predetermined plan and preparatory training given, drills which simulate fire and emergency situations should be carried out on a regular basis. These drills can generally be organised for times which cause minimum disruption to the operation of the premises, but all staff must be involved. The objectives of drills are generally;

- to familiarise persons in control with their assigned roles;
- to test the availability and effectiveness of staff training;
- to test arrangements for an emergency; and
- to identify shortcomings in the emergency procedures.

Each drill should be reviewed afterwards, and procedures revised if necessary. All drills should be recorded in the Fire Safety Register.

5.3.3 Fire Safety Instructions for Occupants

In addition to instructions for staff, written instructions on the action to be taken by building occupants on the discovery of a fire or on hearing the fire alarm should be displayed in prominent positions throughout the building. Instructions should be accompanied by a simple floor plan, showing schematically the location of all storey exits. Particular attention should be drawn to the general advice that lifts should not be used in the event of fire. An example of the notice required, together with the fire safety instructions, is given in Appendix H.

5.4 Escape Routes

In the event of a fire or other emergency, occupants should be able to evacuate the premises quickly and safely, by way of routes protected from fire and smoke and free from obstruction. This can only be achieved if escape routes are unobstructed, if fire resisting doors are kept closed, and if exit doors are readily openable at all times while the premises is occupied. All escape routes should be checked on a daily basis. If any obstruction is noticed in the areas of escape, then it should be removed immediately and any necessary steps taken to prevent a recurrence.

Daily checks of escape routes should be carried out in accordance with Section 8 Table 2 Maintenance Programme Schedule, below.

All fire safety signs, notices and instructions which are provided for the building users, staff and the fire service should be prominently displayed and be fully and clearly visible at all times. Damaged items should be repaired or replaced.

5.4.1 Escape routes in Places of Assembly

Premises which are used as a place of assembly may accommodate large numbers of occupants. A "place of assembly" means a building or any part of a building put to any of the following uses:

- amusement arcade
- art gallery
- assembly hall
- bingo hall
- concert hall
- conference hall
- cinema
- dance hall
- ecclesiastical building
- exhibition hall
- funfair building
- grandstand
- gymnasium
- indoor bowling ally
- indoor games court
- library to which the public are admitted
- museum
- non-residential collage or school
- non-residential club
- premises licenced for the sale of intoxicating liquor other than an off-licence
- radio or television studio to which the public are admitted

- restaurant, café, canteen
- riding school
- skating rink
- sports pavilion
- stadium
- swimming baths(including any swimming pool, changing rooms, or similar facilities)
- tent or marquee to which the public are admitted
- theatre

The Fire Safety in Places of Assembly (Ease of Escape), Regulations, 1985 apply to these premises (S.I. No. 249/1985) and set out some additional fire safety requirements relating to escape routes and ensuring that they can be readily used at all times.

Regulation 4

“every person having control over a place of assembly shall take the following precautions that is to say, he shall ensure that, while the place is in actual use as a place of assembly–

- e)** Subject to paragraph (ii), all escape routes are kept unobstructed and immediately available for use;
- f)** Doors, gates and other like barriers across escape routes are not secured in such a manner that they cannot easily and immediately opened by persons in the place of assembly
- g)** All chains, padlocks and other removable fastenings for securing doors, gates or other like barriers are removed and kept in a place where they may be readily inspected by an authorised person for the purpose of section 22 of the Fire Services act,1981,
- h)** No hanging or drape is placed across or along an escape route in a manner which would impede or obstruct escape

5.4.2 Overcrowding

In all premises, the person having control should guard against overcrowding which could inhibit escape of the occupants. There may be potential for overcrowding in any building.

In the case of premises licenced under the Public Dance Halls Act, 1935 and 2003, the maximum number of persons permitted on the premises/licenced area may be set out as part of the licence conditions

5.5 Liaison with the Fire Authority and Assisting the Fire Service

5.5.1 Liaison with the Fire Authority

It may be appropriate to liaise and consult from time to time with the local fire authority with the following objectives:

- familiarisation of the fire service with the premises;
- to ensure the availability of access and appropriate facilities for the fire service;
- advice on fire safety matters and fire safety management generally.

5.5.1 Assisting the Fire Service

Access routes to premises, including private access roads should be accessible or arrangements should be put in place to facilitate fire service access. Obstruction of private access routes – for example, by waste skips or parked vehicles – should be prevented.

Facilities, such as fire hydrants and other fire-fighting water supplies, dry risers, foam inlets, etc., should be immediately available for use by the fire service.

All firefighting lifts should have a notice displayed adjacent to the lift entrance at fire service access level indicating the maintenance history of the lift, including the date of the most recent weekly, monthly and six monthly checks and tests.

Signs should be provided in firefighting shafts as follows:

- (a)** A storey identification sign, in each firefighting stairs, at each storey landing, that identifies the floor by number.
- (b)** A storey identification sign, in each firefighting lobby, that identifies the floor by number.

Where there is more than one firefighting shaft in a building, the storey identification number should be supplemented by a shaft identification number (e.g. A-1, A-2, etc., or similar).

5.5.2 Plan of Premises

Plans of the building and site should be made available to the fire service upon their arrival. Such plans should indicate the following:

- Building layout, including stairways and escape routes;
- fire protection facilities;
- first aid fire-fighting equipment; gas and electricity supply shut-off points;
- storage of gas cylinders and other hazardous materials;
- the fire alarm panel for the automatic fire detection and alarm system
- the control device for any ventilation systems.

- site layout plans

5.6 Fire Safety Register – Record Keeping

5.6.1 Fire Safety Register

A Fire Safety Register should be maintained for all premises where section 18 applies. The maintenance of a Fire Safety Register will assist in meeting the general obligations, imposed by section 18 of the Fire Services Acts, and is a means of demonstrating compliance



Figure 3 Sample Fire Safety Register

The person having control should retain and make available the Fire Safety register for the premises. This register should be kept on the premises at all times, be kept up-to-date, and should be available for inspection by an authorised officer of the fire authority.

The Fire Safety Register should be a **living** document – with daily, weekly, monthly, quarterly and annual records of fire safety checks of procedures and the life safety systems within the premises.

Larger, more complex premises may have correspondingly a more comprehensive Fire Safety Register and schedule of contents, with other engineering fire safety systems listed, and records of the appropriate maintenance and certification of those systems included.

This information in the Fire Safety Register may also be useful in any future maintenance or renovation. Most active and passive fire safety systems require periodic maintenance/proactive intervention, and it is necessary for all interventions to be properly recorded.

The Fire Safety Register should be produced and maintained in a user friendly format suitable for ongoing use. The following information should be regarded as an indicative schedule of contents: (Note - this list is non-exhaustive and not in any order of preference)

- details of premises (address, owner, management company),
- the name of the person in control – the owner/occupier/manager, and any deputies; fire and emergency procedures;
- fire duties assigned to staff members;
- information regarding:
 - emergency lighting systems (Installation, Inspection, maintenance, and works carried out),
 - fire detection and alarm system (zones, detectors, manual call points, inspections, false alarms, maintenance, and works carried out),
 - fire doors (inventory, inspections, maintenance, and works carried out),
 - sprinkler systems – water,
 - fire suppression systems -gas, foam,
 - smoke control systems,
 - fire mains – dry/wet fallers – dry/wet risers,
 - static water storage, bulk tanks,
 - portable fire extinguishers
- up-to-date construction drawings and specifications; these may include drawings prepared as part of an application to the local building control authority for a fire safety certificate, and any conditions attached to the certificate
- details of instruction and training given to staff on fire safety, and by whom;
- details of each fire and evacuation drill, the date thereof, the names of those taking part, and the type, objective and results of exercises held;
- manuals, and where appropriate certificates, produced by specialist contractors and suppliers which outline operating and maintenance procedures and schedules for plant and equipment installed as part of the

structure;

- details of the location and nature of utilities and services, including emergency and fire-fighting systems;
- details of routine checks, planned inspections and maintenance carried out on fire protection equipment and systems, with comments on the results of the checks and inspections and actions taken (and by whom) to address defects;
- details of each inspection of the building itself, its fittings and services and the actions taken to remedy any defects found; and
- details of all fire incidents and false alarms that occur and the actions

5.6.2 Additional Information

Additionally, persons having control might find the following document useful in providing information regarding the structure and fabric of the premises/building.

- Certificate of compliance on completion, where applicable

6 Fire Safety Maintenance and Testing

The safety and protection of the occupants in the event of a fire will depend greatly on the reliable functioning of fire protection equipment, such as fire detection and alarm systems, emergency lighting systems, fire doors, smoke ventilation systems, fire extinguishing equipment and sprinkler systems. In buildings, a high degree of reliance may be placed on such active fire precautions, and accordingly, the person having control should ensure that such equipment is operated and maintained to the appropriate standards.

All such equipment should be checked by the person having control, or designated member of staff, and inspected and maintained on a regular basis by a competent person. Details of checks and inspection procedures for fire protection equipment are given in Section 8, Table 2 Maintenance Programme Schedule, below. If faults or deficiencies are discovered, they should be noted and corrective action should be taken, as well as any appropriate steps to prevent a recurrence. Maintenance should be arranged with competent companies or persons in accordance with the appropriate standards.

It is important to maintain the condition of the premises/building over time, including passive fire protection features. The integrity of walls, doors or floors which are part of fire compartmentation or the protection of escape routes is an important feature of passive fire protection. When repairs or alterations are made to building structures, it should be ensured that fire resisting walls or other passive fire protection systems are reinstated if damaged. Any alterations, additions, repairs or modifications should to be carried out only by competent persons.

6.1 Fire Safety Systems: Testing, Inspection and Maintenance

Planned inspection, maintenance and testing procedures should be established and used to ensure that all fire protection systems can operate effectively when required. Faults are a life safety issue – not simply a maintenance issue to be dealt with later; faults should be entered in the fire safety register and corrected promptly.

Maintenance should be carried out in accordance with the relevant standards or manufacturer's Instructions at the recommended time intervals, and the testing and inspection of these systems should be carried out by competent persons.

All fire safety installations should be tested individually, but interdependent fire safety installations should be tested collectively, to demonstrate satisfactory interfacing / interlinking (cause and effect) – for example, operation of automatic opening vents upon the activation of localised fire detection and alarm system.

A clear understanding of how the fire safety equipment and systems operate independently and/or collectively is key to the establishment of the planned routine maintenance programme.

The maintenance requirements for all fire safety equipment and systems should be sought from the equipment and/or system manufacturers, suppliers, their technical advisers and/or specialised contractors. The following non exhaustive list details equipment and systems which require ongoing management and routine maintenance:

- fire detection and alarm system
- emergency lighting system
- fire doors and doors on escape routes
- dry mains, dry risers, wet risers, inlet breechings, landing valves, etc.
- fire fighting shafts and lifts
- first aid fire fighting equipment, including hose reels (if provided/ required)
- smoke control systems (common areas, such as corridors, lobbies and stairwells)
- sprinkler systems
- signposting and way-finding measures to assist firefighting
- signposting fire hydrants and water supplies
- special provisions – for example, fire/smoke curtains and shutters, etc.

6.2 Fire Detection and Alarm Systems

The majority of buildings will include a fire detection and alarm system installation (see Figure 4). A fire detection and alarm system can be a simple manual system, with only manual call points (break glass units). In larger or more complex buildings a system will typically include automatic detection (smoke or heat detectors).

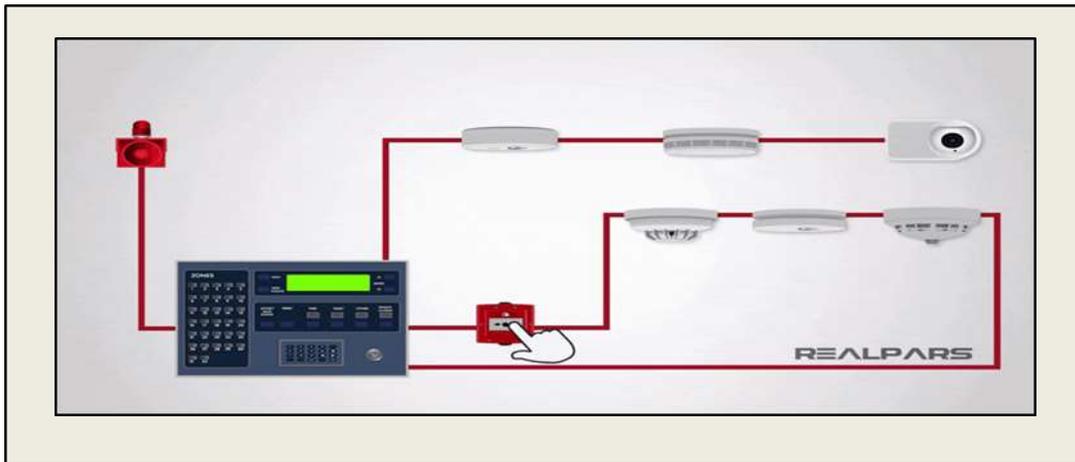


Figure 4 Fire Alarm and Detection System

The person having control should have a clear understanding and written description of the extent of the fire detection and alarm system, and any interaction with the active fire safety systems. In a larger building, the fire detection and alarm system may consist of number of separate alarm zones. This can allow the fire alarm panel (see Figure 5) to indicate the location of a fire, in the event of an alarm activation, or a fault in the system.



Figure 5 Fire Alarm Panel

A zone plan drawing should be displayed on a wall next to the fire alarm panel. This should indicate the locations of the fire detection and alarm zones in layout form for all floors throughout the building. Additionally the schedule of servicing/testing should also be displayed at this location (in accordance with Irish Standard I.S. 3218)

The Fire Safety Register should contain details of the fire detection and alarm system. Fire detection and alarm systems should be inspected and maintained in accordance with the recommendations of the Irish Standard IS 3218. See section 8, Table 2 Maintenance Programme Schedule, below

Section 18(3) of the Fire Services Acts 1981 and 2003 places a duty on each occupant to ensure that any person on the premises is not exposed to danger from fire as a consequence of any act or omission on their part. Reasonable access should be allowed for maintenance of the common alarm system. [Section 7](#) provides additional information for fire detection and alarm systems in buildings containing flats/apartments.

6.3 Emergency Lighting System

In general, buildings are required to include an emergency lighting system – typically used to illuminate escape routes, common areas, corridors, stairways and service rooms, etc. Irish Standard I.S. 3217 sets out requirements for installation, testing and maintenance of emergency lighting systems.

The overall objective of emergency escape lighting is to illuminate escape routes to assist safe exit from a location in a building in the event of failure of the normal electrical supply. An emergency lighting fitting (see Figure 6) automatically illuminates when the power fails, assisting occupants to make their way to an exit. Emergency lighting systems should be inspected and maintained in accordance with the recommendations of Irish Standard I.S. 3217. See Section 8, Table 2 Maintenance Programme Schedule, below.



Figure 6 Emergency Light Fitting

6.4 Fire Doors

Fire doors have two important functions in a fire:

- to maintain the fire resistance of compartmentation in buildings
- to protect escape routes by keeping them free of smoke and fire, to enable occupants to evacuate to a place of safety

A reference to a fire door includes the door leaf(s), frame, hardware, including seals and automatic door closers (See Figure 7). Every fire door is required to act as a barrier to the passage of smoke and/or fire.

Fire doors may be rated differently, depending on their performance in standard fire resistance tests, doors commonly found in buildings can offer various degrees of fire rating eg: 30,60, 90 minutes, where required.

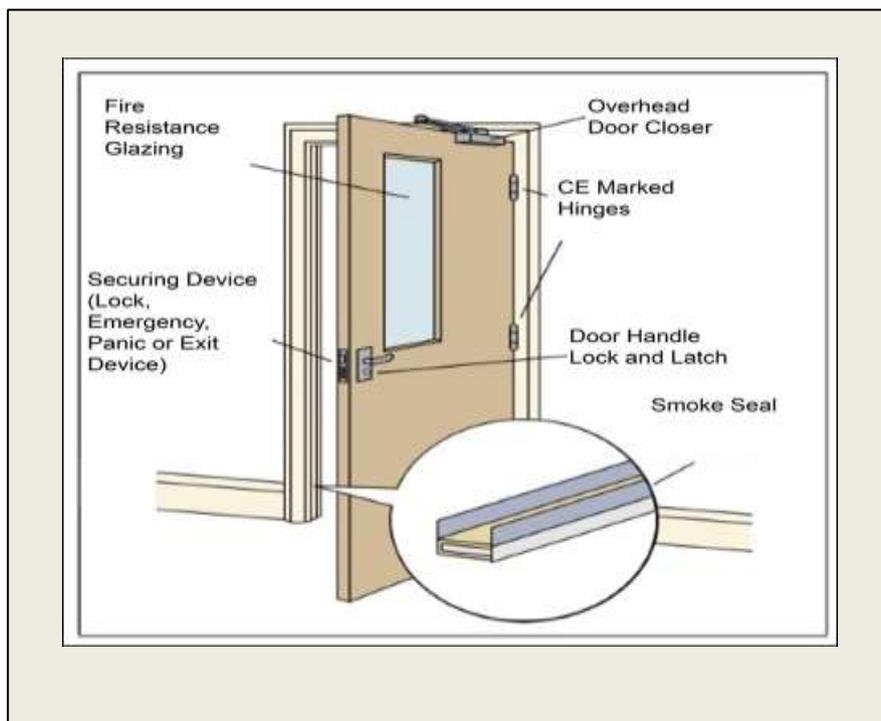


Figure 7 Fire Door Components

Fire doors are typically fitted with intumescent seals around the door or frame. These seals reduce the spread of smoke between the door and frame. The seal swells when exposed to high temperatures, and seals the gaps between door and frame.

Some fire doors may additionally be fitted with a cold smoke seal (see Figure 7). Intumescent and cold smoke seals should not be removed or painted over.

Fire doors should be identified by a label affixed to the top edge of the door or colour-coded plugs inserted into the door to indicate their performance in a fire resistance test. (See Fire Door Labels – A Guide | BWF Fire Door Alliance) They should also have a permanent sign reading “fire door keep shut” fixed on both faces – see Figure 8 (a). (Entrance doors to flats, and internal doors in flats, and bedroom doors in some other residential buildings are exempted from this requirement). Identification marks should not be removed or painted over.



Figure 8(a) Fire Door Sign

Figure 8(b) Overhead Self Closing Device

The protection provided by a fire door is demonstrated in Figure 9 where extensive fire damage has occurred in a car park. This an example of how a fire door in the closed position prevented fire spreading out of the car park to other parts of the building, with only minor smoke damage occurring beyond the car park

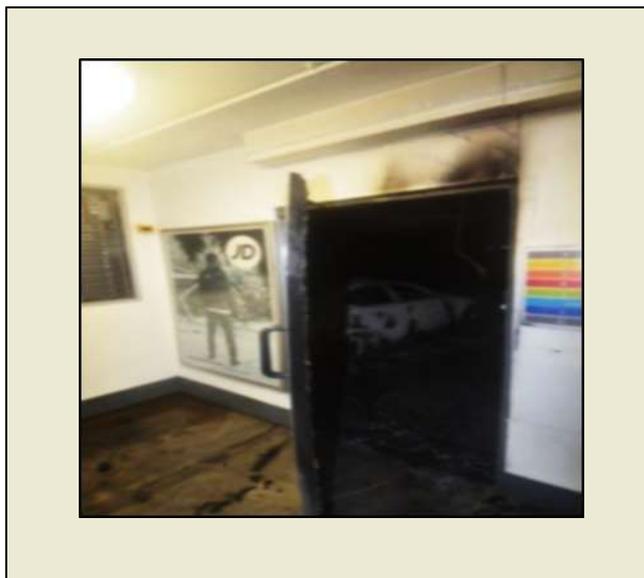


Figure 9 Fire Door

In order that a fire door be effective, it is essential that it returns to the closed position and forms a barrier to smoke and hot gases, this closing action is achieved by the automatic door closing mechanism.

It's essential that fire doors are not rendered ineffective by being held open by wedges or other objects. Any other arrangement should be considered only upon the advice of a competent professional.

Staff moving about buildings on a daily basis who note damage or ineffective operation of a fire door should bring it to the attention of the relevant person, and it should be noted in the Fire Safety Register and remedial action taken. Particular attention should be paid to fire doors where people movement is higher, as these are likely to be more susceptible to wear.

All fire doors should be inspected and maintained in accordance with the recommendations in Table 2 Programme Maintenance Schedule, below. Mechanical items such as hinges, locks, latches, door closers, (see Figure 8 (b)) floor springs etc. are likely to wear over time; it is important that these mechanisms are checked, inspected and maintained.

Any slight alteration to the door or its surrounds can affect the performance of the fire door. Any inspection or maintenance of the fire doors or any alterations or work on a fire door, should be carried out only by a competent person.

Where it is necessary to replace worn hardware on a fire door, the essential items should be replaced with products to the same specification as that outlined in the test certification supplied by the door manufacturer.

Where any alterations are proposed to fire doors, they should be carried out by competent persons, and where necessary, designed, specified, supervised and certified by a competent professional.

6.5 Fire Mains: Risers/Fallers

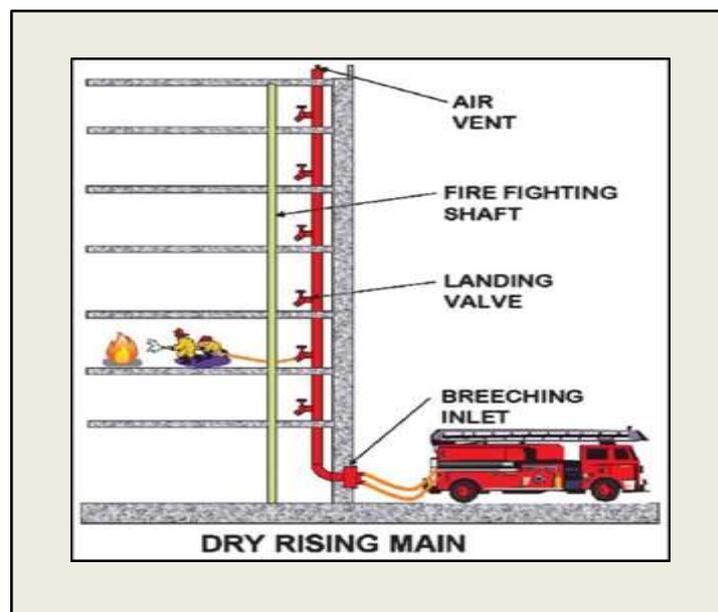


Figure 10 Rising Main

A fire main can be a fixed water supply pipe (riser or faller) installed in building for firefighting purposes, or can be a ring main which circuits a building to serve fire hydrants, fire mains or other firefighting apparatus.

Usually, only the larger, complex or restricted developments include wet or dry riser/faller installations. Risers are fixed pipes provided to facilitate the supply of water above the inlet level, while fallers facilitate water supply below the inlet level.

These may be installed in tall or deep or otherwise complex/inaccessible buildings to eliminate the need for fire-fighting personnel to run hoses up through the building to carry out fire-fighting operations (see Figure 10). In the case of wet risers (usually only taller or complex/inaccessible developments) a detailed maintenance program is necessary and should be carried out by competent persons in accordance with Section 8, Table 2 Programme Maintenance Schedule, below.

In the case of dry risers/fallers a certain amount of maintenance is required, to ensure that the landing valves have appropriate blank caps secured by a chain or similar, and to deal with any damage that may occur as a result of interference.



Figure 11(a) Inlet Breeching at exterior of building

Figure 11(b) Landing valve in stairway at upper levels

Figure 11(a) shows examples of a typical inlet breech, and Figure 11(b) a landing valve. Dry riser/faller systems should be checked, inspected and maintained in accordance with the recommendations in Section 8, Table 2 Programme Maintenance Schedule, below.

6.6 Firefighting Shafts and Lifts

This is a provision that is normally only associated with taller or relatively inaccessible or complex buildings, and includes a series of features collectively referred to as a firefighting shaft, which forms a protected area for initiating fire-fighting operations. It normally includes a protected stairway, firefighting lift and

protected approach lobby enclosed in fire resisting construction (see Figure 12(a)), along with a dry or wet riser and specific ventilation provisions.

Ventilation can be achieved by means of an openable window, naturally or mechanically ventilated smoke shaft. A firefighting lift, unlike a normal lift, is designed to operate for as long as is practicable when there is a fire in the building. Additional lift control system features (see Figure 12(b)) are required above those which would be incorporated on a normal lift. Firefighting lifts should be inspected and maintained in accordance with the recommendations in Section 8, Table 2 Programme Maintenance Schedule, below.

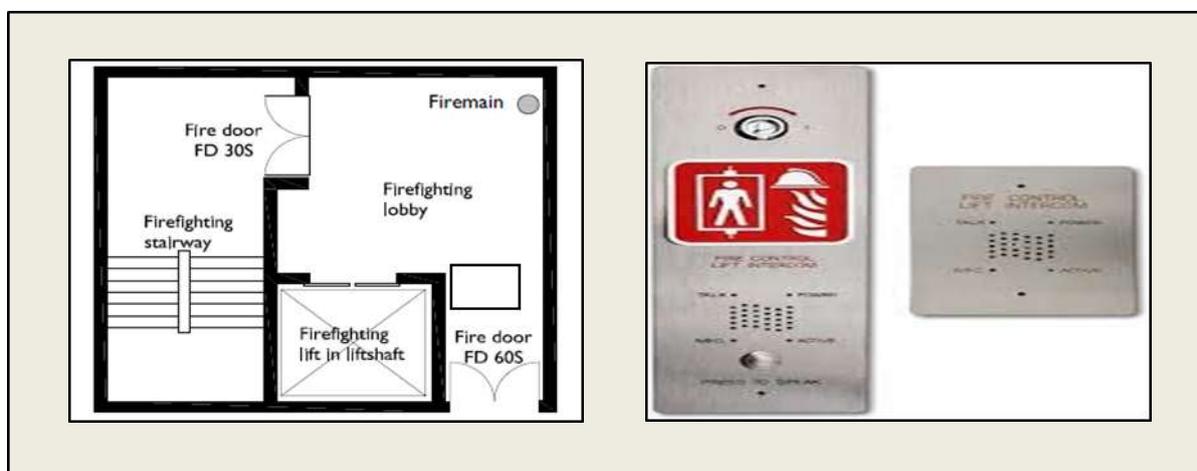


Figure 12(a) Firefighting Shaft

Figure 12(b) Firefighting Lift Control Features

6.7 First Aid Firefighting Equipment, including Hose Reels

First-aid firefighting equipment can make a valuable contribution to containing and extinguishing fire, when operated by a trained user.

Where provided, portable fire extinguishers (Figure 13(b)) should be suitable for the class of fire likely to occur. Portable fire extinguishers should conform with European Standard EN 3, and be installed, inspected and maintained in accordance with Irish Standard I.S. 291; see recommendations in Table 2 Programme Maintenance Schedule, below. Where provided, fire hose reel installations (Figure 13(a)) should be inspected and maintained in accordance with the recommendations in Section 8,

Table 2 Programme Maintenance Schedule, below. Portable fire extinguishers should be in a fixed, permanent location, such as a stand, or wall mounted, and generally located on exit routes near exit doors and for specific hazards in accordance with Irish Standard I.S. 291.

Any extinguisher used in a fire, or otherwise discharged, should be recharged immediately. Damaged extinguishers or hose reels should be repaired or replaced.



Figure 13(a) Fire Hose Reel

Figure 13(b) Portable Fire Extinguishers

6.8 Smoke Control Systems

Smoke Control Systems play an important role in protecting escape routes in many buildings in the event of fire. The objectives are:

- to keep staircases relatively clear of smoke
- to keep lobby or corridor relatively clear of smoke
- to facilitate firefighting operations

The person having control should be aware of the type of smoke control system in place and how this is intended to control the spread of smoke in the event of fire. The person having control may need to seek advice from a competent person or professional to ascertain how it will function.

Some additional information relevant to smoke control in buildings containing flats/apartments is given in Section 7.4.

Smoke control systems should be inspected and maintained in accordance with the recommendations in Section 8, Table 2 Programme Maintenance Schedule, below.

6.8.1 Stairway Smoke Control

For stairways this normally will take one of 3 forms;

1. The provision of manually openable vents (OVs) (in many cases windows on landings in stairways may fulfil this function) at every level in the stairway including at high level at the top of the stairway enclosure, or,
2. The provision of a high level automatic opening vent (AOV) at the top of the stairway (Figure 14(a)), that is opened on activation of smoke detectors in the stairway enclosure, and is additionally manually openable by fire service switch at the entrance level (normally at ground floor level) or,
3. The third method of provision – namely pressurisation systems – which are less common, and use fans to maintain a positive pressure in the escape stairway, and thus prevent smoke from entering in the event of a fire



Figure 14(a) AOV in stairway



Figure 14(b) Roof mounted Automatic opening vent

6.8.2 Smoke Control in Larger more Complex Buildings

In larger more Complex buildings such as shopping centres and buildings containing atria, natural, automatic or mechanical smoke extraction systems can also be employed using roof vents or smoke ventilation shafts.

6.8.3 Smoke Clearance Systems in Enclosed Car Parks

Ventilation of enclosed car parks are employed to limit concentrations of carbon monoxide (CO) and other vehicle emissions in the day-to-day use of car parks, and to remove smoke and heat in the event of a fire. The same equipment/system is often used to satisfy both requirements. The following types of ventilation systems may be employed for a covered car park area or level(s).

- natural ventilation (permanent openings to the exterior) (see Figure 15)
- ducted mechanical ventilation systems.

- mechanical ventilation systems(see Figure 16)

Louvres, dampers, and powered smoke extraction fans are also often integrated into the mechanical system

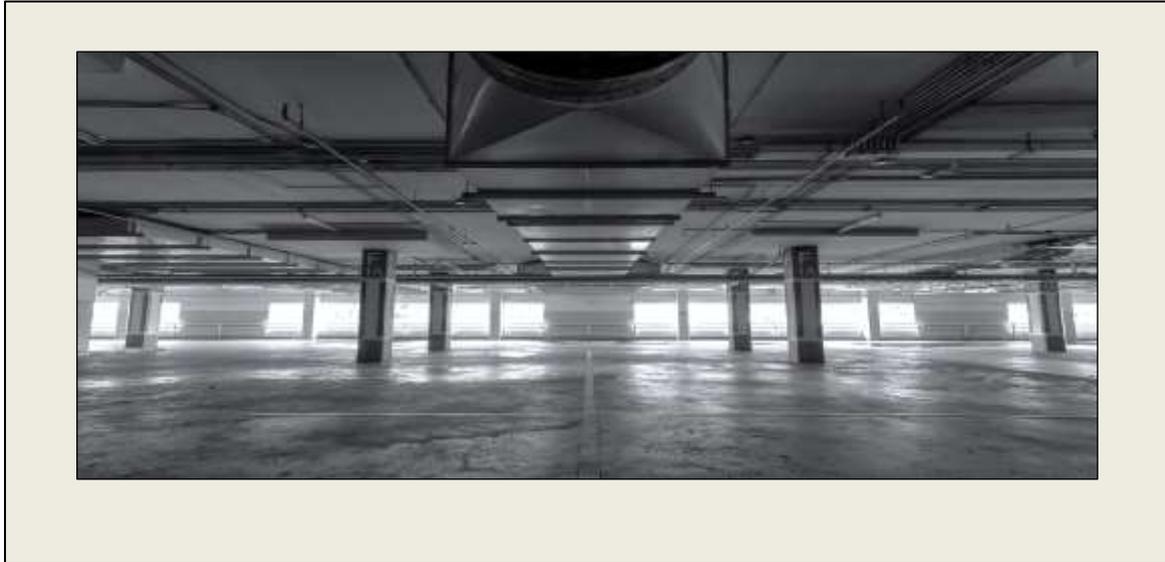


Figure 15 Car Park permanent ventilation openings to the external air



Figure 16 Car Park impulse Ventilation Fan

Any ventilation system, unless permanently open (as in Figure 15), is dependent upon suitable power supplies and controls for correct operation. Ventilation systems

interact with other building services and fire protection systems in normal operation, whether by design or as a by-product of operation. Figure 16 shows impulse (or jet) fans used to clear smoke from an enclosed or underground car park. Ventilation systems should be inspected and maintained in accordance with the recommendations in Section 8, Table 2 Programme Maintenance Schedule, below

6.9 Sprinkler Systems

Sprinkler installations, where provided, (Figure 17(a)(b)) may comprise a single system throughout the building, or, in buildings containing flats/apartments, may comprise a discrete domestic sprinkler system in each individual flat /apartment.

Sprinkler systems should be inspected and maintained in accordance with the recommendations in Section 8, Table 2 Programme Maintenance Schedule, below

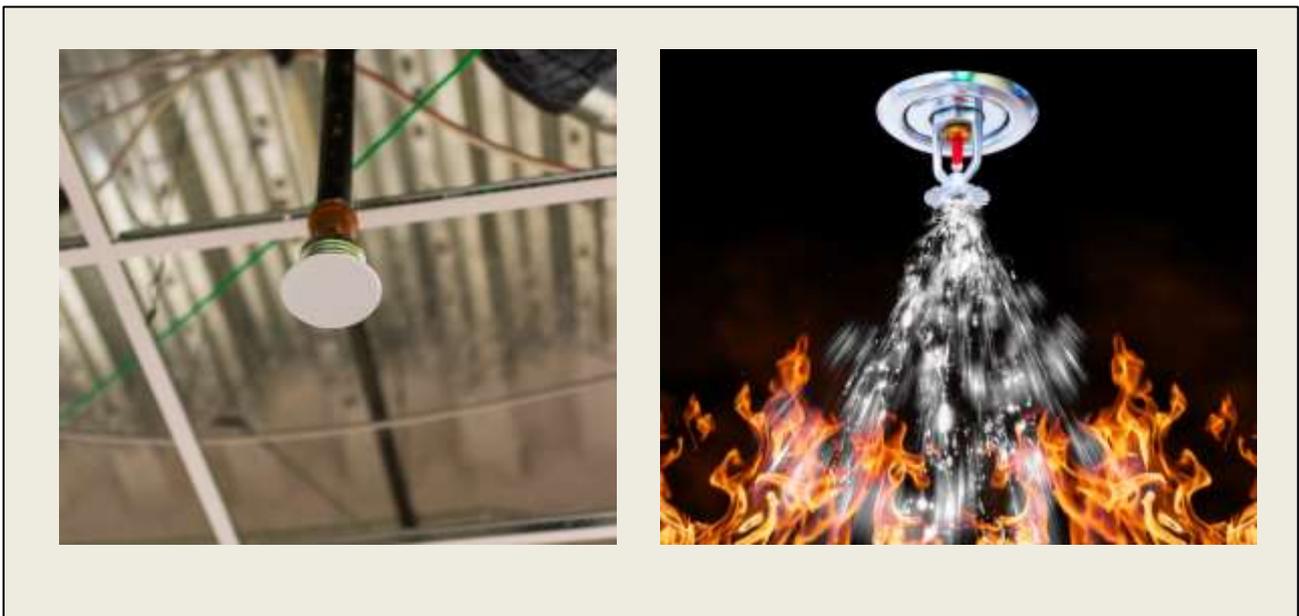


Figure 17(a) Concealed Sprinkler Head

Figure 17(b) Sprinkler Head

6.10 Doors on Escape routes, Final Exit Doors

All doors on escape routes should be readily openable. The time taken to negotiate a closed door can be critical in an escape situation. Doors on escape routes (both within and from the building) should be readily openable if undue delay is to be avoided.

The operation of door fastenings and emergency and panic escape devices (Figure 18), where fitted, should be checked for ease of operation and opening of the door. (see Section 8, Table 2 Programme Maintenance Schedule, below)

Particular attention should be paid to external doors which are not regularly used, as weather conditions can affect the door and frame relationship, and therefore the ease of operation of escape devices.

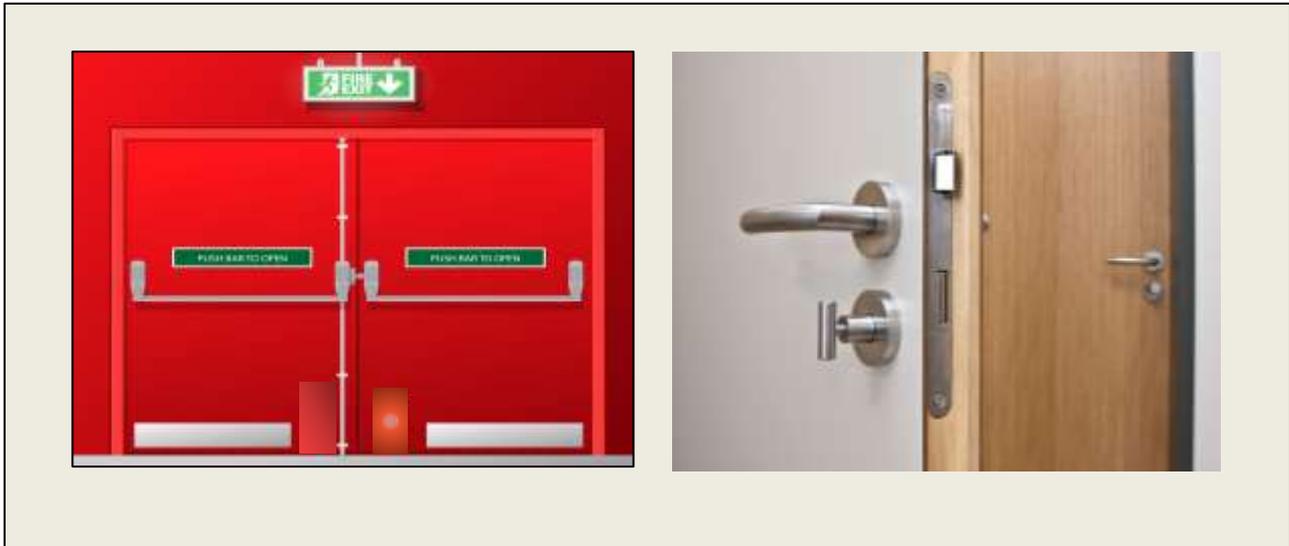


Figure 18(a) Panic Escape Device

Figure 18(b) Thumb-Lock

Where additional security is required on final exit doors when the premises is not in use, hardware which is fully removable may be used. **Such hardware must always be removed when the building is occupied.**

6.11 Maintenance of Private Fire Hydrants and Water Supplies

Normally, firefighting operations rely on the provision of appropriate water supply, usually in the form of fire hydrants, and sometimes as static water supplies, such as ponds or tanks, etc. The access to and identification of such facilities for speedy use is fundamental for successful firefighting operations.

If the building has a fire hydrant(s) on its site, identification is required in order that firefighters can locate the fire hydrant(s) quickly. A fire hydrant indicator plate (Figure 19) to British Standard BS 3251:1976 should be fitted at 450mm over the footpath surface level.

The diameter of the water main in millimetres on the upper part of the plate and the distance in metres of the marker from the fire hydrant on the lower part of the plate.

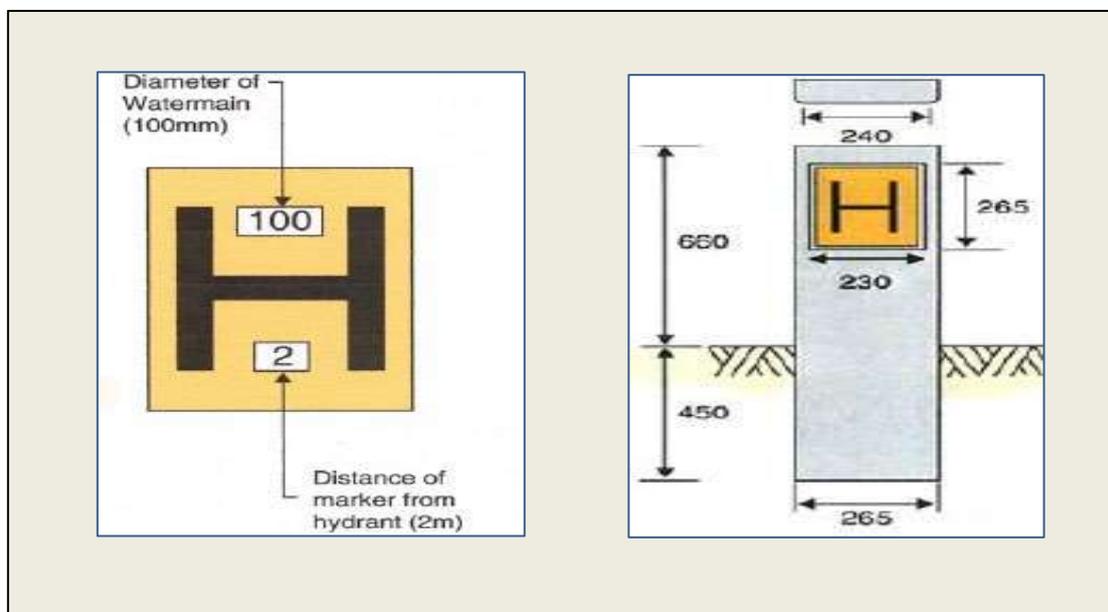


Figure 19 Hydrant Markers

All the characters are black and the remainder of the front face should conform to colour reference number 309 (Canary Yellow) of British Standard 381C.

Fire hydrants should be inspected and maintained in accordance with the recommendations in Section 8, Table 2 Programme Maintenance Schedule, below.

6.12 Maintenance of Compartmentation (Fire Stopping)

Buildings are commonly divided into separate spaces called fire compartments and separated from each other by fire resisting construction to limit the spread of fire and smoke from one compartment to another. This is often done where parts of the building are in separate uses, and to limit the size of individual compartments. In buildings containing flats/apartments, each flat/apartment unit is a single fire compartment. Care should be taken that building works do not affect compartmentation.

In cases where damage to compartmentation is noted, repairs should be carried out only by competent persons

In buildings, services, pipes, ducts may pass through compartment walls or floors. Special measures, known as fire stopping, are taken to ensure the fire resistance of the compartmentation is maintained around these penetrations.

Typical fire stopping arrangements can be seen in Figure 20. Any fire stopping works should be carried out by a competent person.

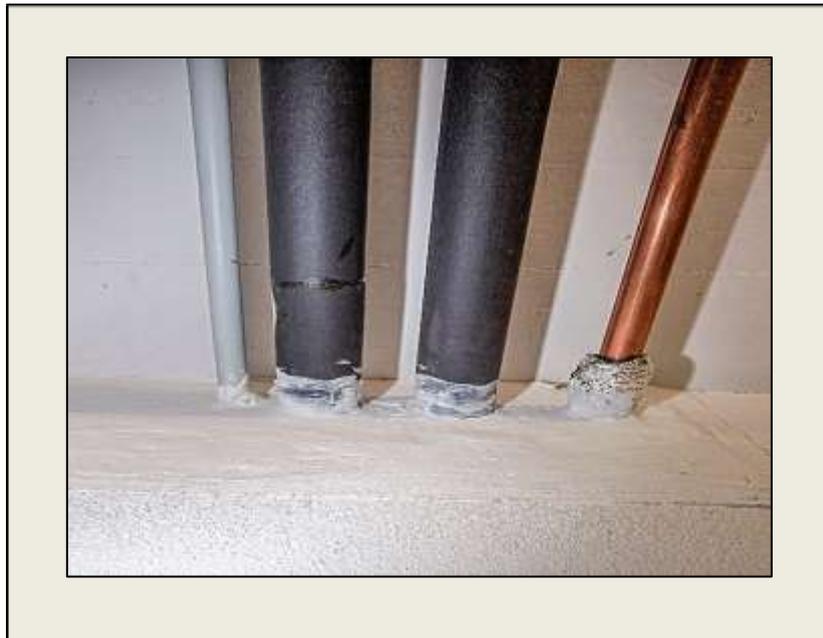


Figure 20 Fire Stopping of Pipe Penetration Wall



Figure 21 Service Risers in Common Areas

Fire stopping can be an issue in service risers. Service Riser cupboards are usually located within the communal areas of buildings and contain pipework and cabling for the main services provided to the building – such as telephone, satellite television, broadband, drainage, electricity and water. Figure 21 shows a typical riser door (fire resisting), opening to the service riser with services. It is important that the service riser doors are kept locked and secure when access to the riser is not required. Risers should not be used for storage.



Figure 22 Fire/Smoke Dampers

Fire /smoke dampers are active devices used in heating, ventilation, and air conditioning (HVAC) ducts, to prevent the spread of fire and smoke inside the ductwork through fire resistant walls and floors (Figure 22). When a rise in temperature occurs, the fire/smoke damper closes, usually activated by a thermal element which melts allowing springs to close the damper blades. Fire/smoke dampers can also close upon receipt of an electrical signal from a fire alarm detector and alarm system indicating the presence of heat or smoke in the building's occupied spaces or in the HVAC duct system.

Fire/smoke dampers should be inspected and maintained in accordance with the recommendations in Section 8, Table 2 Programme Maintenance Schedule, below

7 Buildings containing Flats/ Apartments

In buildings containing flats/apartments, the Section 18(2) responsibilities of the person having control are likely to fall on the building owner or the Owners' Management Company (OMC) or other organisation (see Section 3.0). The guidance throughout this document will be of assistance in meeting these responsibilities. This section contains additional information relating to buildings containing flat/apartments.

In the case of OMCs, in order to have the capacity to meet their Section 18(2) responsibilities they will require a reliable funding stream from service charges on individual units. OMCs should set service charges at an appropriate level and arrange timely collection of same, so that funding is available to maintain fire protection facilities.

The person having control should review the arrangements for ensuring that appropriate fire protection facilities are present within buildings containing flats/apartments and are checked and maintained routinely, and behaviour which could endanger fire safety or unacceptable practices by residents or others can be prevented.

There is some additional information in respect fire safety in buildings containing flats/apartments in “Guide to Fire Safety in Flats, Bedsitters and Apartments” published by Department of Housing Local Government and Heritage. (See other publications).

Residents of buildings containing flats/apartments should be provided with a copy of the leaflet “Fire Safety in Flats and Apartments” issued by the Dept. of Housing Local Government and Heritage, and available at the following link:

<https://www.gov.ie/en/collection/4efe2-fire-safety-leaflets>

7.1 Fire Detection and Alarm Systems

In buildings containing flats/apartments each flat/apartment should be an individual compartment, and should be provided with early warning to occupants of the flat/apartment through a domestic fire detection and alarm system. The removal/disabling/failure to maintain domestic smoke alarms (or other actions or behaviours which endanger fire safety) may be a breach of Section 18(3) of the Fire Services Acts 1981 and 2003.

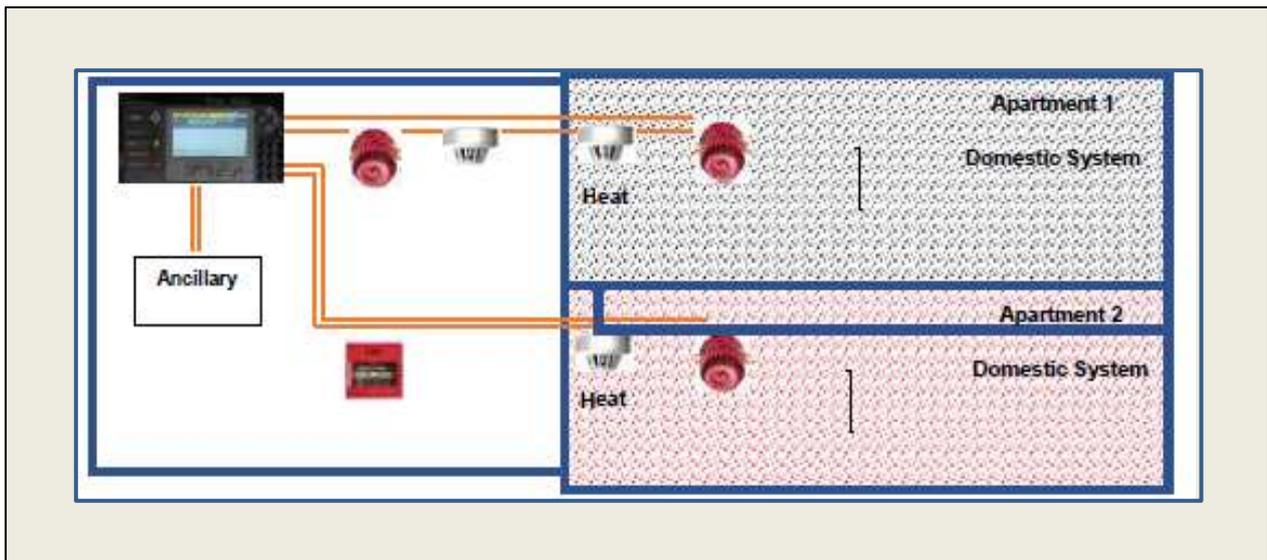


Figure 23 Illustrative Fire Detection and Alarm System in a building containing Flats/Apartments

A separate fire detection and alarm system should be provided in common corridors and stairways, supplemented by a heat detector and sounder inside each individual flat/apartment entrance door. This fire detection and alarm system is designed to give warning generally throughout the building (see Figure 23).

As noted above, Section 18(3) of the Fire Services Acts 1981 and 2003 places a duty on each occupant to ensure that any person on the premises is not exposed to danger from fire as a consequence of any act or omission on their part. Reasonable access should be allowed to each flat/apartment for maintenance of the common fire detection and alarm system.

7.2 Emergency Lighting System in Buildings with Open Shared Balcony Egress

In buildings containing flats/apartments with open shared egress balconies, emergency escape lighting should be provided along such routes to a final exit leading to a place of safety.

7.3 Sprinkler Systems

Where sprinklers systems are provided in buildings containing flats/apartments – typically in open plan flats- there are maintenance requirements for these systems (see Table 2 Programme Maintenance Schedule). Section 18(3) of the Fire Services Acts 1981 and 2003 places a duty on each occupant to ensure that any person on the premises is not exposed to danger from fire as a consequence of any act or omission on their part. Reasonable access should be allowed to each flat/apartment for maintenance of individual sprinkler systems.

7.4 Smoke Control

In buildings containing flats/apartments, there are general provisions to remove or dilute smoke in common corridors and stairways so as to keep them clear for escape when required and for fire service intervention. Such smoke control systems can be either natural openings directly to the outside (a window opening) or mechanically assisted with motorised fans and smoke shafts.

Ventilation to remove smoke may be provided in either the stair lobbies or corridors (Figure 24) that form the common access areas in buildings containing flats/apartments, as well as in the staircase enclosure itself.

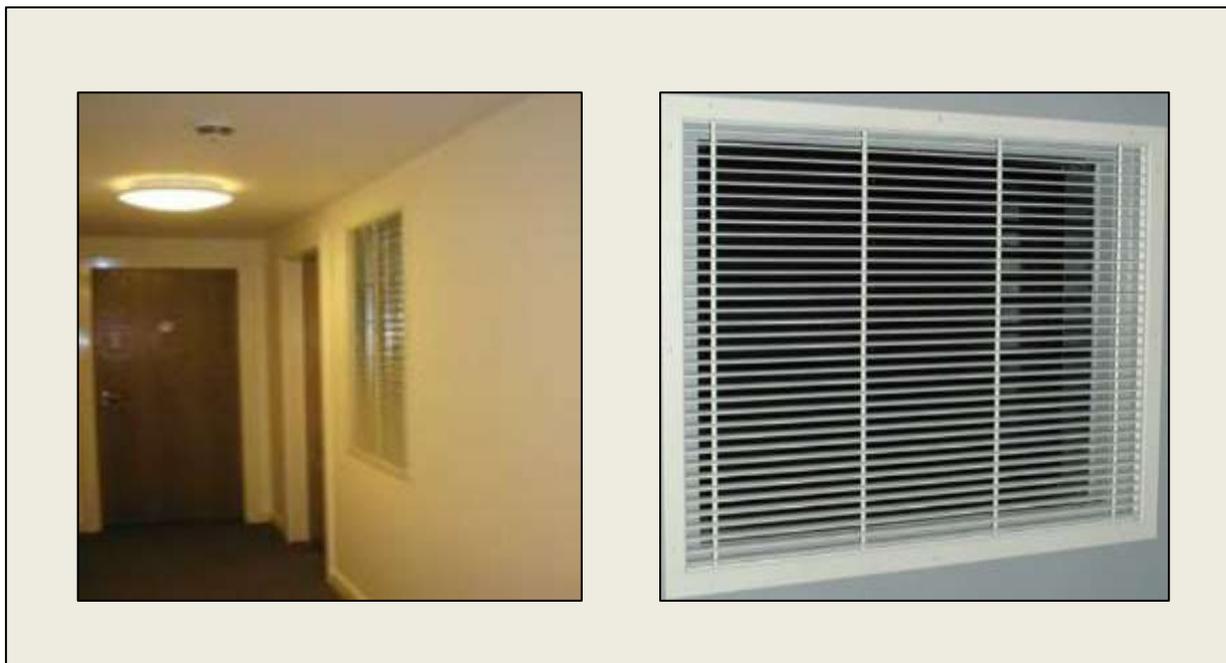


Figure 24 Corridor Automatic Ventilators to Smoke Shaft

Where an automatic smoke control system is in place, and in the event of heat and/or smoke entering the common areas, the smoke control system is designed to vent the heat and smoke to allow for means of escape to continue to be safely used and to facilitate the fire fighting activities.

In the case of a system design that employs a smoke shaft, if smoke is detected in the common area, a fire/smoke damper (Figure 25) into the smoke shaft on only the floor affected will open, together with the vent at the top of the shaft. This creates a chimney effect, allowing the fire gases/ smoke to vent to open air, or may use mechanical extract to vent the smoke. All other vents opening into the smoke shaft should remain closed, to maintain the fire separation within the building, prevent smoke spreading to other floors (Figure 25).

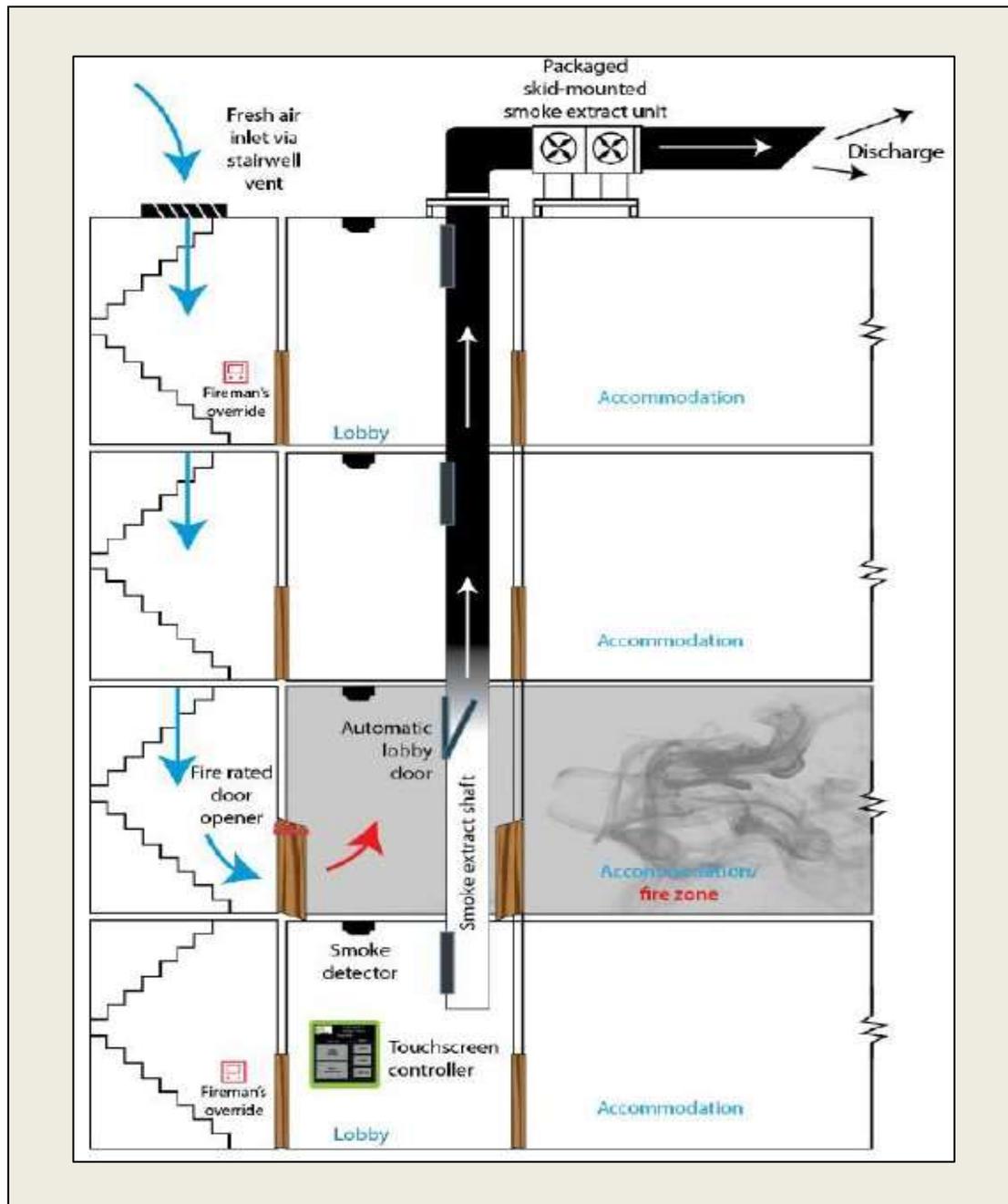


Figure 25 Sample mechanical smoke shaft system

7.5 Evacuation procedures

The person having control should ensure that each flat is provided with instructions for the occupants as to how to react in the event of fire or alarm (see Appendix G). In general, the appropriate response is to evacuate immediately to a place of safety outside the building. Persons with disabilities may proceed to a designated refuge (a place of relative safety within the building) and await assistance if required.

7.6 Flat/Apartment Doors

The entrance door to individual flats/apartments from the common corridor/landing forms part of the passive fire protection of means of escape in buildings containing flats/apartments; such entrance doors should not be replaced with non-fire resisting doors.

Flat/apartment entrance doors should be fire doors and should be inspected, maintained and repaired on a regular basis to ensure that they operate effectively.(see Table 2 Programme Maintenance Schedule, below).

7.7 Building Layout

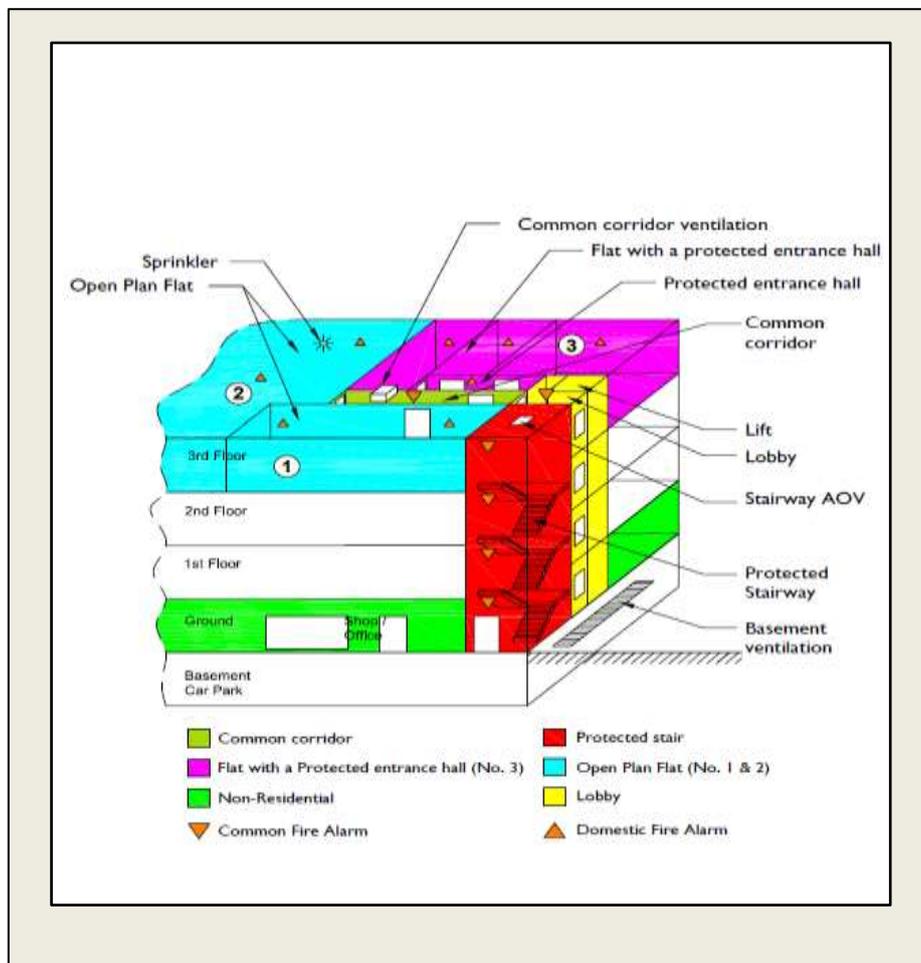


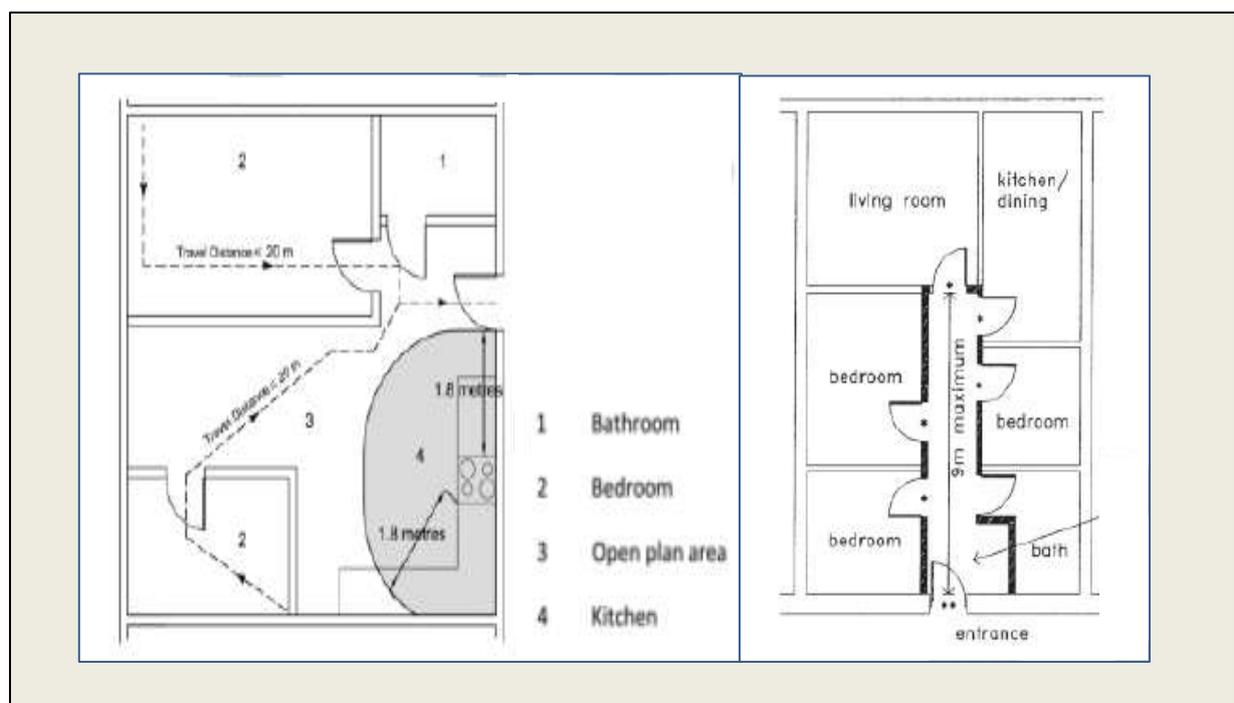
Figure 26 Indicative Flat/Apartment configuration

Buildings containing flats/apartments can consist of many variations in size, height and design, and include mixed uses and various ancillary areas. The mixed uses can include commercial uses, such as shops, offices and assembly & recreation units.

The ancillary areas can include upper levels and/or basement car parks and/or plant and storage areas. Figure 26 illustrates an indicative flat/apartment design with a range of fire safety measures including active and passive systems. Not all apartment buildings will include all the systems shown, as the presence of such system(s) will depend on many factors, such as the height of building, the length of common corridor and the provision of protected entrance halls (PEHs) inside individual flats/apartments.

In buildings containing flats/apartments, each flat/apartment unit is a single fire compartment. For this reason the carrying out of works in a building containing flat/apartments is normally strictly controlled.

Figure 27 indicates different internal layouts inside a flat/apartment – showing open plan or entrance hall arrangements



Open Plan Flat/ Apartment

Protected Entrance Hall Flat/ Apartment

Figure 27 Flat/Apartment Layouts

8 Recommended Routine Maintenance Schedules

A table of recommended routine maintenance schedules is presented for the typical fire safety equipment and systems in buildings. The schedules are tabulated into daily, weekly, monthly, and quarterly, bi-annual and annual activities. Many of the daily, weekly and monthly activities can be carried out without expert knowledge of the equipment or system and this is indicated by the green columns. The columns for the quarterly, bi-annually and yearly activities should be carried out by persons who have competency in their specific areas and can provide certification to the relevant standard for the work carried out.

If information is required, the definitive maintenance requirements for all fire safety equipment and systems should be sought from the equipment or system manufacturers, suppliers, their technical advisers, and or specialised competent contractors. It is important to restate that care should be taken to ensure competent skilled contractors are employed to carry out fire safety equipment and systems maintenance works. The contractor(s) tasked with works should be part of a registered contractor's association where relevant for their trade. The schedules presented are recommended in the relevant guidance or standard appropriate for the equipment or system.

Systems such as the electrical installation and gas installations should be subject to periodic inspection and testing by a competent person, as recommended by the appropriate standard such as Irish Standard I.S. 10101- National Rules for Electrical Installations and Irish Standard I.S. 820 – Non-domestic gas installations or Irish Standard I.S. 813- Domestic gas installations.

Table 2; **Maintenance Programme Schedule for Buildings**

Regular Checks to be carried out by designated person



Planned inspection and maintenance to be carried out by a competent person

Maintenance Schedule for Active and Passive Fire Systems

| System | Daily | Weekly | Monthly | Quarterly | 6 Monthly | Yearly |
|----------------------|--|---------------|----------------|------------------|------------------|---------------|
| Escape Routes | <p>The following should be checked:</p> <ul style="list-style-type: none"> escape routes are not obstructed and are immediately available for use; escape routes should not be used for storage; electrical appliances for example, tumble dryers , should not be located in circulation spaces, common corridors, lobbies ,stairways or landings . Batteries or battery powered devices should not be charged in circulation spaces, common corridors, lobbies stairways or landings escape routes are clearly indicated, sign-posted and adequately illuminated the emergency lighting indicator in each emergency light fitting is operative final exit doors are capable of being readily opened; | | | | | |

| | | | | | | |
|--|--|--|--|--|--|--|
| | <p>doors and gates across escape routes should be easily and immediately openable</p> <p>curtains, drapes or hangings are not placed across or along an escape route in a manner which would impede or obstruct escape;</p> <p>mirrors are not placed across or along an escape route or adjacent to an exit in such a way as to confuse the direction of escape;</p> <p>floor coverings, rugs and mats are fixed or laid so that they do not present a trip or slip hazard during an evacuation, and are not used to prop open doors;</p> <p>fire resisting doors along escape routes are kept closed at all times, unless they are permitted to be fitted with hold-open devices (for example, electro-magnetic) designed to allow the door to close upon activation of the fire detection and alarm system</p> <p>external areas at or near final exits are kept free of obstructions, so as to allow unimpeded escape to a place of safety</p> | | | | | |
|--|--|--|--|--|--|--|

| System | Daily | Weekly | Monthly | Quarterly | 6 Monthly | Yearly |
|--|--|---|---|--|-----------|--|
| Fire Detection and Fire Alarm Systems I.S. 3218  | <p>All fire detection and fire alarm systems should be checked daily. In particular, it should be ensured that:</p> <ol style="list-style-type: none"> the control and indication panel indicates normal operation or, if any fault is indicated, that it has been logged and the appropriate action(s) taken; any fault recorded the previous day has received attention. | <p>All fire detection and fire alarm systems should be checked weekly. In particular, it should be ensured that:</p> <ol style="list-style-type: none"> the control equipment is able to receive a fire signal and to initiate the evacuation procedure, recording which trigger device has been used, in accordance with I.S 3218. any standby batteries are in good condition and the fuel, oil and coolant levels of any standby generators are correct, topping up as necessary. | | <p>See section 9.2.2.5 of IS 3218. A Test/Service certificate should be issued by the competent person upon completion.</p> | | <p>See section 9.2.2.6 of IS 3218. A Test/Service certificate should be issued by the 'competent person' upon completion.</p> |
| Emergency and escape lighting systems I.S. 3217  | <p>The minimum operational requirements shall be checked as set out in section 16.2.1 of I.S. 3217. Additional checks to those listed above may be necessary, due to either the type of system installed or as a result of other factors.</p> | <p>In addition to the daily inspection methodology, schedule and checklist as detailed in 16.2.1, the following as detailed in 16.2.2 of I.S. 3217 shall be carried out on at least 25 % of the emergency lighting system so that 100 % of the system is checked at least every 4 weeks.</p> <ol style="list-style-type: none"> visually check that each emergency lighting lamp, in all maintained type and or combined (sustained) type emergency luminaires, are operational and illuminated. in the case of all self-contained and ATS (Type S) emergency | <p>See 16.2.3 of I.S. 3217 - In addition to the weekly inspection methodology, schedule and checklist (16.2.2).</p> | <p>See section 16.2.4 of I.S. 3217.</p> <p>Upon completion of the quarterly inspection and test, a report for inspection, testing and servicing, as detailed in Annex C1 and Annex C7 shall be issued to</p> | | <p>See section 16.2.5 of I.S. 3217.</p> <p>Inspection and testing is carried out once in every 1 year period subsequent to the completion of 3 three</p> |

| | | | | | | |
|--|--|---|--|---|--|--|
| | | <p>luminaires check that their LED status indicators are illuminated and showing healthy condition/status,</p> <p>c) ensure that all non-illuminating lamps are replaced.</p> | | <p>the owner or occupier.</p> <p>A copy of the report shall be placed in the emergency lighting logbook.</p> <p>The schedule for periodic inspections and tests due dates shall be updated with the required information (see Annex F for model schedule)</p> | | <p>monthly (quarterly) inspections and tests.</p> <p>All emergency lighting systems shall be tested to their rated duration.</p> |
|--|--|---|--|---|--|--|

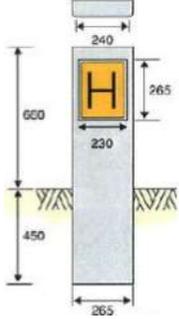
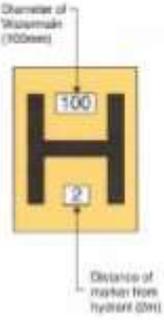
| System | Daily | Weekly | Monthly | Quarterly | 6 Monthly | Yearly |
|--|---|---|---|---|---|---|
| <p>Sprinkler systems Commercial Systems and Residential (Inside apartments) Systems I.S. EN 12845 I.S. EN 16925 B.S. 8458 Domestic Sprinkler System Maintenance requirements in accordance with BS 9251: 2014 & 2021</p>  | <p>Commercial Sprinklers refer to Section 20 of I.S. EN 12845 for maintenance Requirements The installer shall provide the user with a documented inspection and checking procedure for the system. The programme shall include instruction on the action to be taken in respect of faults, operation of the system, with particular mention of the procedure for emergency manual starting of pumps, and details of the maintenance routines.</p> <p>Residential Sprinklers refer to Section 18 of I.S. EN 16925 for maintenance Requirements</p> | <p>The Commercial sprinkler system should be subject to a weekly inspection and test as detailed in Section 20.2.2 of I.S. EN 12845: 2015+A1: 2019 by a competent person.</p> | <p>The Commercial sprinkler system should be subject to a monthly inspection and test as detailed in Section 20.2.3 of I.S. EN 12845 by a competent person.</p> | <p>The Commercial sprinkler system should be subject to a quarterly inspection and test as detailed in Section 20.3.2 of I.S. EN 12845 by a competent person.</p> | <p>The Commercial sprinkler system should be subject to a half annual inspection and test as detailed in Section 20.3.3 of I.S. EN 12845 by a competent person.</p> | <p>The Commercial sprinkler system should be subject to a half annual inspection and test as detailed in Section 20.3.4 of I.S. EN 12845 by a competent person.</p> <p>The Domestic/residential sprinkler system should be subject to an annual inspection and test as detailed in Section 7.1.2 of BS 9251. by a competent person.</p> |

| System | Daily | Weekly | Monthly | Quarterly | 6 Monthly | Yearly |
|---|---|--------|--|-----------|-----------|--------|
| <p data-bbox="49 183 232 427">Fire door automatic release mechanisms EN 1155</p>  | <p data-bbox="264 183 627 343">All doors that are held open by automatic release mechanisms should be released daily.</p> | | <p data-bbox="1189 183 1451 1023">The operation of hold-open devices should be tested once a month by simulating failure of the mains power supply or operation of the fire detection and fire alarm system. The results of the test should be recorded. Any doors that are found to be faulty should be repaired or replaced.</p> | | | |

| System | Daily | Weekly | Monthly | Quarterly | 6 Monthly | Yearly |
|--|-------|--|--|-----------|-----------|--|
| Portable fire extinguishers and fire hose reels I.S. EN 291 I.S. EN 671 Part 1 I.S. EN 671 Part 2 I.S. EN 671 Part 3, I.S. EN 3 | | <p>All gaseous, foam water and powder extinguishing systems should be checked weekly. In particular, it should be ensured that:</p> <ul style="list-style-type: none"> a) any pressure gauges are functioning correctly; b) all operating controls are both properly set and accessible; c) all indicators are functioning correctly; d) the equipment, particularly pipework and nozzles, is free from dust and dirt, is not physically damaged nor leaking, and remains in its designed position; e) the fire risk and its enclosure have not changed; f) the quantity of extinguishing medium is correct and for foam systems, the water supply is available and at the correct pressure. | <p>All points at which portable fire extinguishers or hose reels are usually located. should be checked monthly</p> <p>Missing fire extinguishers or hose reels should be replaced immediately.(a risk assessment may recommend more frequent checks)</p> <p>Fire Hose reels should be visually inspected once a month.</p> <p>In particular, it should be ensured that there are no leaks and that drum assemblies are free to rotate on their spindles</p> | | | <p>All portable fire equipment (PFEs) shall be maintained in accordance with Clause 9 of I.S. 291 at intervals not exceeding 12+/- 1 month.</p> <p>All fire Hose Reel equipment shall be maintained in accordance with Clause 6 of I.S. EN 671 Part 3 annually.</p> <p>Every 5 years all fire hose reels shall be pressurized to maximum working pressure according to EN 671-1 and/or EN 671-2.</p> |



| System | Daily | Weekly | Monthly | Quarterly | 6 Monthly | Yearly |
|--|-------|---|---------|---|-----------|--|
| <p>Smoke control systems for means of escape and fire-fighting BS 7346-8:2013 Smoke Control Association – Guidance on Smoke Control to Common Escape Routes in Apartments</p>   | | <p>Actuation of the system should be simulated once a week. It should be ensured that any fans and powered exhaust ventilators operate correctly, smoke dampers close (or open in some systems), natural exhaust ventilators open, automatic smoke curtains move into position, etc.</p> <p>NOTE On large multi-zone installations it might be acceptable, with agreement from the relevant authorities, to rotate the equipment tested so that a system is tested every week and individual items are operated at intervals of no more than three months.</p> | | <p>The actuation of all smoke control systems should be simulated once every three months.</p> <p>All zones should be separately tested and it should be ensured that any fans and powered exhaust ventilators operate correctly, smoke dampers close (or open in some systems), etc.</p> | | <p>Every 12 months, in addition to the manufacturer's recommendation and weekly tests, the entire system should be tested by following the original acceptance test procedure.</p> <p>A test certificate should be issued.</p> |

| System | Daily | Weekly | Monthly | Quarterly | 6 Monthly | Yearly |
|---|---|--------|---------|-----------|--|--------|
| <p data-bbox="49 178 255 300">Fire hydrants/ Mains IS 391</p>   | <p data-bbox="331 379 1534 528">Note: Periodic checks of the vicinity of all hydrants should be made to ensure that there is no obstruction impeding accessibility (for example, shrubbery) and that hydrant indicator plates are in position and clearly visible.</p> | | | | <p data-bbox="1742 178 2016 877">Arrangements should be made by the owners or the occupiers to ensure that, at least twice a year, maintenance is carried out on all private fire hydrants by a competent person. Periodic inspections should be made to ensure that flow and pressure supplies have not deteriorated.</p> | |

| System | Daily | Weekly | Monthly | Quarterly | 6 Monthly | Yearly |
|---|-------|--------|---|-----------|-----------|--------|
| <p data-bbox="62 172 241 248">Standby Generators</p> <p data-bbox="62 427 210 462">B.S. 9991</p>  | | | <p data-bbox="1198 172 1518 632">Any standby generator should be started up once a month by simulating failure of the normal power supply, and allowed to energize the system for at least 1 h, while the system is monitored for any malfunctioning caused by the use of the generator.</p> <p data-bbox="1198 679 1509 1216">After restoring the normal supply, the charging arrangements for the generator starting battery should be tested, and the appropriate action should be taken if they are found not to be functioning correctly. In addition, the oil and coolant levels should be topped up and the fuel tanks filled.</p> | | | |

| System | Daily | Weekly | Monthly | Quarterly | 6 Monthly | Yearly |
|---|-------|--------|---------|-----------|---|--------|
| <p>Fire Doors</p> <p>BS 8214</p>    | | | | | <p>6 Monthly(biennially in the case of flat/apartment entrance doors)</p> <p>Door Leaf</p> <p>Does the door leaf sit against the door stop and is it free from distortion? If the door is veneered or lipped, is the glue still holding these products firmly in place? Is the door free from damage including dents and holes? Door Frame Is the door frame firmly attached to the wall? If a planted door stop is present, is it firmly attached? Is the frame to door leaf gap consistently 3mm? (tolerance of +/- 1mm)</p> <p>Door Closers</p> <p>Open the door to 5 degrees or 75mm. Does it close and engage with the latch? Is the closer correctly attached to the door and frame? Is the closer free from damage and not leaking? If unlatched, does the closer hold the door in line with the frame and intumescent seal? If hung in pairs, do they close in line if both opened and released together?</p> <p>Hold Open Devices</p> <p>(only electronically powered allowed) Does the hold open device release the door when required?</p> <p>Lock and Latch Does the latch hold the door firmly in place without rattling? Glazing and Glass Is the intumescent seal continuous and attached to the glass and bead? Are the glazing beads well attached to the frame and free from damage? Is the glass free from damage and cracking? If the glass has been replaced, is it fire rated glass? If glazing</p> | |

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| <p>Fire Doors (continued)</p> | | | | | <p>panels are below 1500mm from the bottom of the door, is the glass safety glass?</p> <p>Threshold Gap Is there a consistent gap under the door that allows it to swing without touching the floor covering? Is the door to floor covering gap consistently 10mm or less when the door is closed?</p> <p>Intumescent/Smoke/Acoustic Seals Are intumescent seals in place? Are the seals well attached inside the groove in the frame or door leaf? Are the seals continuous around the frame? Are the seals free from damage? If you have a brush or fin type seal, is it free from damage?</p> <p>Hinges Are there a minimum of 3 hinges with all the screws fitted? Are all the screws the correct size? Are the hinges free from metal fragments and oil leakage, which are signs of wear? Are the hinges free from packing?</p> | |
|--|--|--|--|--|---|--|

| System | Daily | Weekly | Monthly | Quarterly | 6 Monthly | Yearly |
|--|--|--------|--|-----------|-----------|--------|
| Emergency and panic escape doors I.S. EN 1125  | Note: The operation of all emergency and panic escape devices, especially on external doors not used for other purposes, should be checked regularly for ease of operation and opening of the door. Weather conditions can affect the door and frame relationship, and therefore the ease of operation of escape devices. | | <p>To ensure performance the following routine checks should be undertaken at intervals of not more than one month (or the period recommended by the producer;</p> <ul style="list-style-type: none"> a) Inspect and operate the panic exit device to ensure that all components are in a satisfactory working condition; using a force gauge, measure and record the operating forces to release the exit device. b) Ensure that the keeper(s) is (are) free from obstruction. c) Check that the panic exit device is lubricated in accordance with the producer's instructions. d) Check that no additional locking devices have been added to the door since its original installation. e) Check periodically that all components of the system are still correct in accordance with the list of approved components originally supplied with the system. f) Check periodically that the operating element is correctly tightened and, using a force gauge, measure the operating forces to release the exit device. Check that the operating forces have not changed significantly from the operating forces recorded when originally installed. | | | |

| System | Daily | Weekly | Monthly | Quarterly | 6 Monthly | Yearly |
|--|---|--------|---------|-----------|---|--|
| Dry/Wet Risers I.S 391 2020   | | | | | <p>All fire mains should be inspected every six months. It should be ensured that:</p> <p>a) for wet mains:</p> <p>1) booster pumps and their associated mechanical and electrical apparatus are functioning correctly; storage tanks are full of clean water</p> | <p>For dry fire mains, the tests in 7.3.1 to 7.3.2 and 7.3.5.1. of IS 391 should be carried out annually.</p> <p>For wet fire mains, the tests in 7.4.2.1 and 7.5.3.1.1 of IS 391 In addition the following checks, should be carried out</p> <p>a) internal cleanliness, condition and water level of storage tanks, including the operation of float valves and any water level alarms;</p> <p>b) booster pumps and their associated mechanical and electrical equipment;</p> <p>c) electrical supplies and equipment to prevent freezing;</p> <p>d) operation of system monitoring and alarms. Where pressure regulating valves are installed</p> |
| | <p>Note: Routine periodic visual checks of all fire main inlet and landing valves should be carried out to deal with any damage, and to ensure that all inlet and landing valve boxes and/or riser cupboards are suitably secure and clear of storage or debris. The person having control should consider the frequency of these visual checks.</p> | | | | | |

| System | Daily | Weekly | Monthly | Quarterly | 6 Monthly | Yearly |
|--|-------|--|---|-----------|--|--------|
| Firefighting Lift I.S. EN 81-72  | | <p>Operation of the firefighters lift switch to check the lift returns to the fire service access level, parks with its doors open and that the lift does not respond to landing calls.</p> <p>The lift should be connected to the fire detection system. Check to ensure that the lift responds to the instruction from the detection system.</p> | <p>Simulation of a failure of the primary power supply to check changeover to the secondary supply and operation from the secondary supply.</p> | | <p>A full test of the firefighters lift operation from the firefighters lift switch and the fire detection system operation from the secondary power supply to check the full firefighting facilities including communication systems. This should check to ensure the lift can be driven to any required floor and that on arrival at a floor it only opens its door when instructed to do so and then stays at the floor with its doors open</p> <p>Checks of building related issues including measures to prevent water ingress into the lift well and/ or measures to address water ingress into the lift well and the operation of any pumps used to control the level of water in the lift pit.</p> <p>The lift maintenance contractor should also advise of any need to change components or parts of the lift to ensure the availability and reliability of the lift in the event of fire.</p> <p>Advise of any change in standards relating to lifts in service; particularly to lifts for operation in the event of fire.</p> | |

| System | Daily | Weekly | Monthly | Quarterly | 6 Monthly | Yearly |
|--|-------|--------|---------|---|-----------|--------|
| Fire /Smoke Dampers I.S. EN 15650  | | | | I.S. EN 15650 – Ventilation for buildings – Fire & motorised Smoke/Fire dampers Section 8.3 Note states: Regular testing /inspection should be undertaken to meet regulatory requirements, or at intervals not exceeding six months. A comprehensive example of the maintenance procedure is given in Annex D of the standard. Some automatic systems may allow more frequent testing (48 h or less) and this may be required by a national standard. | | |

Appendix A. Referenced Standards

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|--|--|
| I.S. 3217 | Emergency and escape lighting systems |
| I.S.3218:2013 +A1:2019 | Fire Detection and Fire Alarm Systems for Buildings- System Design Installation Commissioning, Servicing And Maintenance |
| I.S.EN 3 | Portable Fire Extinguishers |
| I.S.EN 81-72 | Safety Rules for the construction and maintenance of Passenger lifts .Particular applications for passenger and Goods lifts |
| I.S 391 2020 | Fire mains for buildings - Installation, commissioning, maintenance and testing |
| I.S.EN 1125:2008 | Building Hardware - Panic Exit Devices Operated by a Horizontal Bar, for Use on Escape Routes - Requirements and Test Methods |
| I.S.EN 291:2015 +A1:2022 | Selection, commissioning, installation, inspection and maintenance of portable fire extinguishers and Amendment 1 |
| I.S.EN 671-1:2012 | Fixed firefighting systems-Hose systems-Part 1: Hose reels with semi rigid hose |
| I.S.EN 671 Part 2 | Fixed firefighting systems-Hose systems-Part 2: Hose systems with lay flat hose |
| I.S.EN 671 Part 3, | Fixed firefighting systems-Hose systems-Part 3: Maintenance of Hose systems with semi rigid hose and hose systems with lay flat hose |
| I.S.EN 1155:1998/ A1:2002 /AC: 2006 | Building Hardware - Electrically Powered Hold-Open Devices for Swing Doors - Requirements and Test Methods |
| I.S.EN 12845:2015 +AC: 2016+A1:2019 (+AC: 2016) (+A1:2019) | Fixed Firefighting Systems - Automatic Sprinkler ,Systems - Design, Installation and Maintenance |

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| I.S.EN 16282-7:2017 +A1:2021 | Equipment for commercial kitchens - Components for ventilation in commercial kitchens - Part 7: Installation and use of fixed fire suppression systems. |
| I.S. EN 16925:2018 &LC: 2018&AC: 2020 | Fixed Firefighting Systems - Automatic Residential Sprinkler Systems - Design, Installation and Maintenance |
| BS 8214:2016 TC | Timber based fire door assemblies. Code of Practice. |
| BS 9991:2015 | Fire safety in the design, management and use of residential Buildings. Code of Practice. |
| BS 7346-8:2013 | Components for Smoke and Heat Control Systems – Functional Recommendations and Calculation Methods for Smoke and Heat Exhaust Ventilation Systems, Employing Steady-State Design Fires. Code of Practice |
| BS 9251:2021 | Fire Sprinkler Systems for Domestic and Residential Occupancies. Code of Practice |
| I.S. 3213:2020, Cylinders and cartridges. | Code of Practice for the storage of Liquid Petroleum Gas |
| British Compressed Gases Association: CP44. | The storage of gas cylinders.Revision1:2022 |

Appendix B. Legislation

- Fire Services Acts 1981 and 2003
- Fire Services Act, 1981, Number 30 of 1981
<http://www.irishstatutebook.ie/eli/1981/act/30/enacted/en/html>
- Licensing of Indoor Events Act 2003, Number 15 of 2003
<http://www.irishstatutebook.ie/eli/2003/act/15/enacted/en/html>
- **Fire Safety in Places of Assembly (Ease of Escape), Regulations, 1985, S.I. No. 249 of 1985**
- <http://www.irishstatutebook.ie/eli/1985/si/249/made/en/print>
- Public Dance Halls Act 1935 to 2003
- **Building Regulations, 1997, S.I. No. 497 of 1997**
<http://www.irishstatutebook.ie/eli/1997/si/497/made/en/print?q=Building+Regulations+1997>
- **Building Control Act, 1990, Number 3 of 1990**
<http://www.irishstatutebook.ie/eli/1990/act/3/enacted/en/html?q=building+control+act>
- Building Control Act 1990 Revised – Consolidated Law Reform Commission - Updated to 1 November 2019
<http://revisedacts.lawreform.ie/eli/1990/act/3/front/revised/en/html>
- **Building Control Act, 2007, Number 21 of 2007**
<http://www.irishstatutebook.ie/eli/2007/act/21/enacted/en/html?q=building+control+act>
- Building Control Act 2007 Revised – Consolidated Law Reform Commission - Updated to 31 January 2019 - Consolidated
<http://revisedacts.lawreform.ie/eli/2007/act/21/front/revised/en/html>

Appendix C. Other Publications

Smoke Control Association - Guidance on Smoke Control to Common Escape Routes in Apartment Buildings (flats and maisonettes). Revision 3.1 July 2020

The British Compressed Gases Association - CP44. The storage of gas cylinders. Revision 1:2022

Appendix D. Technical Guidance Documents

<https://www.housing.gov.ie/housing/building-standards/tgd-part-d-materials-and-workmanship/Technical-guidance-documents>

Guides for fire safety, made under Section 18A of Fire Services Acts 1981 and 2003, DoEHLG (DHLGH) – NDFEM from 1989 to 2019.



- 1989 Code of Practice for the Management of Fire Safety in Places of Assembly
<https://www.housing.gov.ie/sites/default/files/migrated-files/en/Publications/Community/FireandEmergencyServices/FileDownload,815,en.pdf>
- 1989 Guide to Fire Precautions in Existing Hotels, Guesthouses and Similar Premises
<https://www.housing.gov.ie/sites/default/files/migrated-files/en/Publications/Community/FireandEmergencyServices/FileDownload,14964,en.pdf>
- 1994 Guide to Fire Safety in Flats, Bedsitters and Apartments (Existing)
<https://www.housing.gov.ie/sites/default/files/migrated-files/en/Publications/Community/FireandEmergencyServices/FileDownload%2C1024%2Cen.pdf>
- 1996 Guide to Fire Safety in Existing Nursing Homes and Similar Type Premises
<https://www.housing.gov.ie/sites/default/files/migrated-files/en/Publications/Community/FireandEmergencyServices/FileDownload,820,en.pdf>
- 1998 Code of Practice for Fire Safety and Indoor Concerts
<https://www.housing.gov.ie/sites/default/files/migrated-files/en/Publications/Community/FireandEmergencyServices/FileDownload%2C18105%2Cen.pdf>
- 1998 Guide to Fire Safety in Fire Safety in Hostels
<https://www.housing.gov.ie/sites/default/files/migrated-files/en/Publications/Community/FireandEmergencyServices/FileDownload,1026,en.pdf>
- 1999 Guide to Fire Safety in Fire Safety in Preschools
<https://www.earlychildhoodireland.ie/wp-content/uploads/2015/08/Fire-Safety-In-Preschools.pdf>
- 1999 Guide to Fire Safety in Guest Accommodation
<https://www.housing.gov.ie/sites/default/files/migrated-files/en/Publications/Community/FireandEmergencyServices/FileDownload,2072,en.pdf>
2008. Guidance document on fire safety in stores for explosives published by Department of Housing Local Government and Heritage.
- 2017 Code of Practice for Fire Safety in New and Existing Community Dwelling Houses

https://www.housing.gov.ie/sites/default/files/publications/files/code_of_practice_for_fire_safety_in_community_dwelling_houses_2017_0.pdf

2019 Guide to Fire Safety in Existing Traveller Accommodation

https://www.housing.gov.ie/sites/default/files/publications/files/guide_to_fire_safety_in_existing_traveller_accommodation_final_november.pdf

[Guidance-Note on Periodic Inspection and Testing of Electrical Installations required by the 2007 Safety Health and Welfare at Work \(General Application\) Regulations](#)

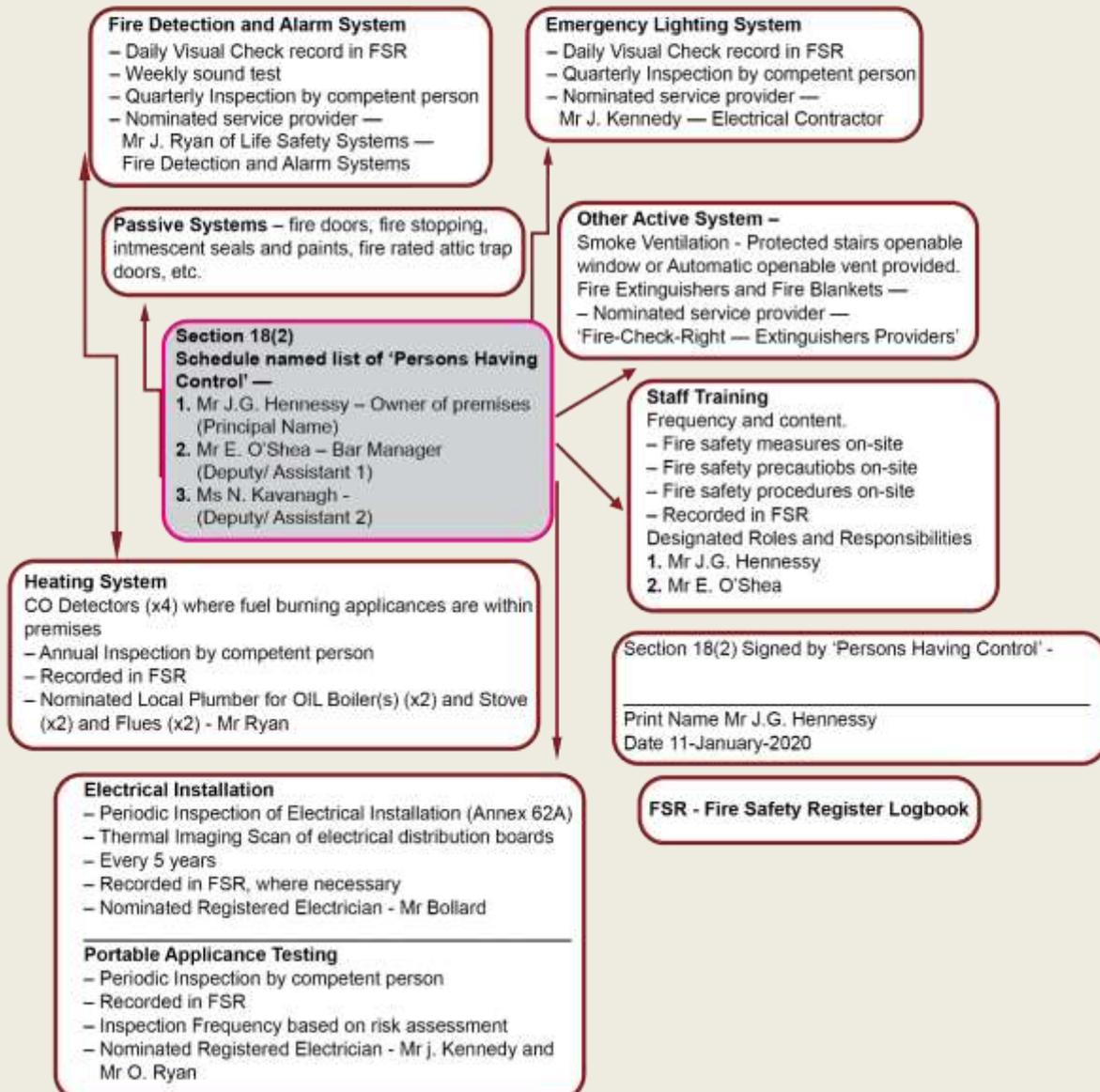
2022 Code of Practice for fire Safety Assessment of Premises and buildings

<https://www.gov.ie/en/publication/354c8-code-of-practice-for-fire-safety-assessment-of-premises-and-buildings>

Appendix E. Management Responsibilities - Exemplar Premise (Informative)



Exemplar - Schedule Notice for Person Having Control with some premise's specific designations Public House with Separate Residential Accommodation Above



Appendix F. Requirements for Landlords

Guide on Minimum Standards for Rented Residential Accommodation

By law, landlords must ensure that their rented properties provide tenants with a safe and healthy environment to live in and comply with the Minimum Standards. Local Authorities are responsible for the enforcement of the regulations. If your property does not comply to these Minimum Standards, as a landlord, you could be prosecuted. New standards came into effect on 1st July 2017 and the information below summarises the Minimum Standards and highlights the new obligations for landlords. Not all standards are applicable to AHBs (housing associations) or local authorities, for further details please contact your local authority.

- The building must be free from damp and in good structural repair (internally and externally).
- There must be hot and cold water available to the tenant(s).
 - Sanitary facilities must be in a safe condition and in good working order.
- The building must have adequate ventilation and heating, which tenant(s) can control.
- Appliances must be maintained in a safe condition and in good working order. A 4-ring hob, oven, grill, fridge, freezer (or combined fridge-freezer), and microwave oven must be provided.
- Electrical wiring, gas and water pipes should be in good repair.
 - Properties should, where necessary, have a carbon monoxide alarm. These should be in suitable locations and in good working order.
- In houses there must be access to a fire blanket and fire detection and alarm system.
 - In multi-unit buildings, there must be a fire detection and alarm system, an emergency evacuation plan and emergency lighting in common areas. It is important that fire safety equipment is maintained.
- Where there is no access to a yard / garden, access to communal laundry facilities, such as a washing machine and a dryer, must be provided.
- There must be suitable safety restrictors attached to a window which has an opening through which a person may fall and the bottom of the opening is more than 1400mm above the external ground level. Suitable safety restrictors must secure the window sufficiently to prevent such falls. Lockable restrictors that can only be released by removable keys or other tools **should not be fitted** to window opening sections.
- Each bathroom or shower room should contain a permanently fixed heater that is properly maintained. The room should be properly ventilated.
- Information must be provided to tenants on the property, building services, appliances and their maintenance requirements.
- There must be access to refuse bins.
- Efforts must be made to prevent infestation of pests and vermin.

Source: SI No 17 of 2017 Housing (Standards for Rented Houses) Regulations 2017

RTB Bord um Thionntachtai Cónaithe Residential Tenancies Board

Údarás Áitiúla Éireann Local Authorities Ireland

An Roinn Tithíochta, Pleanála, Pobail agus Stádas Áitiúil Department of Housing, Planning, Community and Local Government

Requirements for Landlords (Continued)

Guide on Minimum Standards for Rented Residential Accommodation

By law, landlords must ensure that their rented properties provide tenants with a safe and healthy environment to live in and comply with the Minimum Standards. Local Authorities are responsible for the enforcement of the regulations. If your property does not comply to these Minimum Standards, as a landlord, you could be prosecuted. New standards came into effect on 1st July 2017 and the information below summarises the Minimum Standards and highlights the new obligations for landlords. Not all standards are applicable to AHBs (housing associations) or local authorities, for further details please contact your local authority.

- 1** The building must be free from damp and in good structural repair (internally and externally).
- 2** There must be hot and cold water available to the tenant(s).
 - Sanitary facilities must be in a safe condition and in good working order.
- 3** The building must have adequate ventilation and heating, which tenant(s) can control.
- 4** Appliances must be maintained in a safe condition and in good working order. A 4-ring hob, oven, grill, fridge, freezer (or combined fridge-freezer), and microwave oven must be provided.
- 5** Electrical wiring, gas and water pipes should be in good repair.
 - Properties should, where necessary, have a carbon monoxide alarm. These should be in suitable locations and in good working order.
- 6** In houses there must be access to a fire blanket and fire detection and alarm system.
 - In multi-unit buildings, there must be a fire detection and alarm system, an emergency evacuation plan and emergency lighting in common areas. It is important that fire safety equipment is maintained.
- 7** Where there is no access to a yard / garden, access to communal laundry facilities, such as a washing machine and a dryer, must be provided.
- 8** There must be suitable safety restrictors attached to a window which has an opening through which a person may fall and the bottom of the opening is more than 1400mm above the external ground level. Suitable safety restrictors must secure the window sufficiently to prevent such falls. Lockable restrictors that can only be released by removable keys or other tools **should not be fitted** to window opening sections.
- 9** Each bathroom or shower room should contain a permanently fixed heater that is properly maintained. The room should be properly ventilated.
- 10** Information must be provided to tenants on the property, building services, appliances and their maintenance requirements.
- 11** There must be access to refuse bins.
- 12** Efforts must be made to prevent infestation of pests and vermin.

Source: SI No 17 of 2017 Housing (Standards for Rented Houses) Regulations 2017



RTB
Bord um Thionntachtai Cónaithe
Residential Tenancies Board



Údaráis Áitiúla Éireann
Local Authorities Ireland



An Roinn Tithíochta, Pleanála,
Pobail agus Stádas Áitiúil
Department of Housing, Planning,
Community and Local Government

Appendix G. Instructions for Residents

Instructions for escape in the event of fire should be posted on the back of each apartment entrance door. The instructions should also include a floor plan and the following information

- the action to be taken in the event of fire
- the action to be taken on discovering a fire or hearing the fire alarm
- the procedure for calling the fire service
- the location of all relevant escape routes from the building (on the floor plan)
- the location of fire alarm call points and the fire alarm control panel(s)
- the location of firefighting equipment

Firefighting equipment should never be mishandled or tampered with. Fire doors should not be modified, tampered with, or propped open within the common areas of accommodation blocks. Fire alarm sounders, heat sensors as parts of the common alarm system are installed in each residential unit, typically just inside the flats entrance door. These systems are tested on a quarterly basis and access is required for this purpose. Residents should allow the contractors acting for the Owners' Management Company reasonable access to the accommodation to carry out fire safety preventive maintenance.

Residents must not interfere with the fire protection system and equipment, for example, by; removing safety equipment propping fire doors open, covering or removing smoke detectors, blocking escape routes with furniture, bicycles or rubbish etc.

The most important steps that the Residents can take to minimise the risk of a fire are:

1. Make sure that heaters are located where they will not set fire to curtains, bedding or furnishings.
2. Do not use portable gas or paraffin heaters in the apartments.
3. Do not store highly flammable materials in the apartment (such as paint, thinners, LPG cylinders, paraffin or petrol).
4. Do not store large quantities of combustible materials.
5. Residents should understand the dangers of:
 - smoking in bed or when drowsy
 - careless use of candles or incense sticks
 - overloading electrical sockets
 - having trailing cables
 - leaving a chip pan or frying pan unattended, or over-full of oil

- placing clothes to dry on or too close to heaters

Residents should practice 'the bedtime fire safety routine', which should include the following actions;

- ensuring the cooker is turned off
- unplugging electrical appliances
- making sure that no cigarettes or candles are left burning
- closing all doors

In the event of an outbreak of a fire, residents should;

- Not attempt to fight fires that have already taken hold: evacuate from the dwelling. Sound the common alarm as you make your escape
- Telephone the Fire Service on 999 or 112 immediately from a place of safety
- Not try to rescue belongings or pets

Appendix H. Instructions for Occupants

FIRE INSTRUCTION NOTICE

On Discovering A Fire

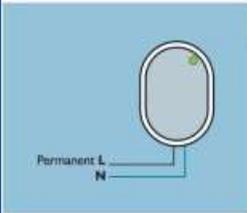
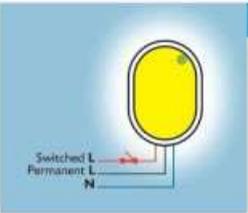
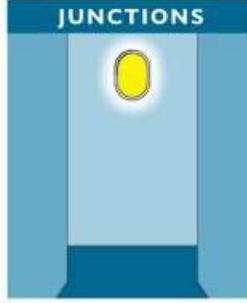
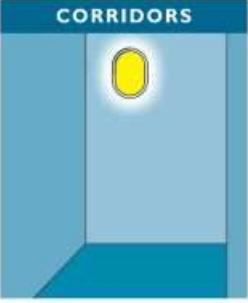
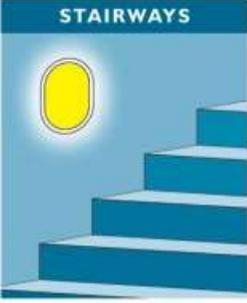
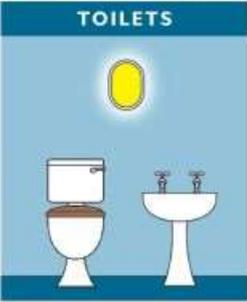
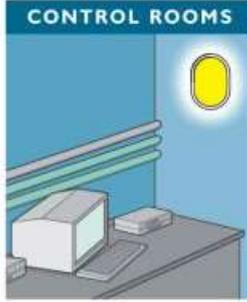
- Activate the nearest alarm* point.
- Inform staff of the location of the fire.
- Leave the premises immediately using the nearest available exit.
- Do not use the lift.
- Do not rush.
- Do not re-enter the premises.
- Obey the instructions of staff.

On Hearing An Alarm or Other Warning

- Leave the premises immediately using the nearest available exit.
- Do not use the lift.
- Do not rush.
- Do not re-enter the premises.
- Obey the instructions of staff.

***Where there is no alarm system, staff and occupants should be warned verbally.**

Appendix J 2 Emergency Lighting Check List

| CHECKLIST FOR EMERGENCY LIGHTING | | | |
|---|---|--|--|
| NON-MAINTAINED | | MAINTAINED | |
|  <p>Permanent L N</p> | <p>The lighting only operates when the normal mains supply fails (emergency lighting only).</p> |  <p>Switched L Permanent L N</p> | <p>The lighting operates normally and continues to operate when the normal mains supply fails (mains lighting and emergency lighting).</p> |
| <p>FINAL EXIT</p>  | <p>JUNCTIONS</p>  | <p>CORRIDORS</p>  | <p>STAIRWAYS</p>  |
| <p>To provide illumination of escape routes.</p> | <p>Install within 2 metres of escape route junctions.</p> | <p>Install within 2 metres horizontal distance of a change of direction in an escape route.</p> | <p>Install within 2 metres horizontal distance of change in floor level or stair (each tread to receive direct light).</p> |
| <p>FINAL EXITS</p>  | <p>ALARM AREAS</p>  | <p>ESCALATORS</p>  | <p>TOILETS</p>  |
| <p>Install externally within 2 metres horizontal distance of any final exits. Please note that sufficient light will be needed to muster a roll call.</p> | <p>Fire alarms, first aid points and fire-fighting equipment, install within 2 metres horizontal distance.</p> | <p>Should not be used as an escape route, but requires the same illumination to protect users on it when the supply fails.</p> | <p>Install in all toilets exceeding 8m² area or where natural light is not present.</p> |
| <p>LIFTS</p>  | <p>CONTROL ROOMS</p>  | <p>OPEN AREAS</p>  | <p>HAZARDOUS AREAS</p>  |
| <p>To provide emergency illumination in all lifts.</p> | <p>Motor generator, control and plant rooms for essential and safety services</p> | <p>Open rooms either with a particular hazard, an escape route passing through or larger than 60m².</p> | <p>Areas of high risk should be illuminated to 10% of normal lighting or 15 lux, whichever is greater.</p> |

Appendix J.3 Certification of Smoke Control System

BRITISH STANDARD

BS 7346-8:2013

B.5 Inspection and servicing certificate

Certificate of servicing for the smoke control system at:

Address:

.....

..... Postcode:

I/we being the competent person(s) responsible (as indicated by my/our signatures below) for the servicing of the smoke control system, particulars of which are set below, CERTIFY that the said work for which I/we have been responsible conforms to the best of my/our knowledge and belief with BS 7346-8:2013, Clause 9, except for the variations, if any, stated in this certificate.

Name (in block letters): Position:

Signature: Date:

For and on behalf of:

Address:

.....

..... Postcode:

The extent of liability of the signatory is limited to the system described below.

Extent of system covered by the certificate:

.....

.....

.....

.....

Deviations from BS 7346-8:2013, Clause 9:

.....

.....

.....

.....

Relevant details of the work carried out and faults identified have been entered in the system logbook.

.....

.....

.....

.....

.....

Appendix J.4 Certification of Fire Detection and Alarm System

I.S. 3218:2013+A1:2019

A1)

Annex D 1 (normative)

Fire detection and alarm system- Annual Certificate of Servicing/Testing

Page 1 of 2

[to be given to the user after completion of service]

[this certificate may be printed on company headed paper]

Certificate number:

Name of premises:

Address of premises:

Protected area(s) covered by this certificate:
.....
.....

System Details

| | | |
|---|--------------------------|--------------------------|
| | Yes | No |
| Details of the "responsible person" for the system have been issued to system Service Provider | <input type="checkbox"/> | <input type="checkbox"/> |
| Has the system Certificate of Design been made available to the Service Provider for inspection | <input type="checkbox"/> | <input type="checkbox"/> |

System Category (tick as appropriate)

| | | | | |
|------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | 1989 | 2009 | 2013 | 2019 |
| I.S. 3218: | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

| | | | | | | | | | |
|----|----|---|----|----|-------|-------|----|---|---------|
| P1 | P2 | M | L4 | L3 | L2/L4 | L2/L3 | L1 | X | Unknown |
|----|----|---|----|----|-------|-------|----|---|---------|

| | | |
|---|--------------------------|--------------------------|
| | Yes | No |
| Does the Certificate of Design note any system design variations? | <input type="checkbox"/> | <input type="checkbox"/> |
| Are the system "as installed" drawings available for inspection? | <input type="checkbox"/> | <input type="checkbox"/> |
| Are the Certificate(s) of installation available for inspection? | <input type="checkbox"/> | <input type="checkbox"/> |
| Are the Certificate(s) of commissioning available for inspection? | <input type="checkbox"/> | <input type="checkbox"/> |

Site Inspection Records

| Date Tested | |
|--------------------------------------|--|
| Periodic Service Inspection and Test | |
| Periodic Service Inspection and Test | |
| Periodic Service Inspection and Test | |
| Annual Service Inspection and Test | |

NOTE Page 2 of this certificate shall be completed, signed, and dated.

Certification of Fire Detection and Alarm System (continued)

Annex D 1
(normative)

Fire detection and alarm system- Annual Certificate of Servicing/Testing

Page 2 of 2

Declaration

I/We hereby certify that the Fire Detection and Alarm System installed in the protected area at the above premises has been serviced & tested in accordance with the requirements of I.S. 3218:2013+A1:2019 and as detailed in the relevant service reports.

I/We confirm my/our competence to undertake this work and to the best of my/our knowledge and ability the Annual Inspection and Test works have been completed and the system is currently operational and any ongoing works and/or deviations from the system design and/or annual service, inspection and test requirements have been notified to the responsible person for the system and recorded in the system log book.

With the following variations:

.....
.....
.....
.....
.....

Service Provider Details

Name (Print):

Position:

Signature: Date:.....

For and on behalf of Service Provider:

Address:.....

Telephone Number:



Certification of Fire Detection and Alarm System (continued)

Annex E 1
(informative)

Model logbook for fire alarm systems - Front page

| | | | |
|---|--|-------------------|-----|
| Protected Premises/Area: _____ | | | |
| Address: _____ | | | |
| Log Number | | Commencement Date | / / |
| Responsible Person | | Date: | |
| | | From: | To |
| | | / / | / / |
| | | / / | / / |
| | | / / | / / |
| System Designer* | | | |
| Name: _____ | | | |
| Address: _____ | | | |
| Telephone: _____ | | email: _____ | |
| Installer * | | | |
| Name: _____ | | | |
| Address: _____ | | | |
| Telephone: _____ | | email: _____ | |
| Service Provider* | | | |
| Name: _____ | | | |
| Address: _____ | | | |
| Telephone: _____ | | email: _____ | |
| Maintenance provider* | | | |
| Name: _____ | | | |
| Address: _____ | | | |
| Telephone: _____ | | email: _____ | |
| * Append extra pages to the logbook if additional or alternative providers become involved. | | | |
| THIS LOGBOOK TO BE KEPT AT: | | | |

Certification of Fire Detection and Alarm System (continued)

Annex E 2
(informative)

Model logbook for fire alarm systems – General register

| Log No. | Date | Time | Device | Event & Detail | | | | | Date Complete | Signed |
|---------|------|------|--------|----------------|------|-------|-------|----------------|---------------|--------|
| | | | | Test | Fire | Fault | Other | Detail/ Action | | |
| | | | | | | | | | | |
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Annex E 3
(informative)

Model logbook for fire alarm systems – False alarm register

| Log Ref. | Cause of Alarm/Notes | Action Taken or Needed/Comments | Date Completed | Signed |
|----------|----------------------|---------------------------------|----------------|--------|
| | | | | |
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Appendix J 5 Portable Fire Extinguisher Check Sheet



▶ Fire Extinguisher – SAFETY CHECKS

▶ Have you selected the right types of fire extinguisher for your workplace?

Your fire extinguisher(s) must be appropriate for the type of fire likely to be encountered. The table below offers a general guide, but specialist advice may be necessary for particular situations.

| Type of Fire | Suitable fire extinguisher |
|--|--|
| Fires involving solid materials such as wood, paper or textile | Water, foam, multi-purpose powder extinguishers |
| Fires involving flammable liquids | Foam |
| Electrical fires | Carbon dioxide |
| Fires involving gases | Dry powder (but seek specialist advice – in some instances it may be better to let the fire burn until the fuel supply can be cut off) |

▶ Have you provided enough fire extinguishers for your workplace?

The number of fire extinguishers provided should be based on the size of the workplace, the equipment and substances it contains, and the number of people present. For smaller premises having one or two portable extinguishers may be all that is required. In larger or more complex premises, a greater number of portable extinguishers sited throughout the premises are likely to be required (and other means of fighting fire may also need to be considered). If unsure, check with your local Fire Authority.

▶ Are the fire extinguishers kept in the most suitable place?

Fire extinguishers should be placed where employees can easily access them, without exposing themselves to danger, and where it will give the best chance of putting out a fire in its early stages or to aid in escape from the fire. Fire extinguishers are generally placed on exit routes near the exit doors, although those provided for a specific hazard should be placed near that hazard.

Fire extinguishers should be permanently located in a fixed place – either wall-mounted or placed on a stand.

▶ Are signs needed to mark the location of the fire extinguishers?

If the fire extinguisher is not in clear view then signs should be used to mark its location. The image opposite is normally accompanied by information on the content of the fire extinguisher and what type of fire it is suitable for.



▶ Have the people likely to use the fire extinguishers been given adequate instruction and training?

People need to know what to do in the event of discovering a fire, how to raise the alarm, what to do when the alarm sounds and how to use a fire extinguisher. Fire drills should be held at least annually. Ask your fire safety engineer to demonstrate the use of a fire extinguisher (outside) whenever one of your extinguishers is due for a test discharge.

▶ Maintenance and Inspection

Fire-fighting equipment must be inspected and maintained as often as necessary to keep it in good working order, and must be serviced annually by a competent person (usually a fire safety engineer).

▶ Record Keeping

Keep a record of all equipment inspections / servicing, staff training and fire drills. A fire register is useful for this purpose.

▶ What to expect when the fire safety engineer calls

Your fire safety engineer will visually inspect all fire-fighting equipment to make sure it is in good condition. They will also weigh each extinguisher, test the gauge and replace the seal where the hose joins the cylinder. Each extinguisher should be test discharged and refilled every 3 years.

Your fire safety engineer should give you a certificate of service for your equipment once the work is complete.

▶ Further Information

Guide to the Safety, Health and Welfare at Work (General Application) Regulations 2007 Chapter 1 of Part 2: Workplace – available at www.hsa.ie
Your local Fire Authority can provide specific advice and information about fire safety.

Portable Fire Extinguisher Check Sheet (Continued)

www.hsa.ie

www.besmart.ie



Fire Extinguisher – SAFETY CHECKS

Pressure Gauge:

- ▶ Good condition and undamaged
 - ▶ Needle must be in 'green' area
- If needle not in green area, remove extinguisher for servicing

General condition:

- The following must be in good condition and undamaged
- ▶ Handle
 - ▶ Hose
 - ▶ Cylinder body
 - ▶ Labels (dates and detail clearly visible)

Suitability:

- Extinguisher must be suitable for:
- ▶ The size and type of the workplace
 - ▶ The type of fire that could happen

Pull Pin:

Must be:

- ▶ In good condition and undamaged
- ▶ Securely fastened within handle
- ▶ Held in place by tamper seal

Maintenance:

Extinguishers must be:

- ▶ Serviced annually
- ▶ Marked with next due date OR maximum period of use (mm/yy). For example:

SERVICE RECORD

| NEXT DUE DATE | RECHARGED | PRESSURE TESTED | INSPECTED BY |
|---------------|-----------|-----------------|--------------|
| | | | |
| | | | |
| | | | |

Access:

Extinguisher must be kept in a location that is:

- ▶ Easily accessible
- ▶ Kept clear
- ▶ Marked with the appropriate signs



Appendix J.6 Registered Gas Installers Ireland (RGI) Certificate

DOMESTIC PREMISES GAS INSTALLATION DECLARATION OF CONFORMANCE FOR NEW INSTALLATIONS OR EXISTING INSTALLATIONS REQUIRING A SUPPLY OF GAS AND/OR NEW METER FIT



PART I

Please complete in BLOCK CAPITALS

S No. SN

LOCATION OF PREMISES REQUIRING SUPPLY
 GPRN
 EIRCODE
 ADDRESS
 CUSTOMER NAME
 TEL. NO.

NAT GAS **L P GAS**
 New Exist/Annex E

ALL DETAILS REQUESTED MUST BE PROVIDED. ONLY THE REGISTERED GAS INSTALLER (RGI) RESPONSIBLE FOR CARRYING OUT THE INSTALLATION & TESTS CAN SIGN THIS DECLARATION. GAS WILL BE SUPPLIED TO THIS PREMISES ONLY ON RECEIPT OF THIS DECLARATION

OWNER OF PREMISES DETAILS
 EIRCODE
 ADDRESS
 CUSTOMER NAME
 TEL. NO.

Appliances Installed
 Appliance Flue Type: Central Heating Fire Flueless
 Open R.Seal Open R.Seal Other Other
 Cooker Hob

Pipework Material: Copper CSST Other

APPLIANCE LOCATION CORRECT **FLUE INSPECTED AND ADEQUATE**
ADEQUATE PERMANENT VENTILATION **SOUNDNESS TEST PASS**

**DECLARATION OF
INSTALLATION
SAFETY &
CONFORMITY
PRIOR TO SUPPLY
OF GAS**

I HEREBY DECLARE, UNDER MY SOLE RESPONSIBILITY & BEING COMPETENT TO DO SO; (Please sign appropriate statement)

"PRE-CONSTRUCTION"

- THAT ALL REQUIREMENTS OF I.S. 813/1.5 EN 1949 & ALL MANUFACTURERS REQUIREMENTS FOR INSTALLING THE ABOVE APPLIANCES WILL BE MET (IN AS FAR AS IS POSSIBLE IF PRIOR TO THE SUPPLY OF GAS)
- THAT ALL REQUIREMENTS OF I.S. 813/1.5 EN 1949 FOR INSTALLING & TESTING OF THE INSTALLATION PIPEWORK WILL BE MET
- THAT COMMISSIONING SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF I.S. 813/1.5 EN 1949
- THAT THE INSTALLATION PIPEWORK WILL BE SOUND
- THAT THE INSTALLATION AT THIS PREMISES WILL BE SAFE TO BE SUPPLIED WITH GAS.

"POST-CONSTRUCTION"

- THAT ALL REQUIREMENTS OF I.S. 813/1.5 EN 1949 & ALL MANUFACTURERS REQUIREMENTS FOR INSTALLING THE ABOVE APPLIANCES HAVE BEEN MET (IN AS FAR AS IS POSSIBLE IF PRIOR TO THE SUPPLY OF GAS)
- THAT ALL REQUIREMENTS OF I.S. 813/1.5 EN 1949 FOR INSTALLING & TESTING OF THE INSTALLATION PIPEWORK HAVE BEEN MET
- THAT COMMISSIONING SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF I.S. 813/1.5 EN 1949
- THAT THE INSTALLATION PIPEWORK IS SOUND
- THAT THE INSTALLATION AT THIS PREMISES IS SAFE TO BE SUPPLIED WITH GAS.

RGI Signed: _____ Issue Date: _____

Company Number: Trainee Number:

RGI Name: _____
BLOCK CAPITALS

Trainee Signature: _____

RGI Number: RGI Tel No: _____

RGI Signed: _____ RGI Number:

RGI Name: _____
BLOCK CAPITALS

Date of Test: _____ Issue Date: _____

PART II

COMMISSIONING DECLARATION

I HEREBY DECLARE, UNDER MY SOLE RESPONSIBILITY & BEING COMPETENT TO DO SO;

- THAT ALL MANUFACTURERS' REQUIREMENTS & ALL REQUIREMENTS OF I.S. 813/1.5 EN 1949 FOR THE CONSTRUCTION, COMMISSIONING, TESTING & PUTTING INTO SERVICE OF THE ABOVE APPLIANCES HAVE BEEN MET
- THAT A WRITTEN OPERATING INSTRUCTION HAS BEEN PROVIDED WITH EACH APPLIANCE
- THAT THE CUSTOMER WAS INSTRUCTED IN THE SAFE USE AND OPERATION OF THE APPLIANCES.

**DECLARATION OF APPLIANCE
COMMISSIONING
SAFETY &
CONFORMITY
AFTER SUPPLY
OF GAS**

FLUE GAS ANALYSIS: Co ppm Co₂ % Co/Co₂ Ratio

RGI Signed: _____ RGI Number: Commissioning Date: _____

NOTE: THIS DOCUMENT IS A COMPLETION CERTIFICATE FOR THE PURPOSE OF THE ENERGY (MISCELLANEOUS PROVISIONS) ACT 2006

**HOUSEHOLDER
IMPORTANT
SAFETY
INFORMATION
PLEASE READ
CAREFULLY**

THIS DECLARATION CONFIRMS TO YOU THE HOUSEHOLDER AND TO YOUR GAS SUPPLIER / NETWORK OPERATOR, THAT THIS INSTALLATION IS SAFELY INSTALLED IN CONFORMANCE WITH IRISH STANDARD 813 "DOMESTIC GAS INSTALLATIONS" I.S. EN 1949 LPG LEISURE ACCOMMODATION VEHICLES.

THE PERSON WHO ISSUES THIS DECLARATION ACCEPTS SOLE RESPONSIBILITY FOR ITS ACCURACY.

AFTER COMMISSIONING, THE SAFE OPERATION AND MAINTENANCE OF THIS INSTALLATION FROM THE METER OR LPG CYLINDERS/TANK VALVE INWARDS IS THE SOLE RESPONSIBILITY OF THE HOUSEHOLDER.

GAS APPLIANCES SHOULD BE SERVICED ANNUALLY. FOR THE SAFE AND EFFICIENT OPERATION OF YOUR APPLIANCES PLEASE REFER TO APPLIANCE USER INSTRUCTIONS.

FOR YOUR REASSURANCE AND SAFETY PLEASE ENSURE YOU ARE ABLE TO OPERATE THE **EMERGENCY SHUT OFF VALVE WHICH IS LOCATED AT** / GAS METER

COPIES: WHITE – CUSTOMER YELLOW – ON SITE FOR GAS SUPPLIER/NETWORK OPERATOR PTO
GREEN – RETURN TO RGI BLUE – COPY FOR YOUR RECORDS

HOUSEHOLDER IMPORTANT SAFETY DOCUMENT

Your Registered Gas installer has issued you with this document, declaring that your gas pipe work and appliances have been installed tested and commissioned in compliance with
**IRISH STANDARD 813 "DOMESTIC GAS INSTALLATIONS"/I.S. EN 1949
LEISURE ACCOMMODATION VEHICLES**
prior to handing the installation over to you.

NOTE: PART I OF THIS DECLARATION OF CONFORMANCE MAY NOT IN ALL CASES BE VALIDATED BY THE NETWORK OPERATOR OR GAS SUPPLIER.

PLEASE RETAIN THIS DOCUMENT IN A SAFE PLACE.

The Register of Gas Installers (RGI) is operated by:
REGISTER of GAS INSTALLERS of IRELAND (RGII)
UNIT 9 KCR INDUSTRIAL ESTATE
RAVENSDALE PARK
KIMMAGE, DUBLIN 12

D I 2 E 9 5 8

Tel 1850 454 454
or visit www.rgii.ie

**IT IS NOW A LEGAL REQUIREMENT TO BE REGISTERED IN ORDER
TO UNDERTAKE GAS WORK.**

Irish Standard 813 "Domestic Gas Installations"/I.S. EN 1949 Specification for the installation of LPG systems for habitation purposes in leisure accommodation vehicles and accommodation purposes in other vehicles is published by the **National Standard Authority of Ireland (NSAI)**, 1 Swift Square, Northwood, Santry, Dublin 9, **D09A0E4**. Email: info@standards.ie

Appendix K. Nomenclature / Abbreviations/ Definitions

- **PHC- Person Having Control**

- **FSA – Fire Services Act**

- **DHLGH - Department of Housing, Local Government and Heritage**

AOV (automatically opening vent): A vent provided for smoke control in common parts, which opens automatically when smoke is detected by smoke detectors.

Active Protection: Active protection are those systems which come into action on detection of fire e.g. fire detection and alarm system, automatically opening vent.

Circulation Space: A space (including a stairway) mainly used as a means of access between a room and an exit from the building.

Compartmentation: Sub-division of a building by fire-resisting walls or floors normally for the purpose of limiting fire-spread within the building.

Dry Riser: A dry riser is a normally empty pipe that can be externally connected to a pressurised water source by firefighters. It is primarily a vertical pipe, although there can be horizontal sections, intended to distribute water to multiple levels of a building or structure

Emergency Escape Lighting: Lighting that provides illumination for the safety of people leaving the building when the normal lighting fails.

Escape Route: Route forming part of the means of escape from any point in a building to the final exit. .

Apartment, "flat": means separate and self-contained premises constructed or adapted for residential use and forming part of a building from some other part of which it is divided horizontally - quoted from BUILDING CONTROL REGULATIONS 1997 - SI 497 of 1997.

Final Exit: The termination of an escape route from a building giving direct access to a street, passageway, walkway or open space and sited to ensure the rapid dispersal of persons from the vicinity of a building so that they are no longer in danger from fire and/or smoke.

Fire Compartment: A part of a building constructed to prevent the spread of fire from another part of the building.

Fire Damper: Mechanical or intumescent device within a duct or ventilation opening, which is operated automatically in the event of fire, to prevent the passage of fire. (Where there is a need to prevent the passage of smoke, the fire damper needs to satisfy additional criteria.)

Fire Main: Water supply pipe installed in a block of flats for fire-fighting purposes, fitted with landing valves at specific points. The main may be 'dry', in which case it is fitted with inlet connections at fire and rescue service access level, so that it can be charged with water from pumping appliances. In tall blocks, the main is 'wet' and is permanently charged with water from a pressurised supply.

Fire Stopping: A seal provided to close an imperfection of fit or design tolerance between elements or components, to restrict the passage of fire and smoke.

Fire Door: A door, together with its frame, hinges, latches, hardware, glazing, automatic self-closing device provided for the passage of people, which, when closed, is intended to restrict the passage of fire and smoke to a predictable level of performance.

Intumescent strip/seal: This is a piece of material fitted around a doorway that when exposed to heat, expands closing any gaps around the door to stop the fire spreading for a period of time. Intumescent strips usually come with either 30 or 60 minutes of resistance to fire.

Means of Escape: A route(s) provided to ensure safe egress from the premises or other locations to a place of total safety.

Multi-Unit Building: A building containing 2 or more dwellings and using a common entrance.

Owners' Management Company (OMC): A not-for-profit company established for the management of a Multi-Unit Development. It owns the common areas of the estate. It is collectively owned and controlled by all the owners of the properties within the estate. The directors are elected by the OMC members, and are typically unpaid volunteers.

Passive Protection: Passive protection relates to the defence against fire provided by the fabric and construction of a building.

Protected Stairway: A stairway that is adequately protected from the rest of the building by fire-resisting construction.

Riser: A cupboard located within the communal areas of apartment buildings which contain cabling for the main services provided to the individual apartments. For example: telephones satellite television, electricity etc.

Smoke Alarm: Device containing within one housing all the components, except possibly the energy source, for detecting smoke and giving an audible alarm.

Smoke Control System: This is a system that is used to limit the migration of smoke within a building due to a fire. There are several methods to limit this migration, and some are designed to provide a tenable environment for occupants to egress the building.

Storey: Any of the parts into which a building is divided horizontally above or below ground level.

Wet Riser: A Wet riser is a supply system intended to distribute water to multiple levels or compartments of a building, as a component of its firefighting

gov.ie/housing

The Department of
Housing, Local Government and Heritage



Rialtas na hÉireann
Government of Ireland