The Institution of Structural Engineers

The Building Safety Act

July 2023

The Institution of Structural Engineers

The Building Safety Act.
Impacts on the role of the structural engineer.
The Act - Overview

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July 2023

Building Safety Act
Background

Notes and caveats

Much of the Government advice that was prepared for The Bill has been subsequently withdrawn when The Act was passed, and the Government is currently planning to issue some further advice and secondary legislation.

However, the Government has made clear that it expects industry to be proactive. Much of the guidance in this presentation is interim, based on previous advice. Direct references are shown thus: Government Advice; withdrawn & awaiting update and HSE advice.

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
Overview

- A **Building Safety Regulator** will oversee the new regime and be responsible for ensuring that any building safety risks in new and existing high rise residential buildings of 18m and above (or of seven storeys or more) are effectively managed and resolved

- This will include implementing specific **gateway points** at design, construction and completion phases to ensure that safety is considered at each and every stage of a building's construction, and safety risks are considered at the earliest stage of the planning process

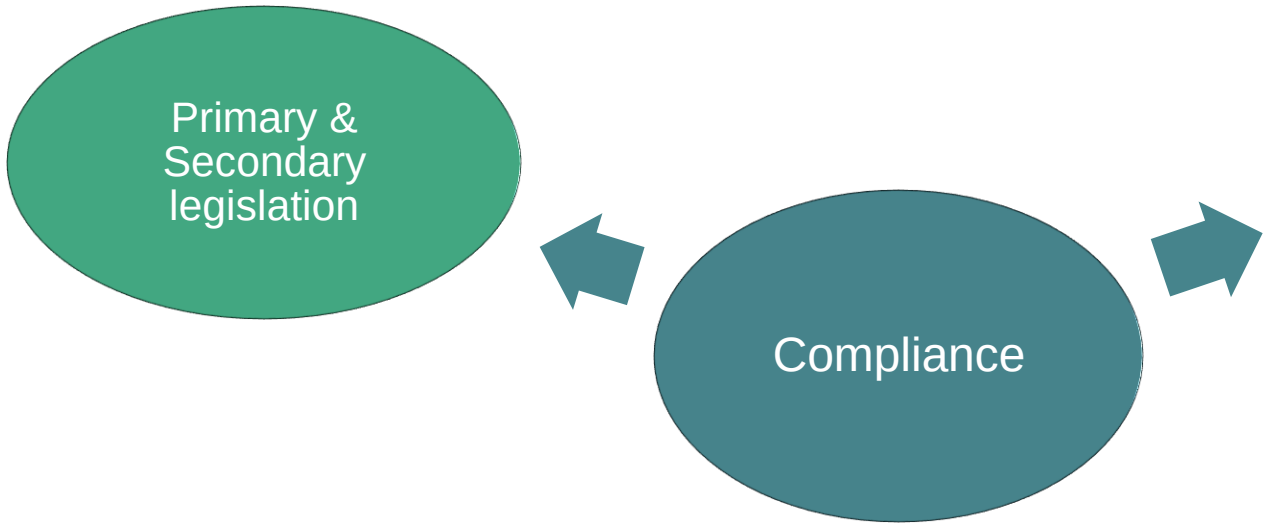
- The duties of cooperation, coordination, communication and competence will apply to the **dutyholders (Clients, Principal Designers, Designers, Principal Contractors, Contractors)** for building work associated with higher-risk buildings

- These changes will simplify the existing system to ensure high standards are continuously met, according to the Government, with a '**golden thread'** of information created, stored and updated throughout the building's lifecycle, establishing clear obligations on owners and enabling swift action to be taken by the regulator, wherever necessary

- The Act also includes measures to prevent leaseholders from being responsible for the remediation costs of their building.

Building Safety Act

Compliance: what do you need to be aware of



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The Building Safety Act - Implementation

Building Safety Act
Implementation: legislative regime

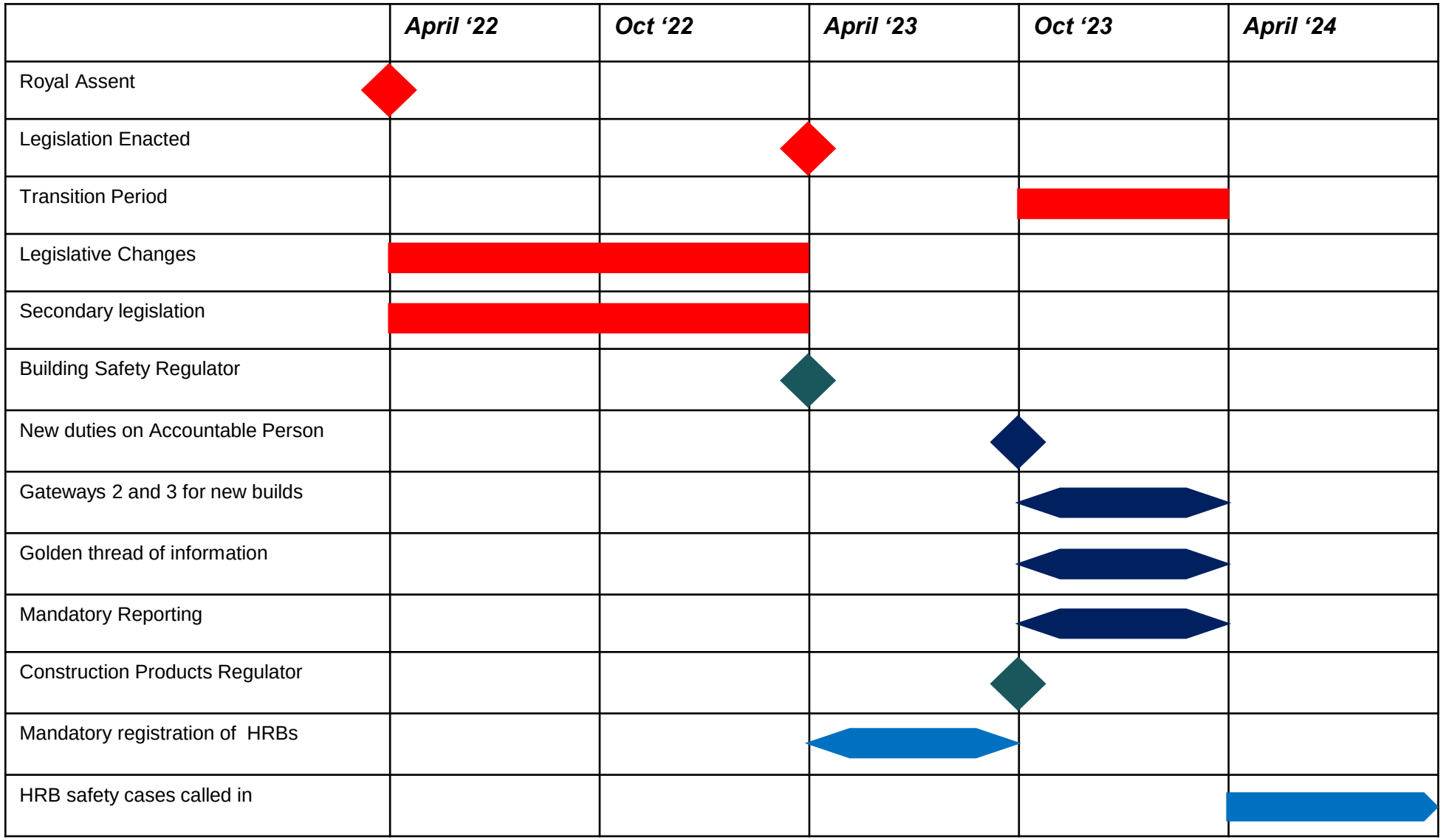
Primary legislation:

- 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 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
- Current guidance is based on draft secondary legislation issued for consultation

Building Safety Act
Timetable



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The Building Safety Act - Scope

Building Safety Act
Technical scope

The Building Safety Act defines building safety risks as relating only to fire spread and structural failure

- Government commissioned researched by the Health and Safety Executive concluded the major accident hazards in a higher-risk (residential) building would largely be:
  - rapid onset escalating fire,
  - structural, or
  - explosion events.
- Though explosion events can trigger a rapid onset escalating fire or a structural failure
- Other risks can result in a major incident when they trigger a spreading fire or a structural collapse, e.g. flooding causing structural damage
- The regulations will apply to all work to which the Building Regulations 2010 apply.

Building Safety Act
Higher risk buildings

- The new regime introduced by the Building Safety Act is a strengthened regulatory regime for high-rise and other in-scope buildings (higher-risk buildings)
- Higher-risk buildings in the Act are defined by their height and use where the consequences from a fire or a structural failure can be significant
- The new regime applies to buildings that are:
  - at least 18 metres in height or have at least 7 storeys
  - and have at least two residential units.
- It also applies to care homes and hospitals meeting the same height threshold during design and construction
- Parts 2 and 4 of the Act will also apply to buildings owned or occupied by the Crown which meet the scope criteria so, for example,
- This in line with the Fire Safety Order and Health and Safety at Work Act which apply to Crown buildings.

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The Building Safety Act - Oversight

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.
- 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
The Building Safety Regulator (BSR)

- The new Building Safety Regulator will be at the heart of the reforms. Housed in the Health and Safety Executive (HSE), it will be responsible for overseeing the “safety and performance of all buildings”.
- The three broad functions of the Building Safety Regulator will be to:
  - Implement the new, more stringent regulatory regime for higher-risk buildings
  - Oversee the safety and performance of all buildings
  - Assist and encourage competence among the built environment industry, and registered building inspectors.
- There will also be registers of:
  - occupied high-rise buildings
  - building inspectors and building control approvers
- BSR must establish and maintain three specific committees:
  - Residents' Panel
  - Industry Competence Committee
  - Building Advisory Committee

Building Safety Act
Building Safety Regulator

Health and Safety Executive

Industry Competence Committee

- The Industry Competence Committee will monitor and help to improve industry competence. It will publish guidance and advise industry and BSR on industry competence.

Building Advisory Committee

- The Building Advisory Committee will:
  - Advise BSR on matters relating to its building functions
  - Help BSR meet its duty to keep the safety and standards all of buildings under review
  - Provide leadership to the industry and drive change

Building Safety Act
Building Control

- The Building Safety Regulator will take over responsibility for Building Control.
- New Competency regimes and Codes of Practice are being put in place for the profession.
- The BSR will be the Building Control Authority for ALL HRBs
- New operational procedures include:
  - A risk based approach to building control
  - BC Officers not permitted to give design advice
  - The need to demonstrate "*functional compliance with building regulations*" over adherence to Approved Documents

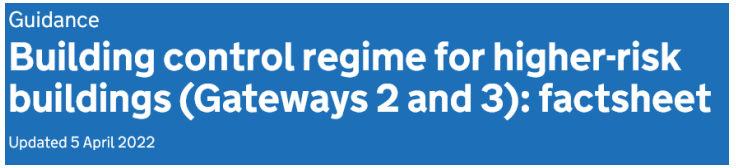
Building Safety Act

Building control regime for higher-risk buildings (Gateways 2 and 3): factsheet

(updated 5 April 2022)

The new design and construction regulatory framework for higher-risk buildings will introduce the following measures:

- Competence requirements, those appointed to work on a higher-risk project must have the relevant skills, knowledge, experience and behaviours necessary to undertake the role. Organisations must have the right organisational capability
- Dutyholders that will have accountability and statutory responsibilities when buildings are designed and constructed -
- Gateways 2 and 3 which will provide rigorous inspection of building regulations requirements, ensuring that building safety is considered at each stage of design and construction
- Golden thread of building information to be created, stored and updated throughout the building's lifecycle
- Mandatory reporting to the new Building Safety Regulator of fire and structural safety occurrences which could cause a significant risk to life safety



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The Building Safety Act - Dutyholders

Building Safety Act
Dutyholders: factsheet

(updated 5 April 2022)

- Dutyholder requirements to ALL building control work (including domestic)
- 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.

Guidance

Building control regime for higher-risk buildings (Gateways 2 and 3): factsheet

Updated 5 April 2022

IStructE

Building Safety Act
Dutyholders: factsheet

(updated 5 April 2022)

What will Clients have to do?

- The Client should have suitable arrangements in place to ensure that the design work and the building work can be completed in accordance with building regulations. In practice, this means appointing the right people, with the right competencies (the skills, knowledge, experience and behaviours or organisational capability) for the work, and ensuring those they appoint have systems in place to ensure compliance with building regulations
- Where there is more than one contractor working on the project, the Client will need to appoint a Principal Designer to be in control of design work and a Principal Contractor to be in control of the whole project during the construction phase
- 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: factsheet

(updated 5 April 2022)

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
  - Where the client does not appoint a Principal Designer or Principal Contractor the lead designer and contractor will assume these roles
  - Members on domestic projects with no architect may therefore be the Principal Designer

IStructE

Guidance
Building control regime for higher-risk buildings (Gateways 2 and 3): factsheet
Updated 5 April 2022

Building Safety Act
Dutyholders: Designers

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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

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The Building Safety Act - Competences

Building Safety Act
Dutyholders: competences

The regulations:

- 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
- Require those carrying out design or building work to notify the relevant people when they are no longer competent for their roles or work arises for which they do not have the competence
- For higher-risk buildings, require a signed declaration from the Client, at the Gateway Two stage, that they have assessed and are content with the competence of the Principal Designer and Principal Contractor. (will be included in secondary legislation relating to the Gateway Two requirements.)

Building Safety Act
Competency frameworks

- BSI Flex 8670 sets core building safety criteria for built environment competence frameworks.
- core criteria are contextualized within sector-specific frameworks
- Contextualization can be:
  - Within sector-specific competence frameworks,
  - To reflect differing seniority or responsibility;

  and/or

  - In relation to specific types of buildings or activities,
  - For example; higher-risk buildings or, e.g. manufacturing of construction products.
- Compliance with BSI Flex can be achieved by mapping new or existing sector specific frameworks against the core competence criteria and scope

Building Safety Act

Structural engineering competencies

- Industry wide competency levels:
  - Technician
  - Incorporated
  - Chartered
- Set by the Engineering Council
- Individual Institutions contextualise
- IStructE has an additional requirements for a Chartered STRUCTURAL ENGINEER (MIStructE)
- HRB Registration for COMPETENT DUTYHOLDERS
- IStructE have decided this is above (MIStructE) level

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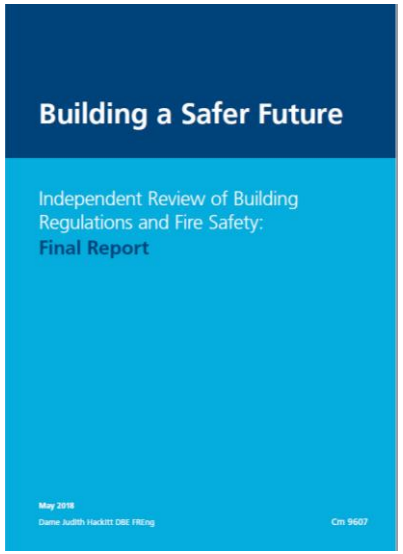
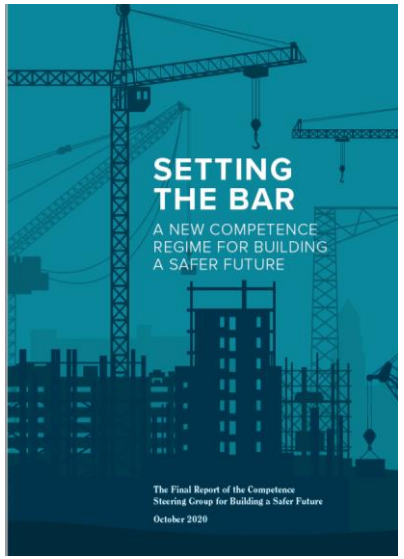
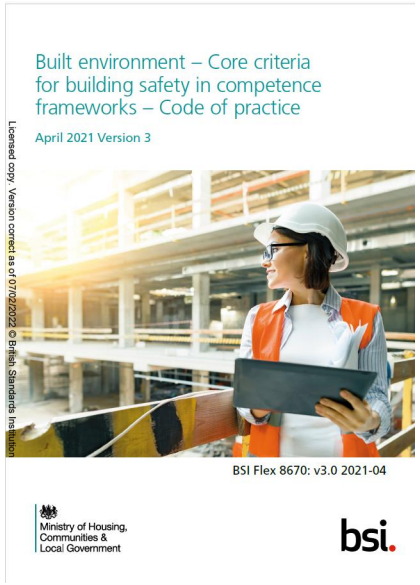
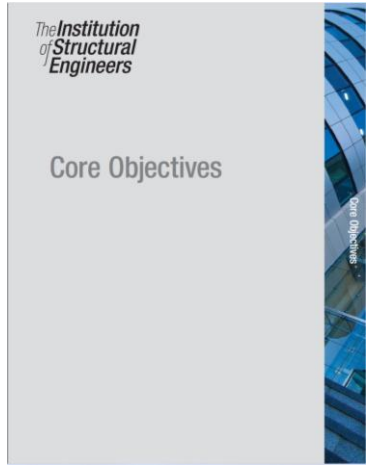
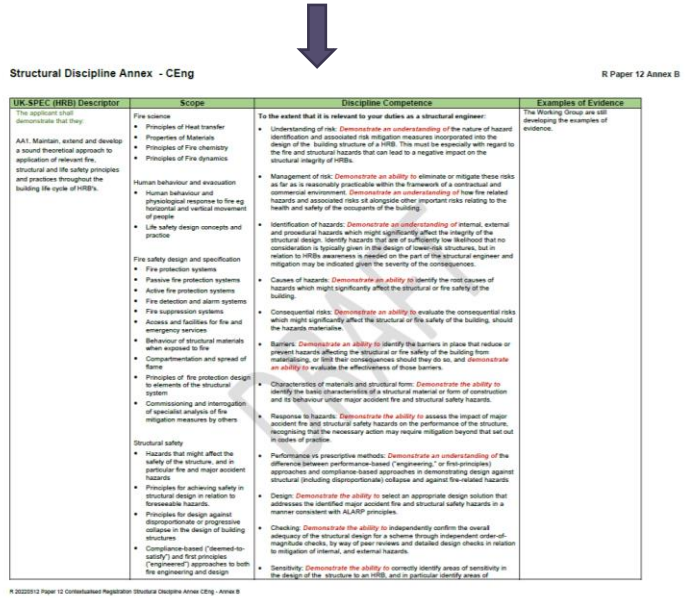
Building Safety Act
Competency frameworks











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

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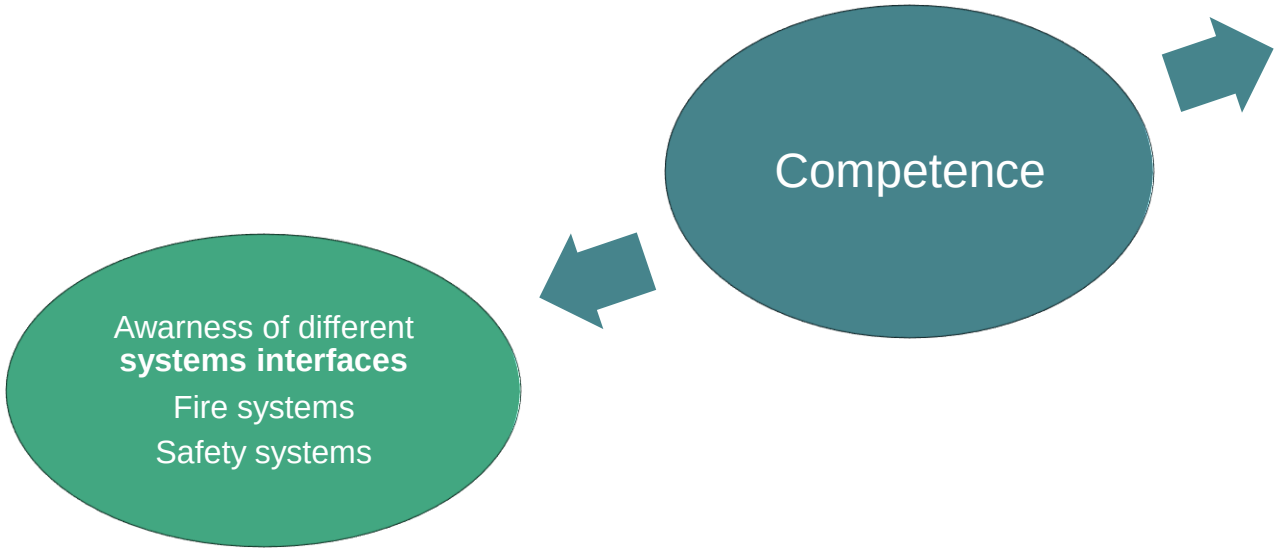
Building Safety Act
Competency Assessment

- The client must assess the competence of the Principal Designer & Principal Contractor.
- The Principal Designer must assess the competence of the designers and will take responsibility for all design work
- The BSR will assess the competency of Dutyholders at Gateway 2 and may decline to approve submissions
- Competency assessment will be based on:
  - Skills
  - Experience
- As Evidenced by
  - Membership of an appropriate institution
  - Acceptance to a register to Engineering Council requirements

Building Safety Act

Competences: What you need to know



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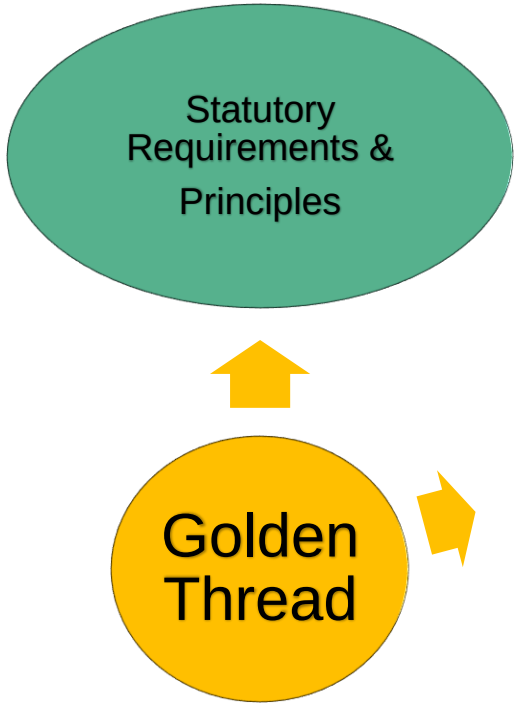
The Building Safety Act - Golden Thread

Building Safety Act

Golden Thread: Aspects



Building Safety Act

Golden Thread: Statutory Requirements

Golden thread information needs to be compiled for **all new and existing HRBs** is set out in the Building Safety Act as quoted below:

88 Keeping information about higher-risk buildings

(1) An accountable person for a higher-risk building must—

(a) keep **prescribed information** in accordance with **prescribed standards**, and

(b) so far as possible keep such information up to date.

(2) An accountable person for a higher-risk building must keep copies of prescribed documents in accordance with prescribed standards.

(3) Where an accountable person does not hold prescribed information or a copy of a prescribed document, **they must obtain it except where it is not practicable to do so**.

Building Safety Act
Golden thread definition

- It will be the duty of the people responsible for a building to put in place and maintain a golden thread of information.
- The golden thread is both the information that allows users to understand a building and the steps needed to keep both the building and people safe
- The golden thread will hold the information that those responsible for the building require to:
  - show that the building was compliant with applicable building regulations during its construction, ongoing management and refurbishment
  - Identify & manage building safety risks to prevent or reduce the consequences of fire spread or structural collapse
- Covers both the information and documents and the information management processes
- Should be stored as structured digital information in line with the golden thread principles .
- Building safety should include the fire and structural safety of a building and the safety of **all the people in or in the vicinity of a building (including emergency responders)**
- People will need to access the golden thread to update and share information throughout a building's lifecycle
- Information from the golden thread will also need to be shared by the Accountable Person with other relevant people including residents and emergency responders.

Building Safety Act
Golden Thread Contents: Gateway 2

Prescribed Documents:

As part of the building control approval application the applicant will be required to provide the following prescribed documents ..

- *A **competence declaration** confirming that the client is satisfied that their Principal Designer and Principal Contractor are competent to carry out their roles; and written records of the steps the client has taken to be satisfied of their competence;*
- *A **planning statement** setting out the status of planning permission (if required for the development);*
- *A **design and build approach document** setting out the proposed standards to be used;*
- *A **fire and emergency file** setting out fire and structural safety information about the proposal;*
- *A **construction control plan** describing the strategies for managing building work to maintain building regulations compliance;*
- *A **change control plan s**etting out how changes during construction will be considered, recorded and when the Building Safety Regulator should be notified or consulted;*
- *A description of the **mandatory occurrence reporting** framework; and,*
- *A* partial completion strategy *(where the applicant proposes occupation of part of the building before completion of the higher-risk building work).*

Building Safety Act
Golden thread: Changes: Gateways 2-3

Changes will be either MAJOR or NOTIFIABLE.

Major Changes

- *Change in proposed use of the higher-risk building, including:*
- *Change in proposed number of storeys (including adding or removing a gallery and/or underground storey or storeys including car parks);*
- *Certain changes in layout and/or horizontal dimensions to the overall building, or its common parts such as extending the building sideways, that affects the structural design or fire safety provision.*
- *Change in the number of proposed fire compartments in the building,*
- *Change in the number and/or the location/positioning and/or widths of evacuation routes, including staircases;*
- *Certain building work on the external wall of the building including installation of cladding, insulation, and fire breaks;*
- *Changes in the proposed fire strategy within the fire and emergency file for the building.*
- *Change in product where the proposed replacement product has a lower fire performance classification or specification than the previous product*
- *Change or changes from the method of complying with regulations*
- *Change to a partial completion strategy*
- *Changes to the structural design and/or loads*
- *Changes to introduce large panel systems.*

The applicant will need to submit a change control application to the Building Safety Regulator and the change cannot be made without its approval.

Building Safety Act
Golden thread: Changes: Gateways 2-3

Changes will be either MAJOR or NOTIFIABLE.

Notifiable Changes

- *Change/s of dutyholder as will be defined in regulations and dutyholders on industry competence*
- *Change/s to Construction Control Plan including:*
- *Change/s to layout and/or dimensions within an individual flat (*
- *Substituting a 'like for like' product where the new product has the same specification/performance classification as the original specified*
- *Change/s to partial completion strategy submitted at building control approval where the applicant proposes to change the number of stages in which the building is occupied.*

The applicant must submit a notification to the Building Safety Regulator so that it is aware of the proposed change and can intervene where it deems this necessary

Building Safety Act
Golden thread: Changes: Gateways 2-3

6.3…. All changes from the original building control approval application must be recorded in a change control log or logs. We propose that the following information should be included in the change control log or logs:

- *The name of the individual recording the change;*
- *A description of the proposed change;*
- *An explanation of the reason why the change has been proposed;*
- *Whether the change is a notifiable change or a major change;*
- *A list of the name and occupation of each person, if any, whose advice was sought in relation to the proposed change and a brief summary of any advice provided;*
- *An assessment of which agreed document is affected by the proposed change and confirmation that a revised version has been produced;*
- *An explanation, in relation to the proposed change, of how the building work will, after the proposed change is carried out, meet all applicable building regulations; and,*
- *A revised version of any agreed document affected by the change.*

Building Safety Act

Golden thread: Changes, Change Control Log: Gateways 2-3

The change control log will include the following information:

- *The name of the individual recording the change;*
- *A description of the proposed change;*
- *An explanation of the reason why the change has been proposed;*
- *Whether the change is a notifiable change or a major change (further information on this can be found in the section on change control);*
- *A list of the name and occupation of each person, if any, whose advice was sought in relation to the proposed change and a brief summary of any advice provided;*
- *An assessment of which agreed document is affected by the proposed change and confirmation that a revised version has been produced; and,*
- *An explanation, in relation to the proposed change, of how— (i) the higher-risk building work will, after the proposed change is carried out, meet all applicable building regulations, and (ii) the strategies, policies and procedures in relation to the higher-risk building work (including in relation to controlled changes, mandatory occurrence reporting, competence of persons or sharing of information and co-operation) will, after the proposed change is carried out, meet relevant requirements.*

Building Safety Act
Golden Thread Contents: Gateway 3: Completion

*3.93 To **ensure that completed building work complies with all applicable building regulations**' requirements, the completion certificate application must include updated plans, prescribed documents and information on the final, as-built (rather than as-planned) building. …*

3.94 The following prescribed documents should be included in a completion certificate application alongside plans of the completed building work:

- *Construction control plan and confirmation it has been followed;*
- *Change control plan and confirmation it has been followed;*
- *Design and build approach document and confirmation it has been followed;*
- *fire and emergency file; and,*
- *Compliance declarations*

Building Safety Act
Golden thread: Handover

8.22 For both buildings in scope of the new regime to which part four of the Act will apply, and for buildings that are only in scope of the design and construction regime, we propose that the client hands over to the relevant person:

- *The information required to be submitted to the Building Safety Regulator in a completion certificate application (the prescribed documents);*
- *The relevant information/evidence required to support the prescribed documents;*
- *Completion certificate issued by the Building Safety Regulator under the building regulations; and,*
- *Any further information that is relevant to the ongoing safety of the building and is not covered by the material above – this could include documents/information required to be submitted to the Building Safety Regulator at building control approval stage, and information required through the statutory change control process during the construction phase. We would expect that most information would be covered in the bullets above.*

8.23 For buildings that are only in scope of the design and construction regime (high-rise hospitals and care homes) we also propose that the ***client extracts the fire safety information*** *and also hands that over to the Responsible Person as standalone information.*

The safety case therefore be included in the Golden thread at Building Assessment Stage.

Building Safety Act
The golden thread summary

	Gateway 2 (Design)	Gate 3 (Construction)	Completion (Handover)	Operation (& Existing HRBs)	Refurbishment
HRB Scope	(a) a building which contains at least two residential units; (b) a care home; (c) a hospital.	(a) a building which contains at least two residential units; (b) a care home; (c) a hospital.	(a) a building which contains at least two residential units; (b) a care home; (c) a hospital.	a) a building which contains at least two residential units;	a) a building which contains at least two residential units;
Overall Responsibility	Client	Client	Client to Relevant Person (a) PAP (b), (c)Fire safety Responsible person	Relevant Person (a) PAP (b), (c)Fire safety Responsible person	Relevant Person PAP
Managed by	Principal Designer (PD)	Principal Contractor (PC)	Principal Contractor	PAP/AP data manager	PAP/AP, PD & PC
Purpose	Design compliance with all applicable building regulations	Design & Construction compliance with all applicable building regulations	Compliance at handover & manage the building safely	manage the building safely	manage the building safely
Content	Prescribed Documents Building Control application	Change control Updated Prescribed Documents	Updated (as-built) Prescribed Documents Compliance Declarations Safety Case Report Fire Safety Report	Safety Case Report Existing Building Information design intent Building history structural surveys/risk assessments key building information Residents' engagement strategy	Existing Building Information Prescribed Documents
Seen by	Dutyholders Regulator Statutory consultees	by designers and contractors	building owners and dutyholders and Responsible Persons [2]	principal accountable person, accountable person(s) and those working for them can use and store sensitive information in the golden thread	All relevant people working on the building
Can request access				residents of the building, owners of residential units in the building, or any other prescribed person. [1]	

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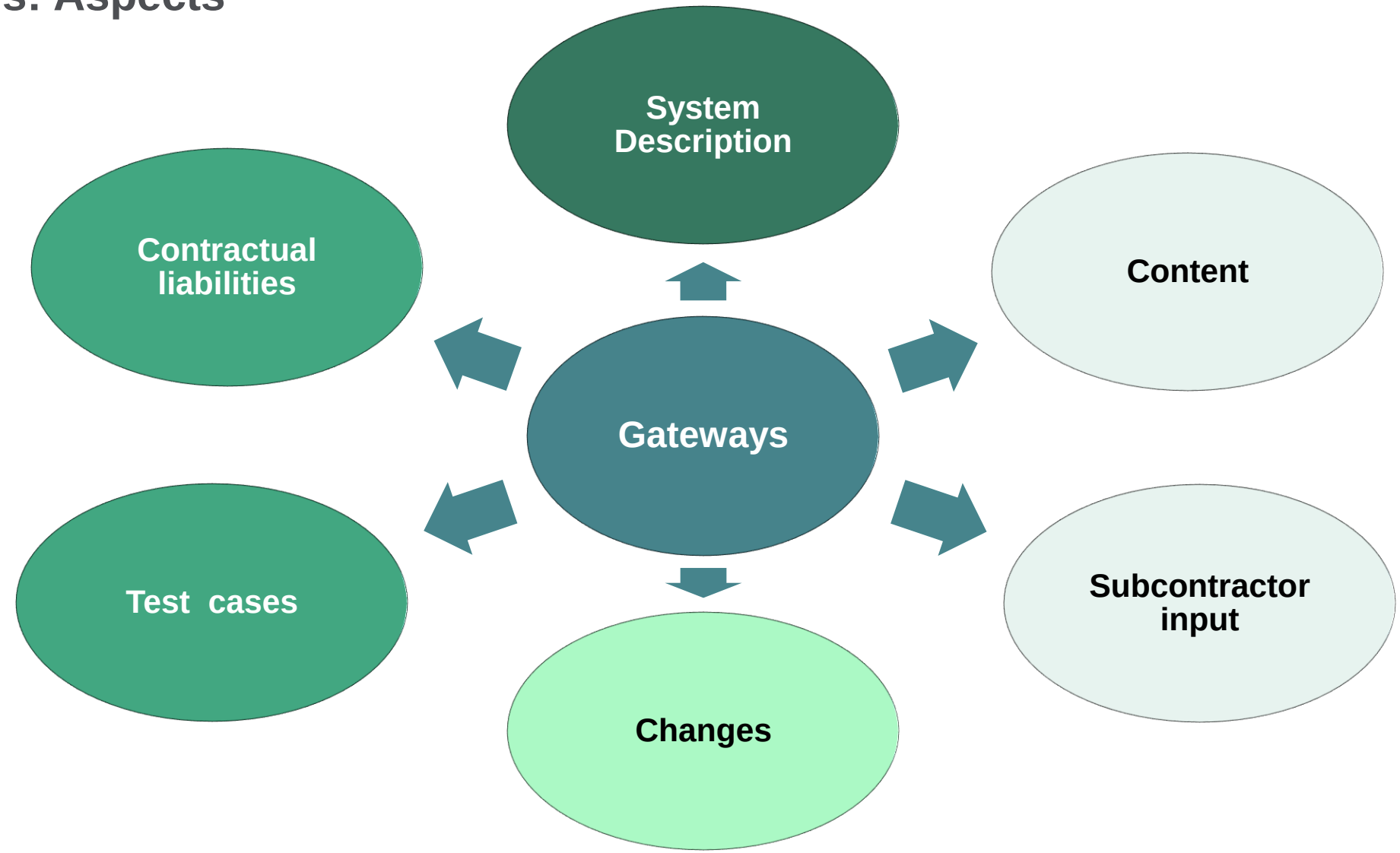
The Building Safety Act - Gateways

Building Safety Act

Gateways: Aspects



Building Safety Act
Gateways requirements

Three gateways at key stages in design and construction have been established

- Planning Gateway one – at the planning application stage
- Gateway two – before building work starts
- Gateway three – when building work is completed
- Gateways two and three are stop/go decision points that must be passed before a development can proceed to the next stage
- The Building Safety Regulator will oversee building work as the building control body for higher-risk buildings
- Local authorities will remain the building control body for other buildings.

Building Safety Act
Gateway 1: Planning applications

Health and Safety Executive

- HSE is a statutory consultee for planning applications that involve or may involve a relevant building
- As part of your planning application to the local planning authority, you will need to show that you have:
  - Considered fire safety needs relevant to land use planning for the proposed building
  - Considered these needs at an early stage
  - Incorporated your thinking into your planning application
- HSE provides local planning authorities with fire safety input on proposals
- Examples of fire safety needs relevant to land use planning include:
  - Site layout
  - Water supplies for fighting fires
  - Access for fire services
- As part of the building safety reforms, the Building Safety Regulator (BSR) will be the building control authority for high-rise buildings.

Building Safety Act
Gateway 2:

Health and Safety Executive

Before building work starts

- Before starting any building work, applicants will need to submit a design application to BSR. The application will include information that shows how the design will:
  - Meet the building regulations
  - Manage change control
  - Help dutyholders meet legal requirements, including on:
    - Competence
    - Golden thread of information about the building
- The application will need to show the assumptions that have been made about the occupied building once built. Any assumptions and proposals must be reasonable and justified

Developments that are built in stages

- Any proposals for phased construction or occupation should be agreed at the design stage.
- Construction work should not start on a phase or stage without approval from BSR.

Timings

- Alert BSR weeks before submission
- BSR has 12 weeks for review
- This may be extended by notice

Building Safety Act
Between Gateways 2&3

Health and Safety Executive

During construction

- Building work must not start until approved by BSR
- There will be ongoing requirements, including:
  - Site inspections at key milestones
  - Reporting certain occurrences
  - Managing change
  - Identifying and storing the golden thread of key information about the building
- Some changes in design may need further approval from BSR before works can proceed.
  - Major changes will require building control approval before they can be made whilst
  - Other changes must be notified to the Building Safety Regulator and cannot be carried out for a prescribed period
  - The approach to categorising major and notifiable changes will be set out in regulations

Building Safety Act
Gateway 3: Completion

Health and Safety Executive

When the building is completed

- At completion, BSR will:
  - Assess the application against the building regulations
  - Undertake final inspections of the completed building work
  - Assess the documents to be given to the building owner
- On approval, BSR will issue a completion certificate.

Before occupation

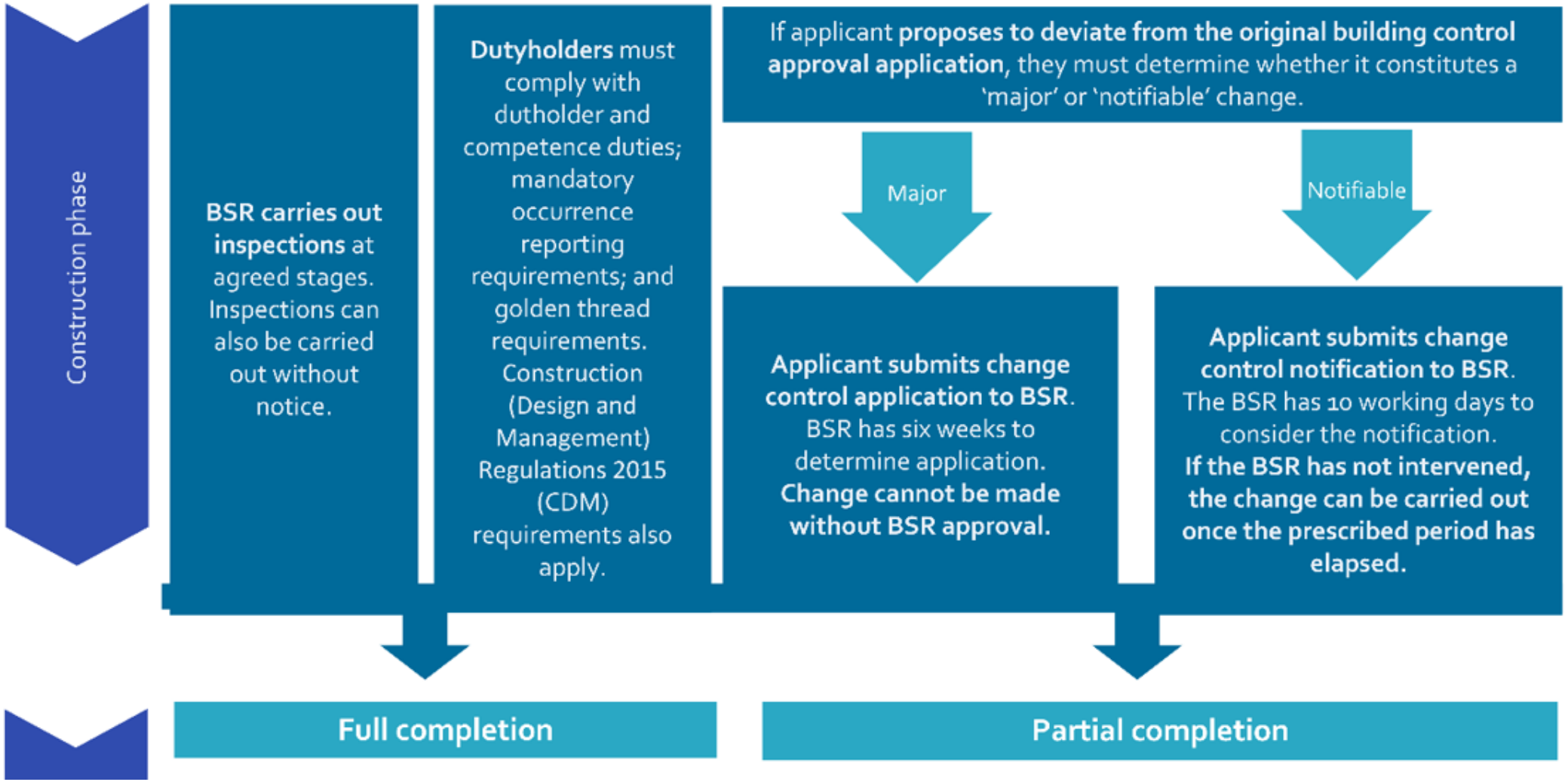
- After a completion certificate is issued, the building will need to be registered
- An application to register the building should be made to BSR
- Residential units must not be occupied until the building is registered.
- Registration is a separate process to Gateway three.

Building Safety Act

Gateways: before work commences

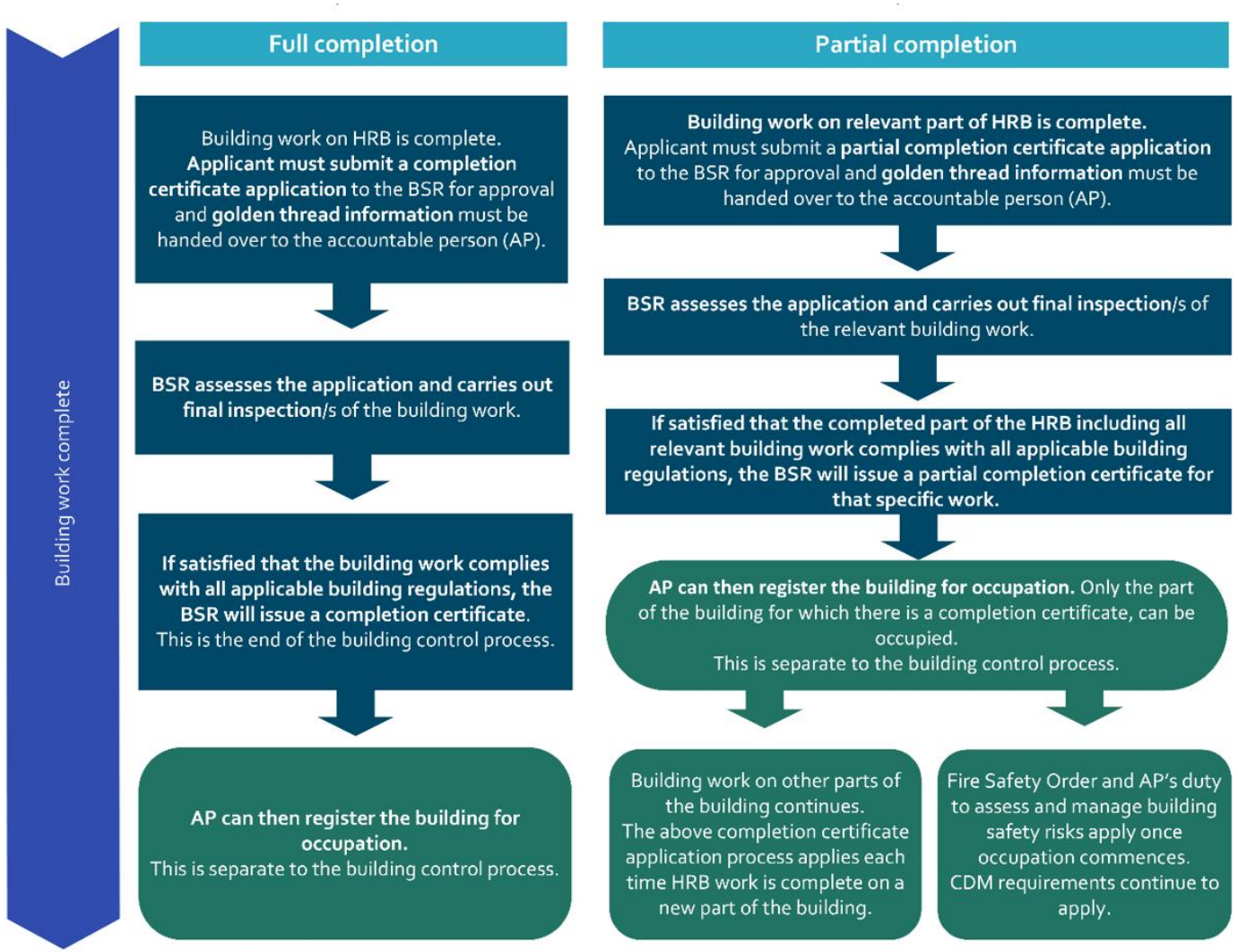
Building Safety Act

Gateways; construction phase



Building Safety Act

Gateways; building work complete



The Institution of Structural Engineers

The Building Safety Act - Safety cases and reports

Building Safety Act

Safety cases: Aspects

Building Safety Act
Safety case: factsheet

(updated 5 April 2022)

- **High-rise residential buildings** that are at least 18 metres in height or at least 7 storeys, will have to develop and maintain a safety case and submit a Safety Case Report to the Building Safety Regulator
- **Accountable Persons** will be required to identify and assess building safety risks and take reasonable steps to ensure those risks are reduced and controlled to a proportionate level on an ongoing basis. This information will need to be submitted to the Building Safety Regulator through **Safety Case Reports**
- **The Safety Case Report** needs to demonstrate how **fire and structural safety risks** that could lead to a major incident are being managed. The scope of the regime will be kept under constant review by the new Building Safety Regulator
- **The Safety Case Report** provides a summary of the steps Accountable Persons have taken to identify, assess, remove, reduce, and manage building safety risks – demonstrating that reasonable and proportionate steps have been taken. It is supported by the **safety case and the Golden Thread**
- **Secondary legislation** to set out the prescribed principles in regulations
- Accountable Persons should be regularly and systematically reviewing building safety risks and the measurers in place to manage them.

Building Safety Act
Safety case and report

The safety case is all the information you use to manage:

- The risk of fire spread
- The structural safety of your building
- How you're:
  - Preventing fire spread and structural failure in your building
  - Limiting their consequences

- **The safety case report** is a document that summarises your safety case.
  - It identifies your building's major fire and structural hazards
  - It shows how you are managing the risks as far as you can
  - The report should show you:
    - Have identified your building's major fire and structural risks
    - Are managing and controlling them

Building Safety Act
Safety case information

Health and Safety Executive

The Safety Case comprises:

1. Building Information
2. Identifying building safety risks
3. Risk prevention and protection information
4. Safety Management Systems
5. Safety case report

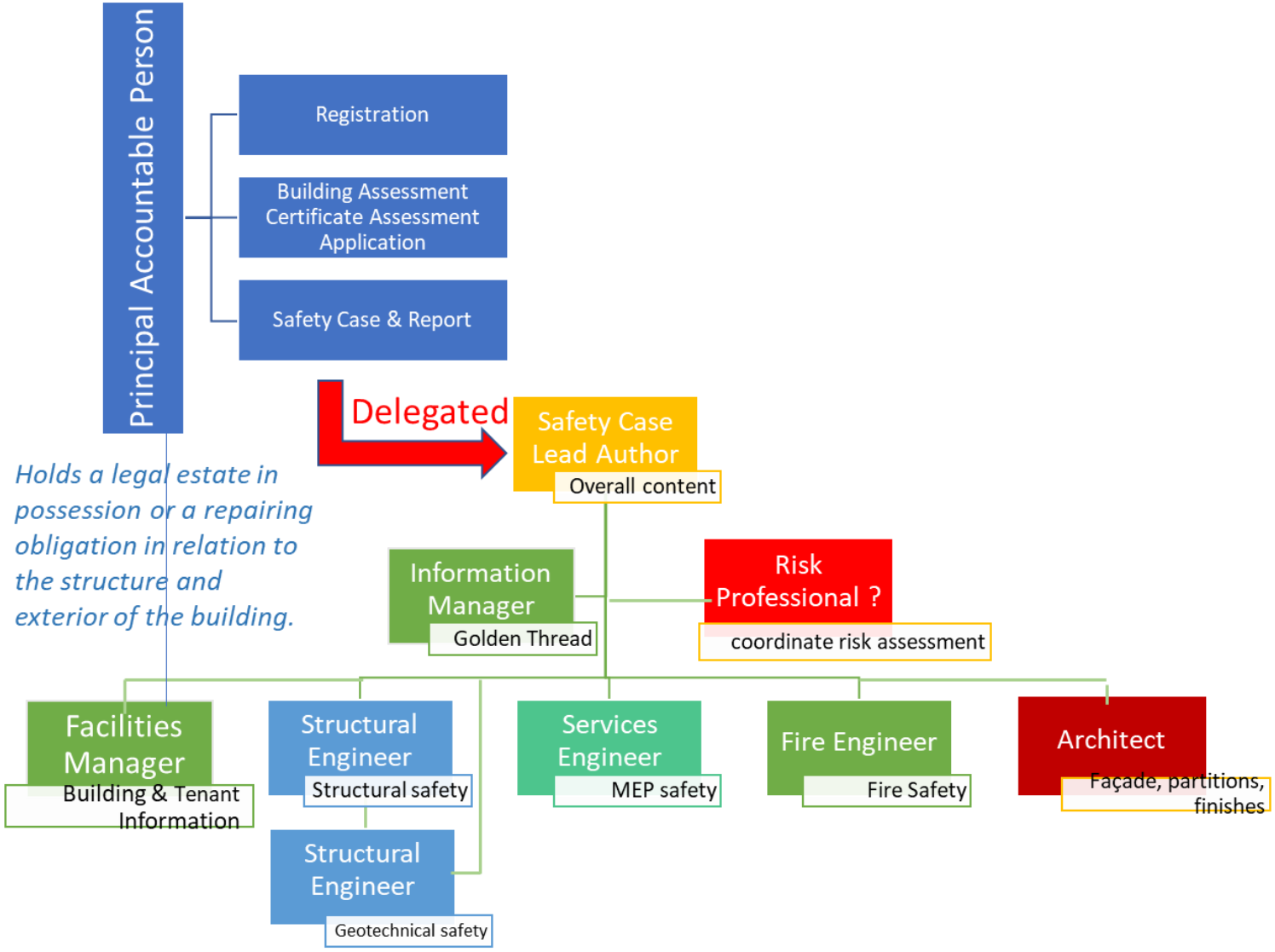
Building Safety Act
Safety case report

The Building Safety Regulator (BSR) will not be providing a template for safety case reports. However, the following guidance has been provided on the structure:

1. General information
2. Description of the building
3. Risk assessment and control measures
4. Safety management system
5. Emergency Arrangements
6. Reporting occurrences and complaints
7. Residents' voice
8. All reasonable steps to Mitigate Risks
9. Ongoing work and continuous improvement
10. Safety Case Summary
11. Information Schedule

Building Safety Act

Safety case report: Assumed Roles



IStructE

Building Safety Act

Safety case report

It is assumed that the structural engineer will input the following areas:

Area	Input	Notes
Building Information	Structural information	Where available
building safety risks	Class 3 risk assessment Structural Risk assessment Structure/ fire cross impact risk assessment	In conjunction with other disciplines
Risk prevention and protection information	Measures to protect key structural elements, including fire protection	
Safety Management Systems	Maintenance, inspection, operation and monitoring regime for structure of the HRB	To sustain the integrity of the protection measures
Safety Case Report	Structural section Interaction with structure-system interfaces	See below
Mandatory Reporting	Significant structural risk factors.	Any risks that could have a potential impact on structural safety
Voluntary Reporting	Structural risk factors	Non-reportable learning points

The Institution of Structural Engineers

The Building Safety Act - Existing buildings: Assessments

Building Safety Act
Managing HRBs

Health and Safety Executive

- Those who manage a high-rise residential building will you'll need to take all reasonable steps to:
  - Prevent any building safety incidents
  - Reduce the severity of an incident, should one occur
- The Act defines a building safety risk as the spread of fire, or structural failure
- The spread of fire includes the spread of all forms of combustion, for example smoke, fumes, and heat
- Those responsible for occupied, high-rise residential buildings will be required to:
  - Register their building with the Building Safety Regulator (BSR)
  - Perform a building safety risk assessment
  - Introduce measures to manage building safety risks
  - Prepare a safety case report for their building to give to BSR on request

Building Safety Act
Existing building assessment

- Existing occupied high-rise residential buildings will be assessed initially over a period of five years
- The Building Safety Regulator will call in new buildings for assessment for the first time within six months of occupation
- Other existing buildings, for example those which have gone through a change of use (e.g. an existing block of offices converted into flats) will be called in for assessment for the first time within six months of occupation
- There will be a gap between the new regime coming into force and the first buildings being called in for the Building Assessment Certificate
- HSE expect this gap to be no longer than 6-12 months
- HSE expect that it will take around five years for all existing occupied buildings to be initially assessed.

Building Safety Act
Higher risk building: key facts

- Total number of high-rise residential high-rise residential buildings of 18 metres or more in height, or at least seven storeys (whichever is reached first) in England is estimated as of April 2020 to be **12,500**
- 6,500 (52%) are private sector buildings (private residential buildings and student accommodation)
- 6,000 (48%) are social sector buildings
- Over 95% of buildings were identified as flat dwellings, with the remaining proportioned across Houses in Multiple Occupation, residential education and sheltered accommodation
- The HSE have identified 1,500 (12%) residential buildings that are seven storeys but under 18 metres in height, 7,000 (56%) buildings between 18 metres and 29 metres and the remaining 4,000 (32%) buildings 30 metres or more in height
- *Source: Building Safety Programme Monthly Data Release England: 31 March 2021*

Building Safety Act

Building Assessment Certificate: transitional arrangements for existing buildings: factsheets

(updated 5 April 2022)

- Existing buildings will be placed into groups or ‘tranches’ for assessment. These will be based on the height of the building and the number of dwellings it contains, so the tallest buildings with the greatest number of dwellings will be placed into the earlier tranches
- The Building Safety Regulator proposes to follow a hazard-based approach to prioritising assessments within tranches that reflect the potential to cause harm to people and the consequences of an incident, were a serious fire or structural failure to occur. Buildings with multiple hazard factors are likely to be assessed earlier in each tranche
- Following the initial assessments, the Building Safety Regulator will reassess Accountable Persons’ management of building safety risks at least every five years. Some may be reassessed earlier than the five-year limit.

Building Safety Act

Building Assessment Certificate: transitional arrangements for existing buildings factsheet

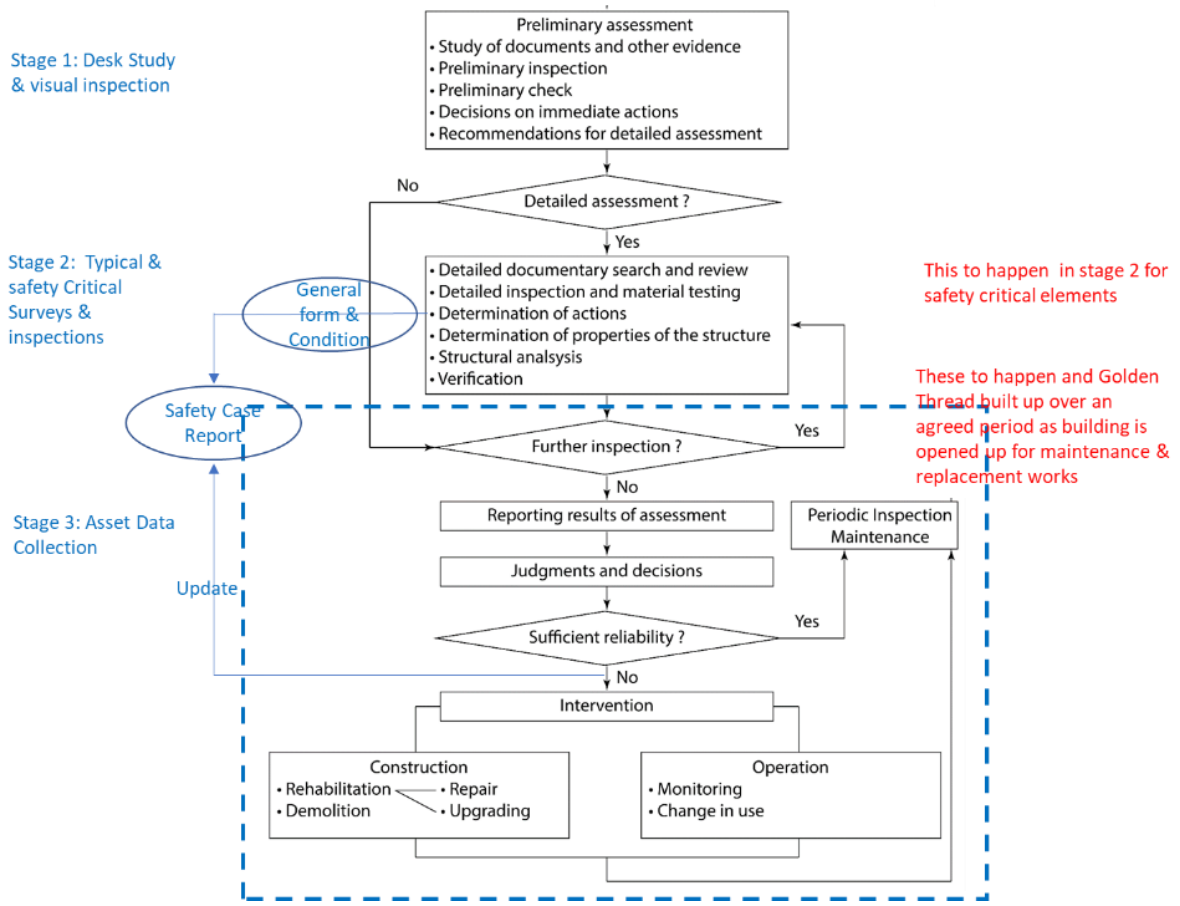
(updated 5 April 2022)

Height of building (in metres)	No. of dwellings: 141+	74-140	54-73	49-53	26-48	11-25	2-10
50+ m	1	1	1	1	1	1	5
30-49 m	1	2	2	3	3	3	5
18-29 m	1	2	3	3	4	5	5

Building Safety Act
Existing building assessment

Building assessments will be compiled and reported under section 2 of the Safety Report. The assessment is assumed to be to the following references:

- ISO 13822, 2010 Assessment of Existing Structures
- Appraisal of existing structures (Third edition) IStructE, 2010
- Guide to surveys and inspections of buildings and associated structures, IStructE 2008
- Practical guide to structural robustness and disproportionate collapse in buildings, IStructE
- Introduction to the fire safety engineering of structures IStructE, 2020
- Manual for the systematic risk assessment of high-risk structures against disproportionate collapse IStructE



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The Building Safety Act - Reporting

Building Safety Act

Reporting: What you need to do

Building Safety Act

Mandatory occurrence reporting: factsheet

(updated 5 April 2002)

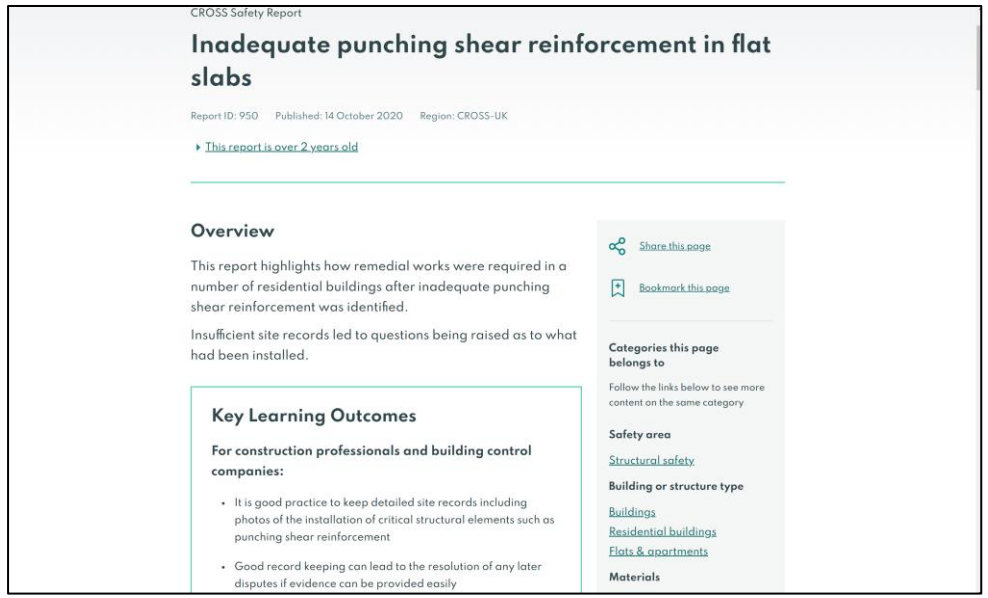
- Mandatory occurrence reporting will legally require dutyholders to capture and report certain fire and structural safety issues (‘safety occurrences’) to the Building Safety Regulator
- Mandatory occurrence reporting will ensure that the regulator is able to capture any risks that could have a potential impact on safety, help drive intelligence-led enforcement, promote safety-conscious culture change, and improve safety standards and best practice
- Compliance with mandatory occurrence reporting will be a legal requirement. These duties are:
  - To establish and operate an effective mandatory occurrence reporting system to enable those on the site or in the building to report safety occurrences to the dutyholder(s)
  - To report safety occurrences to the Building Safety Regulator in a required manner
- Mandatory occurrence reporting will be compulsory for all HRBs from Gateway 2 onwards
- During design and construction the Principal Designer and the Principal Contractor will be responsible
- During occupation the Principal Accountable Person will be responsible
- Specific aspects of mandatory occurrence reporting, will be set out in secondary legislation.

The Building Safety Act 2022

Collaborative Reporting for Safer Structures: How we're helping

Newsletters

Safety Alerts



Safety Reports

The Institution of Structural Engineers

The Building Safety Act - Construction products regulator

Building Safety Act

Construction products regulatory framework: factsheet

(updated 5 April 2002)

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.

Building Safety Act

National regulator for construction products: factsheet

(updated 5 April 2002)

This national regulator will:

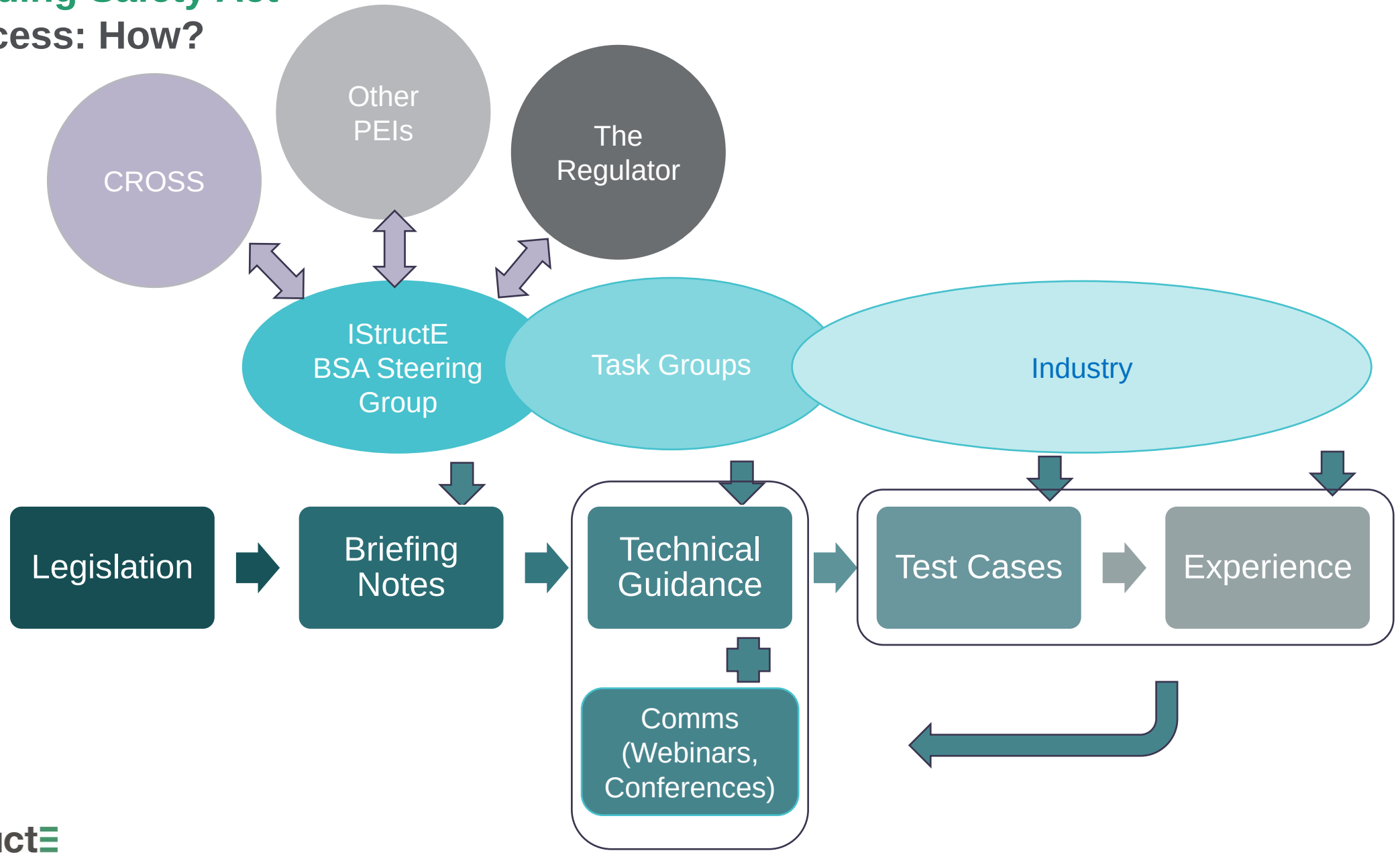
- Provide vital market surveillance and oversight, including maintaining a national complaints system and supporting local Trading Standards so that safety concerns can be spotted and dealt with quickly
- Lead and co-ordinate the enforcement of the strengthened construction product regulations, including removing products that pose a safety risk from the market
- Provide advice and support to the industry to improve compliance as well as providing technical advice to the government
- Carry out or commission its own product-testing to investigate non-compliance
- Establish a robust and coherent approach with the Building Safety Regulator and Trading Standards to drive change across the sector

The Institution of Structural Engineers

The Building Safety Act - What are we doing?

Building Safety Act

Process: How?



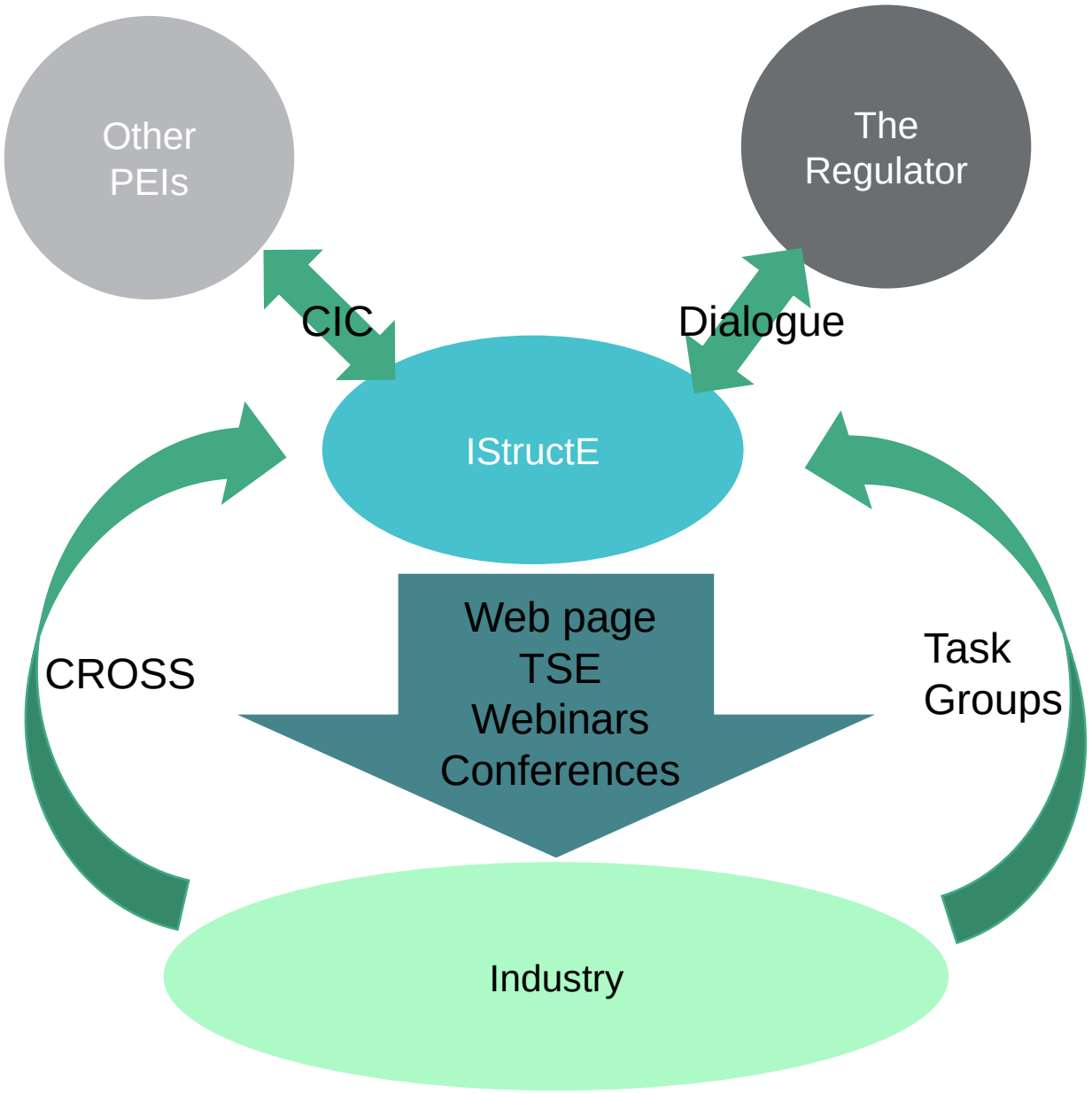
Building Safety Act Conference

How Does this impact us ?

Building Safety Act Conference
Engagement

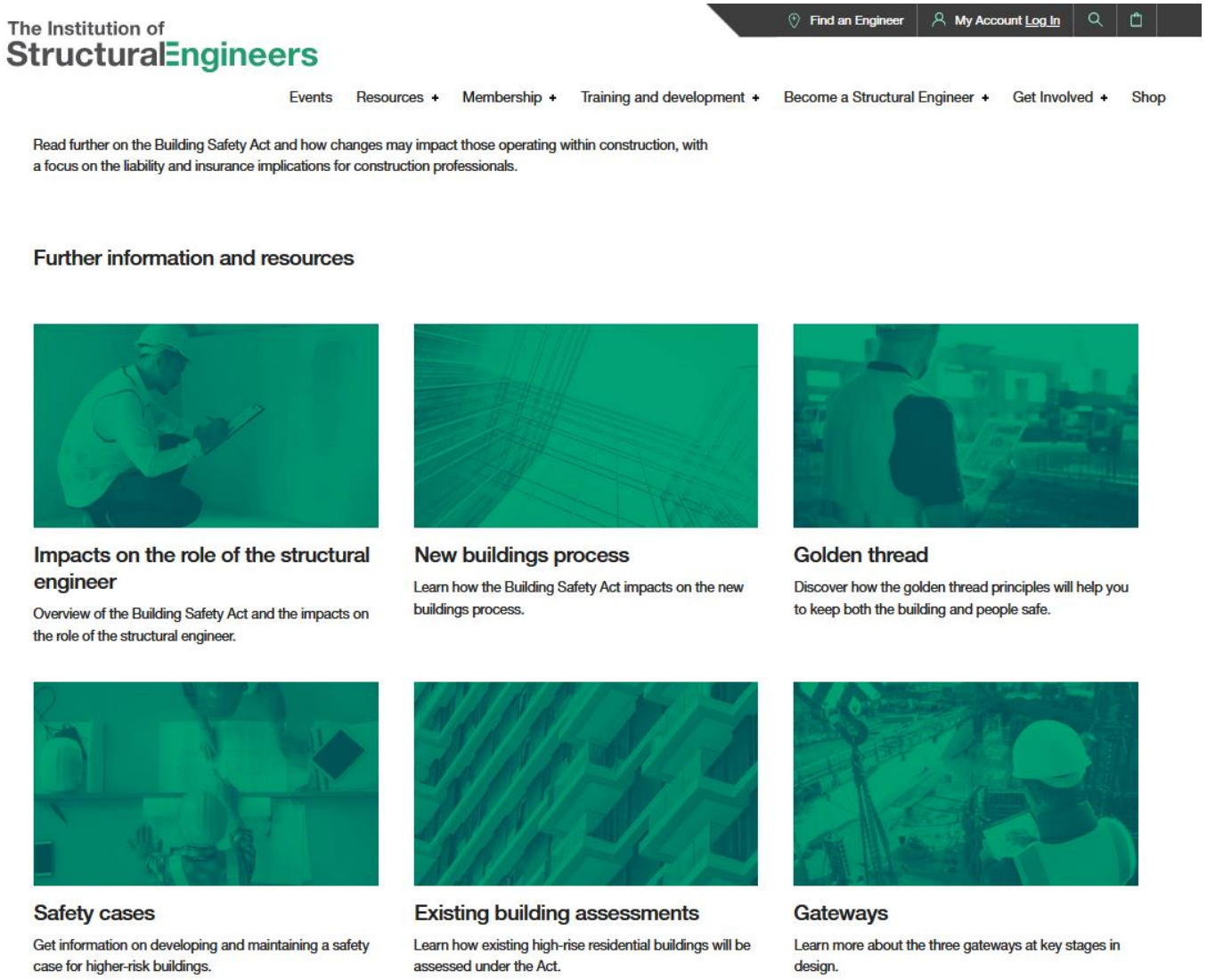
We are calling out to members to join task groups to:

- Coordinate guidance as its produced
- Develop Test Cases
- Compile information on existing building defects
- Feedback on implementation



Building Safety Act Conference

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



The Institution of Structural Engineers

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

The Institution Roadmap

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