

Insight

Fire safety management in high-rise flats

By Paul Boughton and Russell Pearcey

After the tragic fire in July 2009 at Lakanal House, a twelve-storey block of flats in South London that claimed the lives of six people, there has rightly been an increased focus on how fire safety is managed in the high-rise residential sector.

Six years on, what have been the improvements and ongoing fire safety challenges faced by those responsible for property management of high-rise blocks, what have been the improvements already made and what more needs to be done?

Competency gap

Prior to the fire, due to a lack of knowledge and expertise, the completion of fire risk assessments for high-rise blocks was not necessarily seen as a priority within property departments, which tended to focus on other building types such as offices and public property.

The Lakanal fire changed this and those responsible for property management, such as local councils and other social housing providers, faced a challenge to complete large numbers of fire risk assessments to an acceptable standard within a relatively short period of time.

At the time, there was limited national fire risk assessment guidance covering high-rise blocks of flats and no defined approaches to completing fire risk assessments for this type of property. This meant housing providers struggled to determine the scope and



methodology of the assessment and the relevant benchmark standards they needed to achieve.

Additionally, many buildings built in the 1950s and 1960s were constructed to older standards, such as CP3 Chapter IV, which were no longer readily available. Social factors and advances in technology mean that the design standards providing a good level of fire safety at that time are often no longer acceptable today.

Old designs and new recommendations

Therefore, an essential skill of the fire risk assessor was to make a judgement about whether the design of the building (which may have been significantly modified since its construction) and its current condition provided an acceptable level of fire safety, when judged against modern standards such as Approved Document B of the Building Regulations and BS 5588-1 (since replaced by BS 9991: 2011).

However, a lack of knowledge of the design philosophies for purpose-built flats meant that some assessors were tempted to apply a 'code hugging' approach, rather than making a pragmatic assessment of risk. This could result in assessors applying current standards to older buildings (constructed to previous design codes), and thus recommending costly actions that did not have may not have had any significant effect on reducing the overall risk. There was also the potential for misunderstanding within the industry, particularly in relation to the application of 'stay put' policies, and the installation of fire detection and warning systems.

Steps towards new standards

A significant step towards defining a standard approach to fire risk assessment was the publication of the 2011 Local Government Group (LGG) guide 'Fire safety in purpose-built blocks of flats'.

This described current design guidance and importantly provided a summary of historical standards that would be relevant to many existing high-rise blocks built in the 1950s and 1960s.

Following the introduction of this publication, several training providers introduced courses to explain the guidance and how to apply it. The introduction of these training courses, together with accreditation/validation schemes, have gone some way to addressing the lack of competency back in 2009.

Managing fire safety

The implementation of physical fire safety standards and associated passive and active fire systems had often been prioritised to the detriment of fire safety management arrangements.

However, the Lakanal fire highlighted the importance of providing fire safety information to residents and the response to be taken should they become aware of a fire within their flat or the wider building. In particular, this included whether they should stay put, and the precautions to be taken to limit the risk of smoke and flames entering their flat. Should evacuation become necessary, then information on their means of escape, particularly where it does not form part of the normal circulation of the building, must should be provided.

The LGG risk assessment guide and the specialist training courses on high-rise buildings have gone some way to addressing these issues. They stress the importance of providing this information to both fire risk assessors and those responsible for property management by stating what information should be provided.

Fire safety management: a holistic approach

One area often overlooked is the review of fire safety management at organisational level to determine the underlying reasons why deficiencies have developed across a property portfolio. Indeed, while there has been a focus on completing fire risk assessments, organisations have not always examined their overall approach to property management – purely focusing on correcting immediate physical issues, without undertaking a corporate review of how the issues come to be present in the first place. The effectiveness of an organisation's fire safety management is just as crucial as undertaking the risk assessments themselves, and is likely to lead to more significant and long-standing improvements in fire safety.

Promoting fire safety with residents

When addressing fire safety issues, it's important that information given to residents is given equal priority with any physical improvements, as this can be easily overlooked. Although it is important to provide tenants with written information, it can often be beneficial to open dialogue directly with the occupants through tenant meetings and residents' associations, to discuss their local fire safety arrangements.

Occupants often have concerns over fire safety, particularly in high-rise buildings, and in most instances, these fears are compounded by a lack of information about the arrangements for their particular block of flats. These forums are an opportunity for clients to address those concerns as well as being a route to promote general fire safety awareness. This often results in a beneficial outcome for both parties and can help address expensive legal challenges and disputes that can arise where substantial fire safety improvement works are undertaken.

Raising awareness within large organisations: best practice

Raising awareness of fire safety within large organisations is also very important, particularly where departments may be isolated from one another. For example, major works departments that could be delivering government initiatives such as 'Warm, dry and

safe', should have oversight of the building's fire risk assessment to identify outstanding fire safety improvement works that could be incorporated into their project. Any planned works should not have a detrimental effect on existing fire safety features.

This is particularly important on large property portfolios where contractors may undertake works with limited oversight. It is important to hold contractors to specification, and to verify that any fire risks are being appropriately managed and that through undertaking the works they have not damaged the building's fire safety features.

The role of technology

Some of the best examples of promoting fire safety awareness in departments have been presentations. It can also be beneficial to have those responsible for fire safety involved in major refurbishments to ensure that fire safety is adequately considered at an early stage.

The review of fire safety management should be given as much importance as undertaking the fire risk assessment itself.

IT databases can offer an effective fire safety management solution and, while some are little more than a tool for completing a fire risk assessment, the best are able to manage an action from identification to completion, providing an auditable trail. Some also have the ability to analyse trends and information for determining the root cause. Where serious or repeated fire safety deficiencies are identified, they are rarely due to a single point of failure and it is key that all points of weakness are addressed.

Right first time

It is clear that major improvements have been made since 2009, most notably the publishing of clearer and more comprehensive guidance and improvements in fire risk assessor competency. This has significantly helped

housing providers and fire risk assessors to better understand the physical design requirements of high-rise blocks of flats and the necessary remedial actions, both in terms of physical improvements and local management arrangements.

However, a fully integrated fire safety management approach at organisational level still remains a challenge in the sector. PAS 7: 2013: Fire Risk Management System Specification is not particularly well known and, as fire safety professionals, our role should be to actively promote PAS 7, giving the review of fire safety management as much importance as undertaking the fire risk assessment itself.

Undertaking a full review of an organisation's fire safety arrangements and the implementation of any actions can lead to significant short term expenditure; but it can also have significant benefits by improving fire safety compliance in the longer term and reducing fire safety costs through adopting a right first-time approach. This is likely to be the next step towards a sustained improvement in fire safety.

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For more information please contact

Paul Boughton

Principal Consultant

t: +44 (0)121 262 1100

e: paul.boughton@turntown.com

For further information on any of our services visit our website
www.turnerandtowntsend.com

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