Building Safety Post Grenfell

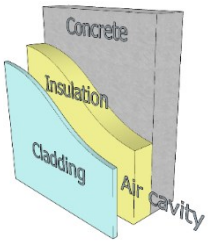


In 2017 the world witnessed the horrific tragedy of the Grenfell Tower fire that claimed the lives of 72 people making it one of the deadliest UK residential fires. This resulted in a number of public enquiries and a raft of legislative changes aimed at improving safety of high-rise buildings both in new and existing developments. Laura Mills describes the legislative changes and assesses what progress has been made in ensuring fires of this magnitude never occur again.

Introduction

The Grenfell Fire Tower in 2017 was a huge tragedy where 72 people lost their lives. The investigations that followed included the independent review of building regulations and fire safety (The Hackitt Review); this was a deep dive into the construction industry and its regulation and resulted in Dame Judith Hackitt highlighting Building Safety as a global concern. The second investigation was the Grenfell Tower Inquiry, led by Sir Martin Moore-Bick, to examine the fire and also the circumstances which led up to the fire. The combined recommendations from the inquires led to reform in legislation within the built environment and the regulatory regime.

Cladding



It is widely reported upon that when the fire escaped from flat 16 and entered the cladding, it spread rapidly up the east face of the tower, then around the top of the building in both directions and down the sides, enveloping the entire building in under three hours. Aluminium Composite Material (ACM) rainscreens with polyethylene cores acted as a source of fuel and one of the main reasons for the horizontal and downward spread of the fire was the melting and dripping of burning polyethylene from the spandrel and column panels that ignited fires lower down the building [2].

Many other existing buildings have similar cladding and so they are exposed to similar risks in the event of fire. The response to this issue was a Cladding Safety Scheme (CSS) funded by both the £5.1 billion allocated by the government to fix the most dangerous buildings and through revenue from the Building Safety Levy on new development. The scheme available to all medium-rise buildings between 11 and 18 metres across England and high-rise buildings over 18 metres (outside of London) where fire safety professionals have recommended that works must take place. The scheme is also available to the social housing sector with the aim of protecting leaseholders from costs where the responsible developer cannot be made to pay [10].

Issues relating to Fire & Building Safety (Grenfell Inquiry Phase 1)

The Grenfell Tower Inquiry Phase 1 report highlighted the lack of on-site information available to the London Fire Brigade on attendance. While some of the senior officers attending had an awareness of the danger of cladding fire, others were not trained to recognise the dangers of these systems and how fire development and fire behaviour could occur. If the building design had been more complex, the lack of information available could have had further impacts [2].

One of the recommendations from the inquiry centred around the availability of plans of high-rise residential buildings to local fire and rescue services and the provision of premises information boxes in high-rise residential buildings. In response to these recommendations, The Fire Safety (England) Regulations 2022 [5], implemented a change in the law for high-rise residential buildings (a multi-occupied residential building at least 18 metres in height or 7 or more storeys) – responsible persons must:

- Share electronically with their local Fire and Rescue Service (FRS) information about the building's external wall system (Regulation 5) and provide the FRS with electronic copies of floor plans and building plans for the building (Regulation 6) [5]
- In addition, hard copies of the building's floor plans, a single page orientation plan of the building, and the name and UK contact details of the responsible person must be held in a secure information box (Regulation 4), which is accessible by firefighters [5]

This knowledge and information will aid FRS teams in planning for emergency response situations.

- Additionally, Section 1 of the Fire Safety Act 2021 also now clarifies that where a building contains two or more sets of domestic premises, the responsible person must take account of structure and external walls in a fire risk assessment. The Fire Safety Act amends article 6 of the Regulatory Reform (Fire Safety) Order Act 2005 [4].

When fire-fighters attended the fire at Grenfell, they were unable to operate the mechanism that should have allowed them to take control of the lifts. They were therefore unable to make use of the lifts, which are often key to carrying out firefighting and search & rescue operations successfully. Occupants of the tower were also unable to use the lifts to escape, in some cases, with fatal consequences [2]. Grenfell tower was 24 storeys high, equal to 67.3m or 221ft [6]. The inquiry recommendation for regular inspection and testing of lifts designed for use by firefighters [2], has been enforced via The Fire Safety (England) Regulations 2022 [5] under regulation 7. Regulation 7 requires monthly inspections of not only lifts, but all key fire-fighting equipment provided in the building to fight fires and reporting any defects to local fire and rescue service electronically within 24-hours. These regulations will help prevent similar situations as the Fire and Rescue Service, in the majority of cases, will know before arrival whether a lift intended for their use in an emergency is operational.

Inquiry recommendations also included the provision of fire safety information to residents of high-rise residential buildings and the marking of floor levels in lobbies and staircase landings [2]. In the Grenfell building, the staircase landings were not marked, firefighters were unable to identify floors clearly when carrying out firefighting or search and rescue operations within the building [5]. The Fire Safety (England) Regulations 2022 sets out the requirement under regulation 8 for floor numbers to be clearly marked on each landing within the stairways, and in a prominent position of all lobbies, which should be visible in normal conditions and in low lighting/smoky conditions [5] to avoid this reoccurring. This recommendation had previously been raised within the Coroner's Rule 43 letter following the fatal fire where two fire fighters tragically died at Shirley Towers in Southampton in 2010 [7].

Evidence from the Inquiry [2] indicated many occupants of Grenfell Tower were unable to read or understand the fire safety instructions placed in the lobbies throughout the building. The Fire Safety (England) Regulations 2022 now sets out the requirement under regulation 9 for the provision of fire safety instructions, including evacuation instructions, in a form that the occupants of the building can reasonably be expected to understand. This relates to all multi-occupied residential buildings in England with two or more sets of domestic premises over 11m or four stories (and which have common parts) [5] to help save lives.

The Inquiry highlighted a need for the inspection of fire doors and self-closing devices due to evidence obtained from Grenfell that defective fire doors allowed smoke and toxic gases to spread through the building more quickly [2].

- Regulation 10 of The Fire Safety (England) Regulations 2022 again relates to all multi-occupied residential buildings over 11m and requires routine checks and the provision of information to resident relating to fire doors
- In addition to this, Section 1 of the Fire Safety Act 2021 also now clarifies that: where a building contains two or more sets of domestic premises, the responsible person must take account of flat entrance doors in a fire risk assessment. The Fire Safety Act amends article 6 of the Regulatory Reform (Fire Safety) Order Act 2005 in this regard [4].

The Hackitt Review



The interim report identified that the current system of building regulations and fire safety was not fit for purpose and that a culture change is required to support the delivery of buildings that are safe.

The Hackitt review has had an astounding impact on building regulations and fire safety from the focus of its initial parameters, this relates to both the built environment (the physical structures that humans inhabit) and buildings currently in occupation [1].

The Built Environment

Recommendations set out to improve the focus on building safety during their design, construction and refurbishment whilst also tackling poor procurement practices & competence, all under a new framework.

Building (Higher-Risk Buildings Procedures) (England) Regulations 2023

The new building control process for higher-risk buildings in England came into force on 1st October 2023 via the Building (Higher-Risk Buildings Procedures) (England) Regulations 2023. From this date, the building control authority for higher-risk buildings is the Building Safety Regulator and new building work in scope can no longer be overseen just by local authority or private sector building control. This includes:

- Construction of new higher-risk building (HRB)
- Building work to existing HRBs
- Building works that change existing buildings to become HRBs (including material change of use)
- Building works that will declassify a building from being an HRB [8]

The Building Regulations etc. (Amendment) (England) Regulations 2023

To raise standards across the built environment, these regulations apply to all building work, with legal responsibilities placed on those who commission building work, participate in the design and construction process and carry out the building control function, to ensure compliance with building regulations [8].

The Building (Approved Inspectors etc. and Review of Decisions) (England) Regulations 2023

Make amendments to the Building (Approved Inspectors etc.) Regulations 2010 to begin to implement the changes introduced by the Building Safety Act 2022 and support the new building control regime. Changes by focus on competence and accountability by establishing a regulated building control profession [8].

Occupied Buildings

The Hackitt report noted the need for duty holders with specific responsibilities, regulation, improvements relating to building information and that residents need to be given a voice, all under new regulation that hold powers of enforcement.

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The Building Safety Act 2022

Granted Royal Assent on 28th April 2022.

- Part 2 established the role of Building Safety Regulator and Part 4 includes information relating to its enforcement powers and relevant appeal processes
- Part 3 initialises changes to building control authorities and building regulations, including building control [9]

Part 4 comprehensively addresses all improvements for in-occupation higher-risk buildings (defined as those which meet 7 stories or 18 metres), and defines the role of duty holders with specific responsibilities that include:

- Registration of all existing buildings with the Building Safety Regulator in 2023, and the long-term requirement for obtaining building assessment certification from the regulator
- Prevention of building safety risks, defined as 'spread of fire and/or structural failure' via assessment, management, notification, and the creation of Building Safety Cases [9].

Safety Cases

Safety cases have been used in Health & Safety since the 1970s and the Building Safety Regulator has adopted these as part of Building Safety. Safety Case Reports should now demonstrate a building is safe for occupation and demonstrate that:

"Safety Case Reports should now demonstrate a building is safe for occupation"

- Building safety risks in relation to the building have been assessed
- All reasonable steps have been taken to prevent the occurrence, and control the impact of, any major incident resulting from building safety risks
- There is compliance with the prescribed principles introduced via secondary legislation
- All obligations in relation to resident engagement and participation, complaints handling, information provision and the role of residents in helping keep the building safe have been met
- A Resident's Engagement Strategy has been compiled and is maintained

Building Assurance Certificates will then be issued where the above can be evidenced [9].

"a 'Golden Thread of Information' – this is the information about a building that enables it to be kept safe and is accurate, easily understandable, up-to-date and readily accessible"

Golden Thread

Part 4 also includes the duty holder' responsibilities relating to documents and information:

- Ensuring information is suitably stored, provided to the regulator and residents where required, and where required, passed over to future accountable persons and a mandatory incident reporting mechanism for HRBs.

An additional parameter of the Hackitt Review was obligating the creation of a digital record, the information and documents required for all new and occupied HRBs to help create a 'Golden Thread of Information' – this is the information about a building that enables it to be kept safe and is accurate, easily understandable, up-to-date and readily accessible. Information and documents are required to be held digitally and established at the start of construction. The Golden Thread should be updated and maintained throughout a building's lifecycle.

Residents' duties and engagement

Residents' duties and engagement are also covered in Part 4:

- Resident engagement strategies are required, to provide greater transparency of information on building safety and residents must be advised of how to obtain further information
- New routes for complaints should be provided by the accountable person(s) and also the regulator to ensure concerns can be voiced
- Residents should also be made aware of duties placed on them, contravention notices and access to premises that are applicable to their responsibilities [9]

What's next – Grenfell Inquiry - Phase 2

In Phase 2 the Inquiry (recently postponed until after the 7th anniversary of the tragedy) will seek to answer various questions set out in the list of issues, some of which are additional matters of particular concern relating to fire & building safety [2].

- The decisions relating to the design of the refurbishment and the choice of materials
- The regime for testing and certifying the reaction to fire of materials intended for use in construction
- The design and choice of materials
- The performance of fire doors
- The warnings of potential fire hazards given by the local community
- The width of the stairs
- The supply of gas
- The supply of electricity and the history of electrical surges

Conclusions

The Grenfell Tower fire was one of the deadliest UK residential fires and rightly resulted in a number of public enquiries and a raft of legislative changes aimed at improving safety of high-rise building both in new and existing developments.



Whilst there have been many changes in the last seven years since the tragedy, it seems there is a long way to go. Inside Housing reported in March 2024 that 'of 3,839 buildings above 11 metres being monitored by the government due to the need for cladding remediation, 2,286 have not even started works yet' [11]. As we approach the seventh anniversary, we are only just starting to see the initial requests for safety cases and requirements relating to the registration of building inspectors becoming enforceable; this will be a point of interest to follow.

An enforceable obligation relating to signage was recommended following the fatal fire at Shirley Towers prior to Grenfell, this was subsequently re-raised within the Grenfell Inquiry and highlights situations which arose at Grenfell could have been avoided. Reports on Action to Prevent Future Deaths (under Schedule 5 of the Coroners and Justice Act 2009 and Regulations 28 and 29 of the Coroners (Investigations) Regulations 2013) [7], previously known as a Coroner's Rule 43 letter are compiled by the Coroner following fatal fires, where an investigation gives rise to concern that future deaths will occur. Whilst the corner raises issues and identifies specific areas of concern, with the recommendation that action should be taken, this does not include what that action should be, this remedy is for the person or organisation to whom the report is directed [12]. I wonder if there will now be changes in the way Action to Prevent Further Future Deaths will be handled [7].

The Grenfell Tower had a profound impact on its residents and indeed all of us have felt the impact on some level. It is important residents can feel safe and to know they have a voice in maintaining that safety, and that voice is being heard. Residents should therefore be at the heart of all of these changes both as the primary focus for safety and in ensuring transparency and collaboration on proposed changes.

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