Fire Safety in High Rise Residential Blocks

What can we learn from Lakanal House?
This information paper has been prepared to focus on the lessons learned from the Lakanal House enquiry. The report shows just how confused local authorities can become, with too many people who, sadly, have too little technical knowledge. This applies both to the management of fire risk matters, understanding responsibilities and ensuring people with the right technical understanding are matched to high risk and high rise dwellings.

“A serious failure”
The death of six people in Britain's worst tower block fire was largely caused by botched and unsafe renovation work and a council’s failure to inspect the building, as well as confusion and chaos during the fire-fighting operation, an inquest has concluded.

In a carefully worded but ultimately damning narrative verdict into the death of three women and three young children trapped inside Lakanal House in Camberwell, South London, on 3 July 2009, the jury highlighted numerous ways they could possibly have been saved. But, the inquest heard, the Lakanal House blaze moved unusually quickly and in unexpected ways. Within half an hour of the first 999 call it had spread to several other floors, moving downwards as well as up, something so unusual that transcripts show emergency operators initially refused to believe this was happening.

The jury heard that a change in the law in 2006 meant Southwark was responsible for fire safety checks at its flats, but by July 2009 the council had carried out no such checks at Lakanal or any other residential blocks. It had, however, managed to carry out the checks at buildings where its own staff worked.

Southwark Council, which owned the block, failed to carry out a proper fire inspection over the three years after it became its legal responsibility, the jury noted. A proper inspection would have picked up work from the 1980s that removed vital fire-stopping material between flats and communal corridors, the inquest said. It also noted that asbestos window panels had been replaced with composite equivalents, which burned out in less than five minutes, accelerating the spread of the blaze.

The failure to carry out inspections amounted to “a serious failure” by Southwark and its contractors, the jury said, and in the case of Hickman, something which made “more than a minimal contribution” to her death. Despite warnings from health and safety officials, the council “did not prioritise carrying out fire-risk assessments” on residential properties.

The Guardian, Thursday 28 March 2013

The Coroner’s Enquiry
The coroner’s enquiry into the Lakanal House fires in 2009 has raised some significant issues both for local authorities and fire risk assessors.

Pursuant to Rule 43 of the Coroners Rules (as amended), which provides:
“(1) Where
(a) A coroner is holding an inquest into a person’s death,
(b) The evidence gives rise to a concern that circumstances creating a risk of other deaths will occur, or will continue to exist, in the future; and
(c) In the coroner’s opinion, action should be taken to prevent the occurrence or continuation of such circumstances, or to eliminate or reduce the risk of death created by such circumstances, the coroner may report the circumstances to a person who the coroner believes may have power to take such action.”

The coroner wrote to the government, the fire service, Southwark Council and the Fire Sector Federation; each had 56 days in which to reply with their comments.

This is a brief note on the issues that were raised.

Fire Risk Assessment
The coroner wrote “there remains uncertainty about the scope of inspection for fire risk assessment purposes which should be undertaken in high rise residential buildings. Evidence was adduced which indicated that inspection of the interior of flats or maisonettes in high rise buildings was necessary to enable an assessor to identify possible breaches of the compartment which have the potential to impact on the fire safety of the resident or others.

The coroner has recommended that the government provides clear guidance on:
• The definition of “common parts” of buildings containing multiple domestic premises.
• Inspection of a maisonette or flat which has been modified internally to determine whether compartmentation has been breached.
• Inspection of a sample of flats or maisonettes to identify possible breaches of the compartment.

Southwark Council was advised to “…review its policies and procedures concerning fire risk assessments of high rise residential buildings.”
• Prioritising such buildings for regular rigorous review.
• Considering the skills and experience needed to undertake an assessment of higher risk residential buildings.
Considering the training required for members of staff considered to be competent to carry out assessments.

- Identifying when individual flats or maisonettes should be inspected and how these should be selected for inspection.
- Ensuring that assessors have access to relevant information about the design and construction of high rise residential buildings and refurbishment work carried out to enable an assessor to consider whether compartmentation is sufficient or might have been breached.

Evidence was also given that a fire risk assessor should inspect individual flats or maisonettes within a high rise residential building to be able to inspect any features which could be seen inside, but not outside, the flat or maisonette and which might indicate that compartmentation had been breached.

**What is ‘High Rise’?**

There is no set definition of ‘high rise’. In Southwark Council’s response to the coroner, it has agreed to apply recommendations to blocks above 30m, equating to those of ten storeys and above. This is supported by the guidance set out in BS 9991:2011 relating to the installation of sprinklers in new buildings, where it says: “All buildings with a floor higher than 30m above ground should be fitted with sprinklers.”

Significantly, it has also not only set out to apply the coroner’s recommendations to any lower height, but complex blocks i.e. those with more than one means of escape, along with the council’s sheltered housing schemes and temporary accommodation hostels that house their most vulnerable residents.

The Fire Sector Federation, having produced two guidance documents, “Competency Criteria for Fire Risk Assessors”, published on 21 November 2011, and “Choosing a Competent Fire Risk Assessor”, published on 1 February 2013, and being seen as having the ability to exert influence in shaping future policy and strategy related to the UK fire sector, was asked to consider whether it had a role in clarifying the scope of fire risk assessments and in offering further guidance as to the training of fire risk assessors.

**Fire Sector Federation Actions**

In response to the coroner’s letter, the Fire Sector Federation has initiated the following actions:

1. Formation of a new work stream within the federation to concentrate on relevant aspects of competency development, accreditation, education and training in fire safety; building on the foundations prepared by the National Fire Risk Assessment Competency Council.

2. A federation member, the National Social Housing Fire Safety Group is well advanced in the development of qualifications for fire risk assessors as a basis for the training of housing and estate management staff.

3. Formation of an additional work stream within the federation to review, co-ordinate and oversee a further programme of actions which include any changes felt necessary to Building Regulations Approved Document B and the practical guidance given therein, in order to redress the ambiguity over Fire Resistance and Surface Spread of Flame classification “O”, and to improve the wider understanding of fire safety matters.

4. An awareness and publicity programme seeking to raise the profile of fire safety, picking out important developments, elements of recommended best practice and highlighting issues for attention.

5. Working with the Glass and Glazing Federation to ensure that members in the window replacement sector have a heightened realisation of the importance of checking and confirming applicable fire safety requirements when they carry out window improvements, particularly regarding Approved Document B.

**Building Regulations and Approved Document B**

During these inquests, the coroner examined Approved Document B and said:

“The introduction to Approved Document B states that it is ... intended to provide guidance for some of the more common building situations”. However, Approved Document B is a most difficult document to use. Further, it is necessary to refer to additional documents in order to find an answer to relatively straightforward questions concerning the fire protection properties of materials to be incorporated into the fabric of a building.

The government was asked to consider reviewing Approved Document B to ensure that it:

- Provides clear guidance in relation to regulation 8.4 of ADB1 of the building regulations, with particular regard to the spread of fire over the external envelope of the building and the circumstances in which attention should be paid to whether proposed work might reduce existing fire protection.
- Is expressed in words and adopts a format which is intelligible to the wide range of people and bodies engaged in construction, maintenance and refurbishment of buildings, and not just to professionals who may already have a depth of knowledge of building regulations and building control matters.
- Provides guidance which is of assistance to those involved in maintenance or refurbishment of older
housing stock, and not only those engaged in design and construction of new buildings.

In its response to the coroner, the government confirmed that the Generic Risk Assessment guidance on High Rise Fire-fighting is under review and will be informed by all of the recommendations made in the Coroners Rule 43 recommendations.

In relation to building regulations, the government stated its commitment to a programme of simplification of the Approved Documents. However, it said that the design of fire protection in buildings is a complex subject and should remain, to some extent, in the realm of professionals.

Research of this part of the Building Regulations, which will form the basis of a formal review leading to the publication of a new edition of the Approved Document in 2016/17, has been commissioned. The revision would be drafted in accordance with a new ‘style guide’ for Approved Documents, aimed at ensuring the guidance is capable of being more easily understood, and that the need to cross-reference is reduced.

**Information and guidance to occupiers of flats and maisonettes in high rise buildings**

Few of the former residents of Lakanal House who gave evidence at the inquests understood the escape strategy for the building. The coroner therefore recommended that, in relation to residents of high rise residential buildings, Southwark Council’s Housing Department should:

- Demonstrate to those who are about to enter into occupation of a flat or maisonette the fire safety features of their dwelling and of the building generally; this should include walking residents through relevant features such as escape balconies and demonstrating how to open fire exit doors and where these lead.
- Give residents clear guidance as to how to react if there is a fire in the building, namely to explain whether they should attempt to get out of their flat or maisonette and leave the building, or whether they should remain in their flat; that guidance should explain clearly how to react if circumstances change, for example, if smoke or fire enters their flat or maisonette.
- Consider additional ways in which information might be disseminated to residents, for example, by fixing inside each flat and maisonette a notice about what to do in case of fire.
- In common areas, explain whether residents should normally remain in their flats or maisonettes or whether they should evacuate the building, in which case evacuation procedures should be explained.
- Provide clear information to residents to enable them to find escape routes.
- Use pictograms to assist those for whom English is not their first language.
- Provide information to those in the emergency services which would assist them to understand a building’s layout and enable them quickly to find a particular flat or maisonette once inside the building.
- Liaise with the fire service regarding use of premises information plates and boxes.

**Training of staff engaged in maintenance and refurbishment work on existing buildings**

Southwark Council was asked to consider the training needs of personnel who will be involved in procuring or supervising work to existing high rise residential buildings - whether maintenance, refurbishment or rebuilding of parts of buildings - to ensure that materials and products used in such work have appropriate fire protection qualities. Staff should, for example, be trained to understand the significance of the compartmentation principle and to appreciate when building control should be notified about work to be undertaken.

**‘Stay Put’ Vs ‘Get Out, Stay Out’ Policy**

Evidence adduced at the inquests indicated that fire brigades generally assume that compartmentation of individual flats or maisonettes in high rise residential buildings would prevent the spread of fire from one dwelling to others or to common parts. However, the evidence also indicated that, particularly with older housing stock, compartmentation might be breached as a consequence of, for example, maintenance or refurbishment work undertaken by building owners or modification to individual dwellings undertaken by occupiers.

This also creates a real decision in terms of the context of guidance given to residents and further advice and information is awaited from government bodies.
Conclusion
The fact that Southwark Building Control had not been notified of any of the alterations taking place in Lakanal House is a cause for concern.

There are essentially three areas for consideration resulting from the coroner’s enquiry and, whilst the focus is on Southwark Council, we know that the situations that occurred there are not unique:
1. It appears that many local authorities fail to understand their responsibilities and manage them. Worse, they may fail to follow technical best practice and often ignore building control and experts in fire risk.
2. Confusion was allowed to reign between contractors and the council and nobody involved had the technical knowledge or experience to point out the flaws in successive works on the building. Nor was anyone cognisant of the dangers produced by changes within the living units. Combined, these created a highly dangerous building.
3. The fire risk assessment process was compromised. It was suggested that even if it had been carried out, the people the council intended to perform it had insufficient technical knowledge or experience to have detected or understood the dangers posed by poorly supervised structural changes and renovations.

In its response to the coroner, Southwark Council has committed to reviewing its current processes to ensure that there is liaison with the council’s building control team in all major work proposals and completions and that all necessary sign-offs are obtained. It is also carrying out a retrospective review of major works to ensure that the necessary consents are in place.

We are aware that local authority property teams are starting to react to the Lakanal House enquiry; this is an opportunity for building control to provide the appropriate advice and guidance; to reinforce the need for building control involvement where building work is taking place in council-owned property and to offer the services of the LABC FRACS-accredited fire risk assessment team.

If you need any further advice or guidance please contact Lorna Stimpson lorna@labc.uk.com or call 07525 967226.
LABC represents all local authority building control teams in England and Wales who work with industry and building professionals to ensure compliance with the Building Regulations. There are 3,000 surveyors working in LABC providing a consistent national service that is delivered at a local level.