

# Fire Safety Guidance Note: GN95 Fires involving balconies in Residential Premises – Information for Housing Providers, Residents Groups and Individual Residents

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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 (The Order) in London.

This Guidance Note, published by the Commissioner, provides information for Housing Providers, Residents Groups and Individual Residents, highlighting the hazards, risks and the danger of fires on and involving balconies in residential premises.

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 here or require advice on another topic please visit your local Fire Safety Office, Telephone 020 8555 1200 and ask for the nearest Fire Safety Office, or visit the LFB web site at <https://www.london-fire.gov.uk>.

## 1 Introduction

- 1.1 This document has been prepared by the Fire Safety Regulation Department, London Fire Brigade (LFB)
- 1.2 The purpose of this Guidance Note is to provide information to Housing Providers, Residents Groups and Individual Residents on the hazards, risks and causes of fires on and involving balconies. This information should be used to inform the review of fire risk assessments and the management of balcony fire risk by stakeholders responsible for fire safety in premises including the Responsible Person (RP), premises management resident groups and individual residents.
- 1.3 Following a number of fires that have occurred on balconies within the London area, the LFB have carried out a review of fires involving balconies. This Guidance Note summarises some of the key findings and provides case studies to illustrate some of the risks.
- 1.4 The Building Regulations 2010 (Par. B4, Sched 1) sets out that:  
*" the external walls of the building shall adequately resist the spread of fire over the walls and from one building to another, having regard to the height, use and location of the building"*.
- 1.5 Approved Document B (Par. 12.5) sets out that:  
*" the external envelope of a building should not provide a medium for fire spread if it is likely to be a risk to health or safety"*

## 2 Summary of Incidents Discussed

### Key findings

- 2.1 Over recent years the LFB Fire Investigation Team have attended a large number of incidents where fires have occurred on balconies. The cause of those fires has often been due to unsafe disposal of cigarettes by the resident or the resident above, or the use of barbecues on the balconies.
- 2.2 Balconies may sometimes be used to store items of furniture or electrical appliances, which has in some cases contributed to the fire or has been the cause of the fire. The majority of these type of incidents have occurred in purpose built blocks of flats where the balcony is private.
- 2.3 The research has shown that there have been 388 fires on balconies in this 26 month period. The frequency of balcony fires equates to an average of 16 fires per month.

Key causes of balcony fires were:

- Smoking materials 67%
- Lighters at 10%
- Matches 10%
- Barbecues 7%

2.4 The type of premises involved, tend to be purpose built blocks of flats and maisonettes with balconies. Some of the newer build premises are frequently constructed with timber or composite material decking and in many cases, these have provided additional fuel to the fire. In addition, the structure has become involved and spread the fire to the flat or maisonette, other balconies and other flats.

### **3 Taking steps to prevent this problem**

- 3.1 There is a need for both the Responsible Person and residents to minimise the risk of fires on balconies. In particular, residents should keep storage on balconies to a minimum in order to reduce the fuel load.
- 3.2 The storage and use of white goods on balconies should be discouraged or prohibited as they contribute to excessive fire-loading and are potential ignition sources.
- 3.3 The use of BBQs on balconies should be discouraged. All stakeholders should encourage the responsible use of BBQs if permitted, with guidance on safe usage. However, the terms of an individual lease / tenancy agreement etc. may prohibit their use..
- 3.4 Smoking on balconies should be discouraged. All stakeholders should encourage responsible smoking behaviours; when smoking is permitted, to ensure careless disposal does not cause a fire on a balcony or elsewhere. This note should be widely distributed to ensure residents understand the consequences of careless use and disposal of smoking materials..
- 3.5 The premises fire risk assessment (FRA) should identify and propose mitigation for where balconies are utilised for storage and other uses.
- 3.6 The use of sprinklers/Automatic Fire Suppressions Systems vastly reduces the risk of a fire developing into a major fire and spreading inside the property.
- 3.7 In 2018/19, The Ministry of Housing, Communities & Local Government issued a range of guidance that relates to balconies. <https://www.gov.uk/government/publications/balconies-on-residential-buildings-advice-note> See Section 5 (Case Study Examples) for further details.

### **4 What am I required to do as a Landlord or resident?**

#### **What am I required to do as a Landlord?**

- 4.1 As a landlord you are required to consider the materials used in construction of the external envelope of the building. This should include the construction of balconies which have the potential for vertical and horizontal fire spread.
- 4.2 A suitable and sufficient Fire Risk Assessment needs to be carried out and should consider the use of balconies and external areas in regard to managing associated risks such as use of barbecues on balconies and reducing risks from smoking related fire hazards.

- 4.3 It is the responsibility of building owners to inform residents of the risks associated with the presence of combustible materials on balconies. This includes the use of barbecues, flammable materials and smoking; as this increases the risk of fire and fire spread. It also includes the monitoring of storage on balconies by residents in order to reduce fire load and potential ignition sources.
- 4.4 Under the Regulatory Reform (Fire Safety) Order 2005 (the Order) there is a requirement for the Responsible Person (RP) to manage the premises to ensure the safety of residents and staff in the common areas and escape routes in the event of a fire. However, private balconies are not classed as common areas and the management of these should be incorporated within individual lease/tenancy agreements.

### **What am I required to do as a Resident?**

- 4.5 Residents should not hinder the landlord in managing the property.
- 4.6 Residents should adhere to tenancy/lease agreements in particular to the use of the balconies.
- 4.7 Residents should not store combustible materials, including white goods or use barbecues and potential ignition sources on their balconies. Residents with concerns about the fire safety of their premises should contact their managing agent, management company or landlord in the first instance. They should be able to provide them with information on fire safety of the building and how this is being managed. Building owners should respond promptly to any such requests.
- 4.8 If residents are unable to obtain fire safety information, or believe their concerns are not being addressed appropriately, then there is information on the government website about organisations who can provide support at: <https://www.gov.uk/guidance/building-safety-programme-other-fire-safety-concerns>

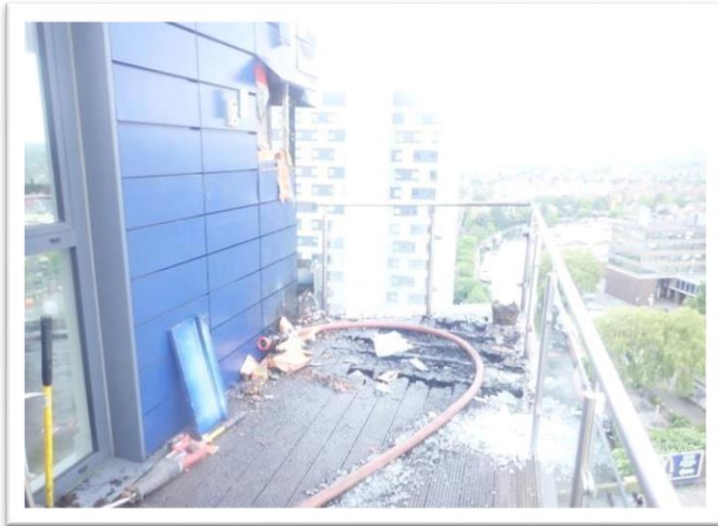
## **5 Case Study Examples**

### **Case Study 1**

A fire occurred on the balcony of a flat on the 13th floor of a 14 floor purpose built block of flats, built in 2015.

The fire occurred as a result of unsafe disposal of a cigarette into a planter that contained dry peat. There was no fire spread into the flat.

There was some fire spread via the external fabric of the building and insulation board.



The image above shows the area of origin and the spread of fire to the external fabric of the building. There was also fire damage to the wooden decking boards. The Building (Amendment) Regulations 2018 now require that balconies attached to external walls of buildings over 18 metres are constructed of non combustible materials.



In terms of wood material, classifications need to be followed. The highest possible European class for fire retardant treated wood is class B. External use wood requires re-application of fire retarding to allow for weathering.

The image above shows the spread of the fire upward along the exterior cladding.

#### **Fire Safety Issues:**

- During this incident it was noted that the Automatic Opening Ventilation (AOV) system failed to operate upon activation of a break glass override on the 13th floor.

- The dry rising main appeared to be faulty and this was reported to the housing provider at the time of incident.

## Case Study 2

A fire occurred on the 4th floor of a six floor purpose built flat in the balcony area.

Below are the main points of the incident.

### Fire Spread:

The fire was contained to the flat of origin and was believed to have been caused accidentally by candles/tea lights being too close to combustible articles. The whole of the balcony was damaged and the lounge had approximately 80% damage due to the spread of fire, heat and smoke. The smoke also travelled throughout the flat leading to further damage. The fire was able to spread from the balcony to the adjacent dwelling / flat via an open window.

### Fire Safety:

The block of flats was noted to have good fire safety measures in place that worked well and the smoke had been contained within the flat.

Evacuation: 75 persons self evacuated the block and LFB firefighters worked hard to bring the incident under control as quickly as possible.

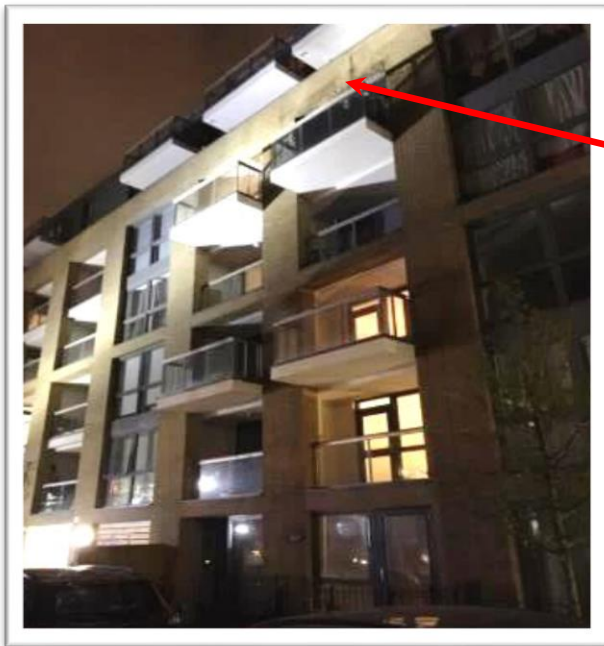


Image of balcony where smoke damage is visible on the 4th floor but the balcony appears to be relatively intact.

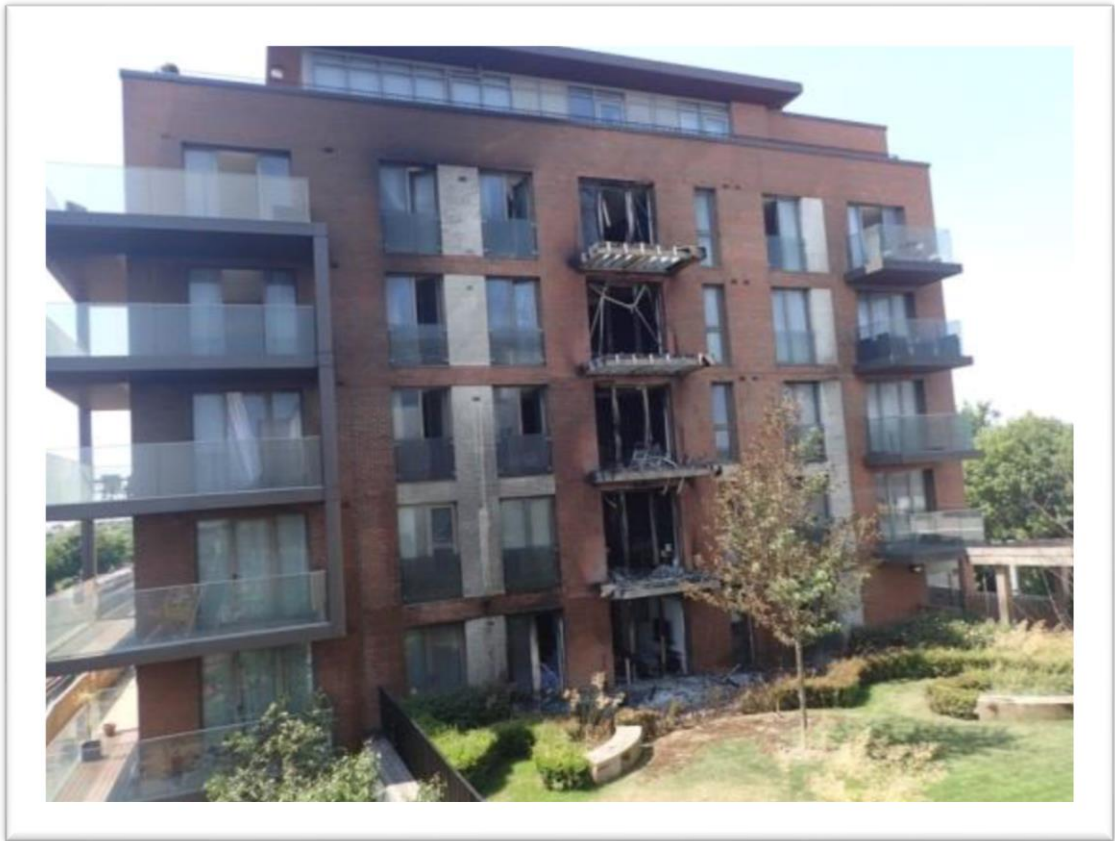


The fire doors at the premises were well constructed and effectively held the smoke back from the common parts.

### Case Study 3

A fire involving balconies outlined the difference that Automatic Fire Suppression Systems can make in terms of controlling fire spread. The balconies were constructed of steel frames, aluminium fascia, composite decking, plastic soffits complete with balustrade glazing. The composite decking added to the fuel load of the fire.

The fire originated on the third floor balcony then spread to the balconies above, up to the sixth floor. Sprinkler activation prevented fire spread into each of the dwellings adjacent to the balconies. A research report on the fire emphasised that the progression of the fire would have been much more severe if the sprinklers were not in place.

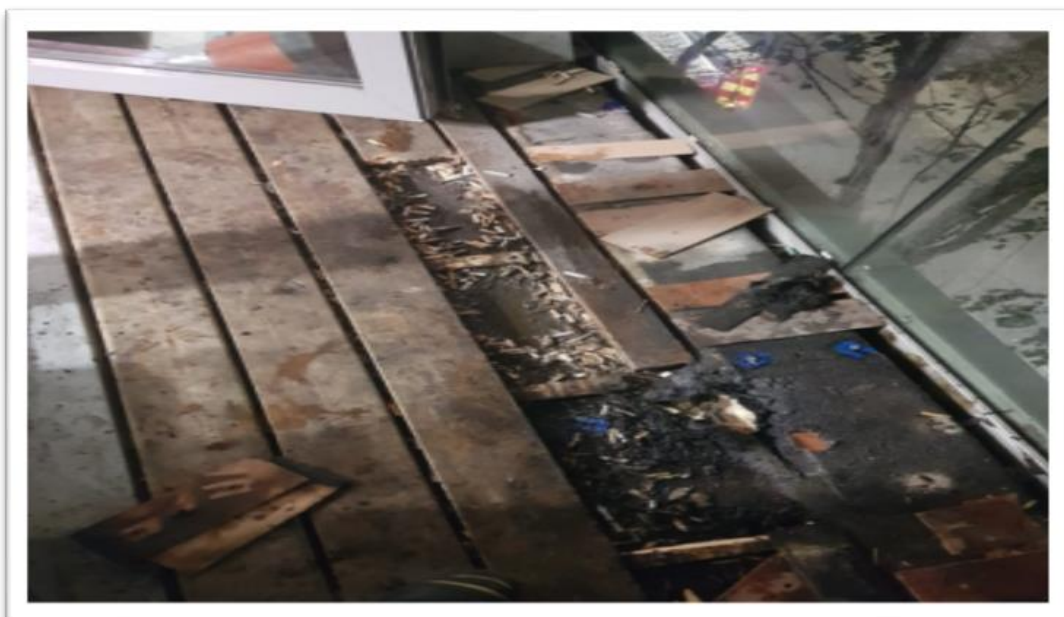


The image above showing the extent of the fire damage. (see Section 6, [Further Information](#)).

#### **Case Study 4**

This fire occurred in a student accommodation of 9 floors. Originating on a 4th floor balcony, of which 10% was damaged by fire.

There was no fire spread externally or internally although smoke was able to enter the premises.





The premises were arranged in a maisonette style and each flat occupying two floors contained up to 6 bedrooms with a shared kitchen, lounge and bathroom facilities.

Each flat had a balcony with wooden decking. The cause of the fire was unsafe disposal of smoking materials. A large amount of discarded cigarette ends were found on the balcony area. The student accommodation had a 'No Smoking' policy.

#### **Fire Safety Issues:**

- Detection and warning The fire alarm had been silenced prior to the evacuation of the premises with smoke still logging within corridors. There were active zones on the fire alarm panel showing 'Fire' on several floors.
- Approximately 30 people had evacuated to the reception area and were unaware of the agreed Emergency Rendezvous Point.
- Staff training records were unavailable during the incident.
- No smoking policy. This would appear to have been poorly managed as there was clear evidence of smoking on balconies.
- Staff training. Crews had to explain the fire alarm panel operation to the onsite security staff during the incident.

It is essential that the Responsible Person ensures that fire safety measures, policies and training are fit for purpose and up to date. An uncontrolled fire has the potential to lead to injury or death.



Example of storage on a balcony that should be avoided.



Example of barbecue on a balcony and the risk of fire. This use should be avoided.

## 6 Further Information/Resources

- 6.1 There was a significant fire in West Hampstead Square on 3 July 2018 which involved a range of balconies. The property was fitted with sprinklers that actuated and despite the intensity of the fire, mitigated the impact, fire spread and damage. A report was produced by the Brigade's Automatic Fire Suppression Systems (AFSS) coordinator and can be found on the LFB website or via the link here: [West Hampstead Square AFSS Activation - Case Study](#).
- 6.2 The Building Research Establishment (BRE) carried out research into balcony fires with a report published in July 2016. The report can be found either by searching BRE's website or via the link here: [Fire-safety-and-balconies-July-16.pdf](#)
- 6.3 The Ministry of Housing Communities and Local Government (MHCLG) have issued a letter <https://www.gov.uk/government/publications/circular-letter-regarding-the-application-of-requirement-b4-of-the-building-regulations-2010> in regards to the amended building regulation (Requirement B4) which states that from December 2018 "the ban on combustible construction materials in the external walls of buildings below 18m are not expressly prohibited, it is necessary to consider the risk from fire spread to health and safety in relation to buildings of any height". This is in reference to The Building Amendment Regulations 2018. The link above will open the letter.
- 6.4 The following link opens a Government issued advice note on balconies for residential premises. <https://www.gov.uk/government/publications/balconies-on-residential-buildings-advice-note>

- 6.5 The following link is the amended Building Regulations 2018.  
<http://www.legislation.gov.uk/uksi/2018/1230/contents/made>
- 6.6 The following links provide documents advising on the Fire Risk Assessment in regards to premises where there is a sleeping risk:
- <https://www.gov.uk/government/publications/fire-safety-risk-assessment-sleeping-accommodation>
  - <https://www.local.gov.uk/fire-safety-purpose-built-flats>

### **General fire safety advice**

General fire safety advice can be obtained from the London Fire Brigade website: Follow link <https://www.london-fire.gov.uk/safety/>

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