Background

Following the Grenfell Tower fire on 14th June 2017, in which 72 people lost their lives, there are three distinct strands of activity.

The Metropolitan Police have an ongoing enquiry, now expected to continue into 2019.

Sir Martin Moore Bick is leading the public enquiry, also expected to last into 2019.
Background

Dame Judith Hackitt FREng has led the most far reaching review of legislation covering how we build and how we manage safety and operation of buildings in a working lifetime: the Independent Review of Building Regulations and Fire Safety.
Building a Safer Future

What caused the Grenfell Tower disaster?

The Grenfell Tower fire should never have happened. Alex Smith looks at what must be learned to ensure residents are never put at risk again

Posted in June 2017

The UK construction industry will never be the same again after the devastating fire at Grenfell Tower in the early hours of Wednesday 14 June. At least 80 people are dead, or missing presumed dead, after the worst housing disaster in Britain since World War II.
Caution

My purpose is NOT to discuss what happened at Grenfell.

My purpose is to discuss the review of Building Regulations and Fire Safety and its findings in relation to the Building Code and Fire Safety management of occupied buildings in England, and the lessons we are learning from that Review.

I will conclude by noting the possible relevance to practice in Australia.
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Source: CIBSE Guide E 2018 in press
Meanwhile

We are also committed to leaving the EU;

The Climate Change Act commits us to an 80% cut in carbon emissions relative to 1990 levels by 2050;

The government wants to build more houses by 2022;

We are committed to review our building regulations covering energy efficiency.

We are not short of things for government to do!
Building Regulations are now devolved

so while we are concerned with the English Regulations, we have to consider Wales and Scotland and Northern Ireland
Building Regulations for England

• Building Regulations are now devolved – Wales has its own “Part L”
• We now have four Building Regulations regimes in the UK
Energy

6.0 Introduction

6.0.1 Background

Within Scottish building regulations, improvements in energy standards have been made over many years, including in 2007, the move to a single carbon dioxide emission based methodology for assessing carbon and energy performance in new buildings.


A key recommendation of this Report was staged improvements in energy standards in 2010 and 2013, with the aim of net zero carbon buildings (emissions for space heating, hot water, lighting and ventilation) in 2016/17, if practical.

In May 2013 Scottish Ministers reconvened the Sullivan panel with a view to revisiting some of their original recommendations, taking account of the impact of the economic downturn on the construction sector. Whilst maintaining the level of ambition, the 2013 Update report (http://www.scotland.gov.uk/Publications/2013/11/6593/0) recommended a more moderate pace of change and offered recommendations in three areas:

- eventual and staged standards – Percentage improvements recommended in 2007
- process – Extending carbon compliance beyond site - related measures and
How did we get here?
Building Regulations 2013

Part L
Building Regulations and Burdens on Business

“11. This Section of the consultation outlines the scope of the consultation, its structure and contents and describes how the consultation fits with current Government policies to reduce the burden of regulation on business.”
Fit with Government policies to reduce the burden of regulation

“12. This Section - referring to the Government commitments to reducing the burdens that fall on business as a result of regulation and to reducing the total regulatory burden on the house building industry during the current Spending Review period - explains how all the proposals in the consultation will impact on business (specifically highlighting home building) and illustrates the overall regulatory picture for the package as a whole. It shows the fit with Government’s “one-in, one-out” policy on regulation where net cost imposed on business by new regulation (an “in”) is offset by at least an equivalent net reduction (an “out”).”
### Notable cladding fires worldwide

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Source: CIBSE Guide E 2018 in press
Independent Review of Building Regulations & Fire Safety
Terms of Reference for the Independent Review

Dame Judith was commissioned to focus on “High Rise Residential Buildings” – HRRBs.

A twofold purpose to the review:

• to make recommendations that will ensure we have a sufficiently robust regulatory system for the future and

• to provide further assurance to residents that the complete system is working to ensure the buildings they live in are safe and remain so.
Dame Judith was asked to:

• map the current regulatory system (i.e. the regulations, guidance and processes) as it applies to new and existing buildings through planning, design, construction, maintenance, refurbishment and change management;

• consider the competencies, duties and balance of responsibilities of key individuals within the system in ensuring that fire safety standards are adhered to;

• assess the theoretical coherence of the current regulatory system and how it operates in practice

• compare this with other international regulatory systems for buildings and regulatory systems in other sectors with similar safety risks;

• make recommendations that ensure the regulatory system is fit for purpose with a particular focus on multi-occupancy high-rise residential buildings.
Building Regulations – Independent Review

Submission of evidence to the Independent Review of Building Regulations and Fire Safety
13 October 2017

Independent review on building regulations and fire safety
October 2017

Response to Call for Evidence
Building a Safer Future

Presented to Parliament
by the Secretary of State for Communities and Local Government
by Command of Her Majesty

December 2017
Interim report key findings

The work of the review to date has found that the current regulatory system for ensuring fire safety in high-rise and complex buildings is not fit for purpose. This applies throughout the life cycle of a building, both during construction and occupation, and is a problem connected both to the culture of the construction industry and the effectiveness of the regulators.
Dame Judith Hackitt

“I have been shocked by some of the practices I have heard about and I am convinced of the need for a new intelligent system of regulation and enforcement for high-rise and complex buildings which will encourage everyone to do the right thing and will hold to account those who try to cut corners.

“Changes to the regulatory regime will help, but on their own will not be sufficient unless we can change the culture away from one of doing the minimum required for compliance, to one of taking ownership and responsibility for delivering a safe system throughout the life cycle of a building.“
The key reasons for this are:

• Current regulations and guidance are too complex and unclear. This can lead to confusion and misinterpretation in their application to high-rise and complex buildings.

• Clarity of roles and responsibilities is poor. Even where there are requirements for key activities to take place across design, construction and maintenance, it is not always clear who has responsibility for making it happen.

• Despite many who demonstrate good practice, the means of assessing and ensuring the competency of key people throughout the system is inadequate. There is often no differentiation in competency requirements for those working on high-rise and complex buildings.
Key reasons - continued

• Compliance, enforcement and sanctions processes are too weak. What is being designed is not what is being built and there is a lack of robust change control. The lack of meaningful sanctions does not drive the right behaviours.

• The route for residents to escalate concerns is unclear and inadequate.

• The system of product testing, marketing and quality assurance is not clear.
Review Phase 2 workstreams

• Design, construction and refurbishment - establishing what industry and regulators need to do to fully embed building safety during the design and construction phase.

• Occupation and maintenance - identifying what building owners, landlords and regulators need to do differently to ensure that building safety is prioritised when a building is occupied and throughout its life cycle.

• Products - determining how the product testing and marketing regime can be improved.

• Competency - establishing how competency requirements for key individuals involved in building and managing complex, high-risk buildings should change.

• Residents’ voice - determining the best way for residents to be given a clear, quick and effective statutory route for raising concerns on fire safety.

• Regulation and guidance - resolving whether central Government ownership of technical guidance is the most appropriate model for complex and high-risk buildings.

• Procurement – looking at the influence of procurement on our buildings
Building a Safer Future

Independent Review of Building Regulations and Fire Safety:
Final Report
The current system is “broken”
“In my interim report published in December 2017 I described how the regulatory system covering high-rise and complex buildings was not fit for purpose. In the intervening period, we have seen further evidence confirming the deep flaws in the current system:

• lack of an audit trail as to whether essential safety work was carried out on the Ledbury Estate, and other large panel systems tower blocks;

• a door marketed as a 30-minute fire door failed prior to 30 minutes when tested, revealing concerns around quality assurance and the ability to trace other fire doors manufactured to that specification;

• another tower block fire where fire spread between floors via wooden balconies; and

• a major fire in a car park in Liverpool which came close to encroaching on a block of flats nearby.”
Key issues underpinning system failure

**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.
Key issues underpinning system failure (2)

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.
Key findings and recommendations

- Creation of a regulatory body consisting of building control, fire and rescue and the health and safety executive to jointly oversee HRRBs
- Reform of the system of building control to limit choice of regulator and cost based competition between inspectors
Key findings and recommendations (2)

• A system of approval gateways up to handover
  At the planning stage
  At detailed plans stage
  At handover

• A “golden thread of information” to be created during design and construction and handed over at completion to inform the management and operation of the building
Professional Competence

Recommendation 5.2

a. The professional and accreditation bodies working within the construction and fire safety sectors should continue the work started in response to the interim report and present a coherent proposal to government within one year. As a minimum, this proposal should cover the role and remit of an overarching body to provide oversight of competence requirements and support the delivery of competent people working on HRRBs, including:

- the professional bodies, professions and disciplines in scope;
- its membership and governance;
- its role in receiving, agreeing and monitoring the individual competence frameworks for those bodies, professions and disciplines in scope for individuals within their membership or on their register, and/or whether a single competence framework for professional bodies in scope should be established;
- its role in agreeing and monitoring accreditation and reaccreditation, and the period within which the competence of individuals should be reassessed and reaccredited;
- its role in establishing a method for demonstrating or proving competence;
- how the correct balance between construction sector skills and fire safety skills should be balanced; and
- whether the competence requirements for those working on HRRBs should also be extended to cover other multi-occupancy residential buildings and to institutional residential buildings.
Professional Competence (2)

b. Progress should be monitored by government, with the professional and accreditation bodies providing government with quarterly progress reports.

c. If government does not consider that the proposed approach provides the necessary assurance to the JCA, or there is evidence that the fragmented approach to the oversight of competence will continue, then government should mandate a body to establish the competence levels required and oversee its implementation.
What might Dame Judith’s report mean for current legislation?
Building Regulations Review

Already announced – government will “ban combustible cladding”
Some precise definition will be needed, and some products will need to be exempted – eg gaskets in window assemblies

To follow:
Probably primary legislation – “A new Building Act”?  
Action to reform building control activity 
Stricter governance around professional competence
- In design, construction AND operation: building safety co-ordinator
Clean Growth Strategy gives commitment to review Building Regulations:

“Following the outcome of the independent review of Building Regulations and Fire Safety, and subject to its conclusions, we intend to consult on

- improving the energy efficiency of new and existing commercial buildings
- strengthening energy performance standards for new and existing homes under Building Regulations, including futureproofing new homes for low carbon heating systems”

So we are “Waiting for Hackitt” (with apologies to Samuel Beckett)

We are also awaiting the Energy Performance of Buildings Directive five yearly review.
Building Regulations
they are not just about Part L, but also:

Part F (Ventilation)
Part J (Combustion Appliances)
Part P (Electrical Safety – Domestic)
Part R (Broadband)

In total we have 23 Approved Documents and Compliance Guides
Could it happen here?
‘Rebuilding Confidence: An Action Plan for Building Regulatory Reform’

Action Plan – Summary

Paragraph 1
‘Australia’s building and construction industry, is facing a problem of national significance that has adverse implications for the industry’s competitiveness, and potentially, for the health and safety of the community.’

Paragraph 2
‘… Yet, the framework under which this major sector of the Australian economy operates is fragmented, needlessly complex and is proving unable to ensure that new buildings provide the levels of health, safety and amenity intended by Governments in legislation and expected by the community.’
Paragraph 3
‘The existing building regulatory framework is increasingly incapable of dealing with modern industry issues and rapid change in the design and procurement of buildings and building and plumbing products. It often fails to facilitate early identification of defective work, fails to hold to account those responsible for building or building product defects when detected, and fails to support building owners who unwittingly inherit responsibility for unresolved defective work.’

Paragraph 4
‘… Multi-unit apartment buildings are large and complex projects, requiring careful design and governance when compared to other forms of housing. They often utilise non-traditional building methods and access new forms of building products. However in many jurisdictions, they are permitted to be overseen and/or built by non-licensed builders or developers with little or no prior experience in large building projects.’
Who said that?

Building Products Innovation Council of Australia
Conclusion

This is a time of unprecedented change for building related legislation. Dame Judith Hackitt’s review is likely to lead to a fundamental change in the way we regulate both building and operating our building stock.
Conclusion

This is a time of unprecedented change for building related legislation. Problems with the widespread use of ACP/ACM will lead to a fundamental change in the way we regulate both building and operating our building stock.
Thank you for listening

Any Questions?

hdavies@cibse.org