

Ryder



Summary of the final Hackitt report

Review of the recommendations to industry changes arising from the independent review of building regulations and fire safety by Dame Judith Hackitt

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Alexandra Blaylock
Architect
BA(Hons) BArch(Hons)



Following the tragedy of Grenfell in June 2017, an independent review into the building regulations and fire safety was commissioned by the government. The interim findings of the review were published in December 2017¹ and the final report published in May 2018,² known as the Hackitt report. The government has since published its response to the recommendations in Building a Safer Future³ and has now released many consultations to collect comments on how these recommendations may be implemented.

There is now an opportunity to pioneer the application and development of the new regulatory framework, and to be at the forefront of the changes that will resonate throughout the industry.

An important part of this will be the future use of BIM, the capture and maintenance of the golden thread of information, methods of record keeping and outputs. Proposals are likely to be put forward to ensure competence of construction industry professionals and as an industry we have a responsibility to ensure we are taking steps to implement the Hackitt report's recommendations, partly because it is our professional obligation and partly because it will have a notable impact on businesses' professional indemnity as we move forward.

The government states in its implementation plan that it "expects industry to work together to show leadership in sharing good practice and learning from each other".⁴

Increasing general awareness of the proposed recommendations from Hackitt is a good starting point to understand what is being addressed within the government's implementation proposals and establish how the industry might be involved and the challenges ahead. To set the scene of the findings from both the interim and final Hackitt reports, Building a Safer Future summarises Hackitt's barriers to implementation as follows.

“Unclear guidance and regulations – the existing regulations and guidance were viewed as complex and unclear, leading to confusion and misinterpretation in their application.

Unclear roles and responsibilities

Accountability for the safety of a building throughout its lifecycle was unclear.

Inadequate resident engagement

There was no clear route for residents to escalate concerns about their building and ensure that action was taken.

Weak compliance, enforcement and sanctions

The current system for assessing buildings and ensuring that designs meet standards and what is built meets regulations was considered weak and does not assure residents' safety. Weak sanctions failed to drive compliance within the sector.

Lack of competence

The means of assessing and ensuring the competence of those working on high rise and complex residential buildings was seen to be inadequate.

Inadequate product quality

The existing system of product testing, marketing and quality assurance was seen to be inadequate.

Ignorance

Regulations and guidance were not always read by those who needed to and when they did, the guidance was often misunderstood and misinterpreted.

Indifference

The primary motivation was often to do things as quickly and cheaply as possible rather than to deliver quality homes which are safe for people to live in. When concerns were raised by others involved in building work or by residents, they were often ignored.

Lack of clarity on roles and responsibilities

There was ambiguity over where responsibility lay, exacerbated by a level of fragmentation within the industry, and which precluded robust ownership of accountability.

Inadequate regulatory oversight and enforcement tools

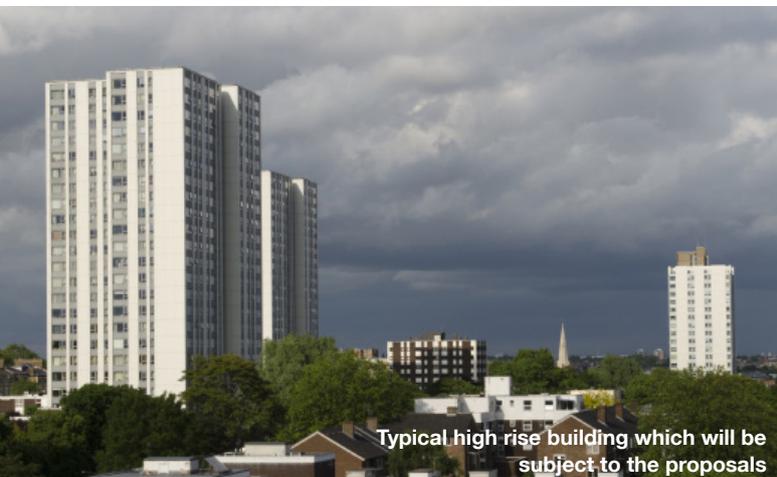
The size or complexity of a project did not seem to inform the way in which it was overseen by the regulator(s).

Where enforcement was necessary, it was often not pursued

Where it was pursued, the penalties were so small as to be an ineffective deterrent.”⁵

Buildings within scope of the new regulatory framework

The new regulatory framework should apply to residential properties which are 10 or more storeys high, however the final Hackitt report goes on to say this should be considered for all multi occupancy residential and institutional residential buildings.



Typical high rise building which will be subject to the proposals

This will affect many projects across the industry. While these implications will most definitely affect larger residential schemes, practices may wish to consider whether it should apply across all projects.

The regulatory framework should treat the building as a single entity (a system encompassing sub systems) and a new overarching approved document should be published describing the system and the holistic analyses that must be completed when undertaking building work. It should be mandatory that any occurrences are reported to the Joint Competent Authority (JCA).

There is varied success of this across the industry. Some practices already do this well with collaborative working practices, but how can we do it better? Figure 1 shows the considerations of holistic thinking around fire design.

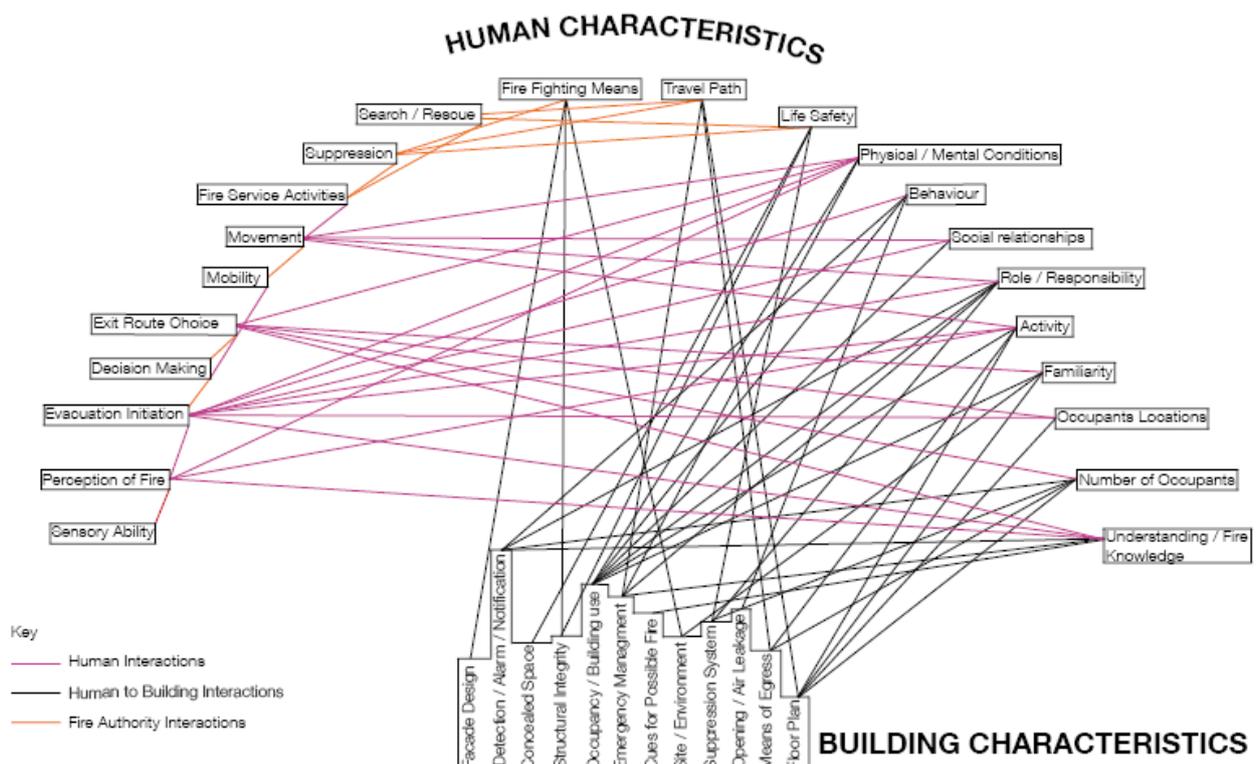


Figure 1: Holistic fire design

Design, construction and refurbishment

The recommendation is that the government specifies the key roles and their responsibilities to ensure safety in High Risk Residential Buildings (HRRBs). This should include legal responsibilities to provide the four information products (digital record, fire and emergency file, full plans and construction control plan) which represent a minimum requirement, verified through three gateway checks.

This will affect production of information and outputs – should there be an additional fee to consider the additional deliverables?

Gateway 1

The LPA should be required in law to undertake a consultation with the JCA where it identifies that a building is a HRRB. This process should also apply where planning permission for another building in the near vicinity is sought (where such a building might impact on fire service access to a HRRB).

Gateway 2

Government should ensure there is a thorough assessment by the JCA of detailed design plans for HRRBs and sufficient assurance that duty holders are in place and relevant responsibilities are being met in order to give permission for building work to legally commence. This should be in line with paragraphs 2.29-2.32. This is described as full plans approval.

Gateway 3

The JCA undertakes a thorough test of the duty holders' as-built construction of HRRBs, supported by clear documented evidence from the principal contractor that the design intent has been delivered as proposed, and any changes are documented and justifiable.

A handover of key golden thread information must occur. This should be as set out in paragraphs 2.33-2.35 above and the building owner must have completed a pre occupation fire risk assessment and resident engagement strategy. All of this must be signed off by the JCA (and a safety case review cycle established) to enable occupation to commence. This completion certificate process is the third gateway point.⁶

Changes to existing buildings

The final Hackitt report is clear to ensure that any significant change to a building is evidently considered and recorded. It suggests there should be a clearer, statutory change control process that places requirements on the relevant duty holder to notify the regulators of significant changes post full plans sign off. Within that context, two types of changes should be defined.

If a practice is appointed to work on a refurbishment, how does this affect the output and what must we ask for to ensure we provide a comprehensive package for future users?

Major changes

These would be a limited list of significant changes, for example (a) changes in use, changes in number of storeys, changes in number of units or (b) changes which could impact on previously signed off building safety plans. Major changes would require an update from the duty holder to the JCA for reconsideration before such work is commenced.

Minor changes

(In other words, all other changes) would need to be recorded and identifiable at the completion of the work for duty holders to demonstrate that building regulations are still satisfied.⁷

Occupation and maintenance

The recommendation is that there should be a duty holder for each building (HRRB), which should be the owner or superior landlord. Appointed by the duty holder should be a building safety manager with relevant skills, knowledge and expertise to be responsible for the day to day management of the building and act as a point of contact for residents. The JCA would hold record of this contact information for both. The JCA would oversee and ensure duty holders and building safety managers meet their obligations.

What level of information will be required to allow for the building safety manager to fulfil their duties, what format will this take and how will it remain accessible?



Building manual

The days of boxes full of manuals are coming to an end for new buildings, but what about those boxes full of manuals from buildings old enough to have them ... who and how will this information be processed if we come to refurbish a building, and will this be required to be digitalised?

Resident's voice

Residents should be able to access fire risk assessments, safety case documentation and information on maintenance and asset management relating to the safety of their homes.

Assuming everyone within the industry will be asked to provide this information, practices may need to consider a standardised solution to ensure information is clear to understand and accessible. Assuming there will be a digital manual produced as discussed in occupation and maintenance, how will the relevant elements be made available to the public?

Guidance and monitoring to support building safety

The recommendation is for industry to take ownership of the guidance on meeting the building regulations, unless proven incapable. Hackitt suggests a new structure to validate and assure guidance and to oversee the performance of the built environment, providing expert advice. The industry, as well as individual companies and practitioners, can input into the consultations to aid development of the guidance and make it user friendly.

Competence

The recommendation is for the construction and fire safety sectors to demonstrate more effective leadership in relation to developing a responsible approach to building safety. Other sectors should be reviewed for good practice and continuous improvement of competence should be developed.

An Early Adopters Programme has been set up by the government to promote good practice and drive the cultural change.

This is made up of eight contractors including Kier, Willmott Dixon and Wates. However it will be everyone's responsibility across the industry to ensure that decision makers understand what implications their choices have, and that tools and training are provided where necessary.

With the increasing cost of indemnity insurance for construction professionals in the wake of Grenfell, it will be important to regain the trust of insurers through competence to ensure a financially viable industry moving forward.

THE 7 LAYERS OF FIRE SAFETY IN BUILDINGS





Fire door test frame

Products

The recommendation is for improved and more transparent testing of construction products as systems, with clearer information provided on the scope of the tests and limitations of the products. Substitution of products should be limited without further full testing.

Industry is in a strong position to input to this through experience of systems and what is required, or by expressing what we would like to use but which has not been tested.

Golden thread of building information

The recommendation is for government to develop and agree with the construction industry a standardised format for digital information for the design, construction and during occupation of HRRBs.

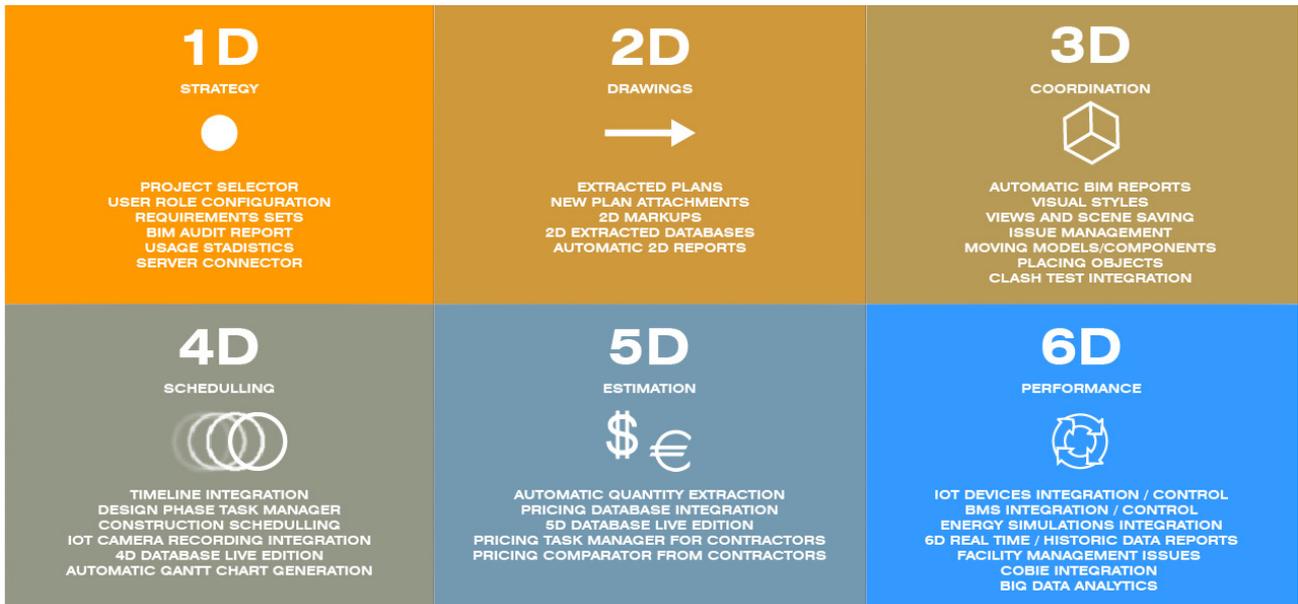


Figure 2: The theory of 10D BIM dimensions⁹

This should be added to / developed should there be any refurbishments on the building. This should be openly accessible and secure.

How will the industry ensure a golden thread through our designs? Figure 2 outlines the theory of BIM – the golden thread will need to be integrated into this.

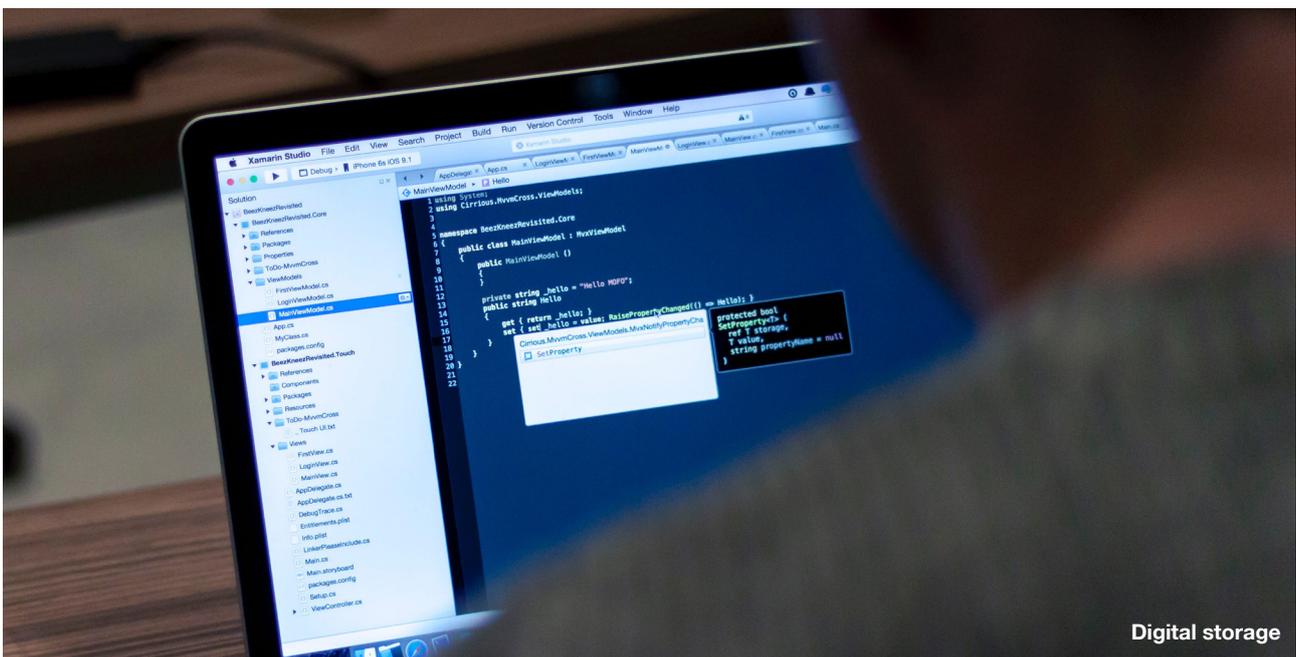
Procurement and supply

The recommendation is for safety requirements to be protected from cost saving processes and that this should be included within the procurement process and any contracts devised for a building. This should be continued through to any tenders, showing that the proposed solution will produce safe building outcomes, approaching the building as a system.

As an industry we have the opportunity to advise clients of this and influence it being included as part of contracts.

It is clear that the regulatory system will be changing – it is already affecting our day to day decisions. Reviewing and implementing changes at an early stage would provide a smoother transition into a new regulatory system and offer the opportunity to make efficiencies.

We have an immediate requirement to ensure competency within our practices, ensuring all people understand the complexities and limitations of fire design guidance. However, we should also be looking at where research and development can be used to improve standards across the whole industry. Concepts such as digital twins could be a way to store building information to both monitor the building and keep an accurate remote record of the building whereby issues can be monitored and flagged.



It will be the responsibility of everyone within the industry to be aware of the upcoming impact on our information production and responsibilities.

“In wider industry, an entrenched focus on least cost rather than greater efficiency has facilitated an unacceptable level of sub standard and potentially unsafe construction. The culture must change to one where the participants at all levels focus on delivering the required quality.”¹⁰

We would love to hear from you if you are interested in collaborating.



research@ryderarchitecture.com

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Ryder Architecture Limited

Newcastle

London

Glasgow

Liverpool

Hong Kong

Vancouver

Amsterdam

info@ryderarchitecture.com

www.ryderarchitecture.com

Ryder Alliance

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