Workshop 1b

Post Grenfell tragedy improvements

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Room: York



NHMF Maintenance Conference 2019

Grenfell tower – Isolated incident?





Global problem?





Experienced on home soil before





Purpose built blocks

- People living in flats experience more fires than people living in houses.
- High-rise does not mean high-risk!
- To keep fire risk to a minimum, it is just as important to prevent fires as to provide measures to protect people when fire occurs. The most significant influences on fire risk are social and
- lifestyle factors and advanced age, not the type of dwelling in which people live.
- All dwellings should have working smoke alarms.
- Very few people die as a result of a fire in a neighbour's flat or the common parts. Nearly all fire deaths occur in the flat in which fire starts.
- In blocks of flats, each flat is designed to be a fire-resisting 'box'. It is important to maintain the integrity of this compartment, particularly when building work and alterations take place. It is important to ensure that fires don't start in the common
- parts or common facilities.



The Stats

- In England 10% of the population live in purpose built blocks
- In 2009-10 25% of fires occurred within these premises
- 23% of fatalities that year occurred in these blocks.
- Number of fires appéars to be disproportionate
- Statistically, Once a fire occurs, occupants of purpose built blocks are safer than those occupying houses and bungalows,
- paralleled by a lower rate of injury,
- Vast majority of fires contained within flat of origin (compartmentation)
- În 2009/10, 8,000 firés in purpose built blocks required evacuation of more than 5 flats in only 22 occurrences
- High rise experience slightly more fires.
- The risk to people is based on demographic of occupant, not architectural design or height



Topics to be covered

- 1. The Hackitt Review
- 2. Whether the Hackitt Review goes far enough
- 3. How organisations should respond to the latest building regulation review
- 4. How organisations should procure appropriately qualified and tested services/products in new and existing premises.
- 5. How organisations should be interrogating their exiting portfolios for potential fire hazards?
- 6. How resident engagement will be critical in ensuring fire safety in the future



Hackitt, not Hackett







1. Hackitt Review

May 2018



Ignorance

 regulations and guidance are not always read by those who need to, and when they do the guidance is misunderstood and misinterpreted.



Indifference

 the primary motivation is 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 are raised, by others involved in building work or by residents, they are often ignored. Some of those undertaking building work fail to prioritise safety, using the ambiguity of regulations and guidance to game the system.



Lack of clarity on roles and responsibilities

 there is ambiguity over where responsibility lies, exacerbated by a level of fragmentation within the industry, and precluding robust ownership of accountability.



Inadequate regulatory oversight and enforcement tools

 the size or complexity of a project does not seem to inform the way in which it is overseen by the regulator. Where enforcement is necessary, it is often not pursued. Where it is pursued, the penalties are so small as to be an ineffective deterrent.



Culture

- The above issues have helped to create a cultural 'race to the bottom'
- caused either through:
 - ignorance,
 - indifference, or
 - because the system does not facilitate good practice.
- There is insufficient focus on delivering the best quality building possible, in order to ensure that residents are safe, and feel safe.



Its Time to ACT

- We know that Accountability, Competence and Traceability (ACT) are going to be the focus for ensuring housing is delivered safely and stays safe.
- We will be promoting ACT with the double meaning of it's now time to act and start preparing for a more robust fire safety landscape.
- This change will be significant and it will happen



The "Duty Holder"

- The duty holder is a new role created within Hackett, the duty holder is much like the RP the person charges with responsibility for a HRRB
- The duty holder is responsible for ensuring ongoing compliance and evidence of compliance is maintained
- Integral part of the Golden thread



Clear model of risk ownership

- Hackitt seeks to identify clear responsibilities for the Client, Designer, Contractor and Owner
- They are charged with demonstrating appropriate delivery and maintenance of safe buildings
- This will be overseen and those duty holders held to account by a new Joint Competent Authority (JCA)



Improving the HRRB design and build process

- A singular regulatory body (the JCA) will oversee building safety
- the same legislative framework will apply across the building life cycle;
- the existing overlaps between different legislation and different regulators would be removed;
- no longer two parallel, but confusingly different, building control bodies providing oversight during design and construction;
- a new set of specific JCA interventions across the building life cycle (gateway points and safety case review); and
- self-certification processes will be removed.



Outcomes based

Hackitt proposes:

- incentives to do the right thing
- serious penalties for those who choose to game the system and as a result put the users of the 'product' at risk.
- people who are part of the system should be competent, to think for themselves rather than blindly following guidance.



Transparency of information and an audit trail

- In order to provide reassurance and evidence that a building has been built safe;
- Testing and certification should be overhauled - its disjointed, confusing, unhelpful, and lacks any sort of transparency.
- Where concerns are identified, these findings must be made public and action needs to be taken if these issues are putting people at risk.



"the fire safety sector is not as strong or mature as other areas of engineering expertise, such as structural engineering."



2.Far enough?



Does it go far enough

- Limited scope HRRB's are residential buildings 10 storeys and above.
- The risks present in a 10 storey building are arguably similar at lower heights.
- Why only residential buildings? Why not hospitals, offices etc?
- The government will review this in the spring.



Does it go far enough

- Fire safety changes ie product substitutions currently occur, and work would continue whilst changes were negotiated with Building control or Al
- Under Hackitt, work would stop whilst substitutions were reviewed by JCA
- Scotland subs are allowed, process is complex because products are precisely specified



JCA planning approvals

- When JCA is implemented, approvals process will create a lag of probably 6 months +
- Whole design needs to be approved before works starts which would include
 - Superstructure not just sub structure,
 - Full fire strategy
 - Mand E
 - Service penetrations in the structure
 - Façade etc
 - Drainage



JCA planning approvals

 Would alignment with Scotland, which is widely regarded as the leaders in approvals, design and construction have been a more appropriate aspiration?



Does it go too far?

- "CDM regulations are a valuable exampler" Hackitt
- Is it not already a requirement of CDM for those who are key in the design and construction process responsible for reducing or controlling foreseeable risk?
- If those involved in the process were competent and this was legislated, would anything need to change at all?



3.Building regulations change

21st December 2018



Old vs new

The Building Regulations 1991

External fire spread

B4.-(1) The external walls of the building shall adequately resist the spread of fire over the walls and from one building to another, having regard to the height, use and position of the building.

(2) The roof of the building shall adequately resist the spread of fire over the roof and from one building to another, having regard to the use and position of the building.

The Building Regulations 2010 (Current Version)

External Fire Spread

B4.—(1) The external walls of the building shall adequately resist the spread of fire over the walls and from one building to another, having regard to the height, use and position of the building.

(2) The roof of the building shall adequately resist the spread of fire over the roof and from one building to another, having regard to the use and position of the building.

The Building Regulations 2000

External fire spread

B4. -

- (1) The external walls of the building shall adequately resist the spread of fire over the walls and from one building to another, having regard to the height, use and position of the building.
- (2) The roof of the building shall adequately resist the spread of fire over the roof and from one building to another, having regard to the use and position of the building.

No change!



External wall design

Buildings 18m +

- ADB 2000
 - Non combustile or;
 - 476 pt 11 test (limited combustibility)
- ADB 2006 (incl 2010 and 2016 ammendments)
 - Non combustible or;
 - Class A2-s3, d2 or better;
 - Pass a BS 8414 pt1 (2002) or BS8414 pt 2 (2005) test



External wall design 2018

Dec 2018 amendment (building regulation) Regulation 7 – workmanship Adds

- (ii) are adequately mixed or prepared, and
- (iii) are applied, used or fixed so as adequately to perform the functions for which they are designed; and
- (b) in a workmanlike manner.

Residential buildings 18m +

- A2-s3, d0 or A1
- Precludes the use of 8414 testing



What does this mean?

- Landlords already know (in the main) where ACM facades exist in their portfolios
- Do you know where cladding that contains
 - polystyrene (EPS),
 - polyurethane (PUR),
 - polyisocyanurate (PIR),
 - Phenolic
- In plain English, this includes all rigid insulation



What does this mean?

- Do you have BS8414 test data for each of those premises?
- If no, you need to take action
- If yes, you need to see if it was installed in accordance with the data from the 8414 test – destructive site surveys
- (Remember reg 7 amendment)



Decision tree

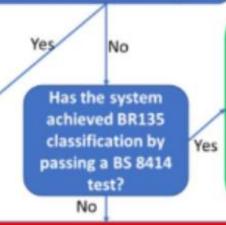
Ensure the system has been installed and maintained appropriately.

Review wider fire safety measures.

External wall systems rely upon design detailing such as cavity barriers and fire stopping to inhibit fire spread.

Building owners should seek professional advice on whether the external wall system has been installed and maintained as recommended by the manufacturer/supplier.

Are all the materials (including facing panel and insulation) in the external wall system limited combustibility?



- Ensure the system has been installed as per the BS 8414 test.
- · Ensure It has been maintained appropriately.
- Review wider fire safety measures.

External wall systems rely upon design detailing such as cavity barriers, fire stopping and in some cases external renders to inhibit fire spread.

Building owners should seek professional advice on whether the external wall system has been installed as per the 858414 test and maintained as recommended by the manufacturer/supplier.

Seek immediate professional advice and consider remediation measures

To assist building owners in assessing what measures they should consider taking to make their buildings safe the Government published astep by step guide to remediating buildings with unsafe ACM cladding*; it is also relevant for buildings with other external wall systems.

Decision tree

- In all cases, external assurance will be necessary
- Without confirmation that achieving BR135 classification via an 8414 test, the premises should be treated as if it has an ACM façade
- "The dutyholder for any given HRRB should ensure that the documentation that supports the performance claims for products and systems incorporated within the HRRB should be maintained throughout the life cycle of a building "



4.Procurement

How organisations should procure appropriately qualified and tested services/products in new and existing premises.



Competency criteria

- All organisations must have an appropriate competency criteria for all fire safety services it procures
 - FRA's
 - Fire engineering
 - Fire alarms
 - Emergency lighting
 - Sprinklers
 - Doors etc



Worst offenders?

- 128 councils answered a freedom of information act request
- 26 used registered assessors
- 56 did not know
- 46 used a mixture
- 23 did not use registered assessors



Products and installers

- The use of 3rd party certificated products and organisations should not be undervalued
- FIRAS, LPCB etc should be the minimum
- Primary test evidence
- Hyde Fire Safety Framework
- The Hyde Fire Safety Works & Services
 Framework is divided into 11 lots covering
 different aspects of fire safety, including fire
 doors, sprinklers and cladding remediation.



5.Identifying fire hazards

How organisations should be interrogating their exiting portfolios for potential fire hazards?



Is type I enough?

- 4 types of FRA
 - Type 1 Minimum
 - Type 2,
 - Type 3,
 - Type 4 Most robust



Type 1 – Common parts only (non-destructive)

- The basic FRA to satisfy the FSO
- Non destructive
- Consideration for Means of escape
- Includes a sample of flat entrance doors
- Considers separating construction between flats and common areas
- Entry beyond the flat entrance door is not required
- Ceiling tiles should be lifted
- Open a sample of service risers
- Type 1 is normally sufficient for most blocks unless serious structural fire protection is deficient



Type 2 – Common parts only (destructive)

- Similar in scope to type 1
- Destructive inspection on a sampled basis
- Requires a contractor (usually)
- Might include a sample of flats to check separation
- Usually a one off exercise
- Carried out only when serious defects are known or suspected
- Age or height of block is not a reason to undertake a type 2
- Might be a recommendation of a type I assessment but should not be recommended as a matter of course



Type 3 – Common parts and flats (non-destructive)

- Same work involved as a type 1
- Goes beyond scope of FSO
- Does not go beyond scope Housing Act
- Considers MOE and detection within a sample of flats
- Non destructive, fire resistance of internal doors considered
- Measures to prevent fire not considered unless the landlords responsibility to maintain.
- Age of block might be a trigger
- Widespread unauthorised material alteration
- Possible in rental
- Not possible in long leasehold as no right of access



Type 4 – Common parts and flats (destructive)

- Same scope as type 3
- Destructive
- Common parts and flats Sampling basis
- Presence of contractor likely to be required
- Nature of work is such that vacant flats should be targeted.
- Includes a sample of flat entrance doors
- Most comprehensive
- Applicable in only limited circumstances, ie new landlord, stock transfer etc
- Only when information is not available
- Reason to suspect occupants and neighbours are at risk
- Asbestos



Frequency of assessment

- Low risk, modern, low rise block bi annual review, new FRA 4 yearly
- Higher risk buildings social factors, building age, and those over 4 storeys in height – Annual Review – new FRA every 3 years
- In extreme cases highest risk only Annual FRA might be appropriate.
- Inside Housing never again campaign calls for annual in all purpose built blocks.
- Most organisations do not differentiate between review and FRA
- What type?



6 Residents



6. Residents

- A no risk route for redress will be created and greater reassurances about the safety of their home will be offered
- Must understand their role and responsibilities for keeping their building safe for themselves and their neighbours.
- Must actively participate in the ongoing safety of the building and must be recognised by others as having a voice.



What does that look like?

- informed residents can hold building owners to account for weaknesses in performance.
- structured engagement via residents' associations and tenant panels,
- collaboration with landlords and building owners to assemble the views of residents and raise common concerns.
- Tennant scrutiny panels?



"There is a need for culture change in the relationship between landlords and residents so that the good practice that already exists becomes the norm across the whole sector."



The Residents have responsibilities

- The need to maintain fire safety measures in flats is the residents responsibility
- Residents will need to cooperate to ensure that essential safety checks can be carried out.
- obligation to ensure that any work that they have done to not impact on the building's safety.
- The RP for a HRRB should therefore provide residents with clear information about their obligations in relation to building and fire safety.



Thank you.

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