

The Institution of
StructuralEngineers

The Building Safety Act Impact on Small Practices

July 2023



The Building Safety Act - Implementation

Building Safety Act

Background

- The Building Safety Bill 2019-20 was announced in the Queen's Speech on 19 December 2019 following the Grenfell Tower fire on 14 June 2017.
- On 28 April 2022, the Bill received Royal Assent, becoming law as the Building Safety Act 2022.
- Its purpose is to put in place new and enhanced regulatory regimes for building safety and construction products, and to ensure residents have a stronger voice in the system.
- The main aims are to:
 - Create an enhanced safety framework for high-rise residential buildings, taking forward the recommendations of the Hackitt review.
 - Provide clearer accountability and stronger duties for those responsible for the safety of high-rise buildings, with clear competence requirements to maintain high standards.
 - Give residents a stronger voice in the system and ensure that they fully understand how they can contribute to maintaining safety in their buildings.
 - Strengthen enforcement and sanctions to deter non-compliance.
 - Develop a new, stronger and clearer framework to provide national oversight of construction products.
 - Develop a new system to oversee the whole built environment, with local enforcement agencies and national regulators.
 - Require that developers of new build homes belong to a New Homes Ombudsman.

Building Safety Act

Implementation: legislative regime

Primary legislation:

- The primary legislation sets out the height criteria in metres and storeys for the design and construction elements of the regime
- For the occupation regime, the primary legislation sets out the height criteria, and that the building must contain at least two residential units. A residential unit can be a dwelling, a flat, a bedroom in a hall of residence or any other unit of living accommodation.

Secondary legislation:

- The government has published the secondary legislation, in draft, alongside introduction of the act. The draft secondary legislation set outs technical definitions, excludes certain buildings from the regime and, for the design and construction regime, defines the use criteria for a building to be covered
- An example of a technical definition is that height will be measured from ground level on the lowest side of the building to the floor surface of the top storey (which does not exclusively contain roof-top machinery or a plant area).

Building Safety Act

Technical scope

- The **Dutyholder and competence** regulations will apply to **all work to which the Building Regulations 2010 apply.**
- The following additional regulations apply to ANY DUTYHOLDER working on **Higher Risk Buildings:**
 - Gateways
 - Safety Cases/ Building Assessments
 - Golden Thread
- A Higher-Risk Building is defined as:
 - A residential, care home or hospital
 - of more than 2 units and
 - Either more than 7 storeys or 18m in height above ground floor

Building Safety Act

Oversight

- The **Building Safety Regulator (BSR)** will oversee the safety and performance of all buildings, as well as having a special focus on high-rise buildings. It will promote competence and organisational capability within the sector including for building control professionals and tradespeople
- The **National Construction Products Regulator (NRCP)** will oversee a more effective construction products regulatory regime and lead and co-ordinate market surveillance and enforcement in this sector across the UK
- The **New Homes Ombudsman Scheme** will allow relevant owners of new-build homes to escalate complaints to a New Homes Ombudsman. Developers of new-build homes will be to become a member of the New Homes Ombudsman Scheme.














Building Safety Act

Building Safety Regulator



- BSR will have three main functions:
 - Overseeing the safety and standards of all buildings
 - Helping and encouraging the built environment industry and building control professionals to improve their competence
 - Leading implementation of the new regulatory framework for high-rise buildings
- BSR will regulate high-rise buildings. These are buildings with seven or more storeys or that are 18 metres or higher, and either:
 - Have at least two residential units
 - Are hospitals or care homes (during design and construction)
- BSR must establish and maintain three specific committees:
 - Residents' Panel
 - Industry Competence Committee
 - Building Advisory Committee

Building Safety Act Timetable

	<i>April '22</i>	<i>Oct '22</i>	<i>April '23</i>	<i>Oct '23</i>	<i>April '24</i>
Royal Assent					
Legislation Enacted					
Transition Period					
Legislative Changes					
Secondary legislation					
Building Safety Regulator					
New duties on Accountable Person					
Gateways 2 and 3 for new builds					
Golden thread of information					
Mandatory Reporting					
Construction Products Regulator					
Mandatory registration of HRBs					
HRB safety cases called in					

The Building Safety Act - Dutyholders

Building Safety Act

Dutyholders

- The regulations set out the framework of duties for those persons and organisations (“dutyholders”) who commission, design and undertake building work to which building regulations apply.
 - Client
 - Principal Designer
 - Designers
 - Principal Contractor
 - Contractors
- Dutyholders will need to work together to plan, manage and monitor the design work and the building work, ensure they cooperate and communicate with each other, coordinate their work and have systems in place to ensure that building work, including design work, complies with all relevant building regulations.
- The regulations will also set out the competence requirements (i.e. the skills, knowledge, experience and behaviours) that those dutyholders will need to have to undertake work and ensure that those they appoint are also competent to carry out that work.

Building Safety Act

Dutyholders: Client

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Who is a Client and what will they have to do?

- The Client will need to be sure that the Principal Designer and the Principal Contractor have the right skills, knowledge, experience and behaviours (or competence) for the work they want them to do, including co-ordinating the broader work programme
- When CDM applies to the work, the client will be able to treat the Principal Designer and the Principal Contractor for CDM as being appointed for this legislation. The client will need to be assured that the Principal Designer and the Principal Contractor have the right competencies or organisational capabilities for the work and consider whether they are the right person or organisation for the job. The Principal Designer and Principal Contractor will need to ensure that any gaps in competence are identified and filled before they are appointed.

Building Safety Act

Dutyholders: Principal Designers

What is a Principal Designer and what will they have to do?

- The Principal Designer is a designer appointed to be in control of all the design work.
- The Principal Designer will need to:
 - Plan, manage and monitor the design work, ensuring that the design, if built, would comply with building regulations
 - Ensure that they, and the designers in the team, cooperate, communicate and coordinate their work with the Client, the Principal Contractor, and other designers
 - Liaise with the Principal Contractor, and share information relevant to the building work

Building Safety Act

Dutyholders: Designers

Any person who carries out any design work or instructs someone under their control to carry out design work, will be a designer. In addition to the general duties designers will have the following duties:

- To not start design work unless satisfied that the client is aware of their duties;
- ensure that, if built, the building work to which the design relates would be in compliance with all relevant requirements;
- take all reasonable steps to provide sufficient information about the design, construction and maintenance of the building
- Where a designer is carrying out only part of the design of the building, consider other design work which directly relates to that building work and report any concerns as to compliance to the Principal Designer; and,
- provide advice to the Principal Designer or the client on whether any work is higher-risk building work.

If a domestic client fails to make the appointments of the Principal Designer and Principal Contractor, the designer in control of the design phase of the project will be the Principal Designer; and the contractor in control of the construction phase of the project will be the Principal Contractor

- Members on domestic projects may therefore find themselves acting as Principal Designer by default and be responsible for the all Building Regulation compliance

The Building Safety Act - Competences

Building Safety Act

Dutyholders: competences

The regulations will:

- Place a duty on those making appointments, or permitting anyone to carry out work, to take reasonable steps to ensure they meet the competence requirements
- Require the people who carry out any design or building work to have the relevant skills, knowledge, experience and behaviours, and/or organisational capability to carry out work in the way that ensures compliance with Building Regulations
- Require the Principal Designer and Principal Contractor to have the relevant skills, knowledge, experience and behaviours, or organisational capability to carry out work and fulfil their duties under these Regulations
- Where the Principal Designer and Principal Contractor is an organisation, require it to designate an individual under their control who is competent to manage its functions as the Principal Designer or Principal Contractor

Building Safety Act

Structural engineering competencies

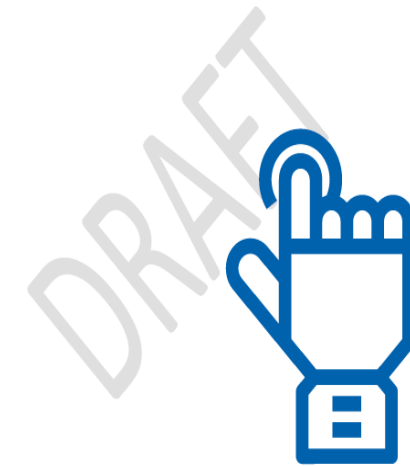
- Industry wide competency levels are Set by the Engineering Council:
 - Technician
 - Incorporated
 - Chartered
- Individual Institutions contextualise
- IStructE has an additional requirements for a Chartered STRUCTURAL ENGINEER (MIStructE)
- Those working on HRBs have additional competency requirements
- IStructE have decided this is above (MIStructE) level
- A registration scheme for those working on HRBs is proposed
- This will be managed by IStructE & ICE



ANNEX A – (B) Paper 10/2022

The UK Contextualised Standard for Professional Engineering Competence and Commitment for Higher Risk Buildings (UK-SPEC HRB)

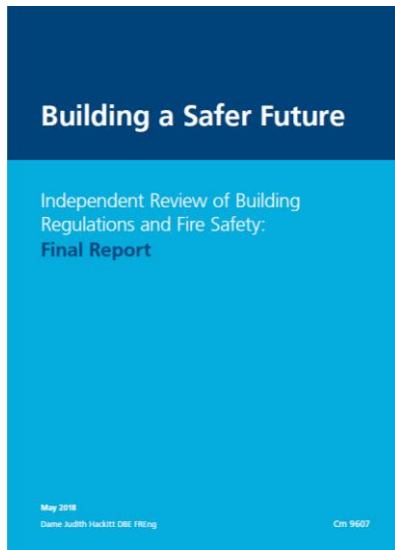
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B20220623 Paper X Contextualised Registration Annex X UK-SPEC HRB

Page 1 of 31

Building Safety Act Competency frameworks

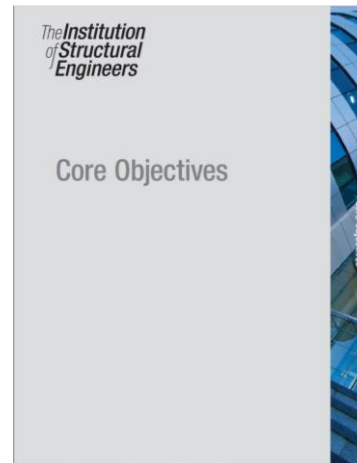


Engineering Council
ANNEX A – (B) Paper 10/2022
The UK Contextualised Standard for Professional Engineering Competence and Commitment for Higher Risk Buildings (UK-SPEC HRB)
DRAFT 1.0

Structural Discipline Annex - C-Eng

UK-SPEC (HRB) Descriptor	Scope	Discipline Competence	Examples of Evidence
The applicant shall demonstrate that they: A.1. Maintain, extend and develop a sound theoretical approach to application of relevant fire, structural and life safety principles and products throughout the building life cycle of HRBs.	Fire science • Principles of Heat transfer • Properties of Materials • Principles of Fire chemistry • Principles of Fire dynamics Human behaviour and evacuation • Human behaviour and physiological response to fire eg horizontal and vertical movement of people • Life safety design concepts and practice Fire safety design and specification • Passive fire protection systems • Active fire protection systems • Fire detection and alarm systems • Fire suppression systems • Access and facilities for fire and emergency services • Behaviour of structural materials when exposed to fire • Compartmentation and spread of flame • Principles of fire protection design to elements of the structural system • Commissioning and interoperation of specialist analysis of fire mitigation measures by others	To the extent that it is relevant to your duties as a structural engineer: • Understanding of risk. Demonstrate an understanding of the nature of hazard identification and associated risk mitigation measures incorporated into the design of the building structure of a HRB. This must be especially with regard to the fire and structural hazards that can lead to a negative impact on the structural integrity of HRBs. • Management of risk. Demonstrate an ability to eliminate or mitigate these risks as far as is reasonably practicable within the framework of a contractual and commercial environment. Demonstrate an understanding of how fire related hazards and associated risks at strategic other important risks relating to the health and safety of the occupants of the building. • Identification of hazards. Demonstrate an understanding of internal, external and procedural hazards which might significantly affect the integrity of the structural design. Identify hazards that are of sufficiently low likelihood that no consideration to typically given in the design of specialist structures, but in relation to HRBs awareness is needed on the part of the structural engineer and mitigation may be indicated given the severity of the consequences. • Causes of hazards. Demonstrate an ability to identify the root causes of hazards which might significantly affect the structural or fire safety of the building. • Consequential risks. Demonstrate an ability to evaluate the consequential risks which might significantly affect the structural or fire safety of the building, should the hazards materialise. • Barriers. Demonstrate an ability to identify the barriers in place that reduce or prevent hazards affecting the structural or fire safety of the building from materialising or limit their consequences should they do so, and demonstrate an ability to evaluate the effectiveness of those barriers. • Characteristics of materials and structural form. Demonstrate the ability to identify the basic characteristics of a structural material or form of construction and its behaviour under major accident fire and structural safety hazards. • Response to hazards. Demonstrate the ability to assess the impact of major accident fire and structural safety hazards on the performance of the structure, recognising that the necessary action may require mitigation beyond that set out in codes of practice. • Performance vs prescriptive methods. Demonstrate an understanding of the differences between performance-based ('engineering' or fire principles) approaches and compliance-based approaches in demonstrating design against structural (including disproportionate) collapse and against fire-related hazards • Design. Demonstrate the ability to select an appropriate design solution that addresses the identified major accident fire and structural safety hazards in a manner consistent with ALARP principles. • Checking. Demonstrate the ability to independently confirm the overall adequacy of the structural design for a scheme through independent order-of-magnitude checks, by way of peer reviews and detailed design checks in relation to mitigation of internal, and external hazards. • Sensitivity. Demonstrate the ability to correctly identify areas of sensitivity in the design of the structure to an HRB, and in particular identify areas of	The Working Group are still developing the examples of evidence.

Page 1 of 8



The competency requirements for those working on HRBs have been determined by industry & the Engineering Council and assessed against our Core Objectives to determine additional requirements

The Building Safety Act - Construction products regulator

Building Safety Act

Construction products regulatory framework: factsheet

(updated 5 April 2022)

The Act will create powers to make regulations to:

- Require construction products to be safe before they can be placed on the UK market
- Create a statutory list of 'safety critical' construction product standards
- Products will be identified as 'safety critical' where they could cause death or serious injury if they were to fail
- Manufacturers will be required to complete a declaration of performance for all safety critical products to be placed on the market, put in place factory production controls and follow the specified system of assessment and verification of constancy of performance (AVCP) to ensure that the claimed performance is consistently met
- This will bring the regulation of these products in line with arrangements for products covered by the existing regulatory framework
- The new regulations cover **all products**, including those already on the market and future products.

The Building Safety Act - Legal Issues

Building Safety Act

Legal issues

Additional Liabilities

Under The Act, residents of existing qualifying buildings will have additional recourse to pursue those responsible for relevant defects.

- Qualifying buildings are 11m or 5 storeys in height containing more than two residential units.
- Relevant defects are those relating to fire or structural safety.
- For claims arising from events after June 2022, the limitation period will be increased from 12 to 15 years.
- For claims arising from events prior to June 2022, the limitation period will increase to 30 years.

Design Warranties

- As the Principal Designer is responsible for all Building Regulation compliance members may also be asked to provide a Design to them.

Buildability

- Designers must also ensure that their design if built will comply with Building Regulations.
- Buildability must therefore be considered.

New build home warranties

- Under The Act developers of more than one unit will need to provide a new build warranty.
- It is possible that members may therefore be requested to provide collateral warranties to residents on even small projects.

The Building Safety Act - Summary

Building Safety Act

Summary Advice

Advice to members working on small domestic projects is therefore to:

- Know the scope of HRB definition to ensure you don't accidentally fall within the provisions
- Know the duties of a designer under The Act
- Inform clients of their duties under The Act
- Keep your membership up to date to demonstrate competence
- Be aware of whether your client has appointed a PD
- From October 2023, check products comply with the new regulations
- If you have worked on larger projects in the past and are looking at run-off insurance, ensure you have adequate cover.
- Know your position regards warranties on new build properties.

For further information, refer to our webpage:

<https://www.istructe.org/resources/building-safety-act/>

Building Safety Act Conference

Keeping up to date: <https://www.istructe.org/resources/building-safety-act/>

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Read further on the Building Safety Act and how changes may impact those operating within construction, with a focus on the liability and insurance implications for construction professionals.

Further information and resources



Impacts on the role of the structural engineer

Overview of the Building Safety Act and the impacts on the role of the structural engineer.



New buildings process

Learn how the Building Safety Act impacts on the new buildings process.



Golden thread

Discover how the golden thread principles will help you to keep both the building and people safe.



Safety cases

Get information on developing and maintaining a safety case for higher-risk buildings.



Existing building assessments

Learn how existing high-rise residential buildings will be assessed under the Act.



Gateways

Learn more about the three gateways at key stages in design.

*“true and lasting change will require a universal
shift in culture.. Dame Judith Hackitt*



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