Practical Fire Safety Guidance For existing Specialised Housing and similar premises

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Contents

Acknowledgments

Introduction

Purpose

1. This Guidance is primarily for those who are responsible for specialised housing and similar premises and for those who provide care and support services in such premises. It provides practical fire safety advice on how to prevent and reduce the risk to life from fire. As such, the focus is on life safety rather than property protection.

2. Its purpose is to strengthen fire safety for people who receive care or support in specialised housing or similar premises. It will also be useful for those receiving "care at home" services or support in "general needs" housing.

3. Although there has been a significant reduction in the number of fires and related deaths and injuries in domestic premises in the last 20 years, a disproportionate number involve older people or others with recognisable "contributory factors", including physical, cognitive and mental health issues. Risk will be reduced significantly if fire safety measures meet the needs of the individual, as well as the premises as a whole. In some cases, people may receive significant care or support and require a high level of fire protection measures.

4. Building Regulations ensure a basic level of fire safety in premises. This should be supplemented by an assessment of fire risk to determine whether existing measures are appropriate or if more needs to be done. This Guidance supports that process.

Scope

5. This Guidance applies to "specialised housing" and similar premises for older people and others requiring care and support. This covers a wide range of premises types and building designs. Various terms may be used but the name itself should not be the key factor in determining whether the Guidance applies; the nature of the premises and the characteristics of the residents are important considerations.

6. For this Guidance, specialised housing includes the following:

   - **Sheltered / very sheltered / extra-care housing -** mainly (but not exclusively) for older people living at home with different levels of care or support. This ranges from sheltered housing complexes with little on-site management to very sheltered or extra care premises with significant on-site, including 24-hour, care.

   - **Supported housing -** for people with physical, sensory, mental health or cognitive impairments. The degree of independent living and level of care varies considerably. Residents may live independently or in a group home setting in the community.

7. This Guidance also applies to **small care homes** which have been constructed as domestic dwellings and accommodate only a few residents. There is a range of groups that live in these: older people; children and young people; people with learning disabilities; people with drug and alcohol problems; people with mental health problems; and people with physical and sensory impairment.

These can appear similar to some types of supported housing, particularly shared group homes, and much of this Guidance will be equally applicable. As with all care homes, they are registered with the Care Inspectorate as providing a "care home service", as defined by the Public Services Reform (Scotland) Act 2010.

8. This Guidance may also be useful for people living in owned or rented dwellings who receive a "care at home" service (referred to as "general needs" housing in this Guidance). It will, therefore, be relevant for them and their families, friends, personal assistants, care and support workers; indeed anyone involved with their care and well-being. Part 1 of the Guidance (person-centred fire safety risk assessment) will be of particular relevance. Some of the benchmarks in Part 2 (Premises Based Fire Safety Risk Assessment) that apply to sheltered housing may also be of interest, for example, standards of fire detection.

Fire Safety Guidance for Other Premises

9. Separate fire safety guidance is available for other premises types and should be applied where most relevant.

10. Practical Fire Safety Guidance for Care Homes. This is for the majority of care homes which accommodate more than just a few residents. The fire safety benchmarks in that Guidance are not appropriate for smaller care homes akin to dwellings with few residents.

11. Practical Fire Safety Guidance for existing Premises Providing Sleeping Accommodation. This is for hostels, refuges, licensed Houses in Multiple Occupation and other sleeping accommodation covered by fire safety law.

12. Practical Fire Safety Guidance for existing High Rise Domestic Buildings. This Guidance should also be referred to for sheltered housing in a high rise block.

13. Part 1 of this Guidance augments the Sleeping Accommodation and High Rise fire safety guidance referred to above, where people living there receive care or support.

Fire Safety Law

14. Domestic premises are generally exempt from fire safety law. However, existing fire safety law does apply to:

   - Premises requiring a licence to operate as a House in Multiple Occupation (HMO) under Part 5 of the Housing (Scotland) Act 2006.
   - Premises in which a "care home service" is provided, as defined by the Public Services Reform (Scotland) Act 2010.

15. Fire safety law also applies to some premises in which a "housing support service" is provided, as defined by the Public Services Reform (Scotland) Act 2010, for example in a shared group home where residents have occupancy agreements, rather than tenancy agreements, and where the main purpose is to provide care or support.

16. Where fire safety law applies, it is a legal requirement to carry out a premises based fire safety risk assessment and to act on its findings. Further information can be found in Part 4 of the Guidance.

Using this Guidance

17. The Guidance is built on 2 main pillars:

- person-centred fire safety risk assessment.
- premises based fire safety risk assessment.

18. The person-centred assessment is about reducing the risk to the individual in their own private accommodation. The Guidance sets out the main risk factors that should be determined and assessed to identify whether additional fire precautions might be appropriate. The Person Centered Fire Safety Risk Assessment Template (Annex 3) provides a structure to assist in the process. The person-centred fire safety risk assessment is good practice and not a legal requirement.

19. The premises based assessment is more technical and requires an understanding of the application of fire safety principles to the built environment. It is an assessment of the fire risk to all residents, including those beyond the room or compartment where a fire originates. Such assessments are increasingly used to manage and ensure adequate fire safety in the domestic sector, even where fire safety law does not apply. Where required by law, compliance may be audited and enforced by SFRS. A blank template is provided in Annex 5.

20. There is an overlap between the two approaches: for example, monitored fire detection and automatic suppression systems can improve safety both for an individual within their own private accommodation and other residents in the premises.

Who is the Guidance for?

21. The Guidance is relevant and useful to the following:

- Housing providers.
- Care providers.
- Housing and Care Regulators.
- Local housing enforcement officers.
- Commissioners of care services.
- Building owners.
- Managing agents.
- Fire risk assessors.
- SFRS.
- Personal assistants.
- Local authority social work assessors.
- Families, friends and care/support volunteers.

22. It is important that fire safety risk assessments are undertaken by suitably skilled people with appropriate responsibility and involve other people as required. Where there are multiple relevant parties, one person should be responsible for instigating, managing and coordinating the assessment and action plans and ensuring they are shared. This will normally be whoever is responsible for the specialised housing or similar premises.

Person-centred Fire Safety Risk Assessment

23. To be effective, it is important that a suitable person carries out the person-centred assessment and acts on its findings. Having basic fire awareness training will assist but a specialist is not usually required.

24. The person best placed to do this will depend on the circumstances of the housing and care/support provision, and their skills and level of responsibility. Housing providers should ensure high risk residents receive a person-centred risk assessment. Those carrying out the assessment should share relevant information with the housing provider.

25. The person-centred assessment may be carried out by appropriate care and support staff and usually involves the residents themselves. In sheltered housing schemes, managers (where provided) or care providers in regular contact with residents might undertake the assessment. In supported housing, those responsible for care and support on-site may be best placed. In general needs housing, the assessment could be carried out by a family member or a care provider or personal assistant with appropriate skills and level of responsibility. A SFRS Home Safety Visit should always be sought and will complement the person-centred risk assessment process.

26. The scope for housing providers or landlords to undertake assessments and/or implement fire safety measures within residents' accommodation will, in some cases, be dependent on the cooperation of the individual residents. Scheduled gas safety checks and inspections of electrical installations can provide opportunities.

Premises Based Fire Safety Risk Assessment

27. A premises based fire safety risk assessor must be a competent person with the necessary skills, knowledge and/or experience. This may be a trained member of housing provider/managing agent staff or an externally contracted fire risk assessor. See Part 2 of the Guidance for more information.

Managing Fire Safety

28. Safety, as a general principle, is a well-established feature of specialised housing and care/support policy. Fire safety could be integrated into existing arrangements, if not already mainstreamed, for example:

Housing

- The Scottish Social Housing Charter, which incorporates the Scottish Housing Quality Standard, covers aspects of tenant safety, landlord/tenant engagement, and equalities: including meeting the needs of those with protected characteristics such as age and disability.
- Scottish Housing Regulator's Regulatory Framework requires an Annual Assurance Statement for Local Authorities and Registered Social Landlords. Landlords are required to consider whether non-compliance with the regulatory standards affect the interests and safety of tenants.
- Tenant/resident safety is a priority in the Scottish Housing Regulator's Corporate Plan.

- Landlord "Housing Health Checks" consider the suitability of accommodation and the need for any adaptations.

Care and Support

- Single Shared Assessments (community care needs).
- Care Plans (care and support services).
- Personal Support Plans (housing support).
- Potential role of Joint Health & Social Care Integration Boards / Care Inspectorate in encouraging a person-centred fire safety approach.
- Health and Social Care Standards published by the Scottish Government are applicable to the NHS and services registered with the Care Inspectorate and Healthcare Improvement Scotland. They set out service user expectations, including those around protection and safety, with appropriate assessments and referrals being part of this.

Partnership Working

- Community Safety Partnerships established under Community Planning arrangements (local fire safety initiatives).
- Joint working protocols/contracts/arrangements.

Part 1 Person-Centred Fire Safety Risk Assessment

Chapter 1: The Person-Centred Fire Safety Risk Assessment

Key Points

- The person-centred fire safety risk assessment considers how a person's characteristics, behaviour and capabilities may increase the likelihood of a fire or affect their ability to recognise and respond to a fire or warning of fire.
- The person-centred approach is key to protecting people at high risk from fire in their own accommodation.
- The aim of the assessment is to identify whether additional fire safety measures may be required to reduce risk.
- A suitable person providing the housing, care or support should carry out the assessment. The most appropriate person to do this will depend on the specific circumstances but may involve sheltered housing scheme managers, care providers or others regularly engaging with the person.
- The person-centred assessment is strongly recommended as best practice but is not required under fire safety legislation.

Introduction

29. This Chapter explains how to carry out a person-centred fire safety risk assessment for high risk residents in their own accommodation. The aim of the assessment is to determine whether additional fire safety measures are required to reduce risk. It involves an assessment of the risk factors that are specific to the individual and of the fire hazards in a resident's private accommodation.

30. This Chapter also provides guidance on some of the main risk factors and hazards to consider. The person-centred approach is separate to the premises based risk assessment (covered in Chapter 3) but fire safety measures identified in one may impact on the other.

Why a person-centred approach?

31. The person-centred approach is about recognising the increased risk associated with people who are particularly vulnerable to fire, due to physical, cognitive or mental impairments. Personal characteristics can increase the likelihood of fire, the severity of the fire and the ability to respond effectively.

32. There are two main ways to reduce risk: by preventing fire (fire prevention) and by reducing the impact that fires have on people (fire protection).

33. Most fires occur within people's own accommodation. The greatest risk of death is for those in the room in which the fire starts: they are often directly involved in the fire as their clothing or bedding may be the item first ignited. Fire prevention is key to reducing this risk and is an important part of the assessment. Additional fire protection measures may also be required to protect people should a fire occur, particularly if their evacuation is likely to be slow or challenging.

34. The person-centered fire safety risk assessment process involves identifying fire hazards and the potential consequences for the individual in the event of fire. Where the assessment determines that additional measures are needed to reduce risk, a plan is drawn up which should list the actions required. The findings of the risk assessment should be shared with all relevant parties, including landlords.

Engaging with Residents

35. Engagement is integral to a person-centred approach. It is an opportunity to provide residents with core fire safety information and to identify people at risk.

36. All housing providers, landlords and managing agents should pro-actively engage with residents. Anyone (care/support, utilities, visitors etc) in contact with residents in their own accommodation should be encouraged to identify and report obvious fire hazards to housing providers (where there is one), as well as bringing them to the resident's attention. They should also inform management of any residents who they feel are particularly at risk.

37. It is important that residents are given fire safety advice and support covering:

Fire Prevention (preventing fires)
- What the common areas policy requires of them (storage and use).
- Clear prohibition on storing and using petrol, bottled gas, paraffin etc.
- The importance of security to reduce the risk of deliberate fire raising.

Fire Protection (measures which protect people in the event of fire)
- How to report faults or damage to fire safety measures.
- Ensuring residents know not to interfere with the fire alarm system, for example to silence the system and the reason for this.
- Safeguarding communal escape routes, for example, ensuring fire doors self-close properly and are not wedged or otherwise held open.
- How to avoid damaging fire protection measures when making changes to their accommodation.

Fire Procedures
Fire procedures are an important element of fire safety. Some people may need to have the evacuation plan explained to them periodically to ensure they understand. In supported housing, it is often beneficial for residents to take part in practice evacuations (fire drills) to reinforce the procedures. In sheltered, extra care and general needs flats, residents should understand the principles of a 'stay put' policy.

Fire procedures should cover:
- Actions residents should take if they discover a fire.
- How residents should respond to fire alarm signals in their own accommodation.
- How to make their way safely from their accommodation and exit the building.

Additionally, in sheltered and extra care housing:

- How to respond if the fire alarm sounds in the common areas.
- Whether any limited assistance will be provided in the event of fire (for example, it should be made clear in "welfare packs" if assistance with evacuation is not provided).

38. There are effective ways to inform and educate people on basic fire prevention, including resident's handbooks, fire safety leaflets, information on company websites. Key messages may be reinforced by notices in the building. In supported housing and small care homes, fire safety information is often best discussed with each resident by care or support workers where they have responsibility for the residents and their accommodation.

39. Annex 1 contains generic fire safety advice for residents. This may need to be supplemented by person-centred advice, following an assessment. Annex 2 contains fire action notice templates detailing the actions that residents should take in the event of a fire (these might not be necessary in all supported housing).

40. Campaigns and initiatives will keep the message fresh. SFRS, in partnership with housing providers and other agencies, may contribute. SFRS also offer free home safety visits and their website has useful information/materials such as Supporting Fire Safety in the Home – A Carers' Guide. The guide, combined with the information in Annex 1 and 2, provides succinct advice in an easy read form for vulnerable people and their families and carers.

Steps to a Person-Centred Risk Assessment

41. People at increased risk from fire may be identified by engagement or referral from a concerned party which should trigger a person-centred fire safety risk assessment. In supported housing, it may be possible to carry out an assessment routinely when a new person moves in, if only a few residents are accommodated. A blank template is provided in Annex 3.

42. The assessment should be completed with the individual's participation. Where this is not possible it should involve other people who are able to speak for the resident.

43. There are nine steps to a person-centred risk assessment:

Steps I-III: The Individual

Consider the person's;

(I) Characteristics, behaviours and capabilities and how these may increase the likelihood and harmful consequences of a fire.
(II) Capacity to respond appropriately to a fire or warning of fire.
(III) Ability to evacuate.

Step IV Fire Hazards

Identify the potential causes of fire and factors which may cause rapid fire development.

Step V Fire Prevention

Evaluate existing fire prevention measures.

Step VI Fire Protection
Evaluate existing fire protection measures.

Step VII Determine Risk
Determine the level of risk to the resident.

Step VIII Action Plan
Prepare and implement an action plan.

Step IX Review
Review the assessment and plan regularly.

Steps I – III The Individual

44. It is important to consider the personal risk factors that increase the likelihood of fire and its impact. Where there is more than one factor present, the risk of harm is significantly increased. For example, a person that smokes, with the potential to set fire to their clothing and is slow to evacuate without assistance, is at high risk.

45. People with cognitive issues, sensory impairment or who are affected by alcohol or medication may be more likely to have a fire due to forgetfulness or a lack of awareness while cooking or smoking. This risk is increased for those who do not recognise danger or are unable to make decisions to respond appropriately to a fire, or a warning of fire. If fire does occur, hoarding and the presence of oxygen cylinders or stored flammable substances can increase the development and severity of the fire.

46. It is essential that a person can evacuate to a place of relative safety if there is a fire in their private accommodation. This may involve corridors and stairs. Each stage of the evacuation needs to be considered. Physical disabilities and impairments may make self-evacuation difficult. Some people may require assistance from staff (where present). If the evacuation strategy does not rely on staff assistance (for example, in sheltered housing or general needs flats), additional fire safety measures, such as automatic fire suppression, can give more time for self-evacuation. These will be considered further in Step VI.

47. Children and people with cognitive issues such as autism may respond to a fire by hiding. Staff assisting with evacuation should be alert to quickly checking in wardrobes, under beds and behind furniture where it is safe to do so. For some, it is often better to give direction in short, clear phrases. They may take longer to respond because they don't understand the directions or are scared and unable to process instructions. Younger children and people with autism should be accompanied at all times to prevent them wandering off or running away after an evacuation or rescue.

48. In supported housing and small care homes with 24 hour staff, residents may require personal emergency evacuation plans (PEEPs). PEEPs should be drafted and agreed with the person, where possible. These should state if staff assistance is required. Further guidance on evacuation and PEEPs for people with mobility, hearing, visual and cognitive impairments can be found in the Scottish Government publication "[Practical Fire Safety Guidance: The Evacuation of Disabled People from Buildings](#)".

Step IV Fire Hazards

49. The next stage is to identify potential causes of fire and factors that may cause rapid fire development. This includes sources of ignition, fuel and oxygen.

Sources of Ignition

50. The following are potential sources of ignition:

- Smoking and smokers materials.
- Electrical wiring and appliances, especially if overloaded or damaged.
- Heating appliances, especially when used in the vicinity of combustible materials.
- Electric blankets that show signs of age or wear and tear.
- Cooking, particularly if left unattended.
- Use of candles, particularly if in unguarded holders and left unattended.

Fuel

51. Separating combustible materials from potential sources of ignition reduces the likelihood of a fire starting. For example not leaving tea towels adjacent to a cooker hob or candles in the vicinity of curtains.

52. Emollient creams containing paraffin based products are used to treat dry skin conditions. They are highly flammable and actions to reduce their fire risk should be taken. Smokers, in particular, should be advised of the risk. Creams should be stored securely when not in use. Emollients applied in large quantities or to large areas of the body increase the fire risk. Impregnated dressings, clothing, towels and bedding should be kept away from naked flames and other sources of ignition. Fabrics should be washed and changed regularly to prevent build-up. The residue may not always be completely removed during laundering. Items may need multiple washes at high temperature using a high quality detergent or, ultimately, should be replaced.

53. Combustible material should not be left in hallways or adjacent to flat entrance doors as a fire there could block the evacuation route.

54. Hoarding combustible material is a particular fire hazard which can place the occupier and other residents at risk.

Oxygen

55. Medical gases, such as oxygen therapy units, are a fire risk and advice on their safe use and storage should be given to people using these. They should not use oxygen therapy when smoking or near other forms of ignition, such as cookers or heaters. Rooms used for oxygen therapy should be well-ventilated. Cylinders should not be stored with flammable materials, such as alcohol hand gels, or materials containing, or contaminated with, oils or grease. Cylinder warning signs outside residents' accommodation should be considered.

56. Cylinders present an explosion risk if exposed to extreme heat. Leaks from cylinders and tubing, or from around the edge of facemasks, can create an oxygen rich atmosphere which increases the intensity of a fire and the combustibility of clothing worn by residents. This is a serious risk for smokers and users of emollient creams.

57. Dynamic air mattresses (also known as 'Airflow' or 'pressure relieving air mattresses') can help prevent pressure sores and ulcers and are used by people who spend prolonged periods in bed due to illness or mobility issues. Carers and users should be aware of potential fire risks. If punctured by an ignition source, oxygen in the escaping air can cause a fire to increase in intensity and to spread quickly. The inflation pump may also continue to reinflate the mattress, making the fire worse. The risk is increased further if the person uses oil based emollients or medical oxygen. Potential sources of ignition, such as smoker's materials, candles, hairdryers/straighteners, electric blankets should be kept well away. Users may be unable to self-evacuate and so would be particularly vulnerable in the event of fire. Additional measures, such as fire resistant bedding, monitored (Telecare) fire detection and automatic suppression should be considered, particularly for those who ignore advice (or policies) and smoke in bed (see paragraphs 61-64).

Fire Hazard Indicators

58. The following are indications that a person could be at risk of having a fire in their home:

All rooms	Clutter/hoarding Overloaded electrical sockets Burn marks or discarded cigarettes on carpets and furniture Overfilled ashtrays Evidence of alcohol misuse (cans, bottles lying around) Unsafe use of candles (e.g. unguarded candles) Combustible storage near electrical intake and meter Combustible materials (e.g. furniture, clothing, waste) near heat sources, such as an electric fire/heater
Kitchen	Burnt pans or cooking Build-up of grease on surfaces, particularly ovens, cookers, extractor hoods Paper or rubbish stored around the cooker hob
Lounge	Used as a bedroom (using the sofa as a bed for example)
Bedroom	Smoking in bed Burn marks on bedding or carpets Old or damaged electric blanket in use Emollient cream residue on bedding
The person	Burn marks on person or clothes Emollient cream residue on clothing

59. Measures to reduce the risk from these hazards include both fire prevention and fire protection measures, as set out in Steps V and VI below. The most appropriate measures to adopt will depend on the findings of the person-centred fire safety risk assessment. It is a principle of fire safety risk assessment that measures taken should be proportionate to the risk. The cost, practicality and benefit gained are all taken into account. Annex 4 offers a range of practical risk

reduction measures, mapped to common conditions such as dementia, impaired sight/hearing, mobility problems etc. Measures should be thought of as a menu of options on a sliding scale, ranging from basic and relatively inexpensive through to more sophisticated and costly.

Step V Fire Prevention Measures

60. This section sets out measures that will help prevent fire and includes:

- Fire-resistant furniture and textiles e.g. bedding / clothing / throws etc.
- Safer forms of portable heating.
- Safety ashtrays / metal bins.
- Fire-resistant smoking apron.
- Cooking appliances with enhanced safety features.
- Fire prevention advice and engagement, taking into account the person's mental capacity to understand, remember and apply such guidance.
- Replacement of old electrical appliances.
- Good housekeeping for safety.

Smoking-related measures

61. Fires started from smokers' materials is the biggest cause of fire deaths in the home. Small care homes and supported group homes often have arrangements for individual risk assessments and control measures which restrict access to smokers' materials. The level of assessment and control may be similar to those in larger care homes. Smoking policies should also take account of the use of e-cigarettes, given the number of fires which have been caused by defective and non-regulated charging devices.

62. Smoking policies do not generally apply to self-contained accommodation units such as flats in sheltered, extra care or general needs housing. There are other straightforward risk reduction measures that can be taken such as fire retardant smoking aprons to cover clothing and gaps between the smoker and the sides of their chairs and safety ashtrays that immediately extinguish cigarettes. For those who tend to overfill ashtrays, the use of metal waste bins (sometimes partially filled with sand) may be a better option.

63. Fire-resistant upholstery conforming to the Furniture and Furnishings (Fire)(Safety) Regulations 1988, as amended, will help to reduce risk.

64. Additional measures should be considered for people that continue to smoke in bed, despite being advised against it. These can include fire-resistant mattresses which conform to the 1988 Regulations and bedding (pillowcases, duvets and sheets) that meets the appropriate test requirements of BS 7175 Methods of test for the ignitability of bedcovers and pillows by smouldering and flaming ignition sources. Guidance produced by the Health Facilities Scotland on the type of furniture and furnishings in hospitals is given in SHTM 87 (Firecode: textiles and furniture) which may be more appropriate in some cases (see Reference Section for full list of British Standards and other documents).

Cooking-related measures

65. Cooking is the most common cause of fire in residential dwellings and can be a

particular risk for people with dementia or who are easily distracted. Cooking combined with alcohol misuse is particularly dangerous.

66. Heat detectors must be provided in kitchens and will provide warning of fire. Automatic cooker isolation devices, linked to heat detection sensors or timers, will isolate electricity and gas supplies. Examples can be found in [Annex 4](#).

67. In most sheltered and extra care flats, a housing provider's influence over individual dwellings will be limited. Residents are often responsible for the ongoing maintenance and cleaning. Housing and care/support providers should provide advice and guidance on the risks of fire from cooking. To reduce risk for vulnerable individuals, it can be useful to involve families and external agencies. All gas and electrical supplies should be subject to ongoing servicing and maintenance.

Electrical Safety

68. Housing providers/landlords should ensure private accommodation has sufficient electrical outlets. Inappropriate use of extension cables and adaptors increases fire risk and should be kept to a minimum. Fire safety guidance should include information on:
   - Not overloading sockets.
   - The dangers of combustible items, such as bedding, near or on heaters.
   - Not using electrical outlets in dangerous situations in kitchens or bathrooms.
   - Trip hazards posed by trailing leads.

69. There is a danger of fire from the unsafe use of white goods. Washing machines, tumble driers and dishwashers should not be used when sleeping or out of the house. Safety and recall information can be found on the [Electrical Safety First website](#). Products should also be registered online to ensure notification is received from the manufacturer.

70. LPG gas heaters, paraffin heaters and open bar heaters should be avoided and replaced with a fixed heating system, if possible. Oil-filled radiator portable heaters should be used rather than convector or fan heaters.

71. Electric blankets should be checked by a specialist every 3 years or as recommended by the manufacturer and should have a British Electrotechnical Approvals Board (BEAB) certification mark. Blankets over 10 years old or that show signs of wear and tear should not be used. Blankets should be stored in line with manufacturer's recommendations. Moth proofing chemicals should not be used or heavy items placed on top. Blankets should not be folded as this can damage the wiring. They may be left on beds or loosely rolled up and stored in a cool, dry place.

72. Care should be taken with the cables of electric profiling beds (EPBs) since they are susceptible to damage. EPBs should be operated in line with manufacturer's instructions, regularly tested to medical equipment standards, the cables checked regularly and no items should be stored underneath. A residual current device (RCD) will improve safety by switching off electricity automatically if there is a fault, reducing the risks of electrocution and fire caused by earth faults. The best place for an RCD is built into the main

switchboard or socket outlet, as this means the cables are permanently protected. If this is not possible, a plug incorporating an RCD or plug-in RCD adaptor is an option.

Housekeeping

73. Fire risk is reduced by controlling the presence of combustible materials and ignition sources with good housekeeping. This also helps to ensure that escape routes are free from obstructions which might hinder evacuation.

74. Hoarding is a risk to the occupier and others in the building. Landlords or housing providers should take action to reduce the risk when they become aware of hoarding. The accommodation lease or rental agreement can cover hoarding given it places other residents at risk. External agencies and relatives may need to be involved to address hoarding. Serious hoarding can be linked to mental health issues so should be referred to Adult Social Care services. Local contact details can be found on the Act Against Harm website.

Step VI Fire Protection Measures

75. This step is about considering the fire protection measures that can be taken to reduce the impact of a fire. Examples include:

- Enhanced fire detection and assistive accessories.
- Fire doors.
- Fire suppression systems.
- Personal protection watermist systems.
- Staff assisted evacuation in supported housing/small care homes.

76. Information on 3rd party certification of products and services can be found in Chapter 5.

Fire Detection and Warning

77. Fire detection in residents' private accommodation is essential for detecting fire as early as possible. It will raise an alarm, giving residents sufficient time to escape. Unless there is a continuous staff presence, detection linked to a social alarm monitoring service, such as Telecare, is recommended. This allows for 2 way communication with the resident. To protect high risk individuals, a high level of coverage is required and so a LD1 system complying with BS 5839-6 will normally be appropriate. This requires a heat detector in the kitchen and smoke detectors in all hallways and all other rooms (toilets, shower rooms and bathrooms are normally excluded, unless justified by risk assessment).

78. Additional sounders and/or low frequency, square wave sounders (520Hz) may also be beneficial for those with hearing difficulties. BS 5446-3 provides further information. Visual alarms complemented by vibrating pads linked to the fire detection system for use under pillows or mattresses when asleep may be required if a person is deaf or has very impaired hearing.

79. Voice alarms giving clear instruction in the event of fire may be more appropriate where conventional alarm signals might cause confusion or distress, for example, for some dementia sufferers.

80. Part 2 of the Guidance provides further information on fire detection and alarm

systems.

Fire Doors

81. Fire doors may protect a high risk resident from fire spread within a dwelling, for example, if the individual is a persistent hoarder. Fire doors to rooms off private internal hallways (excluding toilets/bathrooms) may also be considered if evacuation is likely to be very slow . Part 2 of the Guidance provides further information and benchmarks.

Automatic Fire Suppression Systems

82. Automatic fire suppression systems, such as domestic sprinkler or watermist systems should be considered for high risk residents. These are activated by heat and usually contain or even extinguish a fire in the room of origin, providing more time for occupants to escape. A sprinkler head, however, is unlikely to prevent harm to anyone in the room of fire origin whose clothing has caught fire.

83. Retrofitting suppression systems to existing premises may not always be realistic. The benefit in risk reduction should be measured against the potential cost and disruption. As technology evolves, it may become easier and less expensive to retrofit. Each system will have its own advantages and limitations, so it is important that the fire safety objective is clear and the limitations are fully understood, particularly where systems are not verified as compliant against any recognised standard.

84. Self-contained personal protection watermist systems are also an option. They have a container of water and a pump, with a nozzle that discharges water over a defined area, such as a bed or chair. They are usually triggered by smoke detection and respond faster than conventional suppression systems to further reduce the likelihood of harm. They protect individuals in a specific location and will not have any impact beyond the protected area. Remote monitoring by an alarm receiving centre or social alarm provider is recommended to ensure SFRS are summoned quickly. Systems with a multi-sensor detector, rather than a smoke detector, can reduce the potential for false alarms.

85. Other variations are available that use heat scanning technology with rotating heads that target the fire with a jet of water mist. Triggered by a multi-sensor detector, the spray heads then scan the room using an infrared sensor, looking for high temperature readings, or an increase in readings between scans. Once the readings exceed a threshold, the head with the best "view" then directs a jet of watermist onto the fire.

86. There are currently no British Standards for personal protection watermist systems. Guidance on their use and application is dependent on manufacturer's guidelines. The Loss Prevention Certification Board has produced a standard for approval: LPS 1655: Requirements and test methods for the approval and listing of personal protection watermist systems. This does not assist in determining suitability for use, although "Guidance on the use, deployment and limitations of Personal Protection Watermist Systems in the homes of vulnerable people" has been produced by the Building Research Establishment in partnership with London Fire Brigade (BRE Global).

87. Ideally, suppression should be considered at the design and construction stage

to accommodate the changing circumstances of residents.

88. More information on suppression systems can be found in [Part 2](#) of the Guidance.

Other Options

89. Support needs can change over time and sometimes risk cannot be sufficiently reduced with the additional measures identified by the assessment. For their safety, a resident might need to move into accommodation with suppression; or where self-evacuation is not possible, to accommodation where more support is available. The vulnerable individual, family/friends, service commissioners, care providers and housing providers should jointly explore options and plan appropriately. In the case of supported accommodation, some organisations may provide additional equipment or additional staff for evacuation purposes.

Step VII Determine the level of risk

90. This stage involves considering the overall findings of the risk assessment to prepare and implement an action plan. Risk has two components: the likelihood that a fire may occur; and the potential for a fire to cause death or injury (consequence). By referring to the matrix below, the risk should be categorized as low, medium or high. Action should be taken immediately for high risk individuals.

Risk Matrix

Likelihood		Very Likely	Likely	Unlikely	Highly Unlikely
Consequences	Fatality	High	High	High	Medium
	Major Injuries	High	High	Medium	Medium
	Minor Injuries	High	Medium	Medium	Low
	Negligible Injuries	Medium	Medium	Low	Low

Step VIII Prepare and Implement an Action Plan

91. The Action Plan sets out the additional measures required to reduce fire risk, if needed. These should relate directly to the risk factors identified in the assessment. Taking forward the actions and implementing them may involve multiple agencies, such as housing providers, care providers and others. Someone (usually the person responsible for the housing) should take the lead by coordinating and overseeing activities.

92. There should always be meaningful engagement with the resident, to ensure that measures are, and continue to be, effective in reducing risk. Where individuals have particular needs, additional advice can be included in line with the findings of the person-centred fire safety risk assessment

93. Liaison between housing and care providers, local authority health and social care departments and others may take place through local Community Safety

Partnership schemes or other joint working arrangements. Partnership working has been shown to be successful in securing fire safety improvements.

Review (Step 9)

94. The risk assessment needs to be reviewed regularly to take account of changes in the resident's capabilities, which may deteriorate or vary over time. This may result in changes to the fire safety measures required. Impacts on care or support plans should also be considered. Engagement remains important, particularly where new measures impact on personal liberty.

Part 2 Premises Based Fire Safety Risk Assessment

Chapter 2: Fire Safety in Specialised Housing

Key Points

- Fire safety design of specialised housing comprising blocks of flats is based on the same principles as general needs blocks of flats.
- Each flat is a fire-resisting "box" designed on the "stay put" principle.
- In shared group homes, it is normally necessary to evacuate all residents simultaneously, some of whom may have significant assistance requirements.
- Evacuation generally takes longer in specialised housing than in general needs housing.
- Design of means of escape and fire detection and alarm systems should take account of occupancy characteristics and support the evacuation strategy.

General Characteristics

95. Specialised housing is residential accommodation which facilitates varying degrees of independent living for people with specific needs. The fire safety design of these buildings should take account of the residents' vulnerability in the event of fire.

96. Much of the specialised housing stock comprises sheltered and extra care housing in blocks of flats. Sheltered housing schemes, in particular, vary in size, design, use and complexity. They can range from a collection of self-contained bungalows or flats, with no additional on-site facilities or staff to manage the building and support residents, to larger complexes that provide communal facilities such as kitchens, laundries and lounges, with on-site scheme managers or other staff.

97. Sheltered and extra care schemes are not generally staffed at a level to assist residents to evacuate. The basic design assumption is that residents are able to escape unaided from their own flats and make their way to a place of safety, using the common means of escape. It is recognised that, for some residents, their vulnerability may make this difficult and certainly slower. In some schemes, there may be an on-site scheme manager although many rely on social alarm ("Telecare") systems linked to alarm receiving centres to provide support to residents. There may be limited day time cover with no on-site staff during the night to provide assistance to the residents in the event of a fire. Even in extra care housing schemes, with higher staffing levels and carers on-site, there is limited assistance that can be provided to residents in the event of fire.

98. Sheltered and extra care schemes are usually designed along similar lines to purpose-built blocks of flats. Communal facilities might be provided but this does not alter the fact that people are living in their own private flats. A 'stay put' strategy is usually adopted in the event of fire where the design and construction of the building satisfies the fire safety principles applied to blocks of flats.

99. In supported housing and small care homes that are more akin to single-family dwelling houses, a different approach is adopted, particularly in relation to the evacuation strategy. Many premises are former dwellings which have been

converted or extended. Residents will have their own rooms and will normally share common facilities in an environment that resembles a domestic house. As a result, fire protection features will not normally support a "stay put" approach and a simultaneous evacuation of all residents will be necessary. Staff may be needed to assist with evacuation. In premises where fire safety law applies, such as small care homes and some forms of supported housing, it is a legal requirement to have a sufficient number of nominated staff to ensure appropriate evacuation procedures can be implemented effectively.

Escape in the Event of Fire

100. In a fire situation, it should be possible to escape without external assistance before being affected by fire or smoke. Smoke reduces visibility and is toxic, causing incapacitation. Heat from the flames will also hinder escape. Recognising these hazards and providing safe escape routes underpins fire safety design in all buildings.

101. In sheltered and extra care schemes, mobility and health issues may slow a person in their escape. Consequently, the distance from a flat entrance door to a place of relative safety such as a protected stairway, protected lobby or even to a sub-dividing corridor door should, ideally, be shorter than in general needs blocks of flats.

102. While the design of means of escape and other fire safety measures is not based on external rescue, some residents may have difficulty in evacuating without a degree of outside assistance.

Evacuation and Rescue

103. It is important to distinguish between evacuation and rescue. In sheltered and extra care housing, only the flat of fire origin needs to be evacuated, at least initially. Rescue by SFRS may, ultimately, be necessary if a resident is unable to self-evacuate due to infirmity, reduced mobility or mental health. This is no different from the situation in a general needs block or a bungalow and does not imply a failure of the emergency plan for the premises.

104. Widespread evacuation of general needs, sheltered and extra care housing in the event of fire is not normally required. If it does become necessary, this may reflect a failure in fire separation between occupancies (or some other catastrophic fire safety failure).

105. In supported housing and small care homes, if assistance is required for evacuation, this should be provided by staff on the premises. This is a management responsibility and rests with whoever has control of the premises.

106. SFRS may need to rescue people from affected accommodation. They may also assist with any ongoing evacuation.

Suitability of Accommodation

107. Due to changing circumstances, a resident may become so vulnerable that they are no longer suited to their accommodation. For example, it might be more appropriate to be accommodated in premises where staff can provide assistance in the event of a fire. The vulnerable individual, family/friends, service commissioners, care providers and housing providers should jointly explore options and plan appropriately.

108. Those responsible for the safety of the residents (commissioning groups and care providers) should consider whether additional fire safety measures are necessary before offering a placement or whether the premises are actually suitable in the first place.

109. The use of a person-centred approach (see Part 1 of this Guidance) will determine what measures should be put in place for an individual in their own accommodation to reduce this vulnerability.

Fire Separation to Restrict Spread of Fire and Smoke

110. Fires are most likely to start within private accommodation. In blocks of flats, each flat is built as a fire-resisting enclosure. It is bounded by non-combustible separating walls and floors that will resist the passage of fire and smoke for a period of time. There are also separating walls and floors between individual flats and between flats and other parts of the building, helping to contain the fire and smoke to the flat of origin.

111. Fire separation is key to the 'stay put' strategy (NB separation is a term used in Scottish building standards. It is often referred to more generally as 'fire compartmentation" in the UK). Separation normally ensures that a fire will not spread to other parts of the building although this can be affected by factors such as abnormal fire loading within a flat, combustible wall cladding, unprotected voids/ducts in the building, or defects in separating walls or floors.

112. The building's structural elements must also have sufficient fire resistance to prevent fire spread and structural collapse for a reasonable period.

113. In supported housing and small care homes which are akin to dwelling houses, the level of protection provided to escape routes is likely to be lower than that of separating walls and floors in a block of flats. However, those escape routes should be adequately protected to allow for a complete evacuation to take place.

Evacuation Strategies – Stay Put vs Simultaneous

114. Blocks of flats are designed to facilitate a "stay put" strategy - only residents at immediate risk need to escape while those in flats remote from the fire are normally safe to stay where they are. The principle applies equally to sheltered and extra care blocks of flats.

115. 'Stay Put' is the following approach:

- When a fire occurs within a flat, the occupants alert others in the flat, make their way out of the building and summon SFRS.

- Residents in the common areas should not return to their flats if the communal fire alarm system operates. They should make their way to a place of safety and summon SFRS. This may be an external assembly point or, to avoid exposing vulnerable residents to inclement weather, a relatively safe area, such as a communal lounge on the ground floor with an exit to open air.

- All other people in the building not directly affected by the fire would be expected to 'stay put' and remain in their flat unless directed to leave by SFRS or the Police.

- Any person not directly affected by fire or smoke can leave the building if they wish, although doing so could place them at greater risk.

116. Occupants evacuating a flat where there is fire may alert their neighbours so that they can evacuate if they feel threatened.

117. SFRS will give initial advice over the phone to residents who dial 999. Upon arrival, firefighters will take control of the incident and may advise further, as necessary. There may be fires where, for operational reasons, SFRS decides that a partial or total evacuation is necessary. These uncommon situations include where a fire spreads beyond the flat of origin as a result of failings in the construction.

118. In supported housing and small care homes, there is usually inadequate separation to support a 'stay put' strategy, and so a "simultaneous evacuation" of all residents is needed. This requires a common fire detection and alarm system and a suitably protected means of escape to allow all residents to hear the alarm and escape safely.

119. Simultaneous evacuation is sometimes advocated in sheltered and extra care housing schemes where there are doubts over construction, particularly fire separation. Resolving concerns and addressing deficiencies is usually more appropriate than changing the evacuation strategy. However, on rare occasions it may be necessary to temporarily adopt a simultaneous evacuation strategy until major deficiencies can be remedied (such as the use of inappropriate external cladding systems or widespread failure of fire separation). Where this is the case, specialist advice should be sought and SFRS consulted.

Fire Detection and Alarm Systems

120. Early warning of fire is essential to ensure that residents can evacuate safely in the event of fire. Domestic smoke alarms have been particularly effective in reducing fire casualties. Smoke and heat alarms should be provided extensively in all new specialised housing and should be an objective for existing schemes. Additional protection may be identified for an individual as part of a person-centred fire safety risk assessment.

121. If a fire occurs, early attendance by SFRS will help ensure early extinguishment of a fire, reducing the likelihood of the need to evacuate other residents where a "stay put" policy applies. If wider evacuation is necessary, it also enables SFRS to initiate this at an earlier stage, so compensating for the slower response of some older and mobility impaired people.

122. Fire detection within flats is important in this respect. Early attendance by SFRS is achieved by remote monitoring of the detection at an alarm receiving centre, normally via a social alarm ("Telecare") system, which ensures a call is made to SFRS without delay. Social alarms normally allow for 2 way communication which also helps to filter out false alarms from individual flats.

123. Sheltered and extra care housing often have a separate communal detection system for the common areas because they have shared facilities, such as lounges and laundries. These systems should also be monitored remotely. They provide warning to those in the common parts who should then leave the building immediately (its purpose is not to alert the occupants of flats who should continue to "stay put" if unaffected by fire or smoke).

124. In sheltered schemes without common facilities, a communal system may not be required. This is why such systems are not normally required in general needs block of flats, although there may be a need for detection to operate automatically-opening vents for smoke control purposes (these do not raise an alarm).

125. A single fire detection and alarm system could be configured to provide a local warning for residents in flats, warning in the common areas of a fire in those areas, and early summoning of SFRS by an alarm receiving centre. However, as the system would include smoke detectors in flats, filtering arrangements would be required by either an on-site scheme manager or an alarm receiving centre to prevent the summoning of SFRS to false alarms.

126. A communal fire detection and alarm system will always be necessary in supported housing to support a simultaneous evacuation strategy.

127. There should also be appropriate management arrangements in place. Residents should not normally be required to silence and reset a system. They must understand how to respond to fire alarms, and should have a means to contact someone who can respond quickly if the system is activated when there are no staff on site. This information should be displayed prominently next to the fire alarm control panel.   In some supported housing, there will be reliance on carers to respond to alarm signals.

128. More information on fire detection and alarm systems and other fire safety measures can be found in Chapter 5.

Chapter 3: Risk Management – Assessing Premises Based Fire Risk

Key Points

- The purpose of assessing risk is to evaluate the risk to people in the building from fire and determine appropriate fire safety measures.
- The assessment will normally only consider the common areas and limited, specified parts of flats only.
- Concerns regarding risk to individual residents within their own accommodation should be followed up with a person-centred fire safety risk assessment (see Part 1 of the Guidance).
- Intrusive checks (involving exposure of construction) will only be necessary where there is justifiable concern regarding structural fire precautions.
- Risk assessors must be competent. Where external specialists are chosen, certification or registration schemes can provide some assurance.
- The findings of fire safety risk assessments need to be actioned.
- The assessments should be reviewed regularly and when circumstances change or after a fire or near miss.
- The premises based fire safety risk assessment is a legal requirement for premises which fall within the scope of fire safety legislation (see Part 4 of the Guidance).

Introduction

129. Fire risk is a combination of the likelihood of fire occurring and the consequences to residents and others who may be affected by a fire.

130. A premises based fire safety risk assessment involves an organised and methodical look at the premises, the potential for a fire to occur and the harm it could cause to people. The existing fire safety measures are evaluated to establish whether they are adequate or if more requires to be done. Fire safety measures include not just physical measures, but also standards of management.

131. Despite being referred to as "premises based", the focus of the premises based risk assessment is still life safety: property protection and business continuity are outside the scope of this Guidance. It is a more technical process than the person-centred approach, and requires an understanding of the application of fire safety principles to the built environment.

132. The scope of the premises based risk assessment is far broader than a person-centred assessment, going beyond a single individual and unit of accommodation. It does not consider the specific characteristics of every vulnerable resident, other than possibly in very small supported housing premises (the number of residents in a sheltered or very sheltered complex would make this impracticable). It should, however, consider the generic physical and cognitive characteristics of the residents.

133. There is an overlap between the person-centred and premises based

approaches, particularly where measures provided within private accommodation impact on others elsewhere in the building. Examples include:

- Flat entrance doors protect the shared common areas outside the flats from a fire inside a flat.
- Similarly, reliance was sometimes previously placed on fire doors inside flats to protect not only the flat's internal hallway, but also the shared common areas outside the flats.
- Ventilation systems i.e. common kitchen or bathroom extract arrangements can be a route for fire-spread between flats.
- Suppression systems will normally contain a fire within a flat/room, thereby protecting both the flat and the rest of the building from firespread.

134. The premises based fire safety risk assessment should confirm there are arrangements for carrying out person-centred risk assessments (which ensures those at greatest risk are adequately protected in their own private accommodation).

135. Where fire safety legislation applies (see Part 4 of the Guidance), it is a legal requirement to carry out this type of fire safety risk assessment and to act on its findings. If individual person-centred risk assessments are not undertaken, the premises-based risk assessment should ensure it considers the need of persons who are identified as being especially at risk from fire. Personal Emergency Evacuation Plans (PEEPs) may also be necessary.

136. Where fire safety law does not apply, it is recommended that those responsible for the premises carry out an assessment of fire risk in the building, as part of their corporate responsibility.

137. As with the person-centred approach, measures to address shortcomings in fire safety should be proportionate to the risk. The cost, practicality and benefit gained are all taken into account. If justified by risk, it is possible for a standard higher than that required by Building Regulations to be necessary.

Extent of Fire Safety Risk Assessments

138. There should be a specific fire safety risk assessment of the premises. A generic risk assessment will not be appropriate.

139. A fire safety risk assessment will cover:
- The common escape routes and other fire safety measures.
- An examination of entrance doors to resident accommodation.
- The separating construction between private accommodation and the common area, so far as reasonably practicable.
- The potential for spread of fire on the external envelope of the building.

140. The assessment will focus mainly on the common areas. It is unlikely to include a detailed consideration of risk in residents' private accommodation. It should take account of any features or measures in private accommodation which may have an impact on the safety of the building as a whole. This could include servicing/maintenance of gas/electricity supplies; provision of automatic detection systems; potential breaches in fire separation.

141. Where there are demountable false ceilings in the common areas, a sample of

ceiling tiles should be lifted to check fire stopping where services or pipes pass through walls/floors. A sample of service risers should be checked for measures to stop vertical fire spread. An inspection of roof voids should also be carried out to ensure appropriate barriers against fire spread are provided.

142. Fire safety risk assessment does not routinely involve opening up construction. However, a degree of intrusive inspection might be carried out on a sample basis if serious issues in structural fire protection are suspected, such as inadequate fire separation or poor fire stopping. This is usually a one-off exercise which requires a contractor to open up construction and make good after the inspection. Before starting work, the risk of disturbing asbestos should be considered.

143. Intrusive inspection in private accommodation is best carried out in those that are vacant. Effective fire separation between individual flats, and between flats and common areas, is essential for a "stay put" policy to be safe and appropriate. The premises based risk assessment must include an assessment of fire separation since defects would place vulnerable residents at significant risk.

Competence of Fire Risk Assessors

144. Risk assessors must be competent. Whoever carries out the assessment should have skills and knowledge commensurate with the complexity of the premises and the vulnerability of the residents. Building owners or management should decide whether their employees have the capability to assess fire risk. If they do not have sufficient resources or skills in-house, they can arrange for a suitably qualified external person or company to carry out an assessment.

145. It is important to know that an external fire risk assessor is competent but this can be difficult to ascertain. Those operating in the fire sector or who have previous fire service experience may not necessarily be competent risk assessors.

146. Using registered or third-party certificated persons or firms to carry out fire safety risk assessments is one way to establish competence. The Scottish Government and SFRS recommend selecting an assessor or company that is third party certified by a United Kingdom Accreditation Service (UKAS) accredited Certification Body or an assessor registered with a Professional Registration Scheme. SFRS maintains a list of UKAS and other recommended schemes on its website. SFRS has not assessed and does not endorse any individuals or companies participating in these schemes. Assessor participation in these schemes can offer a degree of assurance that the assessor (individual or company) has met the professional requirements.

147. In selecting a fire risk assessor, their competence in the principles of fire safety in specialised housing should be checked.

148. When commissioning a risk assessment from an external consultant, the following should be specified:

- The extent of the fire safety risk assessment required.
- The style and format required for the report.
- The improvement plan will show priorities and timescales.

- The report should differentiate between recommendations that are important to safety and those that are not essential and are a matter of good practice.

149. The conclusions from a risk assessment should be supported by reasoned judgement. The following types of conclusion from a fire risk assessor should be challenged:

- Generic recommendations that are not specific to the premises.

- Attempts to transfer risk away from the risk assessor.

- Decisions that appear to be over precautionary or risk-averse.

A Methodology for Assessing Fire Risk

150. Below is guidance on one approach to fire safety risk assessment (Figure 1). There is no requirement for a particular style or format for an assessment or recording the findings. There are other equally acceptable approaches and formats.
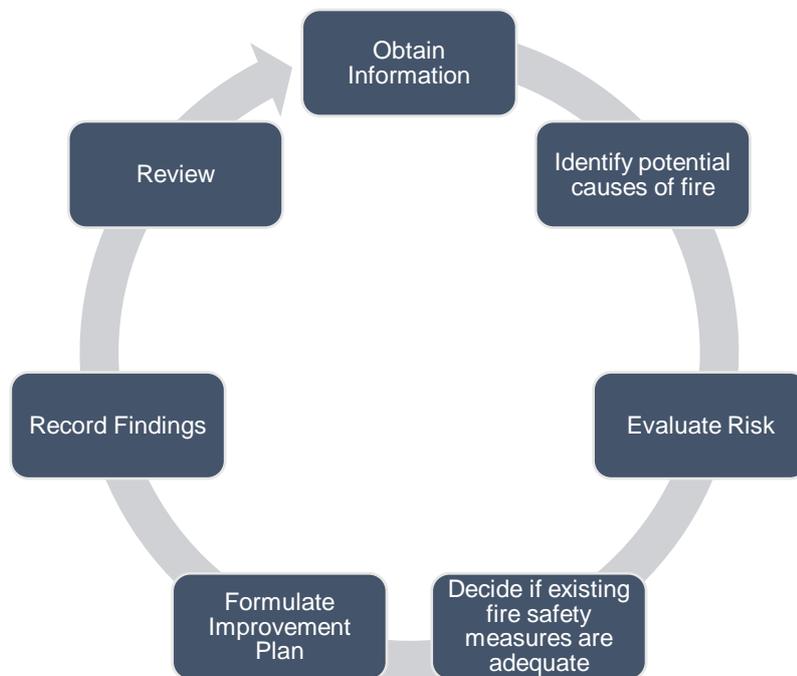
Figure 1 Fire safety risk assessment process

Step 1: Obtain information

151. The following information will be relevant for fire risk and control measures:

- The number of floors and approximate area of each floor.
- Ancillary uses of the building, such as community activities and care services.
- The number and profile of the residents (identify any residents who have difficulty in self-evacuating. Make reference to the provision of person-centred risk assessments for higher risk residents / PEEPs).

- The presence of staff, such as a sheltered housing scheme manager or care/support staff.
- Staff training.
- Previous history of fires.
- The result of any previous examination of external cladding.
- How fire safety in the building is managed.
- The procedures for residents to follow in the event of fire.
- Testing and maintenance of fire safety systems and equipment.
- Arrangements for routine inspections of the building.
- Arrangements for engagement with residents.
- The process for identifying those who require a person-centred fire safety risk assessment.

Step 2: Identify potential causes of fire

152. For a fire to start, three components are needed: a source of ignition, fuel and oxygen. If one of these components is missing, a fire cannot start. Taking steps to avoid the three coming together will reduce the chance of a fire. Reducing the quantity of oxygen (smothering) or fuel (starvation) may restrict its development.

153. The premises as a whole should be examined to identify potential ignition sources, materials that might fuel a fire and the circumstances where a fire could start. Specific measures to prevent fire or protect individuals from fire in their private accommodation should be identified through the person-centred process (see Part 1 of the Guidance). Measures such as fire detection and warning are likely to involve a building-wide strategy, even where separate domestic systems are provided within flats. These would normally be considered primarily through the premises based risk assessment, with refinements or additional requirements being identified through the person-centred assessment.

154. Potential causes of fire and measures to eliminate or reduce the likelihood of each cause should be considered, including:

- Fire raising.
- Electrical faults (in fixed wiring and any equipment provided).
- Smoking.
- Cooking.
- Use of portable heaters.
- Contractors' activities.
- Heating installations.
- Lightning.
- Housekeeping.
- Storage and charging of mobility scooters.

Step 3: Evaluate the risk

155. The risk should be evaluated and a judgement made on the adequacy of fire safety measures. The two components of risk should be considered: the likelihood that a fire may occur; and the potential for a fire to cause death or injury.

156. Having identified potential causes of fire, the chances of a fire occurring should

be considered. The consequences of a fire and extent of the risk to people should also be considered. In evaluating the risk, it is necessary to consider possible scenarios such as:

- The potential for fire to affect escape routes.
- Fire or smoke spread through a building via routes such as vertical shafts, service ducts, service penetrations, ventilation systems, cavities, voids, open doors and external wall cladding systems.
- How generic characteristics will affect how residents are likely to respond.
- Fire and smoke affecting the behaviour of residents.
- Fire and smoke spread into the premises from exterior fires.

157. If there have been any previous fires in the premises, considering the circumstances and lessons learned may assist with evaluating risk.

158. Principal fire safety measures to consider are set out in Chapter 5 but include:

- The means of escape from fire.
- Fire separation, particularly the enclosure of private accommodation within fire-resisting construction. This should ensure adequate separation between units of private accommodation and between private accommodation and the common areas.
- Flat entrance doors, which should be fire-resisting and self-closing.
- Protection of stairways from fire in adjacent areas.
- Travel distance from private accommodation to the nearest stairway or final exit.
- Smoke control within the common areas.
- Emergency escape lighting.
- Fire escape route signs.
- Fire suppression installations provided.

Step 4: Decide if existing Fire Safety Measures are adequate

159. Existing fire safety measures to prevent fire and provide protection in the event of fire are assessed to decide if they are adequate, or if more needs to be done. The level of fire safety measures provided in premises should be proportionate to the level of risk to people's safety and will therefore vary between premises (see Chapter 5).

160. Measures to assist SFRS, such as rising fire mains and firefighters lifts may have been required under Building Regulations at the time of construction.

161. Maintenance of fire safety measures should be verified (see Part 3 of this Guidance). This is a requirement of the Fire Safety (Scotland) Regulations 2006 for measures provided for the safety or use of firefighters.

Step 5: Formulate an Improvement Plan

162. An Improvement Plan should be produced, setting out the actions from the risk assessment. This is a list of preventative, protective or managerial measures to ensure that fire risk is maintained at, or reduced to, an acceptable level. It may be worth consulting with residents on any proposed improvements. The actions should be reasonably practicable, taking cost, effort and risk into account. They should be prioritised and have timescales for completion unless all measures are relatively minor and can be implemented in a short time.

163. If existing fire safety measures are adequate and no improvements are necessary, this should be recorded in the fire safety risk assessment findings.

164. Improvements involving building work should be done in accordance with Building Regulation procedures. The Improvement Plan should also include any specific measures and precautions that need to be taken during upgrade work.

Step 6: Record the findings

165. The significant findings from the fire safety risk assessment, and any action taken, should be recorded and retained. This is a legal requirement for those premises where fire safety law applies and which have either 5 or more employees, or where a licence (such as an HMO licence) or registration under an enactment is required (for example, care services registered with the Care Inspectorate). Although no particular format is required, a template is provided in Annex 5.

166. The significant findings, including any improvement plan, should be shared with the landlord / housing provider. A summary of the significant findings or, if required, a full copy of the completed fire safety risk assessment should also be available to residents on request.

Step 7: Review

167. The fire safety risk assessment should be reviewed regularly. A date for the next review should be set at the last assessment. It should also be reviewed:

- When material alterations take place (where changes are proposed, the consequence to fire safety in the premises should be considered before the change is introduced).
- When there is a significant change in the matters that were taken into account in the risk assessment.
- When there is a reason to suspect that the original assessment of risk is no longer valid.
- After a fire or near miss.

168. A review is not necessarily a repeat of the entire fire safety risk assessment process. A shorter review exercise might be carried out regularly, with a full risk assessment completed less frequently.

169. As a general guide, for low risk sheltered housing, an annual review might be appropriate, with a new fire safety risk assessment every three years. For higher risk accommodation, taking into account considerations such as resident vulnerability, building age/complexity, management controls, a full annual risk assessment might be more appropriate.

170. Reviews may be carried out by suitably trained, competent in-house staff, as they are about identifying changes and checking progress of the improvement plan. This can reinforce ownership of fire safety management, as well as developing knowledge and a positive fire safety culture.

Chapter 4: Risk Management – Fire Prevention

Key Points

- Preventing fires and implementing measures to protect people when fire occurs are equally important.
- The most likely place for fire to start is within a flat
- Fires in common areas can be particularly dangerous but effective housekeeping reduces fire risk.
- There should be a clear policy on whether common areas remain free from combustibles with a 'zero tolerance' approach, or are subject to 'managed use'.

Introduction

171. Preventing fire is fundamental to good fire safety management and reduces risk. It is particularly important where residents have difficulty evacuating in the event of fire or where the likelihood of a fire starting is high. In sheltered and extra care housing, it can be challenging for housing providers, management or landlords to influence the behaviour and safety of people living in their own self-contained accommodation. In such cases, care / support workers or family members may be able to help with fire prevention as part of the person-centred approach set out in Part 1 of the Guidance.

172. This Chapter offers guidance mainly on fire prevention in communal and other areas under management / landlord control. Common causes of fire and possible measures to control or eliminate them are set out below. Risk assessors should consider these but also be alert to other hazards or new hazards that might emerge in the future.

Kitchen and Cooking Facilities

173. Communal facilities can include kitchens, restaurants and cafes. For these, separate fire safety risk assessments by external companies may be required.

174. Communal facilities may also be provided for the use of residents, volunteer groups, friends or relatives. There should be policies and procedures for the safe use of equipment and for cooking in general.

175. In supported housing, the use of kitchens by vulnerable residents may be an integral part of any care package, or part of day to day living. Staff may be available on site to assist or supervise residents. Shared kitchens and the type of equipment provided must be considered in fire safety risk assessments. Automatic isolation devices can improve safety; for example, isolation switches can control the use of cookers during periods where supervision is not available. Gas or electricity cut-off switches (linked to timers or sensors) and portable firefighting equipment, including fire blankets may be necessary. Replacing gas cookers with safer alternatives such as induction hobs might be appropriate in some supported housing.

176. Regular inspection, cleaning and maintenance of appliances and extract systems is important, particularly if deep fat frying occurs.

Smoking

177. Smoking in workplaces and common areas presents a fire risk and should be avoided. Even where prohibited, residents may try to smoke in secret, resulting in increased risk. "No Smoking" signage should be provided in common areas. Engagement with residents to reaffirm the no-smoking policy may be necessary.

178. In designated smoking areas, receptacles should be emptied regularly. Fires have been known to occur as a result of a build-up of discarded cigarette ends.

179. Smoking policies should also take account of e-cigarettes and charging facilities. Defective and non-regulated charging devices have been known to cause fires.

Electrical

180. Faults in wiring or appliances can result in overheating or arcing. These faults are often evident before a fire occurs. Periodic testing should be undertaken by suitably competent persons and the inspection, test and remedial work undertaken in accordance with current IET Wiring Regulations (BS 7671). Arc Fault Detection Devices can mitigate the risk of fire in sleeping accommodation and are designed to operate (trip) when a dangerous arc is detected. They can be installed in distribution boards and consumer units to protect final circuits. BS 7671 contains further information, including details on exclusions for medical locations.

181. Fixed wiring in workplaces, supported housing and in the common parts of sheltered and extra care housing should be subject to periodic inspection and test at periods not exceeding 5 years.

182. Housing providers should have the fixed mains electrical installations in private accommodation inspected and tested regularly. Where providers have limited control, residents should be encouraged to make arrangements. The frequency of inspections will depend on the age of the property and installation, the duration of the tenancy and the nature of the tenant. As a guide, an interval of 10 years may be appropriate for privately owned accommodation; an interval of 5 years for rented accommodation.

183. Where tenant turnover is high, it is advisable to have a visual inspection of the accessible parts of the electrical installations after each tenancy.

184. Portable electrical appliances used in areas under management control should be subject to inspection and test on a regular basis. Further guidance can be found in the IET Code of Practice for In-Service Inspection and Testing of Electrical Equipment.

185. Tenants' and Residents' Associations and any others outwith management control, should be encouraged to have suitable inspection and testing regimes for their portable electrical appliances.

186. Residents should not be permitted to use their extension leads and adaptors in common areas. Extension leads are often used inappropriately, for example, to charge mobility scooters or power Christmas lights in common areas using adapters which power other items, including portable heaters.

187. Where possible, additional electrical sockets should be provided to avoid the

use of extension cables and adaptors. If used, they should comply with industry approved standards, be subject to portable appliance testing and be fixed securely to prevent trip hazards.

188. Part 1 has guidance on Electric Profiling Beds (EPBs) and electric blankets.

189. Some additional measures to reduce the likelihood of an electrical fire are:

- Electrical distribution boards in secure cupboards or rooms, with no combustible storage.
- Key-operated socket outlets in common areas, including lounges and kitchens, to restrict access to cleaners and other legitimate users.

190. Photovoltaic (solar) panels may be in place above the roof covering or form part of the roof covering. Panels which form part of the roof covering should be fire-stopped on the line of any separating wall. Further information can be found in the free to download document RC62: Recommendations for fire safety with photovoltaic panel installations.

191. The Electrical Safety First website hosts a portal to register electrical appliances and provides information on product recalls. Registration is recommended to receive the latest safety and recall information.

Heating Systems

192. Communal heating and ventilation systems can be a potential source of ignition and provide a route for fire spread through common ducts and risers. Planned preventive maintenance will reduce risk. Gas-fired systems should be subject to annual inspections and tested in accordance with gas safety regulations.

193. Where responsibility rests with residents, they should be encouraged to have their heating systems serviced regularly and gas heating checked every year. Landlords are required to arrange annual gas safety checks for rented properties.

194. The use of portable heaters in common areas should only ever be a temporary arrangement. They should be suitable for their intended use and, ideally, fixed to the walls to prevent them from being moved or knocked over. All portable heaters should be inspected regularly and electrical heaters tested as part of the portable appliance testing (PAT) regime. Oil-filled radiator heaters are safer than convector or fan heaters, which should be avoided where possible. Portable LPG gas heaters or open bar heaters should never be used.

Housekeeping

195. Good housekeeping is fundamental to reducing risk in common areas.

196. Common areas are sometimes viewed by residents as amenity areas where they can store personal items, furniture and seasonal decorations. Housing providers may add items such as door mats, pot plants, pictures and seating to promote the image of a homely environment.

197. Unwanted belongings and rubbish are sometimes dumped in common areas. This should never be tolerated and management policies and controls should be in place to prevent this.

198. The ignition of combustible material within common corridors, stairways and landings will give rise to smoke in escape routes and the possibility of fire-

spread into private accommodation.

199. Controlling the presence of combustible materials and ignition sources reduces the potential for accidental fires. It also reduces the potential for deliberate fires.

200. Keeping escape routes clear of obstructions ensures evacuation or access for firefighters is not impeded. This is particularly important for single stairway buildings or "dead end" corridors which offer no alternative means of escape. Residents have a duty to keep common areas free from dangerously combustible items and obstructions under The Civic Government (Scotland) Act 1982 (see Part 4 of the Guidance).

201. Fire risk can vary significantly depending on the inherent properties of the items. Not all items are either easily ignitable or likely to give rise to a serious risk if ignited in isolation. Whilst this suggests that some items can be present in common areas without unduly exposing residents to risk, it can be difficult for housing providers to manage common areas appropriately where some items may be permitted and some not. Unrestricted use of the common areas will not be acceptable.

202. Therefore, it is necessary to adopt either a 'zero tolerance' policy or a 'managed use' policy. With a 'zero tolerance' approach, residents are not permitted to keep personal items, in the common areas. No exceptions apply. The common areas are sterile areas, kept free of combustible material, ignition sources and obstructions at all times. This is not an approach that could be applied to most supported housing or small care homes. However, in sheltered or extra care housing, benefits include:

- It is a simple policy to adopt.
- It reduces the risk of accidental and deliberate fires in the common areas.
- There is no ambiguity so residents know where they stand.
- It is easier to 'police' when carrying out inspections.

203. There are, however, disadvantages:

- It does not take into account the specific circumstances of residents, so may not be risk proportionate.
- It penalises those who manage their common areas effectively.
- It prevents residents from personalising their living environment.

204. A 'zero tolerance' policy should always apply:

- When there is doubt about the ability of residents to follow a 'managed use' policy.
- In an escape stairway that is of timber construction.
- Where the standard of fire protection does not support a "stay put" policy.
- Where deliberate ignition is a concern.

205. The alternative is a 'managed use' approach. This places restrictions on the items allowed in the common areas to limit fire loading and ease of ignition.

206. In supported housing, a "zero tolerance" approach is not realistic and so a "managed use" policy is normally adopted. To maintain a homely environment, pictures, plants, tables and other small items of furniture are normally acceptable. Pot plants and door mats may be allowed outside front doors. Protected routes and stairways should be kept free of obstructions and

significant fire risks, such as portable heaters or cooking facilities. Storage cupboards in protected stairways should be kept locked shut.

207. When adopting a 'managed use' policy:

- Ensure there are clearly defined 'do's and don'ts' for residents.
- There should be a suitable standard of fire protection throughout.
- Particular care should be taken when applying it to situations such as single stairway buildings and "dead end" corridors, where it may not be appropriate.
- Limit it to buildings in which the main elements of structure are non-combustible.
- Only apply it to buildings which have effective security, such as access control.
- Reduce the potential for inappropriate storage by providing communal storage facilities, preferably close to residents' accommodation.
- Never allow combustible waste or recycling storage in common areas since even short term storage poses a risk.
- Manage the type and location of furniture/seating.
- Never allow charging of mobility scooters, batteries or other electrical equipment in common areas. Consider providing dedicated rooms for mobility scooter charging, suitably fire separated from the rest of the building (see Annex 7 for more information).

208. The 'zero tolerance' approach may appear more straightforward to apply but if residents are inconvenienced, they may not abide by the policy. Engaging with residents and encouraging them to follow the policy can be effective.

209. Regular inspection is key to maintaining good housekeeping. Landlords should monitor the situation to check compliance with the policy.

210. Higher risk ancillary rooms that adjoin escape routes, such as communal boiler rooms and electrical switch rooms, should be kept free of combustible material as there is a risk that a fire could eventually impede escape. Storerooms in common areas should not contain LPG cylinders, propane or flammable liquids.

211. Policies and procedures should control the use of equipment in community and store rooms. Sheltered schemes often store discarded furniture and old electrical goods which may be overlooked for inspection and testing.

212. In shared laundries, filters fitted to tumble dryers should be cleared regularly. Gas-fired tumble dryers should be maintained in accordance with the manufacturer's recommendations. Checklists, incorporating other routine tasks, can be useful and records should be kept. To reduce the potential for spontaneous combustion, laundry should not be over-dried in a tumble drier. It should be removed immediately, separated and then folded. This is particularly important if laundry has previously been impregnated with emollient cream or other flammable oils.

Mobility Scooters

213. There has been a marked increase in the use of mobility scooters, particularly in sheltered and extra care housing schemes. They can improve quality of life and, for some people, they may be the only way to travel beyond their

accommodation.

214. Storing mobility scooters in common areas should be avoided, wherever possible. Charging them in the common areas should never be allowed. Fires involving mobility scooters can produce a lot of smoke and heat. Escape routes may be compromised, placing residents at significant risk. Fires involving mobility scooters have resulted deaths and injuries.

215. The most common causes of fires are:

- Faults in electrical equipment/wiring.

- Faults in the charging equipment (which is more likely during the charging process itself).

- Wilful fire raising.

216. Facilities for storing and charging mobility scooters should be considered at the design stage for new premises. A lack of facilities can present a real challenge for existing premises. In sheltered complexes, scooters are often left next to flat entrance doors on protected escape routes or within protected stairways. The situation can be even more difficult in supported housing. If it is not possible to provide adequate facilities, it may be more appropriate to hire vehicles. Schemes such as 'Shopmobility,' provide for delivery of vehicles to hirers' homes.

217. The storage and charging of mobility scooters must be risk assessed and the likelihood and consequence of a fire evaluated. This Guidance considers a range of possible options and risk reduction measures (see Annex 7).

Policies and Procedures

218. Housing providers should have clear policies and procedures for mobility scooters which should cover:

- Any adaptations made to the premises.

- Storage and charging facilities provided.

- Maintenance requirements.

- Ongoing management and control.

219. Residents should be made aware of the policy and any restrictions that apply. For example, they may need permission to use, store and charge mobility scooters on the premises.

Furniture and Furnishings

220. Easily ignitable upholstered furniture, furnishings and textiles should be avoided in the common areas. In general, furniture should be resistant to Ignition Source 5 of BS 5852. BS 7176 offers further guidance for upholstered seating.

221. Domestic furniture and beds should comply with the Furniture and Furnishings (Fire) (Safety) Regulations 1988, as amended. The ignitability and flammability of bedding, mattresses and curtains should be considered in supported housing and as part of a person-centred approach in other forms of specialised housing (see Part 1 of the Guidance).

Fire Raising

222. Measures to reduce fire raising include:

- Good physical security and access control.
- Effective lighting (externally and in the common areas).
- CCTV on entrances and external facades.
- Keeping common areas free from combustible material.
- Vigilance by residents, staff and contractors.

223. There can be conflict between security and fire safety. Measures taken to restrict access for security must not prevent people from escaping easily in a fire or interfere with the operation of fire safety measures. Equally, home security measures should not hinder evacuation or access by SFRS.

224. Advice on crime prevention in the home is available from the police.

225. If a resident has a history of fire raising, measures may be needed to restrict access to materials that can be used to start fires.

Medical Gases

226. Medical gases, including oxygen, may be stored or used in private accommodation or in the common areas.

227. These gases are not inherently flammable but cylinders will present an explosion risk if exposed to extremes of heat and fire. Medical oxygen can present an additional risk; if leaks occur, it can create an oxygen rich atmosphere that will increase the intensity of a fire. In confined, unventilated rooms, it can increase the combustibility of materials which is a risk near potential ignition sources, such as smoking and cooking.

228. Where possible, cylinders should be stored outside in a well-ventilated, secure location. If stored inside, the numbers should be kept to the minimum required for normal day-to-day use. Rooms/cupboards used for storage should be well ventilated, kept secure and have appropriate signage.

229. Cylinders should not be stored in combination with combustible or flammable materials, for example, alcohol hand gels, or materials containing, or contaminated with, oils or grease. Empty cylinders should be stored separately from full cylinders.

230. A premises information box should be provided near the main entrance for SFRS use. It should be easily accessible and hold information on where cylinders are stored or used. Risk information may also be held by SFRS on data systems within fire appliances.

231. The information should be kept current. Details on who uses medical gases can change frequently. Warning signs on residents' accommodation also needs to be closely managed.

Other Causes of Fire

232. An external fire, near a building could affect its external façade. Therefore, vehicles, temporary structures, and materials should not be sited close to the exterior of the building. Waste skips and combustible materials associated with building works should be at least 6m away. Building works and contractors

operations are considered further in Part 3 of the Guidance.

233. Retrospective installation of a lightning protection system is unlikely to be required in existing specialised housing. Existing systems should be subject to regular inspection and testing in line with BS EN 62305.

Chapter 5: Risk Management – Fire Protection

Key Points

- Benchmarks are used to assess the standard of existing fire safety measures.
- Buildings may sometimes need upgrading to current benchmarks to address unacceptable risk.
- When upgrading fire safety measures, fire protection products and services should be fit for purpose and properly installed.
- Third party certification schemes are available for many products and services.

Introduction

234. This Chapter is about assessing physical fire safety measures which are designed to protect people in the event of fire. Measures required where a "stay put" policy applies are significantly different to those where a "simultaneous evacuation" policy applies.

235. The measures described in this Chapter are benchmarks, not prescriptive standards. They should be used to assess whether existing measures are appropriate. The aim should be to achieve an integrated "package" of fire safety measures. Care should be taken not to consider any specific fire safety measure in isolation.

236. It is often possible to minimise cost by delaying work that is not of an immediate priority to coincide with capital maintenance programmes. Depending on risk and priority, it may be possible for works affecting private accommodation to be scheduled for when the premises are vacant, avoiding disruption for vulnerable residents.

Methodology for using Benchmarks

237. It is important to compare existing standards against appropriate benchmarks, before making judgements about the adequacy of the fire safety measures.

238. The standards that applied when the premises was built should be established to determine how far removed they are from what is acceptable today, and whether that gives rise to an unacceptable level of risk.

239. There have been many variations in the fire safety design of domestic buildings over time. For example, since May 2005, automatic fire suppression systems have been a requirement in all new sheltered housing complexes.

240. With older premises, it may be difficult to discern the original design intent and whether it has been preserved or altered. For example, fire separation can be difficult to assess, given that elements of structure are often hidden and inaccessible.

241. Upgrading to current benchmarks must always be justified on the basis of risk, taking into account the time, cost and disruption involved. They are not standards to be applied prescriptively.

Third-party Certification

242. Fire safety products and related services should be fit for purpose, properly

installed and maintained in accordance with the manufacturer's instructions or a relevant standard.

243. Third-party certification schemes provide an assurance of quality, reliability and safety. Goods and services that are not third-party approved are not necessarily less reliable, but there is no obvious way in which this can be demonstrated.

Fire Separation in Sheltered and Extra Care Flats ("stay put")

244. Fire separation restricts fire and smoke spread between areas in different occupation, such as between individual flats and between flats and common areas. A flat's fire-resisting enclosure should include:

- The flat entrance door.
- Internal windows into an access corridor.
- Glazing above or around the flat entrance door doorways.
- Hatches in walls for access to read meters or for deliveries.

245. A 'stay put' strategy relies on adequate separation so that only the occupants of the flat of fire origin would need to evacuate, while the occupants of flats unaffected by a fire should be safe to remain in their flats. Design guidance recommends the following:

- Separating walls and floors may be constructed from combustible materials provided the appropriate fire resistance duration is maintained (wall linings and insulation used in a cavity should achieve European Classification A1, A2, or B).
- Separating walls and floors between individual flats and between flats and any other part of the building in common occupation, including common access corridors, to have a minimum fire resistance of 60-minutes.
- A separating wall enclosing a lift well to have a minimum fire resistance of 60-minutes (NB A platform lift constructed in accordance with the guidance in BS 6440 need not be enclosed by separating walls or separating floors).
- Self-closing fire doors in separating walls to have a minimum fire resistance of 30-minutes.
- Junctions between separating walls and separating floors and other parts of the building should be designed and constructed in such a way to prevent a fire in one part of the building flanking the separating wall or separating floor and entering another part of the building under different occupation, including any solum space or roof space.

246. The lines of separation between flats located on the top floor of a building should extend through the roof void in a continuous vertical plane to the underside of the roof (see Figures 2 and 3). This ensures the fire-resisting 'box' principle extends into the common roof voids, preventing fire spread between flats via the void, and from a flat into other areas of the building (see Figures 4, 5 and 6). Cavity barriers may not provide adequate separation; placing them at regular intervals is unacceptable.
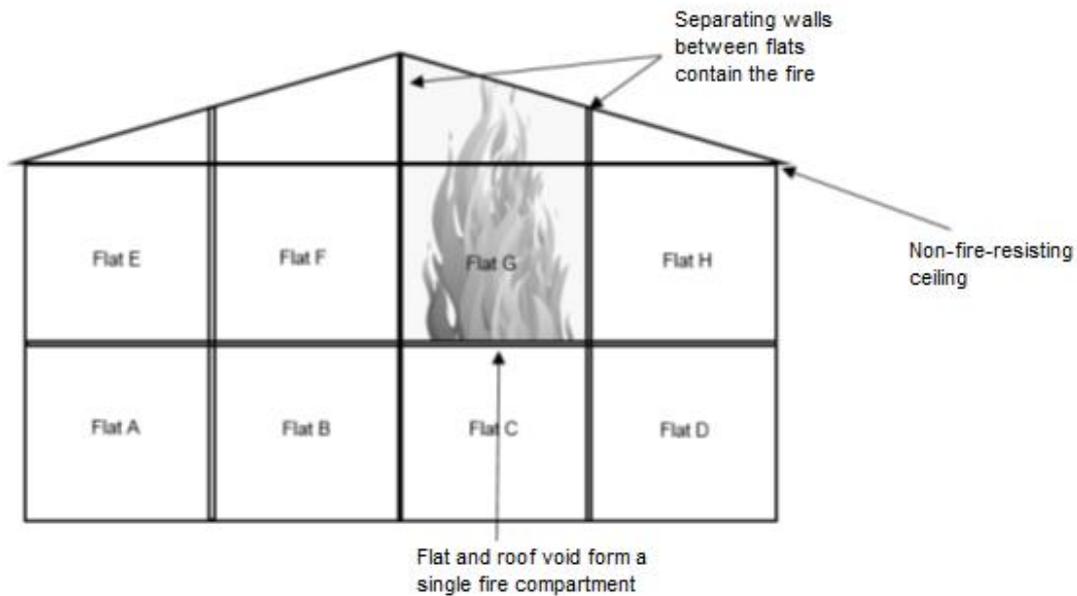
Figure 2   Separating Walls within Roof Void
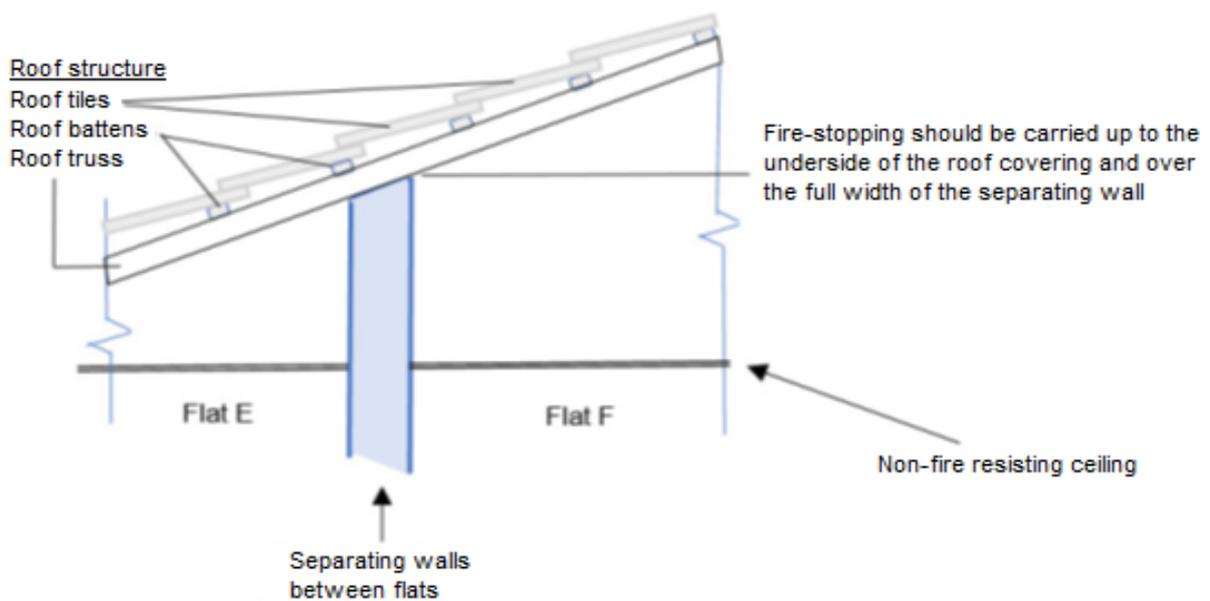
Figure 3   Separating Wall junction with Roof

247. Fire-resisting ceilings in top floor flats (see Figure 4) would not normally achieve an equivalent standard of safety. It fails to address the possibility of a fire within the roof void (see Figure 5) or that enters the roof void externally (for example, as a result of flames projecting from a top storey window – see Figure 6). A fire-resisting ceiling protects against fire-spread from a flat into the roof void, but not normally vice versa (unless double facing).
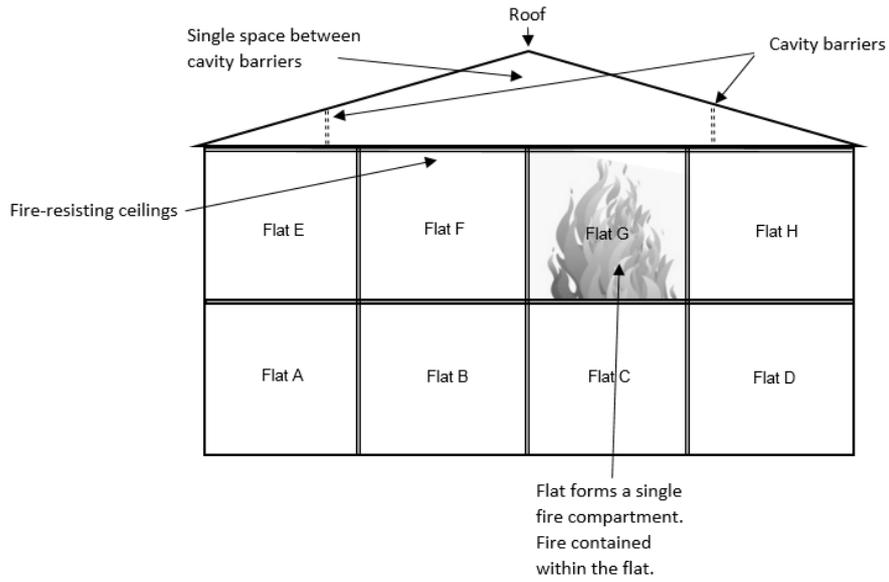
Figure 4 Fire Resisting Ceiling and Cavity Barriers in Roof Void
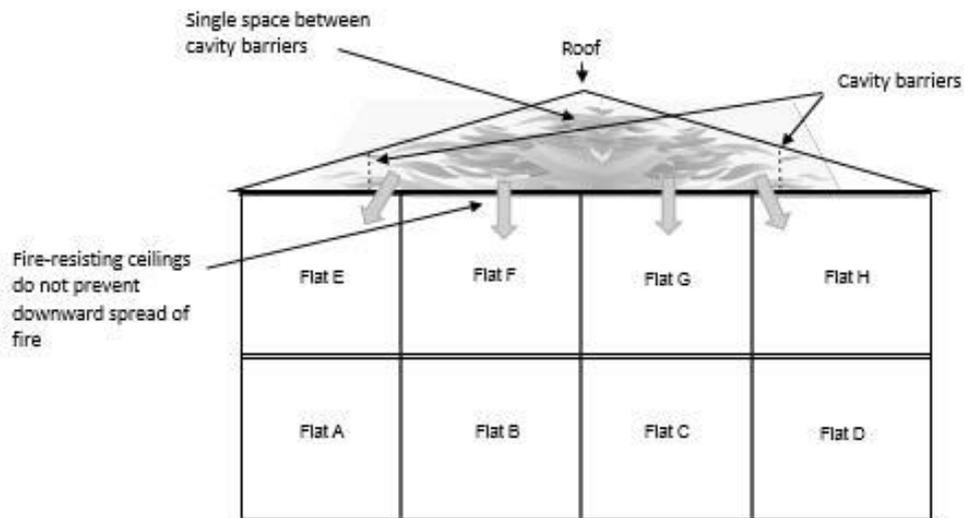
Figure 5 Fire within Roof Void
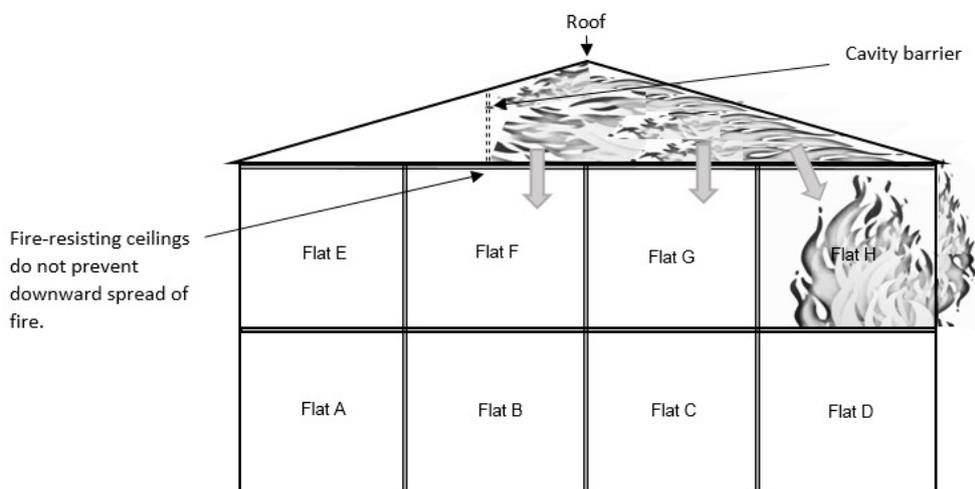
Figure 6: External fire spread from Flat to Roof Void

248. If there is no separation within roof voids, fire-resisting barriers should be provided in line with every separating wall between flats. It may be appropriate to plan structural work over a period of time, particularly if other fire safety measures take priority. This should be reflected in the fire safety risk assessment Improvement Plan.

249. Previous design standards permitted a lower level of fire resistance in buildings. Compensatory measures may be needed in existing blocks which do not have 60 minutes' fire resistance separation, particularly if they cannot be easily upgraded. These measures might include an automatic fire suppression system, such as a sprinkler or watermist system.

250. Separating walls and floors should be in good condition and have no openings that would permit fire or smoke spread. Attention should be paid to service ducts and risers and common heating or ventilation systems.

251. Where balconies have been infilled and incorporated into flats, fire separation and fire stopping between flats should be checked.

252. Ducted heating, ventilation or air conditioning systems that serve dwellings, should be arranged so that they do not transfer fire and smoke. This may involve fire resisting construction and fire dampers.

253. Fire stopping should be checked around openings in walls and floors for services such as gas, water, electricity, telecommunications and drainage. Services may enter from the common areas or pass between flats. Sometimes the extent of openings or fire stopping can only be ascertained through intrusive inspections, by opening up panels in kitchens, bathrooms and other areas.

254. Small bore pipes, typically less than 40mm in diameter, are not normally of concern. Larger pipes, especially if combustible, could allow significant fire and smoke spread. Proprietary fire seals, including externally mounted collars or fire-resisting enclosures, might be used to protect older blocks. It may only be practicable to undertake this on a long-term basis as and when flats become vacant.

255. In some blocks of flats, common ventilation ducts are used to provide extract from bathrooms and, less commonly, kitchens. These ducts can run the full height of the building, serving a large number of flats and terminate at roof level.

256. The common extract from bathrooms often incorporate shunt ducts to link each flat to the common shaft, which reduces the likelihood of fire and smoke spread between flats (Figure 7). Some early designs used the same arrangement for kitchen extract. There may be buildings that do not incorporate shunt ducts and have no adequate means of preventing fire and smoke spread between flats via ventilation ducts. This is so far removed from what is acceptable today that action should be taken to reduce the risk.
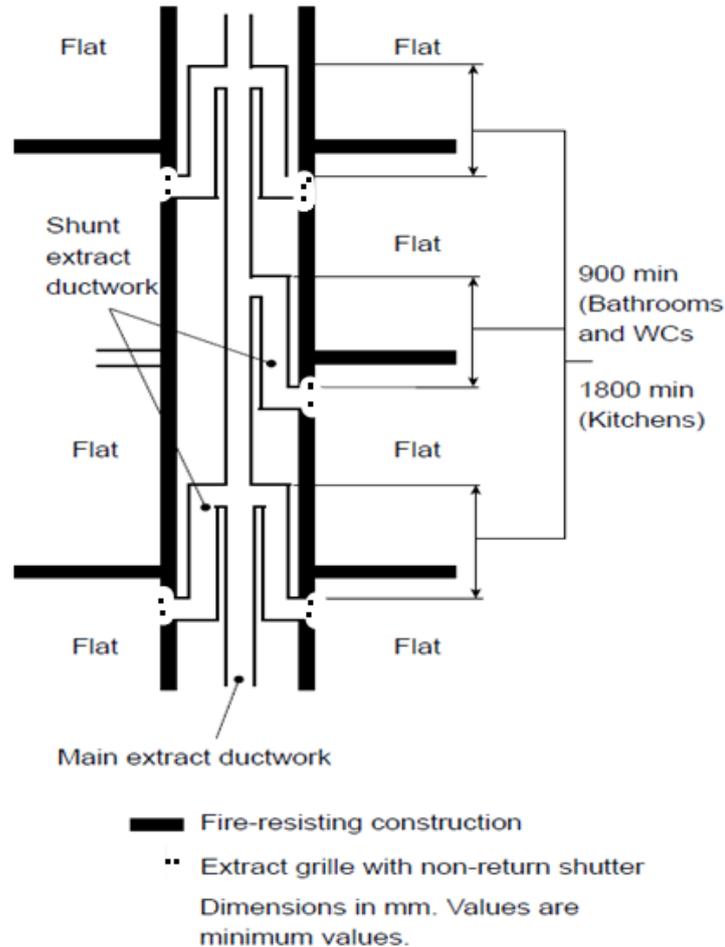
Figure 7 – Shunt duct arrangement

257. It will rarely be practicable to retrospectively introduce mechanical fire and smoke dampers into the ventilation ducts. One way to reduce the potential for fire spread between flats is to retrofit intumescent fire dampers to the vents into the ducts. Although this would not restrict the spread of smoke in the early stages of a fire, it would prevent spread of flames and hot gases. This is a reasonable approach for bathrooms, but not for kitchens, where there is the potential for a serious fire. A solution would be to rearrange the ventilation to discharge directly to outside and not via a common duct.

Fire Separation and Structural Protection in Supported Housing and small care homes ("simultaneous evacuation")

258. If supported housing is provided in purpose-built blocks of flats, the fire separation principles for sheltered and extra care housing would apply, as would a 'stay put' strategy. In semi-detached or terraced housing, fire separation between dwellings should also be considered to prevent fire spread from an adjoining property.

259. Most supported housing comprises properties similar in design to domestic houses. Many were originally single-family dwellings that have been subsequently converted. The evacuation strategy will be simultaneous evacuation of all occupants in the event of a fire. A degree of internal structural

fire protection will be required to protect the means of escape and limit fire spread.

260. Current design guidance requires that structural elements such as floors and load bearing walls should provide at least 30 minutes fire resistance duration. For premises with a storey height above 7.5m (over 3 storeys), they should provide 60 minutes.

261. Lath and plaster ceilings in good condition may be acceptable in lower risk properties of up to three storeys, otherwise floor/ceiling construction should achieve at least 30 minutes. For premises with more than 3 storeys, upgrading to 60 minutes should be considered and will be appropriate for higher risk supported accommodation. Upgrading will not be necessary if the premises are protected by a sprinkler or watermist system.

262. Ceilings should be visually examined for damage or other breaches of integrity. Defects affecting fire resistance or allowing smoke spread must be repaired.

263. Cavity barriers will not normally be necessary to sub-divide roof voids. However, they should be provided above stairway enclosures in properties of three storeys or more (excluding any basement storey). Alternatively, it would be acceptable to either install smoke detection within the roof space, or to install a ceiling that would afford resistance to a fire in either the stairway or the roof void (e.g. comprising fire-resisting board within both the void and the stairway. See Figure 8).
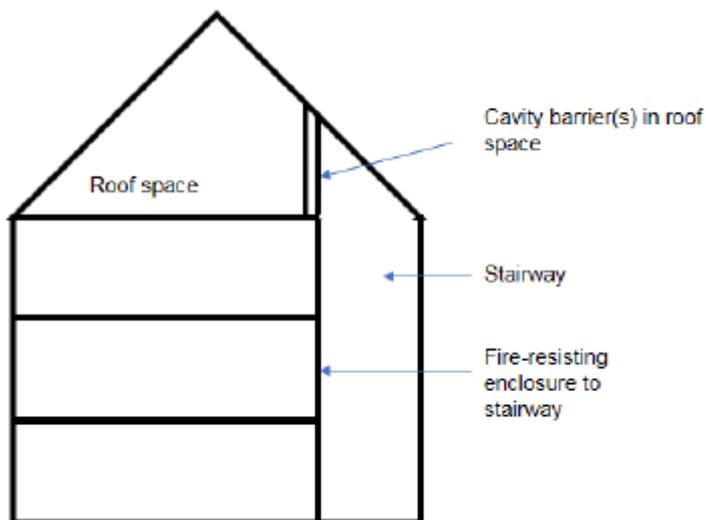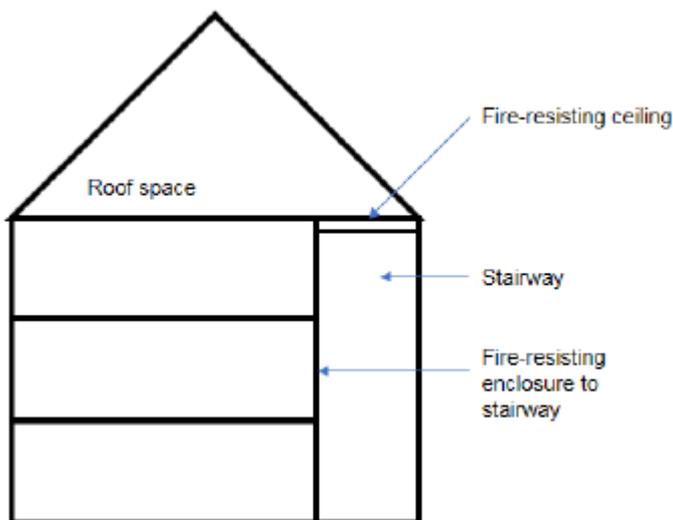
Figure 8 Methods of separating a protected stair from the roof space

Means of Escape

264. Depending on the type of accommodation, means of escape comprises:

- Escape from within an individual dwelling; and
- For flats, continued escape using the common horizontal and vertical routes in a building, to a final exit leading to a place of ultimate safety outside.

265. In general needs flats and houses with no floor above 4.5m, an escape window is recognised as an alternative option for escape. This will not be appropriate for most residents covered by this Guidance and so the use of escape windows is not considered further.

266. The following section deals with means of escape in Sheltered, Extra Care and other private dwellings. Means of escape in supported group housing and small care homes will be considered separately on p63.

(1) Means of Escape in Sheltered, Extra Care and other private dwellings

267. Flats in sheltered and extra care schemes are normally single level. A fire anywhere in a dwelling should not prevent the occupants from escaping. Design guidance recommends three acceptable approaches to providing means of escape from dwellings where all rooms and the entrance door are on a single level:

- Limit the travel distance within the dwelling.
- Provide a protected internal hallway.
- Provide an alternative exit.

268. The risk assessment should take account of generic characteristics, such as age, mobility and vulnerability of the residents. Slightly increased travel distances of up to 3m might not require additional measures. More significant deviations might indicate that compensatory measures are necessary. A person-centred risk assessment should be used to determine appropriate measures on an individual basis (see Part 1 of the Guidance). Compensatory

measures might include Category LD1 fire detection, fire-resisting doors to the kitchen and lounge or an automatic fire suppression system.

Dwellings with limited travel distance

269. The travel distance from any point in a habitable room to the flat entrance door is limited, reducing the chance that residents could become trapped in the event of a fire. This approach avoids the possible difficulty of older residents having to open heavy internal fire-resisting doors (particularly doors fitted with self-closing devices) as part of everyday living.

270. The arrangement is common in existing housing and requires that:

- The travel distance from any point in a habitable room to the entrance door should be limited to 9m.
- Cooking facilities should be remote from the entrance door and should not prejudice the escape route from any point in the dwelling.

271. BS 9991 contains further information.

Dwellings with protected internal hallways

272. For some flats which open directly onto a communal stairway, fire protection of the flat's internal hallway provides protection for the flat and externally, to the communal escape route.

273. Where there is a protected internal hallway (also known as a "protected enclosure"), the escape route within the dwelling should remain relatively smoke free in the early stages of a fire in a room. Current design guidance advises:

- All dwellings with a storey above 4.5m should have a protected internal hallway or suppression.
- Houses and maisonettes with a storey above 7.5m (less than 18m) should have a protected internal hallway and suppression/alternative exit.
- Habitable rooms should open onto the internal hallway.
- The internal hallway should be a protected route, enclosed in 30 minutes fire-resisting construction with fire doors (FD30 doors).

274. In older buildings, the fire resistance of partitions and doors may not meet current standards. Replacing or upgrading doors or partitions may be necessary, depending on the overall risk. An automatic sprinkler system that complies with BS 9251, or a watermist system that complies with BS 8458 could compensate for lower levels of fire resistance.

275. A person-centred risk assessment will determine whether internal self-closing doors pose a risk to older, frailer residents. Swing-free self-closing devices may be more appropriate (see paragraph 327).

Dwellings with an alternative exit

276. Current design guidance states:

- Habitable rooms should be directly accessible from an internal hallway and have an alternative exit remote from the entrance door; or

- All bedrooms should have access to an internal lobby that is separated from the living area (lounge and kitchen) with 30 minutes fire-resisting construction; an alternative exit is then provided from the bedroom area.

277. For an arrangement that relies on alternative exits, each alternative exit should lead to a final exit or common stairway by way of:

- A door to a common corridor, lobby or escape balcony;
- An internal private stair leading to a common corridor, lobby or escape balcony;
- A door to a common stairway; or
- A door to an external stairway.

Inner rooms

278. An inner room is one where escape is only possible by passing through another room (the "access room"). They can be found in larger flats and open plan layouts. Works carried out by residents might also create inner rooms. A fire could develop unnoticed in an access room, preventing the occupants of the inner room from escaping. To reduce this risk, access rooms should have a smoke detector and limited combustible items and ignition sources.

279. Habitable rooms, such as lounges and bedrooms, should not normally be inner rooms, particularly for higher risk individuals or where the access room is a higher risk room. Where possible, habitable rooms should open directly onto a hallway or be provided with an alternative exit. BS 9991 advises that automatic fire suppression may offer compensation in general needs open plan flats with inner room sleeping accommodation, but this is not normally appropriate for flats in sheltered and extra care housing.

Security locks

280. Security locks fitted to entrance doors and alternative exit doors should be easily operated by the residents from the inside without the use of a key.

281. Flat entrance doors are required to be self-closing. Residents may remove or disconnect self-closing devices for convenience or to prevent being accidentally locked out. Entrance doors should be fitted with a suitable lock that can only be locked on the outside by the use of a key operated deadlock, but that can still be opened from the inside without the use of a key.

Escape routes within common areas

282. Smoke and heat from a fire in a flat or ancillary room should not affect the use of the corridors, lobbies, balconies or stairways. To achieve this, current design guidance limits the travel distance from a flat entrance door to a protected stairway, requires escape routes to be enclosed in fire-resisting construction and requires smoke control to ventilate corridors/lobbies and stairways.

283. Where flats are served by a single escape stairway:

- Every flat is separated from the common escape stairway by a protected corridor or protected lobby (except as described in paragraph 287).

- The distance of travel between the flat entrance door and the door to a lobby or stairway is limited to 10m.
- Smoke control is provided by natural or mechanical ventilation automatically activated by smoke detection within each lobby or corridor adjacent to the stairway.
- The stair is provided with a smoke vent at the head (normally under remote control for fire service use) or by manually openable vents on each level or by a smoke shaft arrangement incorporating the simultaneous automatic opening of the lobby vent, stair head vent, and the vent at the top of the smoke shaft.

284. The escape stair should be safe from the effects of fire and smoke while residents evacuate to a place of safety. The enclosing structure of a protected zone incorporating an escape stair should have at least 60 minutes fire resistance and any door should achieve at least 30 minutes fire resistance.

285. A protected lobby restricts the movement of fire and smoke from an adjoining room, storey or space into the escape stair. This is normally achieved by fire resisting construction together with at least 2 sets of self-closing fire doors between the fire and the escape stair. The wall between the protected lobby and the escape stair should achieve 30 minutes fire resistance duration and any door in the wall should be a self-closing fire door with 30 minutes fire resistance duration (see Figure 9 below).
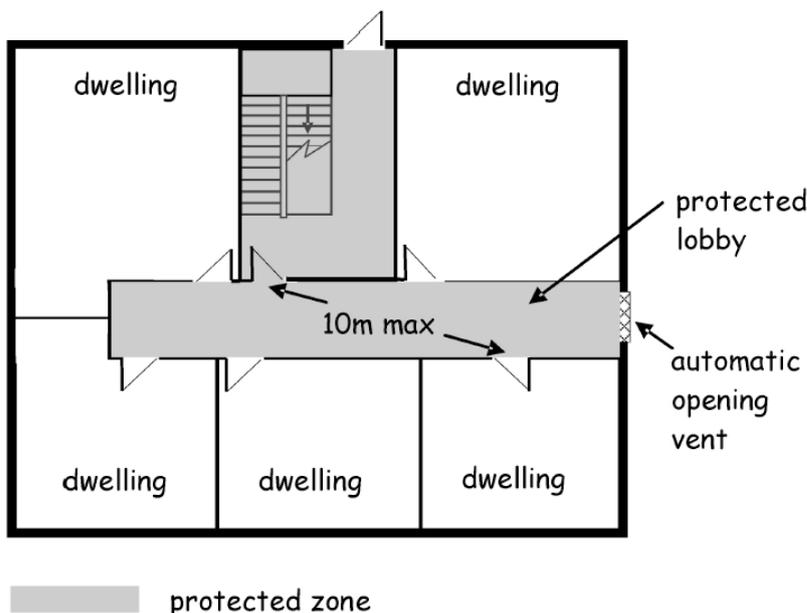
Figure 9   Single Stair Protected Lobby

286. Ancillary rooms, risers and other areas opening onto corridors and lobbies also need to provide this protection. Doors opening into corridors and lobbies should have a minimum of 30-minutes fire resistance. They should be self-closing, except for risers and ancillary rooms which may be kept locked shut when not in use.

287. Protected lobbies are not required where all of the following apply:

- No storey is over 7.5m above adjacent ground level.

- There are no more than 4 dwellings per storey.

- Flats have protected internal hallways or automatic fire suppression.

This limits the size and height of a domestic building where some reliance is placed on the fire precautions in a dwelling to protect the common escape route.

288. A stairway width of 1m is normally adequate for means of escape. With a stay-put policy, the number of people expected to use a stairway at the same time in the event of a fire will be limited.

289. Some residents will find it difficult to use stairs in the event of fire and additional measures may be needed, such as temporary waiting spaces within a protected stair or lobby. External stairways are unsuitable.

290. Stairways should lead directly to a final exit (or a protected route to a final exit). They should not contain significant fire hazards, other than lifts or protected electrical meter cupboards. Ideally, gas installations should not be located within protected stairways.

291. In single stairway buildings, the stairway should not continue down to serve a basement or enclosed car park. In multiple stairway buildings, one of the stairways should terminate at ground level. Other stairways may extend to serve basements, providing they have lobby or corridor protection at basement level.

292. In single stairway buildings, the stairway should not serve a boiler room, fuel storage room or other similar high-risk ancillary rooms. In multiple stairway buildings, the ancillary rooms should normally be separated from the stairways by a protected lobby or protected corridor.

293. Where flats are served by more than one escape stairway:

- Stairways should be separated from each other by fire-resisting construction so that a fire cannot affect more than one stairway (stairs should not terminate in the same enclosure).

- Every flat is separated from each escape stairway by a protected corridor or protected lobby.

- The travel distance from a flat entrance door to the door to the nearest stairway or stair lobby is limited to 30m.

- Any dead end section of an access corridor is separated from the rest of the corridor by a self-closing fire-resisting door – the single direction of travel in the dead end section of corridor should be limited to 10m.

- Smoke control by natural or mechanical ventilation is provided in each lobby or corridor adjacent to the stairway and is actuated automatically by smoke detection.

- There is a smoke vent at the head of the stair (normally under remote control for fire service use) or by manually openable vents on each level or by a smoke shaft arrangement incorporating the simultaneous automatic opening of the lobby vent, stair head vent, and the vent at the top of the smoke shaft.

Figures 10 and 11 show these arrangements.
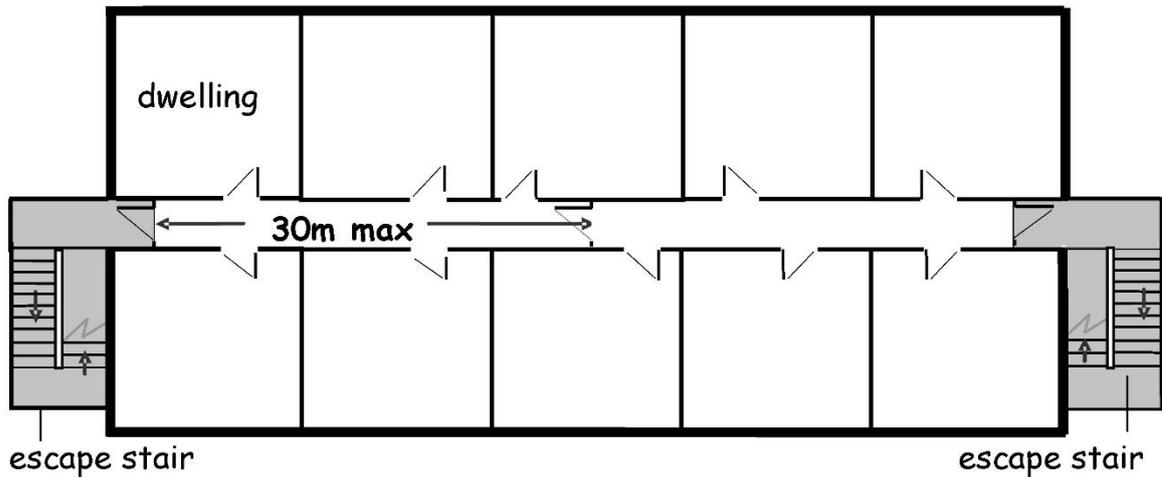
Figure 10 – Upper floor arrangement where flats are served by more than one escape stairway
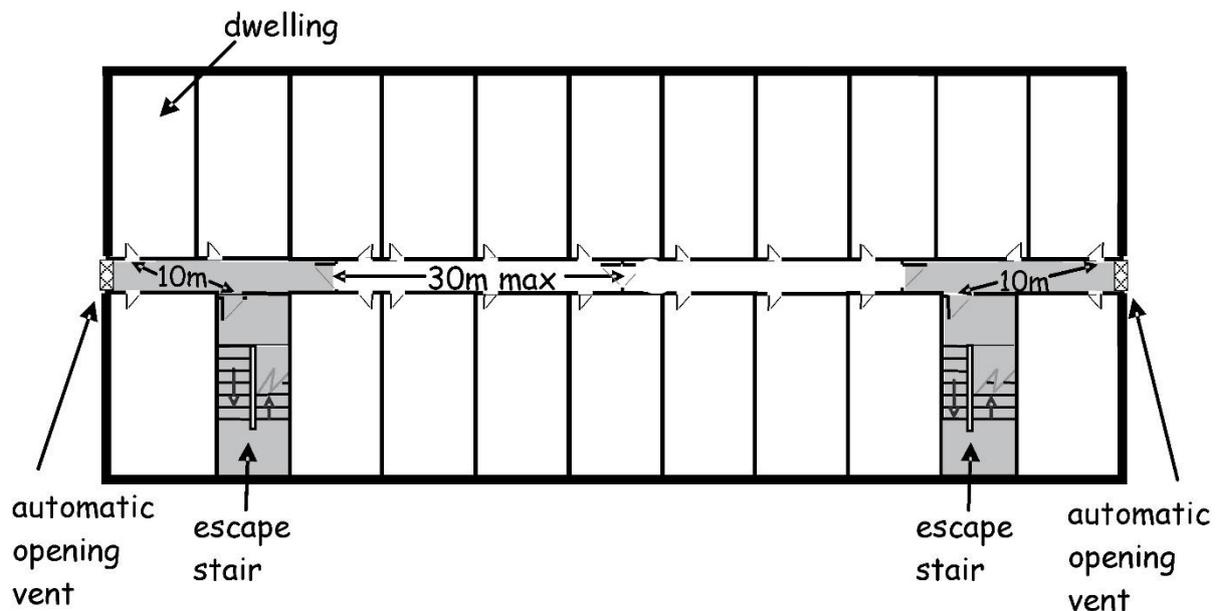
Figure 11 – Upper floor arrangement where flats are served by more than one escape stairway and there are dead ends

294. BS 9991 recommends that residents with assistance requirements should travel no more than 7.5m from a flat entrance door along a corridor or lobby to reach a fire door to a protected stairway, protected lobby to the stairway or a cross-corridor fire door. This principle should apply to sheltered housing, where practicable, and extra care housing, with a maximum permissible travel distance of 10m.

295. Small increases in travel distance can be accepted in most situations without additional measures. Significant increases in travel distance might require:

- Additional cross-corridor doors to restrict smoke-spread.
- Improvements to the smoke control arrangements.

Flats with external balcony or access deck approach

296. If the width of the access balcony or deck is less than 2m, it is assumed that there is little risk of horizontal smoke spread along the balcony or deck from a fire in a flat, which would prevent residents from using the escape route. There is, however, potential for smoke-spread along balconies or decks wider than 2 m. In these situations, downstands (minimum 300mm deep) may restrict the lateral spread of smoke.

297. Ideally, there should be no stores or other ancillary rooms, located off the balcony or deck.

298. The maximum travel distance for a common access balcony or deck is 40 m. For flats with external balcony or deck approach and the balcony or deck provides two directions of escape, there are no limitations on travel distance.

299. For flats with a single direction of escape to a single escape stairway, the separating walls between the flats and the balcony or deck should be fire-resisting up to a height of 1.1m from balcony or deck level. The flat entrance doors in these situations should be self-closing fire-resisting doors (minimum 30-minutes). This will allow residents, if they need to pass a fire in an adjoining flat, to reach the stairway. In flats with alternative independent escape to another balcony or deck on the same level, which leads back to the single stairway, only one of the enclosures between the flats and the balcony needs to be fire-resisting.

300. For residents who require mobility aids, such as wheelchairs and mobility scooters, the 1.1m fire-resisting barrier may not allow some residents to safely pass beneath open windows or unprotected areas.

301. Where there is alternative escape available from each flat entrance along the open balcony or deck to two or more escape stairways, the separating walls between the flats and access balcony or deck and the balcony flat entrance doors are not required to be fire-resisting.

Smoke control

302. Subdividing corridors and separating dead end sections of corridors, using fire-resisting, self-closing doors is a form of smoke control. It ensures that corridors and stairways not directly affected by fire and smoke will remain relatively smoke free. Additional cross-corridor doors in sheltered and extra care housing reduces travel distance and, consequently, the length of corridors that may be affected by smoke. This recognises that older and less mobile residents will take longer to reach a place of safety.

303. Where a "stay put" strategy applies, protected lobbies, protected corridors and escape stairs should have additional measures for smoke control which can be achieved by natural means, using the buoyancy of smoke, or mechanical means. Natural ventilation efficiency, in particular, often depends upon the prevailing wind.

304. With natural ventilation, lobbies and corridors are ventilated where they adjoin a stairway, at a high level, by means of an automatically opening external wall ventilator (AOV) direct to open air or via a natural smoke shaft. AOVs which

discharge direct to the external air should have a minimum area of 1.5m^2. A smoke shaft rises up through the building and is usually found where the lobby or corridor does not have an external wall to allow direct ventilation to external air. It has a minimum 1.5m^2 opening at roof level and AOVs in each lobby into the shaft should have a minimum 1m^2 area. Replacement air is supplied by an AOV in the adjacent stairway. The shaft should have a minimum fire resistance of 60-minutes and all ventilators have a minimum fire resistance of 30-minutes. On detection of smoke in the protected lobby, the ventilator on the fire floor, the ventilator at the top of the smoke shaft and the 1m^2 ventilator at the head of the stairway should all open simultaneously. The ventilators from the protected lobbies on all other storeys should remain closed.

305. Protected stairways should have means to ventilate smoke that may enter the stairway. A vent of at least 1m^2 is normally provided at the head of the stairway. This vent is usually operated manually (which can be electrically powered), unless an AOV is required as part of a smoke shaft arrangement in which case the vent is configured to operate if smoke is detected in a protected corridor or protected lobby. In older properties, openable vents at each level may be provided in lieu of a stair vent at the head of the stair.

306. It is important that firefighters can control the opening and closing of the ventilators on arrival at the building. Ventilators should be fitted with a simple handle or lock that can be easily operated by firefighters. If ventilators are not easily accessible they should be operated by a mechanism positioned at the SFRS access point in the building. In the case of an escape stair and firefighting stair, a local control should also be provided at the topmost storey. This will allow firefighters flexibility in their operations.

307. Electromagnetic holding devices for ventilators have been known to fail under fire conditions due to a loss of power or weakening magnetic fields as temperatures in and around the smoke shaft increase. In light of this, fire safety risk assessments should be reviewed and consideration given to replacing them with more robust vent actuators.

308. A mechanical smoke control system can be a mechanical ventilation system or a pressurisation system. A mechanical ventilation system extracts from the lobby or corridor by creating a negative pressure in the space using fans. Most systems use a vertical shaft. The shaft contains an AOV of 1m^2 at the top storey.

309. A pressurisation system works on the basis of forcing air into a space to create a positive pressure to prevent smoke from entering. Pressurisation systems are most commonly found protecting stairs.

310. A system installed to maintain environmental conditions should be arranged so that it does not compromise the function of the smoke control system. In the event of fire, the system should either automatically shut off or, if it is integrated with the smoke control system, should operate in fire mode.

311. An existing smoke control system should be assessed by reviewing the standards in place at the time of installation, and determining whether it functions as originally intended. Existing arrangements may be able to be left in place, and maintained as originally designed. It may not be appropriate to commit expenditure to restore older, non-functioning systems to their original

design if effective smoke control could be installed in line with modern standards.

312. Corridor smoke control design has changed over time. Previous design guidance included a smoke dispersal strategy, where reliance was placed on cross-ventilation of corridors, uninterrupted by cross-corridor doors. The cross-ventilation could be provided by permanently open vents (PV), manually operated vents (OV) or automatically opening vents (AOV) operated by smoke detectors.

313. Smoke dispersal using PVs is no longer seen as an acceptable method of smoke control. It has been shown to be vulnerable to failure as a result of wind direction or being undermined by residents blocking the permanent vents because of discomfort.   In high rise domestic buildings designed with corridor smoke dispersal systems, consideration should be given to providing cross-corridor doors and to change to a smoke containment approach, but maintain the OVs or PVs to ventilate the sections of corridor remaining. Advice from a specialist should be sought if smoke dispersal is present in a single stairway building.

Lifts

314. Specially designed evacuation lifts are safe for residents to use for vertical escape during a fire. Normal passenger lifts can sometimes be upgraded to evacuation lift standards (usually at the time of lift refurbishment). This requires dual power supplies, which can be created by running two independent, fire-resisting circuits via diverse routes. Evacuation lifts should comply with the recommendations of BS 9999. It is possible for a modern firefighting lift to be used as an evacuation lift without modification, although discussions with SFRS will be required to determine whether this is feasible (its use for evacuation may impede firefighting operations).

315. In exceptional circumstances in sheltered and extra care housing, the use of normal passenger lifts for evacuation, under the supervision of staff or SFRS, might be considered. This needs to be based on a careful risk assessment that takes into account the likelihood of failure of power supplies to the lift, and entry of smoke into the lift shaft, during a fire. If vertical evacuation of residents is essential, using a passenger lift with fire-protected power supplies might be less hazardous to residents with severe mobility impairment than evacuating them down a stairway.

Surface finishes in common escape routes

316. It is particularly important to control the fire performance of linings within the common areas. The surface finishes of walls and ceilings can significantly affect the rate of fire-spread and contribute to the development of a fire. Wall and ceiling surfaces in common areas should achieve European Class A1, A2 or B (BS EN 13501-1).

317. Walls or ceilings constructed of non-combustible materials, such as masonry, brick, concrete or has plaster finishes, will generally be acceptable.

318. It is often difficult to identify existing surface finishes. Surface finishes may have

been subject to many instances of over-painting which can affect their performance when exposed to fire. Multiple layers of paint applied to walls and ceilings in the common areas over the years can give rise to rapid fire spread. Where this risk is considered significant, action should be taken to remove or treat the paint. Proprietary products are available that can be used to treat the surfaces to provide a protective outer coating that will reduce the extent of fire-spread.

319. False ceilings in common corridors and lobbies should preferably be non-combustible (A1 or A2). There should be little, or no, additional fire hazards within the false ceilings. Subject to risk assessment, this may reduce the need for cavity barriers to sub-divide the voids, other than above cross-corridor fire doors.

Fire-resisting doors

320. A 'fire door' is a fire-resisting door which is rated by performance to fire under test conditions. Fire doors are used to prevent fire spread and for the protection of means of escape. A self-closing device is a normal feature of a fire door, though there are some exceptions such as doors to small cupboards which are kept locked shut.

321. A fire door rated to 30 minutes is described as FD30 (tested to BS 476: Part 22) or E30 (tested to BS EN 1634: Part 1). A suffix is added to denote that the door has a smoke seal function giving FD30S and E30Sa respectively. A 60 minutes fire door with smoke seal is designated FD60S or E60Sa. The door rating is an indication of test performance and is not necessarily how a door will perform in a real fire.

322. The level of protection provided by a fire door is determined by the time taken for a fire to breach the integrity of the door assembly, together with its resistance to the passage of smoke, hot gases and flame. The gap between the door leaf and the frame is normally fitted with intumescent strips, in either the door or the frame (but not at the bottom of the door). The strips expand in response to heat from a fire, to seal the gap between the door leaf and the frame.

323. Smoke seals fitted to the door leaf gap prevent the spread of smoke at ambient temperatures, before an intumescent strip expands.

324. In determining the performance of a door in fire, it is necessary to consider the whole door assembly including the frame, glazing, side-panels, transoms and ironmongery. In the case of a new door assembly, the manufacturer's installation instructions should be followed.

325. Doors protecting the common escape route between a flat and the escape stair, including flat entrance doors, are specified as minimum 30-minute fire-resisting self-closing doors (designated FD30S). Fire doors forming part of the stair enclosure should also be a minimum of 30-minute fire resisting and self-closing. Doors to certain high risk ancillary rooms, such as boiler rooms, should be FD60S. Doors to these ancillary rooms need not be fitted with self-closing devices if the premises are well managed and the doors are kept locked shut when not in use.

326. Fire-resisting flat entrance doors, and doors provided to protect common corridors, lobbies and stairways, should always be fitted with suitable positive action self-closing devices. The self-closing device should be capable of closing the door in its frame from any angle and overcoming the resistance of a latch. Where this is not the case, the fitting of suitable self-closing devices should be a priority.

327. Where fire-resisting, self-closing doors, particularly those in common corridors and circulation spaces, present an obstacle to normal movement for older and disabled residents, consideration should be given to the fitting of hold-open devices or swing-free devices. Hold-open devices are designed to hold a door open against the action of the self-closing device. Swing-free devices allow a door to stand open at any angle in normal use. Both types of device automatically result in closure of the door in the event of fire. New hold-open devices and swing-free closers should conform to BS EN 1155. The fitting of hold-open devices or swing-free door closers in sheltered and extra care housing can only be permitted if there is a suitable fire detection and alarm system fitted throughout the areas where these devices are used. Recommendations for the fire detection are given in BS 7273-4. Hold-open devices and swing-free closers should release to allow the door to close under the action of the self-closing device on operation of the fire alarm system and the failure of the power supply. Acoustically-actuated hold-open devices are not acceptable on doors to protected stairways. BS 7273-4 provides recommendations for the design, installation, commissioning and maintenance of door release mechanisms.

328. Powered doors, or powered door opening devices on existing doors, can assist residents who use wheelchairs or mobility scooters. These doors are normally fitted with controls on each side of the door. They close automatically after a pre-set time has elapsed. Doors should fail safe to the closed position in the event of failure of the power and be capable of manual operation. Any in-built delay should be restricted to a maximum of 25 seconds to restrict smoke spread.

329. There are three options for original fire-resisting doors that do not meet current standards:

- Accept the door as it is, provided it is a good fit in its frame, is in good condition, and that it satisfied the standard applicable to fire-resisting doors at the time of construction of the building.
- Upgrade the door by fitting intumescent strips and smoke seals along the edges, and in the case of flat doors, fitting a protected letter box.
- Replace the door with a new FD30S door.

330. Older doors which are solid and 44mm thick may provide a notional 30-minute fire-resistance. They may be acceptable providing they are in good condition. They may lack intumescent strips and cold smoke seals and there may have been reliance on 25 mm door stops but usually strips and seals can be easily fitted retrospectively to doors or doorframes.

331. Flat entrance doors may not have protected letterboxes. Upgrading to meet current standards is not always necessary and will depend on the location of the flat within the block and the construction of the letterbox. A letterbox in the

middle or lower part of the door with a spring-loaded metal flap on the inside and outside of the letterbox may not require upgrading. A flat entry door on an external balcony or access deck does not require a fire-resisting letterbox.

332. Where older doors were self-closing, this was sometimes achieved by using rising butt hinges. Rising butt hinges are, however, unreliable and should be replaced with suitable self-closing devices conforming to BS EN 1154 (Fig 12).

333.   It may still be reasonable to accept notional FD30 doors in smaller schemes, provided doors are in sound condition and are of good fit in their frames. In larger blocks, it might be more appropriate to upgrade existing flat entrance doors and doors to high risk ancillary accommodation with intumescent strips and smoke seals as part of a long term refurbishment programme.

Figure 12   Rising butt hinge

334. Existing fire-resisting doors need to be a good fit within their frames with a maximum of 4mm gaps between the sides and tops of a door and the door frame. The gaps at the base of the door should be limited to 6mm. The doors and frames should be in good condition, undamaged, and have no openings in them where locks or security fastenings have been removed. The fire resistance of frames should not be compromised where cables pass through the frames into flats.

335. Where a fire-resisting flat entrance door has been inappropriately replaced with a non-fire-resisting type by a resident, the non-fire-resisting door should be replaced with a new FD30S door.

336. Testing of fire doors in 2018 by the UK Government's Ministry for Housing, Communities and Local Government (MHCLG) revealed that some existing glass reinforced plastic composite fire doors failed to demonstrate the claimed period of fire resisting duration. These doors are often used as flat entrance doors. Where doors that have failed tests are installed, building owners should review their building fire safety risk assessments and consider how quickly these doors should be replaced. Test evidence should indicate that both sides of the door have been tested and meet the criteria required. Further information can be found on the GOV.UK website.

Final exits and exit capacity

337. The number and capacity of exits will rarely present problems although communal meeting rooms may need to be assessed based on the number and width of exits available. Final exits should be clear of fire hazards and should allow people to exit the building safely.

338. Final exit doors from the building should be easily openable from the inside without the use of a key or code. A simple turn handle or lever that can be easily operated by older or frail residents is preferred. Locks operated by thumb turns are unlikely to be suitable, as they can be difficult for frail residents to open. For doors that are normally secured and used only as a fire exit, a panic bar or push pad is more suitable. Exits fitted with electronic locking mechanisms should comply with the recommendations of BS 7273-4.

339. Final exits and exit routes should not present an obstruction to residents who use mobility aids. Where possible, exits should have a level threshold leading to level ground to allow people to make their way clear of the building to a place of safety. The surfaces of external exit routes should not present a slip or trip hazard. They should be regularly inspected to avoid, for example, a build-up of vegetation or algae and, during winter periods, a build-up of snow.

(2) Means of Escape in Supported Housing / Small Care homes

340. Most supported housing and small care homes are akin in design to single-family dwelling houses, albeit that most residents have their own rooms and share common facilities. The assessment of means of escape starts with an assessment of the residents and their ability to evacuate in the event of a fire (see Part 1 of the Guidance).

341. Where residents are capable of responding appropriately in the event of fire (or alarm), means of escape will be similar to a single-family or shared house. Assuming a comprehensive level of fire detection is provided, the premises should be regarded as low risk.

342. If residents use wheelchairs to evacuate, fire exits need to be wide enough. Some residents may require staff assistance and for very high risk residents, measures such as additional fire detection, upgrading of fire doors and, in some cases, automatic fire suppression may also be necessary.

343. Travel distances will not normally be an issue but should not exceed 9m in a room, or in a single direction of escape. Overall travel distance to a final exit should not exceed 18m. A degree of flexibility should be applied to travel distances, depending on the level of risk.

344. Smoke seals should be fitted to fire doors (or frames) where staff assistance is required to evacuate residents or where prolonged evacuation times are anticipated, such as in small care homes. If upgrading doors with intumescent strips, or replacing doors with new 30 minute doorsets, they should also be fitted with smoke seals.

345. Where fire-resisting, self-closing doors present an obstacle to normal access and egress, consideration should be given to fitting hold open devices or swing-free arms. Further information on fire doors and final exits can be found in the preceding Means of Escape section for Sheltered / Extra Care Housing (see pages 61-64).

346. Ideally, gas meters, electricity meters and distribution boards should not be sited in escape corridors or stairways, although if they are located at high level and are not accessible to residents, they should present little risk (provided they are installed and regularly inspected in accordance with gas safety regulations and current IET regulations). Those at low level should preferably be enclosed

in fire-resisting construction and be secured to prevent unauthorised access.

Means of escape - single storey ground floor

347. In single storey ground floor premises (bungalows or ground floor flats), the means of escape requirements will be limited and relatively simple to achieve, and will be similar to those found in single-family dwellings. Doors to each room should be of sound construction and fit closely into their frames, but need not be fire resisting, unless prolonged evacuation times are anticipated.
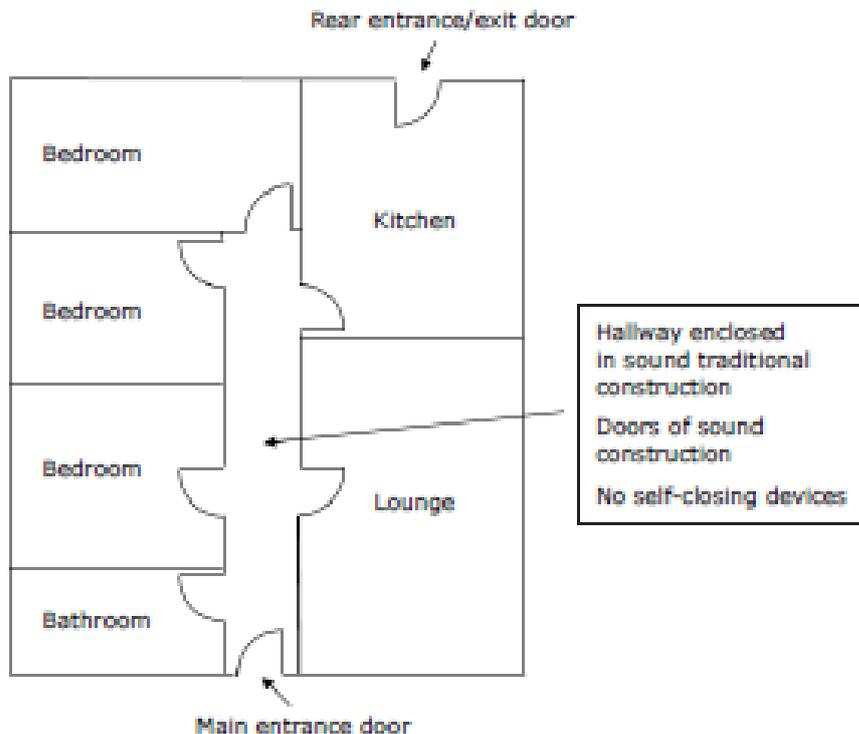
Figure 13 Single storey layout

Means of escape – 2 storey premises

348. The means of escape in two storey premises (with no floor more than 4.5m above ground level), will also be relatively simple. Habitable rooms on the ground floor should either have a final exit door, or, alternatively, a door that opens onto a hallway, which, itself, leads directly to a final exit. If habitable rooms are provided in the basement, they should have a final exit or a door that opens onto a protected stairway which leads directly to a final exit at ground level.

349. Stairways should be a protected route enclosed in 30 minutes fire resisting construction and doors to all rooms (other than toilets, shower rooms and bathrooms) should also provide 30 minutes fire resistance. Stairways should either lead directly to a final exit, or gives access to two separate escape routes, which are separated by fire-resisting construction and lead to final exits.

350. In lower risk premises, this may be a nominal period of 30 minute fire resistance with solid, well-fitting doors (hollow core or thin panelled doors should be replaced) and there will not normally be a need to fit self-closing devices to fire-resisting doors. In other premises, doors to kitchens or lounges that open

directly onto a protected stairway should be fitted with positive action self-closing devices.

Rear entrance/exit door

Staff Bedroom

Kitchen

SC

Staircase enclosed in construction providing notional 30 minutes fire resistance.

Notional 30 minute fire doors.

Self-closing devices on doors to kitchen and lounge only

UP

SC

Lounge

Bathroom

Low risk premises – traditional construction, lath and plaster ceilings, solid doors providing 15/20 minutes fire resistance, no self-closing devices.

Cpd

Main entrance door

Ground Floor

Bedroom

Bedroom

Bathroom

Staircase enclosed in construction providing notional 30 minutes fire resistance.

Notional 30 minute fire doors, no self-closing devices.

UP

Bedroom

Bedroom

First Floor

Figure 14   2 storey layout

Means of escape – ground and two upper floors

351. The means of escape in three storey premises should consist of a protected stairway that leads directly to a final exit, or gives access to two separate escape routes, which are separated by fire-resisting construction and lead to final exits. The stairway should be enclosed in 30 minutes' fire-resisting construction, and doors to all rooms (other than toilets, shower rooms and bathrooms) should afford 30 minutes' fire resistance (FD30 doors). This includes construction and doors to cupboards that contain a source of ignition.

352. In low risk premises, and premises protected by a sprinkler or watermist system, original, traditional construction (for example, lath and plaster) in sound condition is acceptable; original, solid, well-fitting nominal doors that would be likely to provide a fire resistance of around 20 minutes are also acceptable, but hollow core or thin panelled doors should be replaced. Self-closing devices need only be fitted to the doors of a lounge or kitchen that opens directly onto a protected stairway. In other premises, all fire-resisting doors that open onto a protected stairway should be self-closing.

353. If a prolonged evacuation time is anticipated, notional FD30 doors should be upgraded by fitting intumescent strips to the head and vertical edges of the doors; alternatively, new, certificated FD30 doorsets may be installed.
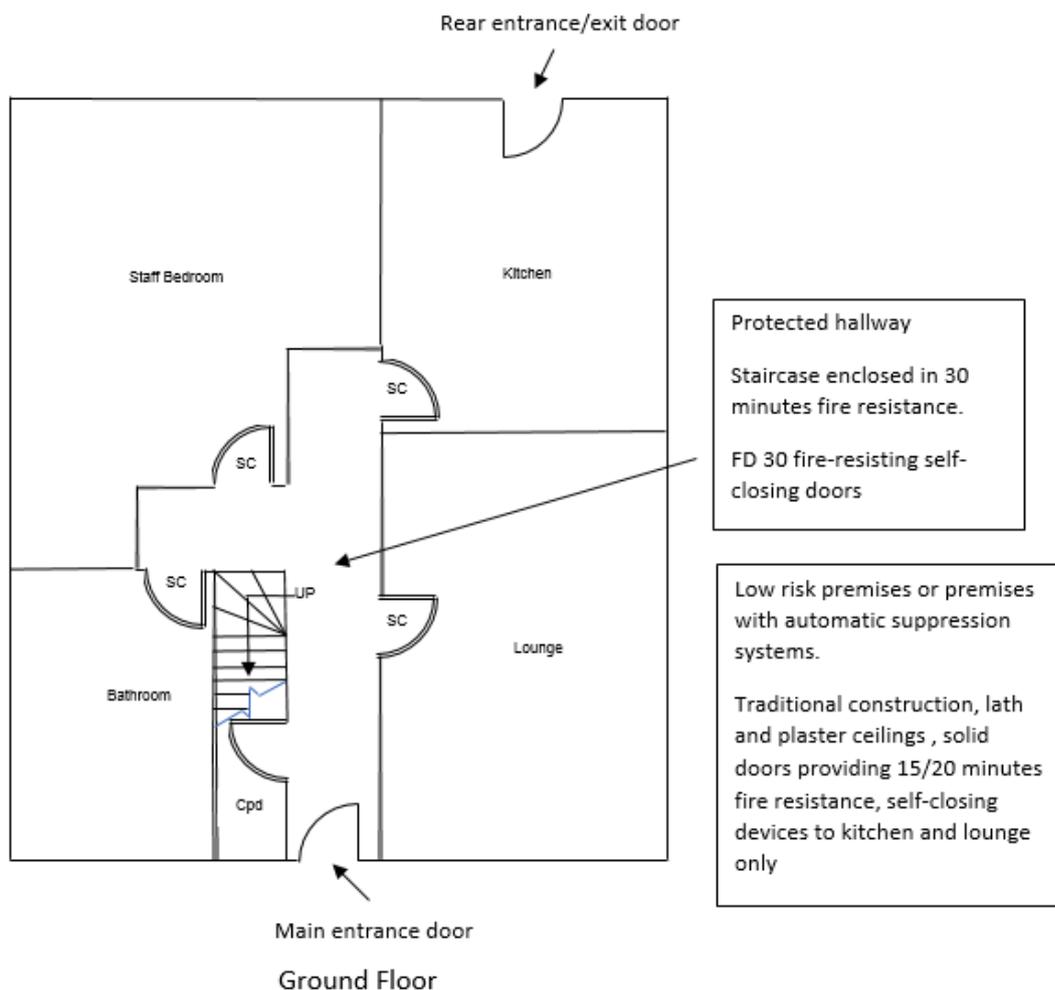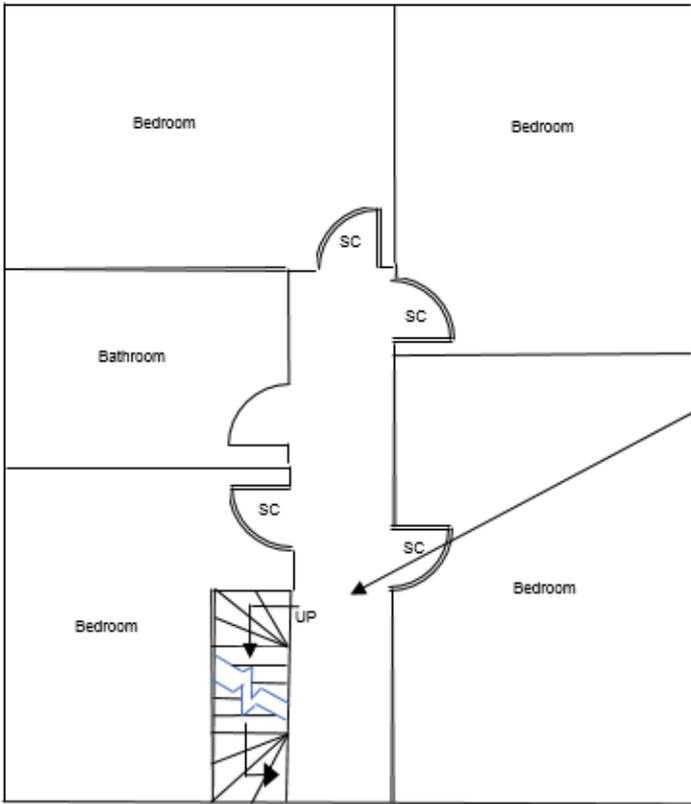
Rear entrance/exit door

Staff Bedroom

Kitchen

Protected hallway

Staircase enclosed in 30 minutes fire resistance.

FD 30 fire-resisting self-closing doors

Low risk premises or premises with automatic suppression systems.

Traditional construction, lath and plaster ceilings , solid doors providing 15/20 minutes fire resistance, self-closing devices to kitchen and lounge only

Lounge

Bathroom

Cpd

Main entrance door

Ground Floor

Protected staircase

Staircase enclosed in 30 minutes fire resistance.

FD 30 fire-resisting self-closing doors

First Floor
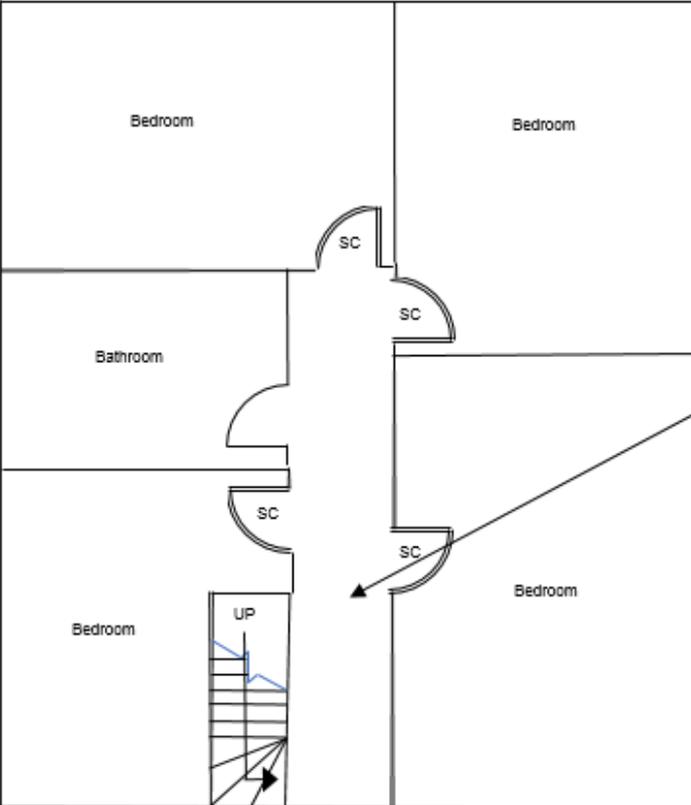
Protected staircase

Staircase enclosed in 30 minutes fire resistance.

FD 30 fire resisting self-closing doors

Second Floor

Figure 15   3 Storey layout

Means of escape – properties of four or more storeys

354. Four (or more) storey supported housing is uncommon. Specialist advice on means of escape from such premises will be required.

Fire Safety Signs

355. Signage may be required where there are alternative exit routes or where there is potential for confusion. Smaller premises and those with a single staircase would not usually require fire exit signage. The excessive use of signs should be avoided, particularly in supported housing.

356. 'Fire Door Keep Locked Shut' signs should be provided on the following fire-resisting doors:

- The external face of doors to store rooms.
- Electrical equipment cupboards.
- Ancillary rooms located within the common areas.

357. 'Fire Door Keep Shut' signs should be provided on both faces of fire-resisting doors forming part of the protection to the common escape routes and on cross-corridor fire doors, but not to flat entrance doors. In the case of fire doors that are held open, and release on operation of smoke detectors, the signs should read 'Automatic Fire Door Keep Clear'.

358. New safety signs should comply with BS EN ISO 7010.

Lighting on Escape Routes

359. Emergency escape lighting should be provided throughout escape routes, other than in small premises of no more than two storeys with adequate and reliable levels of borrowed lighting i.e. from external street lighting.

360. In small supported housing where borrowed lighting is unavailable, automatic plug-in night lights, that continue to operate if the mains electricity fails, may be provided within the hallway and upstairs landing (if applicable). Where residents' rooms do not receive borrowed lighting throughout the night, the night light should be of a type that can be removed from its socket or mounting to be used as a torch.

361. In other cases, emergency escape lighting should conform to the recommendations and requirements of the relevant parts of BS 5266. It should provide illumination for three hours in the event of power failure.

362. One or more test switches should be provided, so that the emergency escape lighting can be tested by simulating failure of the normal power supply to the luminaires without the need to isolate normal lighting circuits.

Fire Detection and Alarm Systems
Supported Housing / Small Care homes

363. A Category LD1 fire detection and alarm system complying with the recommendations of BS 5839-6 should be provided. This requires a heat detector in the kitchen and smoke detectors in all circulation spaces and all other rooms (excluding toilets, shower rooms, bathrooms).

364. Optical smoke alarms are recommended in circulation spaces and areas into

which kitchens open. Multi-sensor alarms may be used to limit false alarms, for example, where steam from bathrooms may enter hallways. There will normally be no need for fire detection within roof voids, unless these contain significant fire hazards such as gas boilers or photovoltaic electrical equipment.

365. In a single storey premises and for premises with no more than four bedrooms, Grade D1 (mains with tamper proof standby supply) domestic alarms are recommended.

366. In other premises, a Grade A system with control and indicating equipment, fire detectors and fire alarm sounders, should be provided. Existing premises of up to two storeys with a Grade D system should upgrade to Grade A when the smoke alarms reach the end of their lifespan. Where there is less than two members of staff on duty, the system should be addressable or there should be remote indicator lamps outside the entrance door to each resident's accommodation, so that the location of a fire can be quickly identified.

367. The standby batteries for a Grade A system should be able to operate the system for 72 hours in the event of mains failure, after which there should be sufficient capacity to sound an evacuation signal for 15 minutes. In premises with at least one member of staff present (whether awake or asleep) on a 24-hour basis, the period of 72 hours may be reduced to 24 hours.

368. BS 5839-6 recommends that the sound pressure level of the fire alarm signal should be at least 85dB(A) at the open doorway of every bedroom, but might need to be a higher level of 75dB(A) at the bedhead of each bedroom. This higher level will be achieved in Grade D systems from the smoke alarms in bedrooms, as they acts as both a fire detector and sounder. In the case of Grade A systems, fire alarm sounders (which may be incorporated in the base of each detector) should be installed in each bedroom.

369. In areas other than bedrooms, the sound pressure level of the fire alarm system can be lower than in commercial premises. A sound pressure level of 55dB(A) will be sufficient. Care should be taken to ensure that the sound pressure level, frequency and other characteristics do not cause a serious adverse reaction from residents who are sensitive to alarm signals as the result of mental health problems. In such cases, alternative forms of warning, such as visual alarm devices or voice sounders, might need to be considered. More information on systems designed to meet the needs of the person can be found in Part 1 of the Guidance (Person Centred Approach).

370. In continuously staffed supported housing with a simultaneous evacuation strategy, it is not normally necessary for alarm signals to be transmitted to an alarm receiving centre. Where there is no 24-hour staff presence, or there is uncertainty that staff will summon SFRS immediately, remote monitoring of fire alarm signals by an alarm receiving centre is recommended. Where this is the case, there should be arrangements to minimise false alarms and to avoid summoning SFRS unnecessarily.

371. Manual call points are not normally necessary. They may be considered as part of a Grade A system if a verbal warning of fire is unlikely to be heard throughout the premises.

372. If supported housing takes the form of small flats or bedsits in which smoke detectors might result in false alarms (for example, as a result of smoking or

cooking), a "mixed system", as defined in BS 5939-6 may be acceptable. Residents must be able to respond appropriately to an alarm in their own accommodation. Warning is given by a Grade D system, comprising mains-powered, interlinked detection. A Grade A system is provided in the common parts, with smoke detectors in all circulation areas and rooms, other than toilets, shower rooms and bathrooms. Sounders and heat detectors forming part of the Grade A system are installed in each resident's accommodation. Heat detectors rarely cause false alarms, and are much slower to operate than smoke detectors, but will give a warning to other residents in the event of a significant fire.

Sheltered/Extra Care Housing and other private dwellings

373. Automatic fire detection in each flat (or house) should comply with the recommendations of BS 5839-6 for a Grade D Category LD1 system (see paragraph 363 above for details). A Grade C system should be considered if elderly or disabled people are expected to test or silence alarms within their flats as this can be done at floor level using Control and Indicating Equipment.

374. All alarms should be ceiling mounted and interlinked. Smoke detector(s) in each flat should not give warning beyond the flat. They should be monitored by an on-site scheme manager (if present) and by an alarm receiving centre at all times when a scheme manager is not present. This is to ensure SFRS are summoned without delay. This is important in premises with a "stay put" strategy to ensure that a fire is extinguished quickly or to instigate an evacuation beyond the flat of origin if the fire proves difficult to bring under control. Evacuation may take longer than in a general needs block of flats and residents may be particularly vulnerable to smoke within escape routes. The likelihood of successful rescue is increased if the fire service are quickly on the scene.

375. Telecare monitoring is preferred as it allows two-way speech between the alarm receiving centre (ARC) and each flat, so that false alarms can be filtered.

376. Safeguards are necessary to ensure alarm signals are reliably transmitted by social ("Telecare") alarm systems. A signal must be transmitted, regardless of which smoke or heat detector operates. Fire signals need to be readily distinguishable from other social alarm signals and should not be delayed. At the very least, the display at the ARC should clearly indicate a waiting fire alarm signal.

377. In schemes with communal facilities, a Grade A communal fire alarm system compliant with BS 5839-6 should be provided. This should not give an evacuation signal within the flats (ideally, the sound pressure level within the flats should not exceed 45dB(A)). Manual call points should be provided within the common areas. The system should also be monitored by an alarm receiving centre.

378. No communal system is necessary in simple sheltered housing that, architecturally, is similar to a general needs block of flats with no communal facilities. Fire detection can be limited to the remotely monitored smoke and heat alarms in each flat. Smoke detection might be necessary to operate automatically opening vents. In this case, the smoke detection should generally be installed in accordance with the recommendations of BS 5839-1, except that no sounders should be provided.   Manual call points are not required.

379. Detection does not need to be installed in roof voids, provided the separation within roof voids satisfies the recommendations of this Guidance and there are no significant fire hazards (for example, boilers, photovoltaic systems and significant volumes of combustible storage). Where hazards are present, the type of detection and its fire warning strategy will depend on the location of the hazards. If the hazards exist in the void above a flat, the detection may comprise smoke alarms linked only to the smoke alarms in the flat. If the fire hazards exist within a void over common parts, the fire detection should give a warning in the common parts.

380. As a further enhancement, heat detectors connected to a communal system could be installed within the hallway of each flat, to provide confirmation of a fire within a flat. This is in addition to each flat's own LD1 system, as heat detectors would not summon SFRS early enough. If a heat detector operates, it might be appropriate to evacuate adjacent (or all) common parts. If staff are present on a 24-hour basis, it may also be appropriate to evacuate flats in the immediate vicinity.

Automatic Fire Suppression Systems

381. Automatic fire suppression systems in domestic premises are primarily designed for life safety purposes. They can provide vulnerable occupants with additional time to escape in the event of fire. Also, fire damage and disruption is usually greatly reduced.

382. Systems react to heat and so the greatest protection is afforded to those occupants outwith the room of fire origin. The spray pattern delivered from the sprinkler heads should control fire spread. Whilst the effect of sprinkler spray will increase the smoke volume and could obscure exits, smoke temperatures and toxicity will be greatly reduced. The fire might even be extinguished if it is not shielded from the sprinkler spray.

383. Automatic fire suppression systems includes sprinkler systems but can include other systems which may be just as effective. The key characteristics are:

- It must be automatic and not require people to initiate its activation.
- It must be designed primarily to protect lives, rather than property, which means it should be fitted with faster responding discharge heads.
- It must be a fire suppression system, one designed specifically to deal with fires rather than other hazards.

384. Retrofitting suppression may compensate for fire safety measures that are so far removed from current standards that they present serious risk to residents. Retrofitting is likely to be necessary if residents need assistance to evacuate but staff are not always available to help.

385. Sprinkler systems should be designed and installed in accordance with BS 9251, but may be installed in accordance with BS EN 12845. For sheltered housing, extra care housing, small care homes and for supported housing in which residents cannot evacuate without the assistance of staff, systems installed in accordance with BS 9251 should satisfy the recommendations of that standard for a Category 2 system. In other supported housing, a Category 1 system will normally suffice. Watermist systems should be designed, installed and commissioned in accordance with BS 8458.

386. Concealed or recessed pattern sprinkler heads can be rendered ineffective or operate less efficiently due to decorative ceiling finishes. Therefore, consideration should be given to labelling of the heads with words 'DO NOT PAINT'.

387. Designers should liaise with Scottish Water to determine what supply is likely to be available and what pressure can be expected. Pressures can be variable and may change over time. It is imperative that the system is designed on the basis of what the minimum pressure and flow is likely to be. If there is any doubt, a tank and pump arrangement should be used.

388. Water supplies should use a direct connection to a town main if possible. A dedicated booster pump may be needed if pressure is insufficient or to achieve the higher pressures required for watermist nozzles.

389. If a pump is used, a duty pump and a standby pump will be required. The standby pump automatically takes over if the duty pump fails (duplication is not necessary for personal protection watermist systems). There should be a suitable standby power supply for the pumps, comprising secondary batteries of sufficient duration to operate the system for the minimum duration over which the system is required to operate. Further guidance on performance, reliability and resilience for sprinkler and watermist systems installed in the homes of vulnerable people can be found in Annex B of BS 9251 and Annex B of BS 8458 respectively.

390. Suppression systems may not be required to protect common corridors or staircases in some sheltered schemes, unless those areas contain combustible materials.

Portable Fire Extinguishing Equipment

391. Fire extinguishers are not required in the common areas of sheltered or extra care housing, but should be provided in plant rooms and staffed areas such as laundries, common lounges, kitchens, hairdressers, staff rooms. They should only be used by trained staff; it is not appropriate for residents to use firefighting equipment. Their provision in the common areas might encourage residents to return to their flat to fight a fire.

392. In the majority of supported housing and small care homes, portable fire extinguishers and fire blankets should be provided for use by trained staff only.

393. Extinguishers should be installed in accordance with BS 5306-8. In single storey supported housing with no more than four bedrooms, fire extinguishing appliances may be limited to a single fire extinguisher with a 13A rating and a fire blanket in the kitchen. Fixed hose reels should be removed.

Facilities and Assistance for Firefighters

394. Firefighting facilities for SFRS may have been required under Building Regulations in larger, more complex premises. Vehicle access for fire appliances should always be maintained. In sheltered and extra care housing, smoke control systems may be provided. In larger schemes, there may be rising fire mains, firefighting shafts and firefighters lifts.

395. There is not normally a requirement to provide or upgrade firefighting facilities in existing premises but it may be considered as part of a planned refurbishment

programme in older premises. Existing facilities must be maintained in efficient working order (see Part 3 of the Guidance).

External Fire Spread

396. The external facades of buildings should not provide potential for extensive fire spread. Particular attention should be given to wooden balconies, balcony infills, spandrel panels and rain-screen or other external cladding system.

397. Combustible cladding materials and extensive cavities can present a risk, particularly in taller or complex blocks. Restrictions are normally applied to the nature of materials and their fire propagation and surface spread of flame characteristics. Cavity barriers are also required.

398. Scottish Advice Note: Determining the fire risk posed by external wall systems in existing multi-storey residential buildings - gov.scot (www.gov.scot) provides further guidance. Specialist assistance may be required to determine if the construction and materials are satisfactory and whether there is adequate provision of cavity barriers.

Part 3 Ongoing Management Control

Chapter 6: Ongoing Management Control

Key Points

Arrangements for managing fire safety should include:

- Developing a fire policy and agreeing which person should take overall responsibility for fire safety.
- Providing staff training (where applicable) and fire safety awareness training to other agencies involved in the provision of housing or care services.
- Preparing fire procedures and making everyone aware of them.
- Managing the risk from building works, including adopting a 'hot work' permit system.
- Putting in place programmes for routine inspection, testing, servicing and maintenance of fire safety measures and systems.
- Monitoring the internal common areas and external areas through formal inspections, and as part of day-to-day activities by staff.
- Liaising with SFRS and encouraging residents to take up the offer of Home Safety Visits.

Introduction

399. Physical fire safety measures need to be managed and maintained to remain effective.

400. Fire safety responsibilities may be shared between many organisations. It is vital they co-operate with each other, share relevant information and co-ordinate the measures. Where fire safety law applies, this is a legal requirement (see Part 4 of the Guidance).

Responsibilities for Fire Safety in the Building

401. Those responsible for fire safety include owners, landlords, managing agents, commissioners of care services (for example, local authorities) and care providers.

402. In sheltered and extra care housing, landlords and others responsible for fire safety may have limited rights of access and control over the activities of tenants within their flat, and even less with owner occupiers. This is not likely to be the case in supported housing or small care homes.

403. There should be a documented fire safety policy for the building. This should identify a named individual with overall responsibility and authority for fire safety to ensure that activities are coordinated and no key aspects of fire safety management are overlooked.

404. The policy should also set out the roles and responsibilities of others who contribute to the management of fire safety. The more organisations that are involved, the more complex the situation. There should be a formal agreement, documented in the form of a matrix, which clearly identifies the agreed responsibility for every key aspect of fire safety management. The allocation of responsibilities may vary according to contracts and agreements e.g. between

housing and care providers. It is important that contracts include clear references to any delegated fire safety responsibilities (including responsibility for funding). A matrix template is provided in Annex 6.

405. The fire safety risk assessment should take account of this matrix and verify that the agreed arrangements are in place and working effectively.

406. On-site staff will have a role to perform in the event of fire. They may also take responsibility for housekeeping matters and, in some cases, routine checking and testing of fire protection measures i.e. confirming that fire extinguishers are present, checking that fire doors operate effectively and weekly testing of the fire alarm system.

407. Regular and ongoing engagement with residents is equally important for fire safety (see Part 1 of the Guidance).

Instruction, Training and Information for Staff

408. Staff must be provided with instruction, training and information relating to the fire procedures and measures provided.

409. For most employees, all that is required is basic fire safety awareness training. They should receive instruction upon appointment and refresher training at appropriate intervals. This will ensure that they:

- Are aware of fire hazards that might occur - in supported housing, where there is a right of access to residents' accommodation, this extends to hazards in the residents' accommodation.
- Know how to prevent fires.
- Recognise the importance of good housekeeping.
- Know when and how to use any fire extinguishers.
- Understand what to do if they discover a fire.
- Know how to escape from the premises if they encounter a fire.
- Are aware of how their actions might adversely affect the fire safety measures present in the building, for example, wedging open fire doors.
- Are able to identify and report obvious deficiencies in fire safety measures.

410. More extensive training will be required for staff with a specific role to play in responding to alarm signals. They should know the emergency plan, understand the evacuation strategy and be able to interpret and, where appropriate, operate the fire alarm panel.

411. Additional training may also be required for staff who undertake fire safety inspections. Risk assessors and reviewers will need appropriate training to ensure competence.

Emergency Plan

412. There should be a suitable Emergency Plan for the premises. This is sometime known as the Fire Procedure or Emergency Fire Action Plan.

413. In supported housing, the Emergency Plan will be a simple fire evacuation procedure. There should be a Personal Emergency Evacuation Plan ('PEEP') for residents in supported housing who need assistance with evacuation. The minimum number of staff that must be available in case of fire should be

determined. Interim measures will need to be put in place whenever there is a staffing shortfall.

414. In sheltered and extra care housing, staff will not always be present to respond to alarm signals or assist residents. If staff do have a role, this needs to be clearly defined in the Emergency Plan. The risk of entering a flat where there is a fire needs to be considered.

415. Residents' support needs are usually assessed when they take up occupation and should be kept under review. This should include their ability to escape unaided in a fire.

416. In sheltered and extra care schemes, SFRS may have to rescue residents that cannot escape by themselves. Information relating to particularly vulnerable residents should be available to SFRS on arrival by keeping it in a 'premises information box' at the main entrance. This should be accessible to SFRS or unlocked remotely by a Telecare alarm receiving centre. Details of residents using medical gases should also be included. A plan should be provided next to the fire alarm control panel, showing the locations of residents who need assistance to evacuate (for example, by using red stick-on dots). Such information must be kept up to date.

417. In larger schemes, plans detailing the layout of the building and its services should be included in the "premises information box" for SFRS.

418. Fire action notices are not normally necessary in supported housing, but should be provided in sheltered and extra care housing (see Annex 2). Notices should be relevant to the specific building. It is good practice to place them where they will be viewed routinely by people entering the building, such as by the main entrance or inside a lift.

419. In most specialised housing, there will be a communal fire alarm system. The fire action notice should reflect this and clearly state the action to be taken on hearing the alarm.

420. Contact details should be available by the fire alarm panel so that residents can arrange for the system to be silenced and reset as quickly as possible in the event of a false alarm. A prolonged delay could result in residents attempting to silence or re-set the system themselves.

Fire Drills

421. It is neither practical nor necessary to carry out drills in most sheltered and extra care housing. Discussing a pre-planned scenario with residents can be a good way to check they understand what they should do in the event of a fire.

422. In larger housing complexes with extensive communal amenities, such as hairdressers, cafeterias and shops, fire drills may be necessary. These will only apply to people present in the common areas. Residents in flats would not be expected to take part.

423. In supported housing, fire drills can be useful and should be considered as part of the fire safety risk assessment. They reinforce the Emergency Plan for staff and give an indication of the likely evacuation time. Some residents may also benefit from practicing the evacuation procedure. They are also useful learning opportunities and can highlight:

- Any shortcomings in the emergency plan.
- The need for further staff training.
- Any challenges with assisted evacuation.
- Changes to residents capabilities and the need to review their PEEPs.

Controlling Building Work and Alterations

424. Building Regulation approval should be obtained where relevant.

425. Building works can create new hazards or impair existing fire safety measures and can often be the cause of fire.

426. Those undertaking building works must implement appropriate fire precautions. Contracts may include requirements and method statements and these should be available for scrutiny. Inspections should take place during the course of the works. This should happen for all building works, not just major projects.

427. 'Hot work' is a particular risk. It is vital that control is exercised by adopting a 'permit to work' system. This places obligations on those carrying out the work to inspect the areas in which work is taking place, both before and after the work, and to take all necessary precautions, including provision of accessible fire extinguishers.

428. Contractors should be made aware of lines of fire separation and other fire resisting enclosures in the building, so that any breaches to walls or floors (for example, for pipes or ducts) can be appropriately fire stopped. Following the work, checks should be made to ensure that the original fire resistance is restored.

429. Examples of new hazards or impairments to existing fire safety measures that can arise from building works include:

- Making holes in separating walls and floors.
- Removing stairway doors to allow free access for delivering materials
- Parking over fire hydrants.
- Placing site huts/waste skips too close to the building.
- Leaving gas cylinders inside the building overnight to avoid having to store them properly away from the building.
- Blocking access to a rising fire main inlet.
- Opening up parts of the structure without providing suitable fire-resisting hoarding to separate work areas from occupied areas.
- Blocking exit routes.
- Leaving combustible building materials and waste in common parts.
- Wedging of fire doors.
- Disablement of fire detection / covering of detectors.

430. Further advice on fire safety during construction work is available from the HSE (HSG168 Fire Safety in Construction) and the Fire Protection Association (Fire Prevention on Construction Sites).

431. Tenancy agreements should restrict the works that tenants can undertake without permission. Examples of alterations which could be detrimental to fire safety include:

- Replacing a flat entrance door with one that is not fire-resisting and self-closing.
- Installing a new bathroom suite, but not ensuring that breaches of riser walls created for new drains are fire-stopped afterwards to maintain fire separation to the common riser.
- Removing the doors and walls to the kitchen and lounge to create an open plan living area, but in so doing making all the bedrooms inner rooms, and possibly impairing protection to the common parts.
- Installing new gas supplies to flats and creating ventilation to gas meters with unprotected openings into common corridors and stairways.
- Adding a pitched roof to a flat roofed block without providing suitable cavity barriers.
- Fitting non-condensing tumble dryers with holes through fire walls and doors for vent pipes.
- Replacing smoke vent windows with sealed units
- Installing a new false ceiling without transfer grilles to allow smoke to reach existing permanent vents
- Fitting rain screen cladding to an existing block of sheltered or extra care housing without considering the potential for a fire from a flat to travel upwards through the cavity behind the cladding to spread into the flats above
- Installing downlighters which are not 'fire-rated', have no intumescent fire hoods or an insulation support box, thereby diminishing the fire resistance of the ceiling.
- Damaging the protection to the timber frame construction by installing additional electrical sockets.

Inspection, Testing and Maintenance of Fire Safety Systems and Equipment

432. Fire safety systems and equipment need to be maintained in effective working order. There must be arrangements for routine inspection, testing, servicing and maintenance.

433. The maintenance and testing of some systems and equipment fall within the recommendations of British Standards. Frequencies for testing and maintenance should be followed where possible although minor deviations may be appropriate for reasons of practicality and should be based on an assessment of risk.

434. Some of the inspection and testing may be carried out by competent in-house staff. Other work should be carried out by competent contractors. Third party certification and approval schemes provide confidence that listed companies have been assessed against recognised standards.

435. Where systems are tested by in-house staff or other non-specialists, call-out arrangements will be required to repair any deficiencies.

436. The following guidance outlines the basic requirements for routine inspection, testing and maintenance of fire safety systems. See Annex 8 for summary table.

Emergency escape lighting

437. Emergency lighting should be tested as follows (unless self-testing):

- A monthly functional test using a suitable test facility to check that the fitting has not failed. This simple test can easily be undertaken in-house.

- A full duration discharge test once a year to confirm that the batteries are still capable of supplying the fitting for its duration. (Care should be taken not to leave a building entirely without escape lighting while batteries recharge after a test).

438. Further guidance on testing and servicing emergency escape lighting systems can be found in BS 5266-8.

Smoke ventilation

439. AOVs and electrically operated OVs should be tested once a month for correct operation using the manual controls provided. Windows and other non-electrical means provided for venting smoke should be operated at least once a year. These are simple tests that can be undertaken by non-specialists.

440. Testing and maintenance of the interface between smoke detectors and the controls associated with AOVs should take place at least twice a year, and in accordance with the manufacturer's instructions. Further guidance can be found in BS 7273-6.

441. Other systems of smoke control, including smoke extract systems and pressurisation systems, should be tested and serviced periodically in accordance with the manufacturer's instructions. This will normally be at least annually, but may involve monthly or more frequent functional tests where the systems are intended to protect the means of escape. It is important that those servicing such systems are familiar with the performance parameters used in the design of the system.

442. Further guidance on testing and servicing of smoke control systems can be found in BS 9999.

Fire extinguishing appliances

443. Fire extinguishers and fire blankets should be inspected and maintained every 12 months by suitably trained specialists.

444. Staff should look out for missing or damaged equipment as part of normal walk-rounds or formal fire safety inspections. Defects should be reported. A simple visual check of fire extinguishers should be carried out monthly.

445. Further guidance on inspection and maintenance of fire extinguishing appliances can be found in BS 5306-3.

Fire detection and alarm systems

446. Where relevant, alarm receiving centres (ARC) should be warned before carrying out the test. They should be contacted again after the test to ensure that the signal was received correctly.

447. A different manual call point should be tested each week. This can be carried out by non-specialists. Swing-free arms, electromagnetic door holders and other interlinked devices should be checked to ensure they operate correctly.

448. Where remote monitoring is in place, transmission from a resident's flat should also be tested. A different flat should be tested each week so that, over a period of time, all residents' systems are tested.

449. Periodic servicing should be undertaken at least once every six months. Further guidance on testing and servicing of fire alarm systems can be found in BS 5839-1.

Smoke and heat alarms

450. Smoke and heat alarms should be tested preferably weekly but at least every month, using the test button or remote test switch. Many residents will be able to carry out this test themselves. Alternatively, contractors may undertake this as a value-added service during a routine repair or annual safety check.

451. Anyone engaging with residents in sheltered or extra care housing could carry out a quick visual check to ensure alarms are not damaged or batteries removed.

452. Further guidance on testing smoke alarms can be found in BS 5839-6. Alarms should be replaced at the end of their lifespan in line with manufacturer's recommendations.

Fire dampers

453. Fire dampers should inspected and tested at least once every two years for those operated by fusible links and every year for those that are spring operated. Guidance on testing of fire dampers can be found in BS 9999.

Automatic fire suppression systems

454. Domestic/residential sprinkler and watermist systems should be maintained annually. Further guidance on maintenance of sprinkler systems can be found in BS 9251. Sprinkler systems installed in accordance with BS EN 12845 should be subject to a weekly test and quarterly maintenance in line with that standard. Further guidance on testing and servicing of watermist systems can be found in BS 8458.

Rising fire mains

455. Rising fire mains should be inspected every 6 months. Outlets should be checked for damage and padlocks and straps on landing valves should be in place. This could be carried out in-house. The rising main should be subject to an annual pressure test which will require a specialist contractor. Further guidance can be found in BS 9990.

Firefighters lifts

456. Firefighters lifts should be subject to monthly inspections and annual testing and servicing. More information can be found in BS EN 81-72.

Fire-resisting doors

457. Fire-resisting doorsets (including flat entrance doors) should be inspected every six months to identify defects such as:

- Missing or ineffective self-closing devices.
- Damaged or missing intumescent strips and smoke seals.
- Damaged doors or frames.
- Poorly fitting doors caused by distortion, shrinkage, or wear and tear.
- Newly fitted, inappropriate, door furniture.
- Doors that have been replaced using non-fire-resisting types.

458. Staff can be trained to identify these defects and remedial action should be taken as soon as possible. Checks of flat entrance doors could be combined with routine repairs or annual gas safety checks.

459. Further advice on routine inspection and maintenance of fire-resisting doors can be found in BS 8214.

Fire-resisting construction

460. Damage to walls or signs of unauthorised work are likely to be obvious in common corridors, lobbies and stairways. Fire safety checks should also include areas such as riser cupboards and plant rooms.

461. When flats become vacant or change tenancy, the condition of fire-resisting construction should also be inspected.

462. Separating walls should be checked annually where the fire strategy relies on fire separation within roof voids (for example, in sheltered and extra care housing). Checks should be made during fire safety risk assessments but more comprehensive inspections may need to be carried out, particularly following works affecting the roof space. For example, new penetrations in separating walls should be checked to ensure they are properly fire stopped.

External escape routes

463. The use of external stairways should be avoided owing to the age and vulnerability of the residents. If provided for staff use, they should be subject to periodic inspection which includes visual checks for:

- Evidence of damage or corrosion.
- Build-up of moss or other slip hazards.
- Trip hazards or obstructions on the stairway.

464. A structural integrity survey is required every 3 years by a specialist.

Checking Fire Safety Standards

465. Formal inspections can identify fire safety shortcomings but many routine activities also provide useful opportunities to monitor fire safety in the common areas. The standard of fire safety can be improved by encouraging staff and others to be fire safety aware.

466. The extent of formal inspections will depend on how well standards are being maintained. Inspectors should also be alert to new hazards, for example, the use of extension leads to charge a mobility scooter brought in by a visitor. Inspection checklists should at least cover the following:

- Monitor housekeeping in common areas and check policy is being followed.
- Doors to residents' store rooms, electrical cupboards, plant rooms, bin stores and other ancillary rooms are secure and not being left or held open.
- Front doors and other entrance and exit doors are closing properly.
- Fire extinguishing appliances are not missing, discharged or damaged, if provided.
- There are no signs of damage to fire-resisting walls, doors and glazing.
- Smoke control vents have not been tampered with or obstructed.
- Fire exit signs (if fitted) or fire action notices are not missing or defaced.
- Fire detectors, call points and sounders are still in place and have not been damaged, covered over or interfered with.
- Rising fire main outlets are not damaged or obstructed.
- Permanently illuminated (maintained) emergency lights/signage are working normally.

Records

467. Records of fire safety risk assessments should be kept. It is also good practice to keep records of:
    - The fire safety policy (fire safety management arrangements).
    - Staff training and drills, where appropriate.
    - Inspection, testing and maintenance of fire safety measures.

468. Records can provide evidence of good management. Where fire safety law applies, Enforcement Officers from SFRS will want to review records as part of their fire safety audit.

469. In larger schemes, a fire safety manual should contain a record of the fire safety arrangements. Guidance on the content can be found in BS 9999.

Upgrading Fire Safety Measures

470. Alterations and improvements can provide an opportunity to upgrade fire safety measures. For example, when lift replacement becomes necessary, upgrading to evacuation lift standard will significantly improve the ability to evacuate mobility impaired residents.

Liaising with SFRS

471. SFRS may visit premises to obtain information so that operational crews can become familiar with the features of the building, including access, availability of water for firefighting, and firefighting facilities such as firefighters lifts and rising fire mains. They may also check on legal obligations to maintain the property and facilities for firefighter use or safety.

472. Supported housing is unlikely to receive such a visit. Sheltered and extra care schemes may be visited although this is a matter for SFRS.

473. Home safety visits are a key component of SFRS's community safety engagement work. Housing providers and agents should inform residents of this service and make a referral to SFRS if they have concerns. Details on how to do this are on the SFRS website.

474. Some premises, for example, care homes and some supported housing may be subject to a fire safety audit to check compliance with fire safety law.

Part 4 The Law and Fire Safety

Chapter 7: The Law and Fire Safety

Key Points

- Compliance with Building Regulations provides a base-line standard of fire safety for new buildings and extensions, alterations and conversions of existing buildings. Building Regulation guidance cannot be applied retrospectively to existing buildings.
- Housing legislation makes requirements in respect of smoke and heat detection and the Scottish Social Housing Charter requires social landlords to deliver services that meet the needs of residents.
- The Civic Government (Scotland) Act 1982 requires occupiers to keep common property free of dangerously combustible items and obstructions.
- Part 3 of the Fire (Scotland) Act does not generally apply to domestic premises but it does apply to any premises which provide a "care home service" or which requires a licence to operate as a House in Multiple Occupation. It also applies to some forms of supported housing, for example in group homes with occupancy agreements, where the main purpose is to provide care.

Introduction

475. This Chapter gives an overview of relevant legal requirements governing fire safety. This includes Building Regulations, Housing Acts, the Civic Government (Scotland) Act 1982 and the Fire (Scotland) Act 2005. It includes a consideration of the application of Part 3 of the Fire (Scotland) Act to premises which provide care services, as defined in The Public Services Reform (Scotland) Act 2010.

Building Regulations

476. Building Regulations apply to new building work, buildings being converted from one use to another, and alterations or extensions to existing buildings. They contain requirements in respect of various fire safety measures. Contravention of Building Regulations is an offence.

477. Any proposal to carry out alterations should be submitted to Building Standards Verifiers to determine if approval is necessary (and, if so, to obtain approval of the proposals) under the Building Regulations.

478. Unapproved minor alterations and building works can result in a contravention of the Building Regulations. The replacement of a self-closing, fire-resisting flat entrance door by a non-fire-resisting door or by a door that is not self-closing is a common contravention. This may place other residents at risk if a fire occurs in the flat in question.

479. There is no requirement under the Building Regulations to upgrade existing fire safety measures to current standards. However, existing non-compliance with current Building Regulations must not be made worse in the course of alterations or building works.

480. Powers exist under the Building (Scotland) Act 2003 to require unauthorised

alterations to be rectified if the work breaches the Building Regulations.

481. Anyone in doubt about the application of Building Regulations should contact their local authority Building Standards department.

Housing Acts

482. The Housing (Scotland) Act 2006 requires that private rented housing has satisfactory provision for detecting fires and for giving warning in the event of fire or suspected fire. The Act also requires inspection and testing of electrical installations in private rented housing.

483. The Housing (Scotland) Act 2010 makes provision for a Scottish Social Housing Charter which sets out standards and outcomes that social landlords should aim to achieve when performing housing activities. The Charter includes a duty to ensure compliance with the Scottish Housing Quality Standard. The Standard includes requirements for electrical safety testing, fire detection and the provision of thumbturn locks to allow escape in event of fire. The Charter also requires social landlords to communicate effectively with tenants and to deliver services that recognise and meet individual needs. This should be achieved regardless of age, disability or other protected characteristic, in line with Equalities legislation. The Scottish Housing Regulator sets out its role, requirements and powers in its Regulatory Framework and associated guidance.

484. From 1 February 2022, an amendment to the statutory tolerable standard comes into force under section 86 of the Housing (Scotland) Act 1987, which requires that all dwellings, regardless of tenure, must have satisfactory provision for detecting fires and for giving warning in the event of fire or suspected fire. The standard requires:

- One smoke alarm installed in the room most frequently used for general daytime living purposes.
- One smoke alarm in every circulation space on each storey, such as hallways and landings.
- One heat alarm installed in every kitchen.

485. All alarms should be ceiling mounted and interlinked. They can be either mains-wired or have tamper proof long-life lithium batteries. There is also a requirement for carbon monoxide detectors to be fitted where there is a carbon-fuelled appliance (such as boilers, fires (including open fires), heaters and stoves) or a flue.

486. The benchmarks for fire detection and warning in Chapter 5 recommend a higher standard than that required in either building regulation or housing legislation guidance, reflecting the increased risk associated with those living in premises covered by this Guidance.

The Civic Government (Scotland) Act 1982

487. Section 93 of this Act requires occupiers to keep common property free of combustible substances and anything which might obstruct egress from and access to the property in the event of fire.

488. SFRS has power to enter the common property to determine if the duty is being complied with, and if it is not and there is an immediate risk of fire likely to

endanger life, to do anything necessary to remove that risk including seizing and retention of items. SFRS can recover from occupiers the expense of removing items or substances from common property. SFRS can issue Notices requiring occupiers to remove or render safe items or substances in common property. Any person who fails to comply with a Notice from SFRS is guilty of an offence.

Fire (Scotland) Act 2005 and Regulations

489. Fire safety duties are imposed on dutyholders by Part 3 (Fire Safety) of the Fire (Scotland) Act 2005 ("the 2005 Act") and the Fire Safety (Scotland) Regulations 2006 (the Regulations).

490. Duties include undertaking a fire safety risk assessment and taking measures to ensure the safety of persons from fire on, or in the immediate vicinity of, the premises. A "competent person" must be appointed to assist in undertaking the necessary measures. Risk assessments must be reviewed regularly. Records must be kept of the significant findings of the risk assessment; the fire safety management arrangements (for the effective planning, organisation, control, monitoring and review of fire safety measures); and information regarding any relevant persons identified by the assessment as being especially at risk from fire, where:

- A dutyholder employs 5 or more employees;
- A licence/registration under an enactment is required; or
- If required by an Alterations Notice issued by SFRS

491. Additional duties include:

- Nominating a sufficient number of competent persons to implement fire procedures in so far as they relate to the evacuation of relevant persons from relevant premises.
- Where necessary, nominating competent persons to implement measures for fighting fire.

492. The 2005 Act and Regulations applies to 'relevant premises' as defined in section 78 of the 2005 Act. These are mainly non-domestic premises; "domestic premises" as defined, are not "relevant premises". The legislation in Scotland does not generally apply to individual dwellings, or to the common areas of blocks of flats.

493. However, one provision of the Regulations does apply to the common areas of domestic premises. This is the requirement to ensure that the common areas and any facilities, equipment and devices provided for the use by, or protection of, firefighters, are maintained in an efficient state. This provision is imposed on the persons who have control of the common areas. SFRS may inspect premises to audit compliance with the specific provision. If SFRS identifies a breach, it may notify the dutyholder(s) of steps to be taken to remedy the breach. If not resolved it may issue an enforcement notice. Any person who fails to comply with an enforcement notice from SFRS is guilty of an offence. A person on whom an enforcement notice is served has the right of appeal to the Court for 21 days after service of the notice. Alternatively, if the dutyholder and SFRS cannot agree on the measures necessary, either party may refer the matter for a determination by the Chief Inspector of the Fire Service

Inspectorate.

494. The Act may, of course, apply to some parts of sheltered or extra care complexes which are not considered to be "domestic premises", such as offices, day care facilities for non-residents, commercial premises and dedicated guest overnight accommodation outwith individual dwellings.

495. Some premises, such as houses which fall within the scope of House in Multiple Occupation (HMO) licensing in the Housing (Scotland) Act 2006, which may normally be considered domestic in nature, are excluded from the definition of domestic premises in section 78 and are therefore deemed to be "relevant premises". Likewise, any premises in which a "care home service" is provided, will always be "relevant premises", regardless of whether it is purpose-built or is small and domestic in nature.

496. In most cases, application of the 2005 Act and Regulations will be a straightforward consideration, but in some cases the application may not be straightforward and may require interpretation and judgement. The remainder of the guidance in this Chapter is offered to provide clarity although it should be noted that it is not definitive and it therefore remains for each dutyholder and SFRS to reach their own conclusions in the individual circumstances of each case.

COMMON AREAS OF PRIVATE DWELLINGS

497. The common areas of private dwellings, such as stairs and corridors, are specifically excluded from being relevant premises by section 78(4) of the 2005 Act.

498. For the purpose of the 2005 Act, premises can only be considered as a workplace where they already meet the description of relevant premises in section 78. This means that the definition of workplace does not extend to the common areas of private dwellings since these parts are expressly not relevant premises by virtue of section 78. For example an office for a concierge in a block of flats may be relevant premises, but the common parts of the building are not relevant premises even though the concierge may, as part of his or her employment, use or carry out work in the common parts.

SHELTERED HOUSING FOR OLDER PEOPLE

499. Housing for older people falls into the following broad categories:

- Amenity or medium dependency housing. This is housing generally considered suitable for older people due to the physical characteristics of the house, but does not necessarily include any services.

- Sheltered housing. This is a generic term to describe housing with a warden service which combines older people's accommodation requirements and support needs into a single package. Usually built in a block or comprises a cluster of bungalows and often includes communal facilities, such as a lounge. Scheme residents can call upon a warden for support and the warden may also organise activities. Wardens tend to live off-site. Sheltered

wheelchair housing is housing adapted to wheelchair standards for elderly people who use wheelchairs.

- Very sheltered housing (sometimes known as 'care housing' or 'extra care housing'). This is accommodation generally suitable for frailer people who might otherwise be in a care home. These schemes may have additional facilities such as special bathroom facilities, a greater level of care and support through extra wardens, full-time carers, domiciliary assistance, or the provision of meals. However there is no single model for this type and provision can vary.

500. There are three main categories of provider of sheltered housing for older people.

Local Authority Providers

- Most Scottish local authorities provide sheltered housing and several also provide very sheltered housing.

Housing Association Providers

- A number of housing associations provide sheltered and/or very sheltered housing. These range from 'national' organisations such as Bield and Hanover (Scotland) who manage large numbers, to small organisations responsible for one or two schemes. Some of these organisations have a small proportion of shared ownership or shared equity accommodation.

Private Sector Providers

- There is private sector provided sheltered housing where the dwellings within the schemes are privately owned and buildings are managed by a private company. Dwellings can subsequently be sold on. Some private sector schemes include very sheltered housing. Almost all the schemes provided by the private sector comprise freehold properties.

501. In general, sheltered housing comprises private dwellings. These dwellings, and the common areas serving the dwellings such as the corridors, entrance lobby, stairs, common room/lounge, are therefore not relevant premises.

502. However some specific parts of some sheltered housing complexes may be relevant premises, examples are:
- Offices used by persons other than the residents, such as a non-resident warden.
- Guest overnight rooms, outwith individual dwellings, which are kept available for the exclusive use of visitors.
- Rooms or facilities within a building which are regularly used for the day care of non-residents.

503. Where, within a building, there are areas that are relevant premises, such as an office used by a warden, this does not mean that the common areas of the building such as corridors or a common room then become relevant premises

simply because they may be accessed by employees.

504. In some very sheltered housing complexes, shared facilities are provided to the extent that this brings the premises within the scope of HMO licensing. Where HMO licensing applies to sheltered housing, the premises will then be relevant premises.

505. Where only part of a building is relevant premises, such as will be the case in many sheltered housing complexes, persons in other parts of the building may fall within the description of 'relevant persons' in section 79 of the 2005 Act, with the effect that dutyholders responsible for fire safety in the parts that are relevant premises, must take into account the safety of the other persons in the building from a fire starting in the relevant premises.

PROVISION OF A SUPPORT SERVICE

506. Support services are services designed to help a wide range of people, from those who need support with very complicated needs, to people who need time-limited support at different points in their lives.

507. The Public Services Reform (Scotland) Act 2010 ("the 2010 Act") includes a care registration category of 'support service' and a separate category of ''housing support service'. A "care at home" service, delivered in a person's own home, is an example of a "support service." Sheltered Housing is an example of a "housing support service".

508. Registration of these services under the 2010 Act applies to the service provider rather than to the premises where support is delivered. There are no references to these services in the 2005 Act.

Care at home

509. 'Care at home' (also known as 'home care' or 'home support') is care and support provided in a person's own home to enable that person to function as independently as possible and/or continue to live in their own home.

510. Care at home services may be provided to older people, children and young people and their families and carers; adults with learning disability or mental health problems; people with physical disabilities; people with alcohol and drug problems, and other vulnerable groups. The time, length and areas covered will be different for different individuals. Care at home can include:

- routine household tasks within or outside the home (basic housework, shopping, laundry, paying bills)
- personal care as defined in schedule 1 of the Community Care and Health (Scotland) Act 2002
- respite care in support of the person's regular carer(s)
- overnight, live-in and 24 hour services

511. Care at home may be provided by local authorities or private or voluntary sector agencies. Primary healthcare teams may also be involved in intensive "care at home" schemes.

512. There are a significant number of dwellings where treatment and care is provided by NHS Scotland bodies for patients in their own homes.

513. Since care at home is delivered in a person's own home it follows that these will generally be private dwellings and will therefore not be relevant premises. Where a person living in their own private dwelling receives care or support to allow that person to continue to occupy their home, their home is deemed to be domestic premises; a change in mobility and dependency of the person, or the provision of a carer, will not alter this.

514. Private dwellings, within the meaning of section 78 of the 2005 Act, are not relevant premises. Obligations in respect of the fire safety of employees involved in domiciliary care may sit within the scope of the Health and Safety at Work etc. Act 1974. Guidance is available on the HSE website.

Housing support service

515. Housing support covers a range of activities that allow people to maintain their accommodation, meet their duties and responsibilities as a tenant and to live independently in the community. Housing support services can range from around one hour a week to 24-hour residential support.

516. A wide range of people with particular needs can receive housing support services - the largest group is older people living in sheltered housing. Other groups include homeless people, refugees, women escaping domestic violence, people with a chronic illness, people with a physical impairment or learning disability, ex-offenders and people with drug and alcohol related problems. They may use these services when their accommodation is temporary (for example, in a crisis) or when they are being re-housed.

517. Housing support services may be provided or commissioned by a landlord as part of a tenancy agreement where the provision of accommodation is part of the support.

518. Housing support may be provided in all types of accommodation and tenure such as to people living in ordinary houses, sheltered housing, hostels for homeless people, accommodation for learning disabled people, women's refuges and group homes where people share accommodation supported by residential or visiting housing support workers.

519. Premises where persons are in receipt of housing support may or may not be relevant premises. The existence of housing support in itself is not an indication that premises are relevant premises, there needs to be an individual consideration of each premises.

520. The tenure of the premises - whether the residents are tenants or occupiers - is a strong indication as to whether they are private dwellings or not.

521. A tenancy agreement is an indication that the person rents the house or flat exclusively (or with another person), and that the premises are a private dwelling and not then relevant premises.

522. An occupancy agreement is an indication that the person rents a room in a group home where some rooms are shared with other people, or the main purpose of the stay is to receive support, for example in a rehabilitation centre or a hostel. These premises are likely to be relevant premises. Any premises with shared facilities to the extent that this brings the premises within the scope of HMO licensing, will of course be relevant premises.

CARE HOMES

523. The term care home is sometimes used generically to describe a wide range of premises where care is provided. For the purposes of fire safety legislation, care homes are only relevant premises where there is the provision of a care home service as defined in paragraph 2 of schedule 12 to the 2010 Act.

524. Section 78(5)(b) of the 2005 Act specifies that such premises are not to be regarded as domestic premises. This means that a care home, which matches the description, is always a relevant premises. Wider definitions of care home must not be used in the interpretation of the legislation.

ADULT PLACEMENT SERVICE

525. Adult placement is a registered care service which is defined in schedule 12 to the 2010 Act. An adult placement service arranges the provision of accommodation and support for vulnerable adults by placing them in the homes of families or individuals where they will be part of the household, and where there is support and care. Generally, premises used for adult placement are private dwellings and are, therefore, not relevant premises.

526. However, there is no exclusion from HMO licensing, so in those cases where the number of persons living in the premises exceeds the HMO licensing threshold, the premises may be a licensable HMO and then would be relevant premises.

527. A summary of the application of fire safety law is given in Figure 16 below:

Type of Premises	Fire Safety Law applies?
General needs premises (including those with a "care at home" service)	x
Sheltered Housing	x
Extra Care Housing (very sheltered housing)	x (unless HMO licence required)
Supported Housing	Applies to some e.g. group homes with housing support services which offer occupancy agreements and whose main purpose is to provide care
Licensed HMOs in which care / support is provided	✓
Small Care Homes	✓

NB fire safety law may apply to limited parts of premises e.g. an office, separate guest overnight accommodation, and rooms which provide care for non-residents in sheltered housing complexes. In all premises, it is a legal requirement to maintain any facilities provided for firefighter use/safety in common areas in good repair and efficient working order.
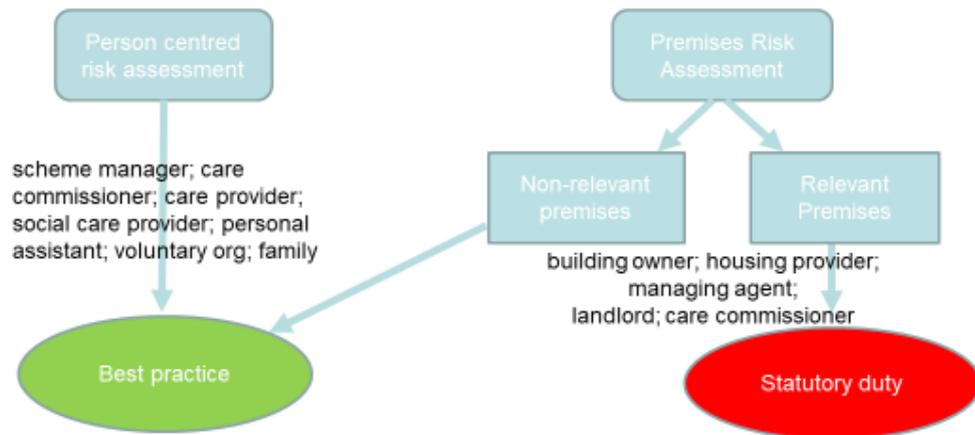
Figure 16: Application of Fire Safety Law

Annexes

Annex 1: Example of Fire Safety Advice for Residents

Smoke and heat alarms save lives. They provide early warning of a fire and allow you to make your escape – but only if they are working. For the best protection, smoke alarms should be provided in every room, including bedrooms and the lounge, and a heat alarm in your kitchen. Speak to your housing provider if you have any concerns.

This note provides fire safety guidance to keep yourself and others safe from fire. Further advice on fire safety in the home can be found on the SFRS website.

You can prevent fire from happening by taking a few simple steps:

- Never leave cooking unattended – keep an eye on your cooker when it is on.
- Deep fat fryers or oven chips are much safer than using open chip pans. If you use a chip pan, do not fill it up too much (no more than 1/3 full).
- Make sure cigarettes are put out properly in a sturdy ashtray.
- Don't smoke in a chair if you have been drinking alcohol or feel sleepy.
- Do not smoke when sleepy or in bed.
- Keep lighters and matches away from children.
- Do not overload electrical sockets by plugging in too many electrical appliances.
- Turn electrical appliances off at the wall, this is safer than leaving them on standby.
- Don't leave appliances on when sleeping or out of the house – this includes washing machines, dishwashers and tumble dryers.
- Avoid the use of candles - if you must use them, make sure candles are secured in a holder and away from materials that may catch fire, like curtains - children must never be left alone with lit candles.
- Take care if you use portable heaters. Don't dry clothes over them or otherwise obstruct them.
- If you use an electric blanket, make sure it is in good condition. Only use blankets that bear the BEAB certification mark. Do not use blankets that are more than 10 years old or that show signs of wear. Arrange for the blanket to be checked by a specialist every 3 years or as recommended by the manufacturer. Moth proofing chemicals should not be used or heavy items placed on top. Blankets should not be folded as this can damage the wiring. They may be left on beds or loosely rolled up and stored in a cool, dry place.
- If you have a mobility scooter, follow the guidance from your housing provider as to where it can be stored and charged. If you need to keep it in your own accommodation, this should be agreed with your housing provider in advance and make sure you don't leave it where it will stop you getting out quickly in an emergency.
- If you require oxygen therapy, follow the guidance you are given on using this safely. Never smoke when using oxygen.

Keep safe and plan your escape

Flats are designed to resist the spread of fire. Because of this, a fire is not likely to spread from one flat to another. The flat entry door is a fire door and is fitted with a self-closing device. It is important that the self-closer works correctly to make sure a fire does not spread from one flat to another.

If your building operates a 'stay put' policy and there is a fire in your building – but not in your flat – you should stay in your home and keep the front door closed unless:
- You are directly affected by heat, smoke or fire.
- Or the Fire and Rescue Service or Police tells you to get out.

Follow the instructions on the fire action notices. Take time to read them, so that you know what to do if there is a fire or the fire alarm sounds.

If the fire is where you are – in your home or in a common area – leave the building immediately if it is safe to do so and call the Fire and Rescue Service on 999. Tell other residents if you can, but don't put yourself at risk.

If you are in the common parts and you hear the fire alarm sounding, leave the building. Do not return to your flat. If the building is fitted with a fire alarm system, operate a fire alarm call point on your way out.

Your stairway should be safe for escape throughout the course of a fire. Use the stairs to get down to the ground floor – never take the lift (unless it is designed for evacuation in a fire situation).

Your housing provider may have specific instructions including where to wait outside (it may be possible to wait inside, for example, in a communal lounge, but this will be dependent on the circumstances in your building – check the instructions from your housing provider).

It is rare for people to be trapped by fire. If you are:
- Go to a "safe room" which should have a window and a phone.
- Call the Fire and Rescue Service and pack bedding or towels around the door to keep out smoke.
- Open the window to breathe clean air and try attracting attention by waving a sheet if it is safe to do so.

Once you get out, call the Fire and Rescue Service and stay out.

Key things to remember:
- Plan an escape route out of your home and keep it clear so you can leave quickly if you have to.
- Make sure you've got working smoke and heat alarms and test them weekly.
- At the end of the day, check cookers and electrical appliances are switched off and cigarettes are extinguished.

- Close all doors when you go to bed - especially the doors to the lounge and kitchen.
- If your clothes catch fire 'stop, drop and roll' .

Assist your housing/care provider in keeping you and others safe from fire:

Follow the advice of your housing/care provider in preventing fires in your accommodation and elsewhere in the building and in avoiding false alarms from smoke alarms that disrupt you and others. In particular;
- Do not interfere with the fire alarm system.
- Make sure stairs, landings and corridors are clear for escape. Never leave your belongings or rubbish in stairs, landings or corridors.
- Provide information when requested so that SFRS can be advised of those with mobility issues/using oxygen.
- Do not wedge open fire doors. If you see a fire door that is not closing or is damaged, let your housing provider know.
- Follow restrictions that may apply to what you can store and use in your accommodation.

If you have any questions, you should speak to the person responsible for fire safety in your building.

Annex 2: Example of Fire Action Notices

Example of notice for use in sheltered / extra care housing with a 'stay put' strategy

Fire Action

If Fire Breaks Out In Your Home:

- Leave the room where the fire is straight away, then close the door.
- Tell everyone in your home and get them to leave - close the front door of your flat behind you.
- Call the Fire Service.
- Do not use the lift (unless it is a confirmed, fire-protected, evacuation lift).
- Wait outside, away from the building.

If You See Or Hear Of A Fire In Another Part Of The Building:

- The building is designed to contain a fire in the flat where it starts - this means it will usually be safe for you to stay in your own flat if the fire is elsewhere.
- You must leave immediately if smoke or heat affects your home, or if you are told to by the Fire Service.

To Call The Fire Service:

- Dial 999 or 112.
- When the operator answers, ask for FIRE.
- When the Fire Service replies give the address, if available provide the floor and flat position of where the fire is.
- Do not end the call until the Fire Service has repeated the address correctly.

Example of notice for use in specialised housing with a communal fire alarm system and a simultaneous evacuation strategy

FIRE ACTION

IF FIRE BREAKS OUT IN YOUR ACCOMMODATION:

- Leave the room where the fire is straight away, then close the door.
- Do not stay behind to put the fire out.
- Raise the alarm by using a 'break glass' call point.
- Call SFRS.
- Wait outside, away from the building at the assembly point*.

* It may be appropriate to specify the location if not immediately obvious.

IF YOU SEE OR HEAR OF A FIRE IN ANOTHER PART OF THE BUILDING:

- If you discover a fire elsewhere in the building, raise the alarm by using a 'break glass' call point and leave by the nearest fire exit.
- Call SFRS.
- Wait outside, away from the building at the assembly point.
- You must also leave immediately if you hear the alarm.

TO CALL SFRS:

- Dial 999 or 112.
- When the operator answers, give your telephone number and ask for FIRE.
- When SFRS reply, give the address where the fire is.
- Do not end the call until SFRS has repeated the address correctly.

Annex 3: Person-Centred Fire Safety Risk Assessment Template

Full Address		Resident Name	
Date		Name of Assessor	
Date for review			

Hazard and risk factors	Circumstances (Circle as appropriate	Further details of current circumstances	Details of any existing control measures	Outstanding risk (Yes or No)	Additional actions required
Smoking	Non-smoker	No further consideration required.			
	Smokes but no signs of careless handling				
	Smokes and signs of careless handling	☐ Discarded Cigarettes and matches. ☐ A few burn marks found on carpet. ☐ Multiple burn marks found on carpet ☐ Cigarette burns to clothes or furnishings. ☐ Other (please specify):			

Hazard and risk factors	Circumstances (Circle as appropriate	Further details of current circumstances	Details of any existing control measures	Outstanding risk (Yes or No)	Additional actions required
	No cooking facilities.	No further consideration required.			
	Cooking but no evidence or suggestion of careless behaviour.				
Cooking	Cooking and evidence or suggestion of careless behaviour.	☐ Inappropriate use of cooking equipment (e.g. microwave ovens). ☐ May occasionally leave cooking unattended. ☐ Likely to leave cooking unattended. ☐ History of alarm signals or small fires from cooking. ☐ Other (Please specify):			

Hazard and risk factors	Circumstances (Circle as appropriate	Further details of current circumstances	Details of any existing control measures	Outstanding risk (Yes or No)	Additional actions required
	Equipment safely used and maintained.	No further consideration required.			
	Extensive use of extension leads and adapters and/or electric blankets, but adequately maintained.				
Electrical	Use of extension leads and adapters and/or electric blankets, but lack of maintenance or signs or wear and tear.	☐ Cube adapters. ☐ Potential overloading of circuits. ☐ Worn equipment or cables. ☐ Electric blankets not maintained regularly. ☐ Other (please specify):			

Hazard and risk factors	Circumstances (Circle as appropriate	Further details of current circumstances	Details of any existing control measures	Outstanding risk (Yes or No)	Additional actions required
	No use of portable heaters.	No further consideration required.			
	Portable heaters limited to oil-filled radiators or convector heaters compliant with modern standards.				
Portable Heaters	High hazard portable heaters, such as fan heaters, radiant bar fires or paraffin heaters.	☐ Evidence of heaters sited too close to combustible materials. ☐ Likelihood of heaters sited too close to combustible materials. ☐ Potential for other careless use (e.g. drying clothes, warming meals, etc.). ☐ Other (please specify):			

Hazard and risk factors	Circumstances (Circle as appropriate	Further details of current circumstances	Details of any existing control measures	Outstanding risk (Yes or No)	Additional actions required
Use of candles	No candle use.	No further consideration required.			
	Candles used, but with appropriate precautions.				
	Candle use without appropriate precautions.	☐ Please specify:			
Deliberate ignition	No history of, or likely potential for, deliberate ignition.	No further consideration required.			
	No history of deliberate ignition, but some potential.	☐ Please specify:			
	History or likelihood of deliberate ignition.	☐ Previous history of deliberate ignition. ☐ History of malicious false alarms to the fire and rescue service. ☐ Other (please specify):			

Hazard and risk factors	Circumstances (Circle as appropriate	Further details of current circumstances	Details of any existing control measures	Outstanding risk (Yes or No)	Additional actions required
Alcohol or drug use	None.	No further consideration required.			
	Alcohol or drug use, with no other high fire risk behaviour.				
	Significant alcohol or drug use, combined with high fire risk behaviour.	☐ Evidence or likelihood of careless handling of smoking materials. ☐ Evidence or likelihood of leaving cooking unattended. ☐ Other (please):			

Hazard and risk factors	Circumstances (Circle as appropriate	Further details of current circumstances	Details of any existing control measures	Outstanding risk (Yes or No)	Additional actions required
Hoarding (access)	No Hoarding, or hoarding of generally non-combustible materials that do not obstruct escape routes.	No further consideration required.			
	Significant Hoarding issues	☐ Hoarding confined to a single room. ☐ Hoarding in more than one room. ☐ Hoarding within escape route. ☐ Types of material hoarded.			
Oxygen	No oxygen used.	No further consideration required.			
	Use of oxygen combined with high fire risk behaviour.	☐ Oxygen use combined with smoking. ☐ Other (please specify):			

Hazard and risk factors	Circumstances (Circle as appropriate	Further details of current circumstances	Details of any existing control measures	Outstanding risk (Yes or No)	Additional actions required
Sensory impairment	None.	No further consideration required.			
	Hard of hearing, or partially sighted	Please specify:			
	Deaf or blind.	Please specify:			
Capacity of resident to respond appropriately to fire alarm signals or signs of fire.	Fully able to respond appropriately.	No further consideration required.			
	May be slow to respond.	☐ Limited decision-making ability. ☐ Learning difficulties. ☐ Dementia. ☐ Please specify:			
	Unable to respond; would need staff assistance.	☐ Inability to make appropriate decisions. ☐ Severe learning difficulties. ☐ Dementia. ☐ Please specify:			

Hazard and risk factors	Circumstances (Circle as appropriate	Further details of current circumstances	Details of any existing control measures	Outstanding risk (Yes or No)	Additional actions required
	Fully able.	No further consideration required.			
Ability of resident to make their way to safety.	Limited mobility, so slow to evacuate.	☐ Ability to evacuate the building. ☐ Ability to move from the room of fire origin, but not the building. ☐ Ability to move away from the fire, but not the room of fire origin.			
	No mobility without assistance.	Please specify:			
Other factors.		Please specify:			

Risk Level		Low		Medium		High	

Action Plan - overleaf

Action	Priority	Person Responsible	Date

NB High Risk Factors (in red) require immediate action

Ensure risk assessment findings are shared with all relevant parties (tick as appropriate):

☐ Landlord / Housing Provider

☐ Managing Agent

☐ Commissioner of Care Services

☐ Care Service Provider

☐ Other:

A free Home Safety Visit should be requested from SFRS for vulnerable people:

- Call 0800 0731 999
- Text "FIRE" to 80800 from your mobile phone
- Complete their online form
- Call your local fire station

Annex 4: Examples of Assistive Technology Options

Easy Reference Guide: Look at the 'factors' and at the corresponding tools

Key (1) Item Number o Recommended Sensors ▲ Suggested Additional Sensors	Bed/Chair Bound	Smoker/evidence of burn marks	Dementia	Mental Health	Falls Management	Frail & Vulnerable	Hearing Impairment	Mobility Problems	Visual Impairment
Access/ Carer Trigger (1)	o		o	o	o	o	▲	o	▲
Bed Occupancy Sensor (2)	o		o	o	o			o	
Big Button Phone (3)			▲	▲			o	▲	o
Chair Occupancy Sensor (2)	o		o	o	o			o	o
Clip on Ashtray with Remote Tube (5)	o	o							
Clocks and Calendars (6)			o	o					
CO Detector			o	o					
CO Detector (specialist) (4)							o		o
Detectors to turn off electric cooker (7)			o	o					
Falls Detectors (8)	▲		▲	▲	o	▲		o	▲
Fire Retardant Bedding (9)		o							
Fire Retardant Nightwear (11)		o							
Fire Retardant Spray (12)		o							
Fire Retardant Throws (10)		o							
Gas Cut Off Valve (13)			o	o		o		o	
Gas Detector (14)			o	o				o	
Heat Detector (15)	o	o	o	o		o	o	o	o
Induction Hob (16)			o	o	▲	▲		▲	▲
Kitchen Timer (17)			o	o		▲		▲	
Metal Waste Bin (18)		o	o	o					o
Object Locator (19)			o	o					o
Tactile Markings (20)									o
Pendant Alarm (21)	o		o	o	o	o	▲	o	o
PenFriend Audio Labeller (22)									o
Pill Organiser & Dossett Boxes (23)			o	o					
Safety Ashtrays (24)		o							
Smoke Alarms (25)	o	o	o	o	o	o	o	o	o
Smoke Alarms (specialist)(26)							o		o
Smoker's Fire Retardant Apron (27)		o							
Sounder Beacon (28)							o		▲
Stovetop/Cooker Shut off Device (29)			o	o		▲		o	o
Temperature Monitor (30)	o	o	o	o	o	o	o	o	o
User Alert Pager (31)							o		
Visual Call Beacon (32)							o		▲
Voice Record Reminder Sensor (33)			o	o					▲
Wi-Safe Remote Warning Handset (34)							o		
Water Suppression Systems (35)	o	o	o	o	o	▲	▲	▲	▲
Wheelchair Access to Ovens (36)								o	

Further information can be found at https://www.london-fire.gov.uk/media/2238/1-assisted-living-technology-catalogue.pdf. It should be noted that the catalogue contains information from, and links to, external websites. The Scottish Government shall not be responsible or liable in any way for the content of any external websites, including the accuracy or relevance of information contained on such websites. The Scottish Government does not endorse the companies or products mentioned in the catalogue. In particular, the Scottish Government cannot vouch for the effectiveness, reliability or safety of the products displayed in the catalogue, which are examples only of the assistive technology options listed in the table

Annex 5 - Fire Safety Risk Assessment Template

Record of Fire Safety Risk Assessment (premises based)

Address	
Postcode	
Name of organisation	
Name and contact details of Assessor	

Assessor signature		Date of assessment	

PART 1   Obtain Information

How many floors does the building have?	
Number of residents in the building? Are any residents particularly at risk? / Have person-centred fire safety risk assessments/PEEPs been completed? Please include details below.	

	Yes	No
Is there a staff presence, such as a scheme manager / care provider? If yes, please detail below.		

Does the building have any ancillary uses such as care provision, commercial or community activities? If yes, please detail below.		Yes	No
Has the building any previous history of fire? If yes, please detail below.		Yes	No
Has there been any previous examination of the building's external cladding? If yes, please detail below.		Yes	No
Is there a current procedure for residents to follow in the event of fire? If yes please append a copy and explain below how it is communicated to residents.		Yes	No

PART 2	Identify any potential causes of fire in the common areas

Are there any sources of ignition present?

	Action required (Please tick)	YES	NO
	If you answered yes, record action at PART 4		

Are there any sources of fuel present?			
	Action required (Please tick)	**YES**	**NO**
	If you answered yes, record action at PART 4		

Are there any sources of oxygen present e.g. Oxygen cylinders, airflow mattresses, ventilation			
	Action required (Please tick)	**YES**	**NO**
	If you answered yes, record action at PART 4		

PART 3	Evaluate the risk and adequacy of existing fire safety measures

What is the likelihood of a fire starting?

		YES	NO
	Action required (Please tick)		
	If you answered yes, record action at PART 4		

What may be the consequences to people from a fire starting in the building?

		YES	NO
	Action required (Please tick)		
	If you answered yes, record action at PART 4		

Are fire detection and warning arrangements adequate?

		YES	NO
	Action required (Please tick)		
	If you answered yes, record action at PART 4		

Is there the potential for fire to spread and affect escape routes?			
	YES	**NO**	
	Action required (Please tick)	**YES**	**NO**
	If you answered yes, record action at PART 4		

Is there potential for fire or smoke spread through routes such as open doors, vertical shafts, service ducts, service penetrations, ventilation systems, cavities, voids and external wall cladding systems?			
	Action required (Please tick)	**YES**	**NO**
	If you answered yes, record action at PART 4		

Is there potential for fire and smoke to spread into/onto the premises from an external fire?			
	Action required (Please tick)	**YES**	**NO**
	If you answered yes, record action at PART 4		

Are the flat entrance doors sufficiently fire resisting and self-closing?			
		YES	**NO**
	Action required (Please tick)		
	If you answered yes, record action at PART 4		

Is there protection of the stairways from fire in adjacent areas? For example, provision of properly maintained self-closing fire doors on stair and lobby enclosures, fire resisting glazing etc.			
		YES	**NO**
	Action required (Please tick)		
	If you answered yes, record action at PART 4		

Is the travel distance from flat entrance doors to the nearest stairway or final exit acceptable?			
	Action required (Please tick)	**YES**	**NO**
	If you answered yes, record action at PART 4		
Is there emergency escape lighting provided and maintained? Is it required if not?			
	Action required (Please tick)	**YES**	**NO**
	If you answered yes, record action at PART 4		

Are there fire escape route signs? Are they required if not?			
	Action required (Please tick)	**YES**	**NO**
	If you answered yes, record action at PART 4		

Is there adequate fire separation evident, particularly the enclosure of flats within fire resisting construction?			
	Action required (Please tick)	**YES**	**NO**
	If you answered yes, record action at PART 4		

Are there any fire suppression installations provided/required?			
	Action required (Please tick)	**YES**	**NO**
	If you answered yes, record action at PART 4		
Where provided, are rising fire mains, firefighters lifts and smoke ventilation systems properly maintained?			
	Action required (Please tick)	**YES**	**NO**
	If you answered yes, record action at PART 4		

The assessor completing the following section should prioritise remedial measures, based on the level of risk.

Priority ratings and suggested timescales:

Low (L) 3 – 6 months	Medium (M) Up to 3 months	High (H) As soon as possible

The above timescales are recommendations, however, risks should be removed as soon as possible.

PART 4 Action points			
	Priority	Person responsible	Completion date

Continue on separate sheet if necessary.

Review the fire safety risk assessment if there is a reason to suspect it is no longer valid or if there has been a significant change in the matters to which it relates.

PART 5	Record and review		
Review Date		Reviewed by	

Reason for review

Outcomes of review

Annex 6: Matrix of Responsibilities

Aspect of Fire Safety Management	Agreed Responsibilities				
	Owner/landlord	Housing Provider	Managing Agent or Facilities Managers (if different from housing provider)	Care Provider	Commissioner of Services
Lead duty holder[12]					
Building fire risk assessment					
Person-centred fire risk assessment (where appropriate)					
Testing of fire alarm system					
Maintenance of fire alarm system					
Testing of emergency lighting					
Maintenance of emergency lighting					
Testing of sprinkler system					
Maintenance of sprinkler system					
Testing of smoke vents					
Maintenance of smoke vents					
Testing of door release mechanisms					
Maintenance of door release mechanisms					
Testing of social alarm system					
Maintenance of social alarm system					
Routine housekeeping inspections, including checking fire doors, fire exit doors and condition of fire extinguishers, etc.					
Maintenance of fire doors					
Maintenance of fire extinguishers					
Maintenance of rising mains					
Maintenance of lightning protection system					
Provision of fire safety information to new residents					
Ongoing engagement with residents regarding fire prevention					
Ongoing engagement with residents to remind them of fire procedures					
Fire drills (if applicable)					
Maintaining a record of the fire safety arrangements					
Ensuring that fire procedures are up to date					
Liaison with local fire and rescue service crews					
Training of staff					
Inspections during contractors' works					
Provision of information to outside contractors					
Recording false alarms					
Holding of relevant records re testing maintenance, training, drills, etc.					

[1]This is not intended to represent a legal interpretation of responsibility, but should merely reflect the agreements which should be in place for overseeing fire safety.

Annex 7: Mobility Scooter Guidance

Mobility vehicles are categorised under the Use of Invalid Carriages on the Highways Regulations 1988. Class 1 refers to manual wheelchairs that are not electrically propelled. Class 2 refers to powered wheelchairs and scooters intended for use on footpaths. Class 3 refers to powered scooters and invalid carriages intended for use on the road.

Class 3 vehicles are generally much larger, have a much wider turning circle and have potentially larger and heavier batteries, which are more difficult to remove for charging. This limits the options for internal storage, including within private dwellings. Even if this is possible, it may not be possible to proceed beyond the entrance hall, which may, in itself, present a risk to the individual resident as it blocks their means of escape if fire occurs within their flat. This removes the option for this type of scooter to be stored inside residents' own accommodation, which is why Class 3 mobility scooters are often left outside flat entrance doors in common corridors and on escape routes, which can pose a significant risk.

It is possible for Class 2 scooters to pass through flat entrance doors. However, the risk to individual residents from storing and charging mobility scooters within their own accommodation needs to be considered.

BS EN 12184: 2014 applies to the manufacture of mobility scooters in the UK and Europe. The standard considers two specific aspects related to fire, namely the resistance to ignition and the risk of ignition from the power and control systems. The ignition resistance test is based on the simulated match test used for fire testing of upholstered furniture. The test for power and control systems is designed to reduce the risk from ignition of any part of a power and control system, including the battery charger.

Understanding the Risk

Mobility scooters are generally constructed around a steel frame, with plastic fairings, rubber tyres, foam seats, wiring and batteries. They are often retro fitted with vehicle registration number plates, waterproof covers and storage bags.

The type of batteries used in mobility scooters are generally lead acid (wet cell) or sealed lead acid scooter batteries. Other battery types include Gel and Absorbed Glass Mat (AGM) batteries.

The recent use of lithium iron phosphate (LiFeP04) batteries instead of lead acid batteries to power mobility scooters has increased risks due to their unpredictable and adverse reaction when subjected to fire. All batteries can give off hydrogen when charging.

Mobility scooters involved in a fire can release large volumes of smoke and generate significant heat outputs in a very short period of time. If mobility scooters are stored on escape routes and are involved in a fire, there is a likelihood that escape routes will become impassable due to smoke and heat, placing residents at significant risk. Therefore, appropriate measures must be considered within the building fire safety

risk assessment to address the risks posed by the storage and charging of mobility scooters.

Mobility scooters that are stored externally are not always kept in a secured compound and can be at risk from deliberate ignition. This has allowed fire to spread through windows and doors, into buildings and internal compartments, and has led to fatalities.

Storage and Charging

There cannot be a 'one size' fits all approach taken to storing or charging mobility scooters. The layout and design of each building will be different; the type, number and location of mobility scooters will also differ and the needs of individual residents should be considered as part of the overall assessment of risk. The maximum numbers of mobility scooters for the premises should be identified by the fire safety risk assessment. Residents should be aware of local arrangements which will help to future proof mobility scooter storage issues in buildings. A solution that might be appropriate in one building may not be acceptable in another. Although external storage may be an option, the vulnerability and mobility of residents may make it impracticable for them to utilise external facilities.

The options detailed below offer a solutions based approach, based on a general hierarchy of risk. Any one of the options might be acceptable in the right circumstances. Where there is a reference to fire-resisting construction and fire-resisting doors, the period of fire resistance should normally be 60 minutes. If an area contains no more than three mobility scooters or is provided with automatic fire suppression, 30 minutes' fire resistance will normally be adequate.

Option 1: External parking with charging facilities:

Mobility scooters may be parked outside premises. A charging facility is normally provided adjacent to the parking area. Security and the risk of fire-raising would need to be considered. The location of the parking space should not present a risk of fire spread into the building in the event of a fire.

Option 2: External storage with charging facilities:

This could be external storage with charging facilities which are:

- Purpose-built, including individual storage units.
- Converted external facilities, such as garages or storerooms.

Depending on their location and proximity to the building, such facilities may need to be fire-resisting enclosures and may also be fitted with automatic fire detection if they can be monitored.

Option 3: Purpose-built internal storage rooms:

Purpose-built rooms inside premises for the storage and charging of one or more mobility scooters might be an option. Rooms would need to be enclosed in fire-resisting construction, and be fitted with fire-resisting, self-closing doors and automatic fire detection.

<u>Option 4: Adapted internal storage rooms:</u>

Specially adapted rooms inside premises for the storage and charging of one or more mobility scooters might be an option. Rooms would, as a minimum, need to be enclosed in fire-resisting construction, and be fitted with fire-resisting, self-closing doors and automatic fire detection.

<u>Option 5: Existing fire-resisting rooms utilised for storage:</u>

The use of rooms which are not originally designed for this purpose but which are separated from the remainder of the premises with fire-resisting construction and self-closing fire doors, might be considered. This may include options to utilise storerooms, utility rooms, on a permanent or temporary basis. In these instances, the use of the rooms, or clearly separated areas, might need to be restricted to the storage and charging of mobility scooters and not combined with other uses.

<u>Option 6: Storage and charging within residents' own accommodation:</u>

Suitable storage and charging arrangements might be possible inside residents' accommodation. This option removes the risk from the common areas, and places the storage and charging of scooters within a fire-resisting enclosure beyond a fire-resisting, self-closing door. However, this potentially places individual residents at risk from a fire involving a mobility scooter in their own home. If this option is considered, the scooter should not be stored or charged in the private hallway, if this is the only means of escape available. The scooter should, preferably, be stored and charged in a separate room, which is fitted with a fire-resisting or substantial door and fire detection. Residents should be provided with advice on the safe use and charging of scooters as part of a person-centred approach.

<u>Option 7: Internal storage in other areas:</u>

If mobility scooters are stored in areas not mentioned above, they must be thoroughly fire risk assessed with the housing provider's involvement. Compensatory factors to reduce risk could include:

- An automatic sprinkler or watermist system.
- A comprehensive fire detection and alarm system (which is automatically linked to an alarm receiving centre).
- Smoke ventilation (to keep flats smoke free).
- Alternative means of escape available from all flats that open directly onto the escape route in question.
- Scooters with limited flammability.

The appropriate combination of measures should be determined by the fire safety risk assessment for the premises.

The charging of scooters in dead end corridors and single stairway escape routes should not be permitted in any circumstances. Even where alternative means of escape is available, the storage, and particularly the charging, of mobility scooters in common corridors and escape routes is not generally recommended and all other alternatives should be considered.

Consent/Permissions and Insurance

No mobility scooters should be stored in premises where permission or consent has not been given or where policies or legislation is breached. Managers should also reserve the right to refuse storage where none of the options in this guidance are suitable and/or this would breach legislation or impact on the health, safety or welfare of other occupants within the premises.

Expectations should also be appropriately identified and supported within tenancy agreements and communicated to tenants.

Appropriate insurance cover should be in place by tenants that covers liability for damage or injury to others. Contents insurance alone is not sufficient to provide third party cover (should damage occur to the premises or to another person). Permission should not be given if appropriate insurance cover is not in place for the equipment being used.

Maintenance and Testing

Tenants should ensure that mobility scooters are maintained in line with manufacturer recommendations; this should include mobility scooter usage and charging. Those responsible for the premises should ensure that appropriate maintenance and testing regimes are in place to ensure designated storage areas are fit for purpose and offer effective fire protection, including:

- Fixed wiring installation testing.
- Portable appliance testing of equipment.
- Fire detection maintenance and testing.
- Fire doors and fire door furniture.
- Emergency lighting.
- Ventilation.
- Inspection of floors, walls or ceilings.

The above guidance includes information taken from the NFCC publication "Mobility Scooter Guidance for Residential Buildings" (2018).

Annex 8: Testing and Maintenance

Fire Safety Measure	Weekly	Monthly	6-monthly	Annually	Other
Emergency Lighting		Test		Service (discharge test)	
Smoke Ventilation (excluding those for means of escape)		AOV / OV manual control test	AOV interface test	Service of smoke extract/ pressurisation systems	
Fire Extinguishers		Visual check		Service	
Fire Detection and Alarm Systems (BS 5839-1)	Manual Call Point test		Service		
Smoke and Heat Alarms within private accommodation (BS5839-6 compliant)	Test*				
Fire Dampers				Service (spring operated type)	Service (fusible link type) every 2 years
Suppression (BS 9251)				Service	
Rising Fire Mains			Inspection	Pressure Test	
Firefighters Lifts		Inspection		Service	
Fire Doors			Inspection		
Fire Separation				Annual check of roof space	Flats checked when vacant
External Escape Stairs					3 year structural survey

*BS5839-6 advises testing Grade A systems weekly and all others at least monthly. Weekly testing is recommended where possible.

See [Chapter 6](#) for more information.

Glossary

Definitions to assist readers in understanding some of the technical terms used in this guidance. In some cases, the definitions relate specifically to this Guidance and may therefore differ from other definitions.

AOV (automatically opening vent)	A vent provided for smoke control in common areas, which opens automatically when smoke is detected by smoke detectors.
Cavity barrier	A construction provided to close a concealed space against penetration of smoke or flame, or provided to restrict the movement of smoke or flame within such a space.
Common areas	Those parts (whether in blocks of flats or houses), used by occupants of more than one dwelling unit for access and egress.
Competent person	A person with enough training and experience or knowledge and other qualities to enable them properly to assist in undertaking the fire safety measures recommended in this Guidance.
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.
Evacuation lift	A lift that may be used for the evacuation of people with disabilities, or others, in a fire.
Extra care housing	For the purpose of this Guidance, any housing of a similar nature to sheltered housing (though sometimes including residents with disabilities that are not age related), but with managed on-site care and support service, commonly on a 24-hour basis. This includes premises described as very sheltered housing, "housing with care", "assisted living" and "integrated care and housing (ICH)" or, where support is linked to a care home, "close care housing".
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.
Firefighters lift	A lift, designed to have additional protection, with controls that enable it to be used under the direct control of SFRS.
Firefighting shaft	A fire-resisting enclosure containing a firefighting stair, rising fire mains, firefighting lobbies and a firefighters lift.
Fire resistance	The ability of a component or construction of a building to satisfy, for a stated period of time, some or all of the appropriate criteria of relevant fire test standards.
Fire safety measures	Measures to prevent fire and to protect people from the effects of fire, including actions to be taken in the event of fire.

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-resisting door	A door which, with its frame and furniture, and when closed, is intended to restrict the passage of fire and smoke to a specified level of performance **Fire-resisting door – Notional FD30 door** A door assembly that satisfied the current specification, or fire resistance test, for 30 minutes at the time of construction of a block of flats or manufacture of the door. **Fire-resisting door – Upgraded FD30S door** A 'notional FD30' door, fitted with intumescent strips and smoke seals, and with any other necessary work carried out, such that it may reasonably be anticipated that it would satisfy the relevant test requirements for the 30 minutes integrity and control of the passage of smoke at ambient temperature. **Fire-resisting door – Replacement FD30S door** A door assembly that has been independently certificated by a UKAS-accredited fire test laboratory as satisfying the relevant test requirements for the 30 minutes integrity and control of the passage of smoke at ambient temperature.
General needs housing	Accommodation intended for occupation by members of the general public and not those of a specific demographic or vulnerability.
Inner room	A room from which escape is possible only by passing through another room (the access room).
Means of escape	A route or routes provided to ensure safe egress from the premises to a place of total safety.
Mixed system	A fire alarm arrangement whereby two different Grades of fire detection and alarm system are provided within the same premises for the purpose of satisfying two different fire safety objectives (e.g. in sheltered housing, a Grade D system within each flat to give a warning to residents of a fire in their own flat, in conjunction with a Grade A communal fire alarm system to give a warning of fire within common areas).
OV (Openable vent)	A vent provided for smoke control in the common areas, that can be opened by SFRS by means of hardware or a control (which may be located remotely) provided for the purpose.
Person-centred fire safety risk assessment	An assessment of the risk that fire poses to a specific individual. It should involve the person and take into account behavioural factors such as their physical and cognitive characteristics and their lifestyle, as well as fire hazards in their own private accommodation. The outcome is a proportionate person-centred action plan which reduces risk to a tolerable level.

Personal Emergency Evacuation Plan (PEEP)	A PEEP is an individual escape plan for people who require assistance to safely evacuate a building in an emergency. This may be in the form of help, guidance or special equipment.
Personal protection system (PPS) or Personal protection watermist system	An automatic fire suppression system, fitted with one or more watermist nozzles and intended to suppress a fire in a defined area of a dwelling.
Premises based fire safety risk assessment	An assessment of the risk that fire poses to all occupants in the premises as a whole. The aim is to reduce risk as far as is reasonably practicable. Existing fire safety measures are evaluated to determine if they are appropriate or if more needs to be done.
Protected corridor or lobby	A corridor or lobby that is protected from fire in adjoining accommodation by fire-resisting construction.
Protected route	An escape route that is protected from the rest of the building by fire-resisting construction.
PV (Permanent vent)	A permanently open vent provided for smoke control in the common areas.
Rising fire main	A water supply pipe installed for firefighting purposes, fitted with landing valves at specific points. The main may be 'dry', in which case it is fitted with inlet connections so that it can be charged with water from a fire service pumping appliance. In taller blocks, the main is 'wet' and is permanently charged with water from a pressurised supply.
Self-closing device	A device that is capable of closing a door from any angle and against any latch fitted to the door.
Separation (fire separation)	Sub-division of a building by fire-resisting walls and floors for the purpose of limiting fire spread between different occupancies.
SFRS	Scottish Fire and Rescue Service
Sheltered housing	For the purpose of this Guidance: any housing in which each dwelling is designed and constructed for the purpose of providing self-contained residential accommodation for older people, and where some form of assistance is available at all times, though not necessarily from persons on the premises. This includes premises sometimes described as retirement or amenity housing and similar blocks of flats, regardless of whether flats are rented or are owned.
Simultaneous evacuation	A procedure in which all parts of a building are evacuated after the actuation of a common alarm of fire.
Small care home	For the purpose of this guidance: a premises similar to supported housing in which a "care home service" is provided, as defined by the Public Services Reform (Scotland) Act 2010 in which only a small number of residents are accommodated (typically no more than 6).
Smoke containment	A method of smoke control involving physical barriers to the spread of smoke, usually in combination with vents, primarily to prevent the passage of smoke into escape stairways.

Smoke dispersal	A method of smoke control used in older blocks of flats (now deprecated). Vents are sited to achieve uninterrupted natural cross-ventilation of corridors and lobbies in an endeavour to dilute and disperse smoke in these areas.
Social alarm system	A system that provides facilities for alarm initiation, signal transmission, alarm reception, reassurance and assistance, for use by older and other persons considered to be living at risk. These are commonly described as "Telecare" systems, but other terms, such as community alarm systems, are also sometimes used.
Solum space	The sub-floor space located between the containing walls of a building
Specialised housing	Accommodation for occupants who live independently, or with an element of support, and who are wholly or mainly limited to a specific section of the population and are likely to require additional measures to secure their safety in the event of fire, including, but not limited to, accommodation provided for older people, physically disabled people, people with cognitive difficulties and people with mental health problems.
Stay put	An evacuation strategy based on the principle that only the residents of the flat of fire origin need to escape initially, while other residents may remain in their own flats.
Structural element	Part of a building which is part of the structural frame (beams and columns), loadbearing (other than a part which is only self-loadbearing), a floor, or supports a floor.
Supported housing	Housing (excluding sheltered housing and extra care housing) designed for vulnerable people with common characteristics, living as part of a community with support that is normally, but not necessarily, provided on a 24 hour basis. This includes housing for groups of people with learning or physical disabilities and mental health issues, but not "hostel"-type accommodation for groups such as homeless people, victims of domestic violence or ex-offenders. Residents may live independently or as a single group.
Third party certification	Schemes which offer independent verification that a company or person has demonstrated an ability to meet specific criteria and standards for a specified service or product.
Travel distance	The distance to be travelled by a person from any point within a specified area, to the nearest exit leading to a place of relative safety.
Very sheltered housing	See "Extra care housing"
Visual alarm device	A component of a fire detection and alarm system, not incorporated in the control equipment, which incorporates a flashing light that is used to give a warning of fire.

| Voice sounder | An audible fire alarm device that contains all the necessary components, except normally a power supply, to generate and broadcast recorded voice messages. Voice sounders cannot normally be used to broadcast live speech. |

References

British Standards can be purchased or subscribed to online at
https://shop.bsigroup.com/ or https://www.bsigroup.com/en-GB/standards/british-standards-online-database/ respectively. Other subscription services are available.

Guidance document

BS 9991: Fire safety in the design, management and use of residential buildings. Code of practice

Other British Standards referenced

BS EN 81-72: Safety rules for the construction and installation of lifts - Particular applications for passenger and goods passenger lifts Part 72: Firefighters lifts

BS EN 1154: Building hardware. Controlled door closing devices. Requirements and test methods

BS EN 1155: Building hardware. Electrically powered hold-open devices for swing doors. Requirements and test methods

BS EN 1634-1: Fire resistance and smoke control tests for door and shutter assemblies, openable windows and elements of building hardware. Fire resistance test for door and shutter assemblies and openable windows

BS EN 1634-2: Fire resistance and smoke control tests for door, shutter and openable window assemblies and elements of building hardware. Fire resistance characterisation test for elements of building hardware

BS EN 1634-3: Fire resistance and smoke control tests for door and shutter assemblies, openable window and elements of building hardware. Smoke control test for door and shutter assemblies

BS EN 12184: Electrically powered wheelchairs, scooters and their chargers. Requirements and test methods

BS EN 12845: Fixed firefighting systems. Automatic sprinkler systems. Design, installation and maintenance

BS EN 13501-1: Fire classification of construction products and building elements. Classification using data from reaction to fire tests

BS EN 62305-2: Protection against lightning. Risk management

BS EN 62305-3: Protection against lightning, physical damage to structures and life hazard

BS EN ISO 7010: Graphical symbols. Safety colours and safety signs. Registered safety signs

BS 476-22: Fire tests on building materials and structures. Method for determination of the fire resistance of non-loadbearing elements of construction

BS 5266-1: Emergency lighting. Code of practice for the emergency lighting of premises'

BS 5266-8: Emergency escape lighting systems (BS EN 50172: 2004)

BS 5306-3: Fire extinguishing installations and equipment on premises. Commissioning and maintenance of portable fire extinguishers. Code of practice

BS 5306-8: Fire extinguishing installations and equipment on premises. Selection and positioning of portable fire extinguishers. Code of practice

BS 5446-3: Detection and alarm devices for dwellings. Specification for fire alarm and carbon monoxide alarm systems for deaf and hard of hearing people

BS 5839-1: Fire detection and fire alarm systems for buildings. Code of practice for the design, commissioning and maintenance of fire detection and fire alarm systems in non-domestic premises

BS 5839-6: Fire detection and fire alarm systems for buildings. Code of practice for the design, commissioning and maintenance of fire detection and fire alarm systems in domestic premises

BS 5852: Methods of test for assessment of the ignitability of upholstered seating by smouldering and flaming ignition sources

BS 6440: Powered vertical lifting platforms having non-enclosed or partially enclosed liftways intended for use by persons with impaired mobility. Specification

BS 7175: Methods of test for the ignitability of bedcovers and pillows by smouldering and flaming ignition sources.

BS 7176: Specification for resistance to ignition of upholstered furniture for non-domestic seating by testing composites

BS 7273-4: Code of practice for the operation of fire protection measures. Actuation of release mechanisms for doors

BS 7273-6: Code of practice for the operation of fire protection measures. Fire detection and fire alarm systems. Interface with ancillary systems and equipment

BS 7671: Requirements for Electrical Installations. IET Wiring Regulations (18th Edition)

BS 8214: Timber-based fire door assemblies. Code of practice

BS 8458: Fixed fire protection systems. Residential and domestic watermist systems. Code of practice for design and installation

BS 9251: Fire sprinkler systems for domestic and residential occupancies. Code of practice

BS 9990: Non-automatic firefighting systems in buildings. Code of practice

BS 9999: Fire safety in the design, management and use of buildings. Code of practice

Other guidance

Code of Practice for In-service Inspection and Testing of Electrical Equipment,

Code of practice: Refurbishment of communal buildings and the fire risk of multi-layer paints, Warringtonfire

Fire Prevention on Construction Sites, FPA

Fire Safety in Construction (HSG168), HSE,

LPS 1655: Requirements and test methods for the approval and listing of personal protection watermist systems, BRE Global.

Guidance on the use, deployment and limitations of Personal Protection Watermist Systems in the homes of vulnerable people, Building Research Establishment in partnership with London Fire Brigade, BRE Global.

Guidance to support a temporary change to a simultaneous evacuation strategy in purpose-built block of flats, NFCC

RC62: Recommendations for fire safety with photovoltaic panel installations, FPA

SHTM 87 (Firecode: textiles and furniture), Health Facilities Scotland

Scottish Government
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