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Lettings, Property Management & Consultancy

AMBASSADOR HOUSE

A guide on

Fire Safety in Purpose Built Blocks of Flats

INTRODUCTION

Fire safety in blocks of flats is something that must be taken very seriously. The Local Government Group (LGG) was commissioned to produce guidance aimed specifically at fire safety in blocks of flats.

Until very recently there was no specific guidance on how to manage the risks from fire in purpose-built blocks of flats. This has led to a sometimes inconsistent approach from those responsible for overseeing fire & safety measures - from landlords and managing agents to fire officers and local authorities.

Following consultation with fire authorities, local councils, landlords, managing agents, housing professionals and others a guidance document called ***'Fire Safety in Purpose Built Blocks of Flats'*** was produced by the LGG in July 2011.

Purpose of this guide

Affinity Property Management has created this Customer Guide to summarise some of the principles of fire safety in blocks of flats.
Note: Italicised sections are taken directly from the LGG Guide.

Compartmentation

The most fundamental design principle in blocks of flats is limiting the spread of smoke and fire by using fire-resisting construction methods and materials. This helps to ensure that people living in flats have the same level of protection as people living in houses or bungalows.

The high degree of fire separation between flats and the common parts is achieved by making each flat a fire-resisting enclosure. This is known as compartmentation.

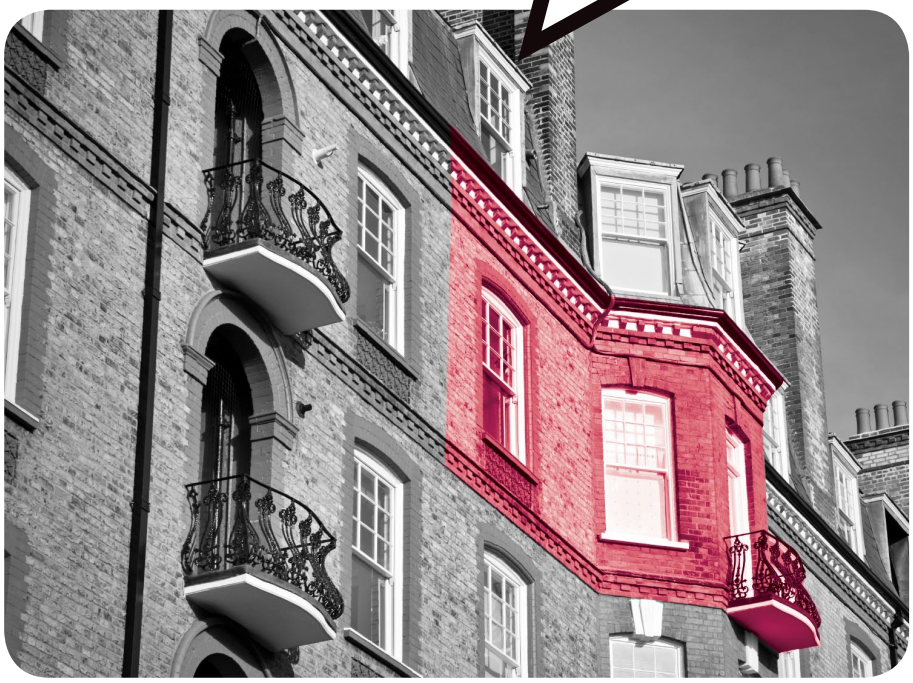
A compartment is simply a part of a building bounded by walls and floors that will resist the passage of fire for a specified period of time. The fire resistance of this construction is such that, normally, a fire will burn itself out before spreading to other parts of the building.

Adequate compartmentation is a basic requirement in all purpose built blocks of flats.

Just as it should not be expected that a fire in a semi-detached or terraced house could spread to the neighbouring house, so in a block of flats a fire should not be able to spread from one flat to another – or to common area corridors and stairs, which will be the means of escape.

Did you know?

- 17% of the total housing stock in England are blocks of flats
- 10% of the population live in purpose-built flats



'Stay Put' Policy

Compartmentation is designed to ensure that a fire cannot spread beyond the flat of origin, so that people in flats remote from the fire should be safe to remain in their apartments.

This is the essence of the 'stay put' principle. It has underpinned fire safety standards from even before the 1960s, when national standards were first drafted. It is still the basis upon which blocks of flats are designed today. In the majority of existing blocks, it remains entirely valid.

Affinity Property Management operate a **'stay put'** in the blocks it manages. A **'stay put'** policy involves 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 the fire and rescue service. If a fire starts in the common parts, anyone in these areas can make their way out of the building and summon the fire and rescue service.

All other residents not directly affected by the fire would be expected to 'stay put' and remain in their flat unless directed to leave by the fire and rescue service.

N.B. It is not implied that those not directly involved who wish to leave the building should be prevented from doing so.

Most blocks of flats are designed on the 'stay put' principle. Although this relies on there being effective compartmentation, it is a principle that should be adopted wherever possible.

Is **'Stay Put'** safe?

When a fire occurs within one dwelling (or, less likely, in the common parts), it is normally safe for other residents to remain in their own flat. This principle is undoubtedly successful in an overwhelming number of fires in blocks of flats.

Means of Escape

Although blocks of flats should have adequate compartmentation and a **'stay put'** policy, it is of course absolutely vital that people can escape safely.

In houses and bungalows, there will almost always be alternative means of escape (e.g. ground or first floor windows). However, in flats – especially higher rise flats – there will often only be one escape route – the common area corridors and stairwells.

It is possible – and perfectly normal – for blocks of flats to have only one means of escape. This is based on a number of assumptions and design principles:

- ***That the most likely place of origin of a fire will be in a flat itself***
- ***That there is a high degree of fire separation between flats and the common parts and therefore the likelihood of fire and smoke spread beyond the flat of origin is low***
- ***That front doors to flats are fire-resisting and self closing***
- ***That any areas, rooms or risers opening onto communal escape corridors and stairways need to be fitted with fire-resisting doors that are self closing or kept locked shut***
- ***That the use of the common parts, and the nature of any combustible items present, is such that any fire originating in the common parts is unlikely to spread beyond the immediate vicinity***
- ***That there will be no external rescue, and residents should be able to escape by themselves***

When it comes to high rise blocks of flats, it is often perceived that high rise equals high risk. ***There is a common misconception that those living on the higher floors of a high-rise block of flats are at greater risk from fire than people living in low-rise blocks, or in bungalows and two-storey houses.***

Statistically, there is no evidence to support this, even though, in principle, the potential risk might be regarded as greater.

Items in common areas

As blocks of flats will usually only have one escape route (i.e. the main communal corridors and stairwells), it is imperative that fires cannot start in these areas.

That's why our aim is to keep communal areas completely clear. Residents are advised not to store items in riser cupboards, leave bikes on escape routes, or leave items of furniture in common areas - even if only temporarily. It is vital that fires cannot start in common areas and that escape routes are kept clear - essential for any residents leaving the building and fire crews entering the building.

Did you know?

in 2009-2010, of over 8,000 fires in blocks, only 22 fires necessitated evacuation of more than five people with the assistance of the fire and rescue service.

Fire Detection

Statistics show that people are safer from fire now than at any time in recent history. There has been a 60% reduction in the number of deaths caused by fire in dwellings over the last thirty years.

This significant reduction in domestic fire deaths is almost certainly the result of a number of factors, one of the most important of which is the great increase in the provision of smoke alarms in homes. There is overwhelming evidence to show that, where occupants of a dwelling are given an early warning of fire by a smoke alarm, the chances of anyone dying is greatly reduced.

Fire Detection within Flats

Early warning of fire should be provided by means of smoke alarms in flats which are an essential component of fire safety.

Residents should always ensure that smoke detectors are fitted and tested regularly, and that batteries are replaced as per the requirements of the unit.

Detectors have been fitted for you in your apartment, you just need to maintain them.

Fire Detection within Communal areas

Whilst smoke detection in flats is essential, it is actually not normal for there to be a fire detection system in the communal areas.

Communal fire alarm systems should not be installed unless it can be demonstrated that there is no other practical way of ensuring an adequate level of safety.

So long as communal areas are free from combustible items, there is very little, if any, chance that a fire in a communal area can take hold. There are, however, situations where a communal fire alarm system is required, for example:

- Inadequate compartmentation (unless it can be brought up to standard)
- Where AOVs (see 'Smoke Control') are present, as a means to trigger these to open (although such alarm systems would not necessarily sound)
- Inadequate means of escape e.g. longer distance to travel to safety than Building Regulation requirements, or lack of fire resisting doors to separate corridors from stairwells etc
- Significant amounts of flammable items in common areas which cannot be removed
- Where the dumping of combustible items and arson is an on-going problem (Note: although dealing with the problem should be the first solution, not fitting a fire alarm system, which would be a last resort).

Fire Fighting Equipment

Due to high standards of compartmentation and the presence of fire detection systems in flats, ***it is rare for there to be a need for fire-fighting equipment***.

If a fire occurs in a flat, the provision of fire extinguishers in the communal areas may encourage occupants of the flat to enter the communal areas to obtain an extinguisher and return to their flat to fight a fire. Doing so may put residents at risk.

Also using the wrong extinguisher for a particular type of fire (e.g. water extinguisher on an oil fire or electrical equipment) can lead to far greater danger, therefore ***such equipment should only be used by those trained in its use. It is not considered appropriate or practical for residents in a block of flats to receive training.***

This does not preclude residents in any block of flats from providing their own equipment, such as fire blankets or fire extinguishers to tackle a fire in their own flat should they wish to do so.

Smoke Control

In the event of fire, smoke is often the greater problem than fire itself. Due to the early warning offered by smoke detection in flats, residents will normally be able to escape from the building long before a fire is able to take hold.

However, it is critical to ensure that people can escape quickly and safely, and smoke filled corridors and stairways do nothing to aid this. It also needs to be recognised that

the fire and emergency services will need to enter a building, and smoke can significantly hamper their ability to deal with a fire quickly.

The current design principle is that there must be an emphasis on keeping stairways free of smoke. This is achieved by providing a means of ventilation – either automatic or manual.

Manually openable vents can just be windows, so long as they are not locked. When entering a building to fight a fire, fire crews can simply open the windows (or, in some cases, specific manual vents) to help clear smoke.

Automatic Opening Ventilators (AOVs), on the other hand, are triggered to open when a communal fire detection system detects a fire. Smoke detection in the common areas is often provided solely to operate the AOVs.

Emergency Lighting

Huge emphasis in the design of purpose-built blocks of flats is placed on the ability of residents to be able to escape quickly and easily in the event of fire. Therefore another design principle in blocks of flats is to provide emergency escape lighting in common areas, in case the main lighting fails due to loss of power caused by fire.

Adequate artificial lighting and, where necessary, emergency escape lighting should be provided in common escape routes, such as corridors, lobbies and stairways, to enable residents and visitors to make their way safely out of the building. Although there are some buildings where emergency lighting is not a requirement, it is now rare to find a purpose-built block of flats without some form of emergency lighting present.

Fire Signage

There must be recognition that blocks of flats are people's homes, and therefore the amount of signage should be kept to an absolute minimum to reflect this. What and if

signage is required will depend on the block.

Blocks of flats with a single staircase would not usually require any fire escape signage. on the other hand, blocks with multiple escape routes would require signage so that people (especially those less familiar with the building) can find the quickest way out of the building, even in a state of panic.

Fire Risk Assessment

Fire safety legislation has, in some form, been around for a long time – certainly since the early 20th century. However this was often in the form of localised bye-laws relating to aspects of building design, and was by no means comprehensive.

Subsequently – and to this day – the Building Regulations dictate the principles by which blocks of flats are constructed, including fire safety requirements. These Regulations are updated to reflect changes and advances in construction techniques, materials used, knowledge of fire safety etc.

However, once construction is complete, there is no requirement to upgrade existing buildings as new Building Regulations are enacted, which is why existing buildings have separate fire safety legislation.

The central piece of fire safety legislation in England and Wales is the Regulatory Reform (Fire Safety Order) 2005 – FSO for short.

The FSO covers many areas of fire safety and its enforcement, but most important is a requirement to carry out fire risk assessments. In the case of blocks of flats, your managing agent has a duty to carry out Fire Risk Assessment of the common areas. This fire risk assessment does not address the safety of residents from fire within their own flat'

The fire risk assessment for a block of flats should note what fire safety measures are already in place, and then assess whether these are sufficient or if more needs to be done to ensure a suitable standard of fire safety is achieved. If more needs to be done, an action plan outlining the required 'control measures' should be drawn up, including timeframes in which to complete the actions, where the length of time is proportional to the level of risk.

REFERENCES

All references, unless otherwise stated, are taken from 'Fire Safety in Purpose Built Blocks of Flats' published by the Local Government Group on the 29th July 2011.

This document can be downloaded from:
www.local.gov.uk/web/10161/fire-safety-guidance

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