LONDON FIRE BRIGADE

Fire Safety Guidance Note: Fires in Communal Areas - Information for External Partners

GN84

Version: 3, 01 August 2023

Contents

The London Fire Commissioner (the Commissioner) is the fire and rescue authority for London. The Commissioner is responsible for enforcing the Regulatory Reform (Fire Safety) Order 2005, as amended by the Fire Safety Act 2021, (The Order) in London.

This Guidance Note, published by the Commissioner's Fire Investigation Unit provides information for both responsible persons, residents, and other interested parties on the danger of fires in the communal areas of multi-occupied residential buildings.

This Note is one of a series produced by the Commissioner to provide advice on various aspects of fire safety. If you require any further guidance on the advice given or require advice on another topic please telephone or visit your local Fire Safety Office (telephone 020 8555 1200 and ask for your nearest Fire Safety Office) or visit the London Fire Brigade web site at http://www.london-fire.gov.uk.

1 Introduction

1.1 This document has been prepared by the LFB Prevention and Protection department; to show how relatively small fires in communal areas can rapidly develop, put the residents in danger, cause significant damage and result in a major cost to the housing provider/insurer. In London, during 2022, there were 281 fires that involved a communal area.

1.2 Although fire safety within communal areas has improved over the years, there remains concern with the storage of combustible items in these areas. Of particular concern is the storage and charging of electric bikes and scooters.

1.3 The economic cost of fire can be hard to appreciate. Table 11 in the DCLG report (3/2011 – The economic cost of fire, estimates for 2008) cited the average cost of fire in a domestic dwelling as £48,092 in London. When the potential costs of mass displacement, re-housing and repairs are factored in, as well as inflation, this figure could prove to be a conservative estimate.

2 Summary of incidents

2.1 All common areas of multi-occupied residential buildings are subject to the Regulatory Reform (Fire Safety) Order 2005 (as amended) and the Fire Safety (England) Regulations 2022. These require the Responsible Person to take general fire precautions to keep occupants safe from fire. Failure to comply with fire safety legislation can result in enforcement action being taken against the Responsible Person, and possible prosecution proceedings where occupants have been exposed to the risk of death or serious injury in the event of a fire.

2.2 Over recent years, the Fire Investigation Team has attended a range of incidents where stored items such as prams or discarded/unwanted items such as household furnishings or rubbish etc. have been involved in a fire. In recent years the storage of e-bikes, e-scooters and the like have increased the number and intensity of fires. Case studies 1-4 below, describe fires involving these Electronic Powered Personal Vehicles (EPPV).

2.3 In other cases, the cause of these fires has often been arson. In one recent case, a serial arsonist was 'at work' for over four years in different blocks in a borough. The fires are made worse due to the materials being burnt, as there are often plastics and synthetic materials which create high volumes of poisonous and acrid smoke.

3 Taking steps to prevent this problem

3.1 It is recognised that the storage of items in communal areas is a problem that can be hard to monitor and resolve. However, this document is put forward to generate awareness and guidance to motivate work to mitigate the risk.

3.2 As many communal areas are used for escape purposes in case of fire, these should be free from combustible materials and obstructions. This would ensure limited ignition sources and sources of fuel. The Home Office guidance on fire safety in purpose-built blocks of flats guide, Part E expands on these issues. It recommends either a managed or zero tolerance approach to storage in these areas because of the risk to persons regarding being able to escape, the risk of fire in common areas and the subsequent risk of death or injury from fire. The most appropriate approach to take will depend upon the specific risks and circumstances within your building.

3.3 This approach is also appropriate to any shared accommodation, including flats, sheltered accommodation, houses of multiple occupation (HMOs), bedsits etc., which have previously been converted from a house or other type of use.

4 What am I required to do as a responsible person or resident?

What am I required to do as a responsible person?

4.1 The management of common parts and escape routes is essential to ensure occupants can escape safely from the premises in the event of a fire.

4.2 The Regulatory Reform (fire safety) Order (as amended) places a responsibility on the person in control of a premises, known as the "Responsible Person" to:

- Carry out a fire risk assessment which must focus on the safety in case of fire of all persons lawfully on the premises.
- Consider persons at special risk, such as disabled people and children.

4.3 The fire risk assessment must consider the means of escape in event of fire. These means of escape must be:

- Kept clear of combustibles and obstructions.
- Be checked on a regular basis to ensure this is the case.

4.4 These actions will reduce the potential for accidental fires to start and it also significantly reduces the threat of deliberate fires.

4.5 Where necessary it may be required to enforce covenants or tenants' agreements.

4.6 The Fire Safety (England) Regulations 2022 require the Responsible Person to provide fire safety instructions to residents and display these instructions clearly in their building's communal areas (or any conspicuous part of the building) and share directly with residents when they move into the building.

4.7 The Equality Act 2010 (the '2010' Act) has a provision to prevent indirect discrimination based on relevant protected characteristics, such as sex, age, or disability. However, the '2010' Act does allow such indirect discrimination where it is shown to be a "proportionate means of achieving a legitimate aim". Fire safety in multi-occupied residential buildings can be considered as a legitimate aim meaning the 2010 Act does not specifically allow for the storage of items such as prams and/or mobility scooters in the common areas nor does it supersede the requirements of fire safety legislation for managing fire risk. The storage of any items in the common parts must be

considered as part of the fire risk assessment and detailed in any fire safety policies for the premises.

4.8 For further information on the application on the Equalities Act 2010 in relation to the common parts of multi-occupied residential buildings specialist legal advice should be sought.

What am I required to do as a resident?

4.9 Your actions should not hinder the landlord in fulfilling their requirements under the Regulatory Reform (Fire Safety) Order (as amended) to maintain and manage the means of escape and keep common areas free from combustibles and obstructions.

4.10 It is essential that escape routes are kept completely clear of items of furniture, prams, buggies, rubbish, clothes drying facilities, bicycles etc.

4.11 Nothing should be allowed to accumulate in the escape route that would hinder the safe evacuation of residents and visitors in the event of a fire.

4.12 Prior to any items being stored in the escape routes, agreement should be sought through the landlord and the fire risk assessment reviewed to assess suitability. Not doing so could result in lease and/or tenancy being enforced up to and including the agreement being revoked by the courts.

4.13 Check your home's safe using our simple Home Fire Safety Checker tool – click here to access.

4.14 Our tool allows you to carry out a thorough check of your home in only a few minutes. It's simple and practical – giving you specific fire safety advice for your family and your home.

5 Case study examples

Example 1 – Electric bike and associated lithium-ion battery pack fire in communal hallway.

5.1 Three fire engines attended a fire which occurred in a mid-terraced shop and dwellings of three floors. Hard wired smoke detectors were fitted to the flats and common areas. The shop had a single entrance at street level. The residential flats had a single communal entrance at street level that opened to a hallway. Two doors led off the hallway, one to a ground floor flat, and one that opened to a staircase that accessed a flat which occupied the first and second floors.

5.2 The fire was discovered, and the fire brigade called when a resident heard the lithium-ion batteries of their converted e-bike fail and catch fire.

5.3 On arrival the fire brigade found the hallway smoke logged and the battery pack of the e-bike on the floor smoking. Firefighters removed the bike to the street (Seen in image right) and immersed the batteries in a bucket of water. The fire damaged the hallway, as seen in the images above.

5.4 Two adult females and one adult male were rescued from a flat roof at the rear of the property. One adult male and one adult female were rescued from the rear garden, but luckily, there were no reported injuries at this incident.

5.5 Fire investigation attended the scene, the cause of this fire has been recorded as the failure of lithium-ion batteries.

5.6 A Senior Fire Safety Officer attended the scene and found minor fire safety issues around fire doors, escape route, fire safety management and detection and warning – factors which could potentially have increased the risk to residents had the fire been more severe.

Example 2 – Electric bike fire in hallway of an HMO.

5.7 A fire occurred in a purpose-built block of flats of three floors.

5.8 The affected flat was on the first floor and was used as a house of Multiple Occupation. It contained three lockable bedrooms, a shared bathroom and kitchen, all accessed from one hallway.

5.9 The fire was discovered by the occupants when a smoke alarm actuated, and they could hear the fire. On opening their bedroom door, they found a fire in the hallway (as seen in the images). Some of the occupants then escaped out of the first-floor bedroom window with the remaining occupants leaving by the front door. On arrival firefighters saw smoke issuing from a side window and a group of people standing in the street. Firefighters extinguished the fire and searched the property.

5.10 The flat sustained significant damage by fire heat and smoke. Four adult males were removed to hospital suffering smoke inhalation with one further adult male treated on scene. Fire investigation attended the scene, the cause of this fire has been recorded as accidental due to failure of lithium-ion batteries from an e-bike on charge. A Senior Fire Safety Officer attended the scene.

Example 3 – Electric bike fire in the communal hallway of a converted house into an HMO.

5.11 Four fire engines attended a fire which occurred in an extended end of terraced house of two floors and a loft conversion. The house had been converted into 10 individual bedrooms, with shared communal facilities. The property had hard wired smoke detectors fitted to the common areas and the flats; several detector heads had been removed from the bedrooms.

5.12 The fire was discovered when residents smelled burning. Residents were unable to leave the house via the front door due to smoke logging in the hallway, seven residents escaped by kicking out the windows.

5.13 On arrival the fire brigade found two residents on the canopy of the bay window and rescued them using a short extension ladder and extinguished the fire. The ground and first floor were significantly damaged by fire, as seen in the images.

5.14 Four adult males suffered smoke inhalation and injuries from escaping via the first-floor windows. Three adults were taken to hospital while one was discharged at the scene, 10 residents needed to be rehoused.

5.15 Fire investigation attended the scene, the origin of the fire was located around an e-bike. A four-gang extension lead and transformer from a charger were also located in this area and were sampled by fire investigation.

5.16 A Senior Fire Safety Officer attended the scene and found fire safety issues.

Example 4 – Small buggy set alight in an entrance lobby of a modern low-rise block of flats.

5.17 The image to the right shows a small buggy which was set alight in an entrance area to a low-rise residential block of flats. There was apparently very little additional fuel loading e.g. no toys and extra blankets.

5.18 The damage to the ceiling, plaster work, décor and electrics in the area would have resulted in a significant repair cost. It was lucky that no one came out of their flats during the fire, as there would have been significant amounts of toxic smoke and hot fire gases.

5.19 In another incident, a baby buggy was set alight on the ground floor of a common stairway area. Smoke spread up the stairway cutting of the single staircase escape from the upper floors.

5.20 The occupants were advised to stay in their flats until the fire was extinguished, but 21 persons needed to be assisted to the ground floor by the Brigade. Two people escaped from the upper floor before arrival of the Brigade suffering from smoke inhalation and needed medical attention in hospital.

5.21 There was a history of problems relating to leaving the buggy on the ground floor, as the owner had difficulties carrying it up to top floor flat.

Example 5 – Small cupboard in internal hallway in a high-rise block of flats. Domestic items belonging to one of the residents were stored in it.

5.22 The three images on this example relate to a fire which occurred in a common lobby shared by four flats on the second floor of a high-rise block. The seat of the fire was within a small cupboard (approximately 30-50cm wide) used to house services such as drainage and telephone cables. The cupboard had been filed with old clothes and electrical items (*example image left*).

5.23 One door to the lobby had been wedged open leading to the stairwell becoming heavily smoke logged.

5.24 Several occupants of flats on the upper floors called the Fire Brigade concerned that they were trapped and received fire survival guidance from Brigade control.

5.25 The image to the right shows the cupboard with some fire debris removed. There was not a huge amount of material involved, considering the extensive smoke damage, as seen in the image below.

5.26 The fire was extinguished by breathing apparatus crews using a single main jet.

5.27 The fire was confined to the area of origin with the remainder of the lobby and corridor being damaged by heat and smoke.

5.28 In this case, there was significant life risk, but thankfully there were no casualties.

Example 6 – Papers & stored goods in a mixed-use semi-detached building of three floors.

5.29 In this next example, the fire occurred in an interlinked semi- detached building of three floors, circa 1900s. The ground floor was used as offices, with the adjoining property's ground floor being used as a restaurant. The two properties were connected at ground and first floor levels. The upper floors were used as a house of multiple occupation. The building was undergoing a refurbishment. It is believed that there were nine people living in the building.

5.30 The fire started in the hallway on the ground floor offices at the base of the internal staircase to the flats (as shown in image to the left) and damaged approximately 50% of the ground floor. The remainder of the ground floor was damaged by heat and smoke, with the rest of the building damaged by smoke. The fire was attended by four fire engines.

5.31 There were seven people in the building at the time of the fire. All were unable to escape from the building. Two were rescued from a first-floor window by a road contractor, who put the bucket of his JCB up to the window prior to the arrival of the Brigade. The other five were rescued from a second-floor window by the Brigade with a ladder (as seen in image to the right, with Brigade ladder in situ). All seven were removed to hospital by the London Ambulance Service, suffering from smoke inhalation.

5.32 All seven occupants had to be rehoused. The cause of the fire was believed to be deliberate.

Example 7 – Mattress and chair in lobby area of high-rise block of 10 floors.

5.33 This fire occurred in the 6th floor communal area of a residential block of 10 floors. The deliberate fire involved two separate areas of fire, a mattress in the lift lobby and an upholstered chair in the adjacent stairwell within the same firefighting shaft.

5.34 There was very little lateral smoke spread, however there was considerable smoke damage to the stairway between the 6th floor and the 10th (top) floor. Six fire engines and a turntable ladder attended.

5.35 A 30-year-old female and a four year old child were trapped in a flat at 6th floor level and received fire survival guidance from Brigade control. Both were rescued by a Breathing Apparatus crew and subsequently examined at the scene by the Ambulance Service and treated for smoke inhalation.

Image left: View of communal area with the remains of the mattress in foreground. Note damage to ceiling and walls, doors and wall panels.

Image right: View from other side of doors. Note extensive damage to ceiling, walls, doors and wall panels. Light fitting and electrical wiring indicated by red arrow also damaged by fire.

Example 8 – Papers on a small sofa which was left in a ground floor communal area of a low-rise block of flats.

5.36 Two fire engines attended this fire in the communal hallway of flats in a low-rise residential building. Occupants were unable to escape due to the location of the fire and smoke spread within the building.

5.37 The fire is believed to be caused by the careless disposal of smoking materials into paper (envelopes magazines and cardboard) which were on top of an abandoned two seat sofa in the communal area of the ground floor stairwell (image below), the sofa was only partially damaged, however:

- A one-year-old child needed to be rescued from a 2nd floor window using a ladder.
- Two children and one adult female were rescued from a first-floor window using a short extension ladder.
- Two adult males and one adult female were rescued from the ground floor by crews wearing breathing apparatus.
- One adult male and one adult female were rescued from internal staircase by crews wearing breathing apparatus.
- One adult male and one adult female were rescued by crews wearing breathing apparatus from the first floor and led to safety via the internal staircase.
- Two children and one adult were removed to hospital suffering from the effects of smoke inhalation.

5.38 Crews wearing breathing apparatus extinguished the fire using main and hose reel jets. 25% of the communal stairwell from ground to second floor was damaged by fire.

5.39 The image (to right) shows the area of origin where the sofa was. Note that the structural damage was not particularly severe in this case, but the smoke travel resulted in the rescues and injuries detailed above.

Example 9 – Motor scooter (similar fuel loading to mobility scooter) left in ground floor entrance lobby of low-rise block of flats.

5.40 The following example involved a small motor scooter in a communal area. What is notable is the extensive damage not only from smoke, but also from the heat. There was apparently relatively little petrol in the scooter; most of the fuel loading was from the plastic body panelling.

View of front communal entrance

View going in through the communal entrance. Note light fittings have melted

Clear burn pattern behind the scooter Note: rear tyre is still intact

Stairwell opposite the scooter. Note: spalled plaster from the stairwell has fallen onto the stairs

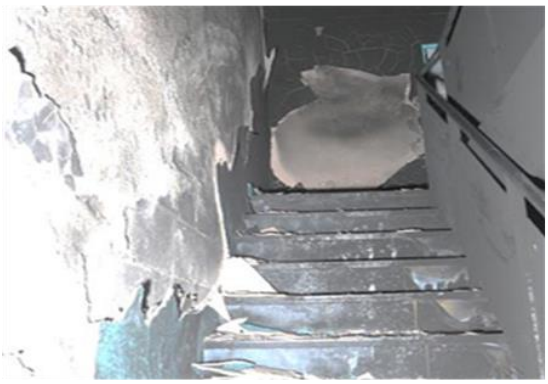

Image to left: View upstairs showing extensive heat and smoke damage.

6 Bibliography

Detailed guidance on the various standards referred to in this guidance note may be obtained from the following bibliography. You can also obtain fire safety advice on other subjects by visiting the London Fire Brigade's website at www.london-fire.gov.uk.

The publications can be obtained from the following addresses:-

AVAILABLE FROM	TITLE
The Stationery Office (Mail, Telephone, Fax & Internet Orders) TSO Orders/Post Cash Dept PO Box 29 Norwich NR3 1GN Telephone: 0870 600 5522 Fax orders: 0870 600 5533 Web: http://www.tso.co.uk	Fire safety in purpose-built blocks of flats https://www.gov.uk/government/publications/fire-safety-in-purpose-built-blocks-of-flats

The above publications are current at the time of preparation of this Guidance Note (see date in footer).

Making London the Safest Global City