



How to Develop a Building Safety Case: 4 Stages to Compliance



In response to the Grenfell Tower tragedy, the Building Safety Act 2022 creates a new and modernised regulatory regime for building safety and construction products, ensuring residents will be, and will feel, safer in their homes.

In England, and from October 2023, a building owner will hold an increased legal responsibility for preventing the spread of fire and structural failure in their high rise residential buildings. To mitigate these building safety risks they must create, hold, and maintain a Building Safety Case, making a report available to the Building Safety Regulator upon request.

This four stage guide will help you understand the implications of the Building Safety Act and to provide you with an overview of the steps required to define, gather and maintain the information required for your Building Safety Case.

First steps to understanding Building Safety

On 28 April 2022, The Building Safety Bill received Royal Assent, becoming an Act of Parliament.

This landmark Building Safety Act contains provisions intended to secure the safety of people in or about buildings through the creation of a national framework that will create lasting generational change.

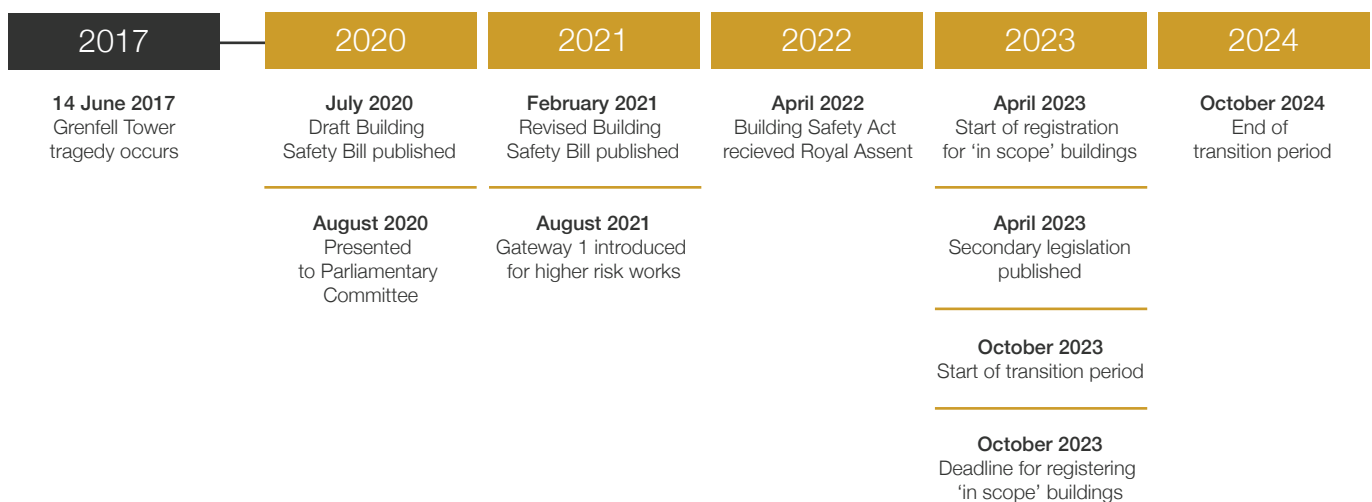
The Building Safety Act has specific implications for high rise residential buildings.

High rise residential building is the common term used for a higher risk building.

The Building Safety Act defines a higher risk building as:

- A building in England that:
 - is at least 18 metres in height or has at least 7 storeys
 - contains at least 2 residential units
- The height of a building is to be measured from ground level to the top floor surface of the top storey of the building (ignoring any storey which is a roof top machinery or plant area or consists exclusively of machinery or plant rooms).

Key dates leading up to and following the Building Safety Act's Royal Assent



What is an Accountable Person?

An Accountable Person is the organisation or person who owns or has responsibility for the building.

The Accountable Person will have a duty to take all reasonable steps to prevent a Building Safety risk happening, with Building Safety risk defined as 'spread of fire and/or structural failure', in addition to reducing the seriousness of an incident if this occurs.

The Accountable Person is responsible for creating, holding and maintaining the Building Safety Case, making a report available to the Building Safety Regulator upon request.

If a building has more than one Accountable Person, the Accountable Person responsible for the structure and exterior of the building will be the Principal Accountable Person.

When buildings have a single Accountable Person, that entity or person is the Principal Accountable Person.

As well as their duties as an Accountable Person, Principal Accountable Persons must register their buildings with the Building Safety Regulator.

It will be a criminal offence for an unregistered high rise residential building to be occupied after October 2023. All existing high rise residential buildings must be registered with the Building Safety Regulator between April 2023 and October 2023, and all new high rise residential buildings must be registered with the Building Safety Regulator prior before occupation.

To register a building, a Principal Accountable Person will need to provide key information to the Regulator including evacuation strategy, number of stairs, external wall composition, etc.

What is a Building Safety Case?

A Building Safety Case Report is a digitally produced and maintained document that summarises your Building Safety Case.

The report should give the Building Safety Regulator confidence that you have identified your building's major fire and structural risks and are managing and controlling these risks accordingly.

A Building Safety Case may be best understood as a structured argument on why your building is safe for occupation, evidencing the control measures and management systems that have been implemented and continue to be implemented to mitigate spread of fire, structural failure, and reduce the seriousness of an incident if one should occur.

Considering the critical role a Building Safety Case plays in safeguarding the residents of your building, it is essential that the integrity of this information is maintained throughout the building's lifecycle. The collation of the building information is commonly known as the Golden Thread and it ensures that the Accountable Person has all the necessary information to manage building safety risks.

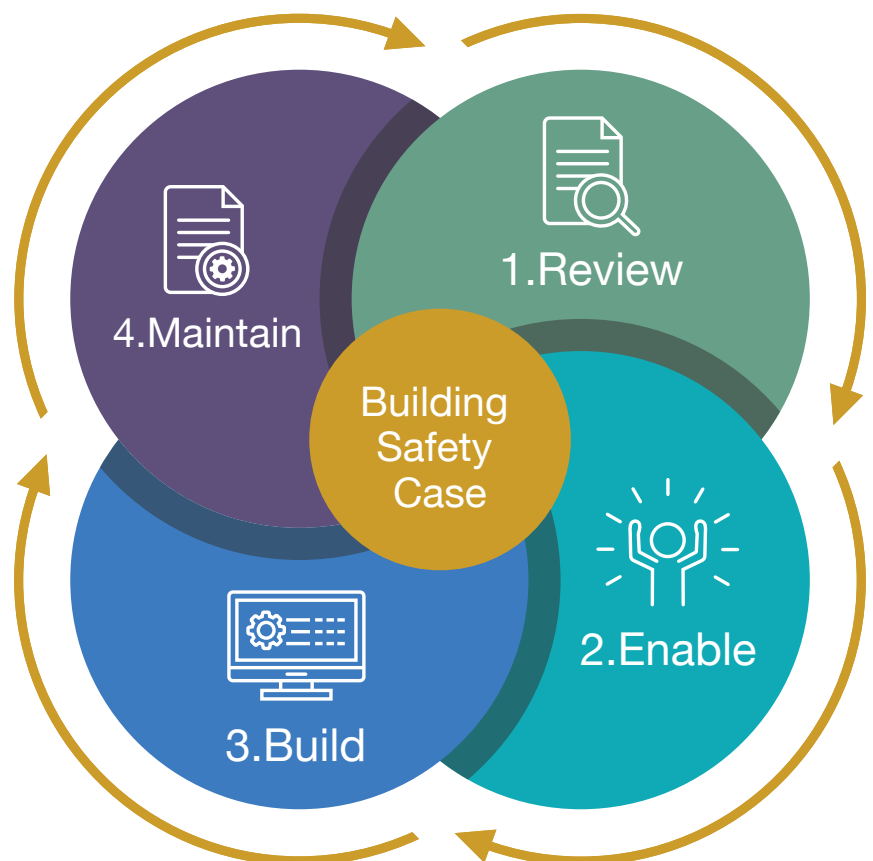


Four stages

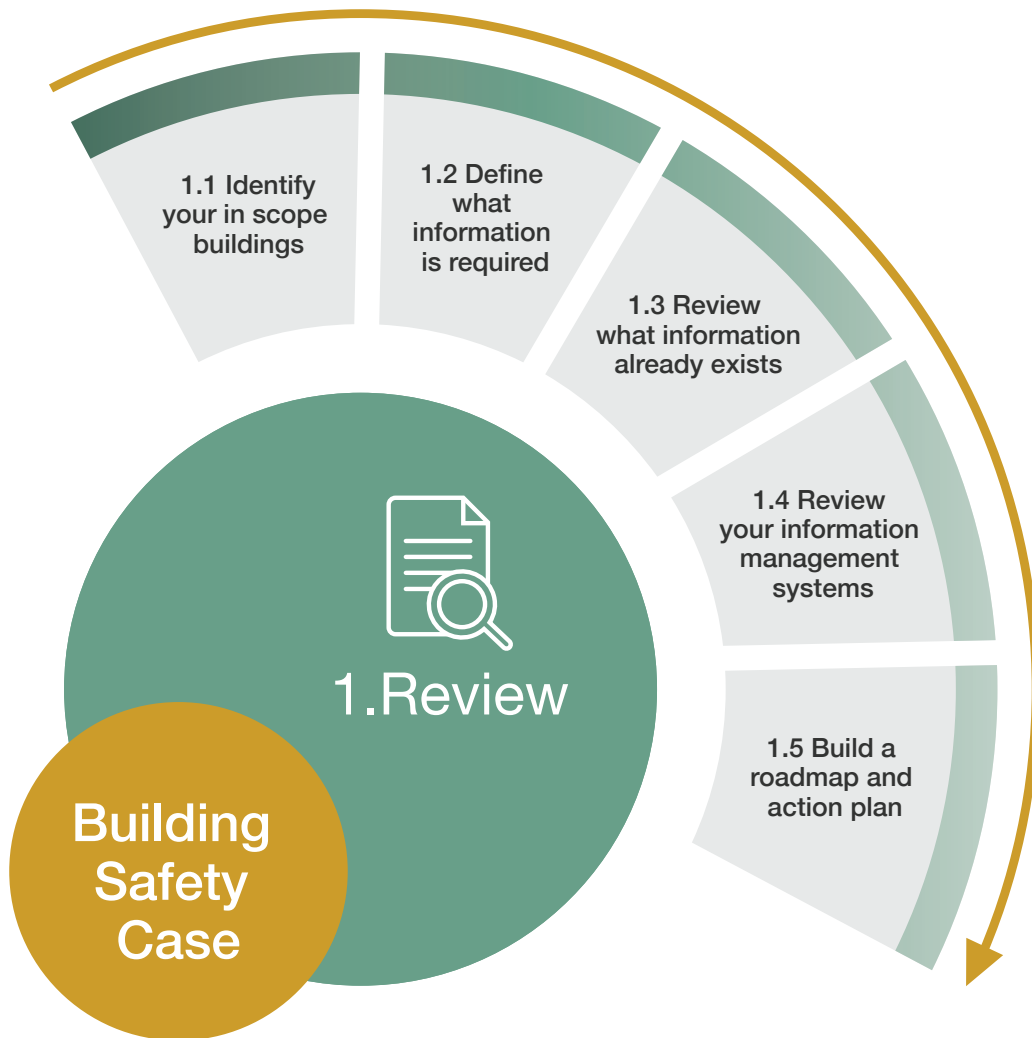
BIM Academy has developed a four stage process to create and maintain a Building Safety Case, supporting compliance with the Building Safety Act.

This process involves a strategic review of what systems and processes currently exists and developing a tailored roadmap for facilitating a Building Safety Case. This roadmap will set out the path to compliance with the Building Safety Act by implementing processes to support the specification, development and maintenance of the Building Safety Case.

We have developed this process using our extensive digital and safety knowledge and experience to help you build your digital Building Safety Case and to ultimately keep your residents safe. This process draws on the elements of people, process and information to help structure the methodology.



1 Review



The first stage in undertaking any strategic work is to review what currently exists. Within the context of developing and maintaining a compliant Building Safety Case, this will include understanding how many in scope buildings exist within your portfolio, what information currently exists on these buildings, and the processes and systems in place to support the maintenance of a Building Safety Case.

1. Review



1.1 Identify your in scope buildings

Whilst the scope of the Building Safety Act will extend in the future, the period of registration and the current transition period concerns high rise residential buildings only. By definition, high rise buildings are taller than 18 meters or seven storeys which also contain two or more residential units. The review should not only include your existing assets, but also any planned developments or acquisitions.

1.2 Define what information is required

You will be required to hold information that will help you to assess building safety risks, ie. the risks surrounding the structural collapse and spread of fire, take all reasonable steps to prevent these risks, and to minimise the impact should any building safety incidents occur.

This information will need to be defined and used as a benchmark against which your buildings can be assessed for gaps. The questions you will ask yourself here will also help inform your information requirements for new buildings and acquisitions.

Every building holds different levels of information, a fundamental part to this step will be to understand what information is valuable and what is not. It is also important to note that this will be proportionate to the stage at which the building is at in its life; the older a building is, the more information will exist to document its history.

1.3 Review what information already exists

Once you have defined what information is required for each in scope building, you will need to review what already exists and what does not. It is important to also consider what format this information exists in and whether it is sufficient to fulfil the requirements of achieving a Golden Thread. Much of this information will be most likely be held in physical copies, which will need to be digitised to help you validate and maintain the information throughout the building's occupation.

This step forms a gap analysis which will help you understand to what extent your existing information is fit for purpose under the Building Safety Act.

1. Review



1.4 Review your information management systems

Information needs to be stored and managed digitally, not only to comply with the new legislation, but to help improve accessibility to it during operation which in turn can achieve efficiencies in undertaking maintenance tasks. How you currently hold information will need to be reviewed to assess whether it can support the maintenance of a Golden Thread. This may currently take the form of different methods, formats, and tools for different pieces of information.

When reviewing your information management systems and processes, you will need to think about the following questions:

- Is the information secure?
- Is there a single source of truth (ie, no risk of information duplication)?
- Is the information shareable with the people who need it to fulfil tasks?
- Is the information presented in a way that the person can use it?
- Can you validate the currency of the information and who is responsible for it?

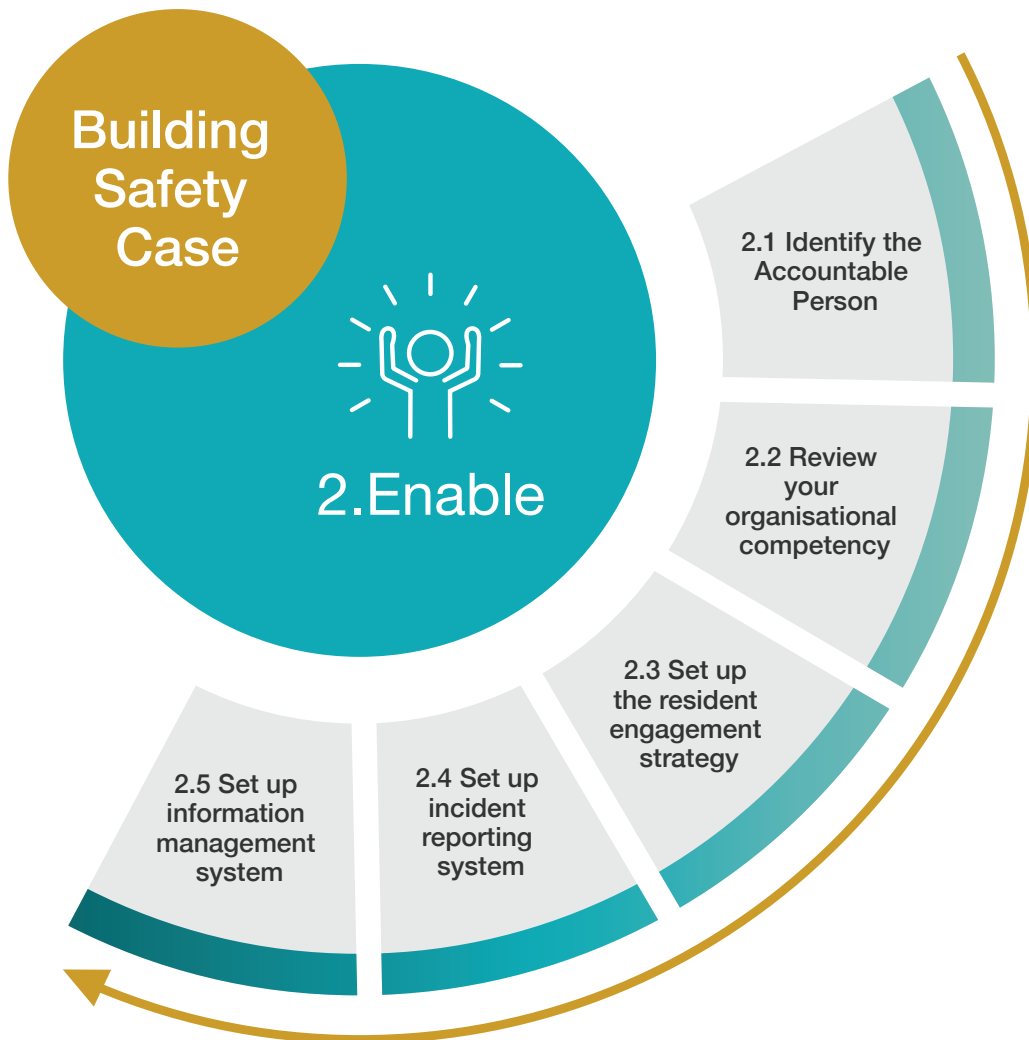
These questions will help frame whether your current processes and systems are suitable for complying with the Building Safety Act.

1.5 Build a roadmap and action plan

The outcome of this review stage should be to build a roadmap and action plan for how you will implement any required changes across your portfolio. This will provide you with a clear roadmap of the steps you need to take to ensure you can meet all your building safety obligations. An effective roadmap will have clear links to the action plan, provide an estimate of the resource required, and set out intermediary targets and review points to help you understand the effectiveness of its rollout.

The October 2023 deadline and the following 12 month transition period, provides you with a defined timescale against which to build this roadmap. However, to help structure your approach, it is recommended that you undertake a pilot project on one in scope building to understand what is involved and how much resource will be typically expected. You can then refine your processes if required and subsequently roll out to your wider portfolio.

2 Enable



Once you have a comprehensive review and gap analysis of your portfolio, the next stage will be to undertake the first few steps in your roadmap and action plan: build your capability. This will include identifying the Accountable Person, increasing awareness of the new responsibilities across your team, setting up the resident engagement strategy, establishing an incident reporting system and actioning information management systems and processes.

2. Enable



2.1 Identify the Accountable Person

One of the most significant changes to the occupation phase of buildings is the requirement for an Accountable Person who will be responsible for assessing and managing the building safety risks. This could be the building owner, the freeholder, or the management company. The Accountable Person will have an ongoing duty to demonstrate how they are identifying, mitigating and managing risks within their building.

2.2 Review your organisational competency

In line with new requirement of the Building Safety Act, you will need to consider whether you have the organisational competency to manage safety in high rise buildings. To do so, you will need to review competence of your team, particularly for those delivering on your building safety obligations. Within your team structure, you should identify the roles and responsibilities, as well as the required competencies, to develop an appropriate upskilling plan.

The competency requirements for managing safety in a residential building are set out the PAS 8673.

Arguably, the biggest change to be enacted by the Building Safety Act is the requirement to store and manage building safety information digitally. This will require a shift in mindset compared to how information has been captured, stored and managed to date, particularly if your team has been dealing with hard copies of information primarily. You will need consider whether you have the in house capabilities or whether you to outsource this requirement.

2.3 Set up the resident engagement strategy

Your residents want to have the knowledge that they are safe in their homes. One of the tools to provide this reassurance will be your adoption of a resident engagement strategy, which will enable residents to participate in any decisions surrounding safety risks in their building. This will help inform and empower your residents, providing them with confidence in the safety of their own building.

Your resident engagement strategy should set out what information will be provided to residents, such as what measures are in place to reduce the risk of fire and contact information for the Accountable Person, how the residents will be consulted and what they will be consulted on. This will help residents understand their own responsibilities (for example, such as not removing any of the building's fire safety measures, such as smoke detectors) with regards to building safety in addition to understanding the duties of the Accountable Person. Once you have developed your strategy, this will need to be shared with every resident.

2. Enable



2.4 Set up incident reporting system

To report your safety occurrences, your Accountable Person is required to set up an occurrence reporting system which will allow anyone interacting with the building, whether they are residents or those managing or working on the building, to report such occurrences. Regardless of how the system operates, it should allow the provision of supporting information about the incidents and should be able to report on a whole building basis; that is, every safety occurrence with the entire building can be reported on from the same system. This information may include elements such as the date and time of the incident, the nature of the issue, and the location of the occurrence within the building.

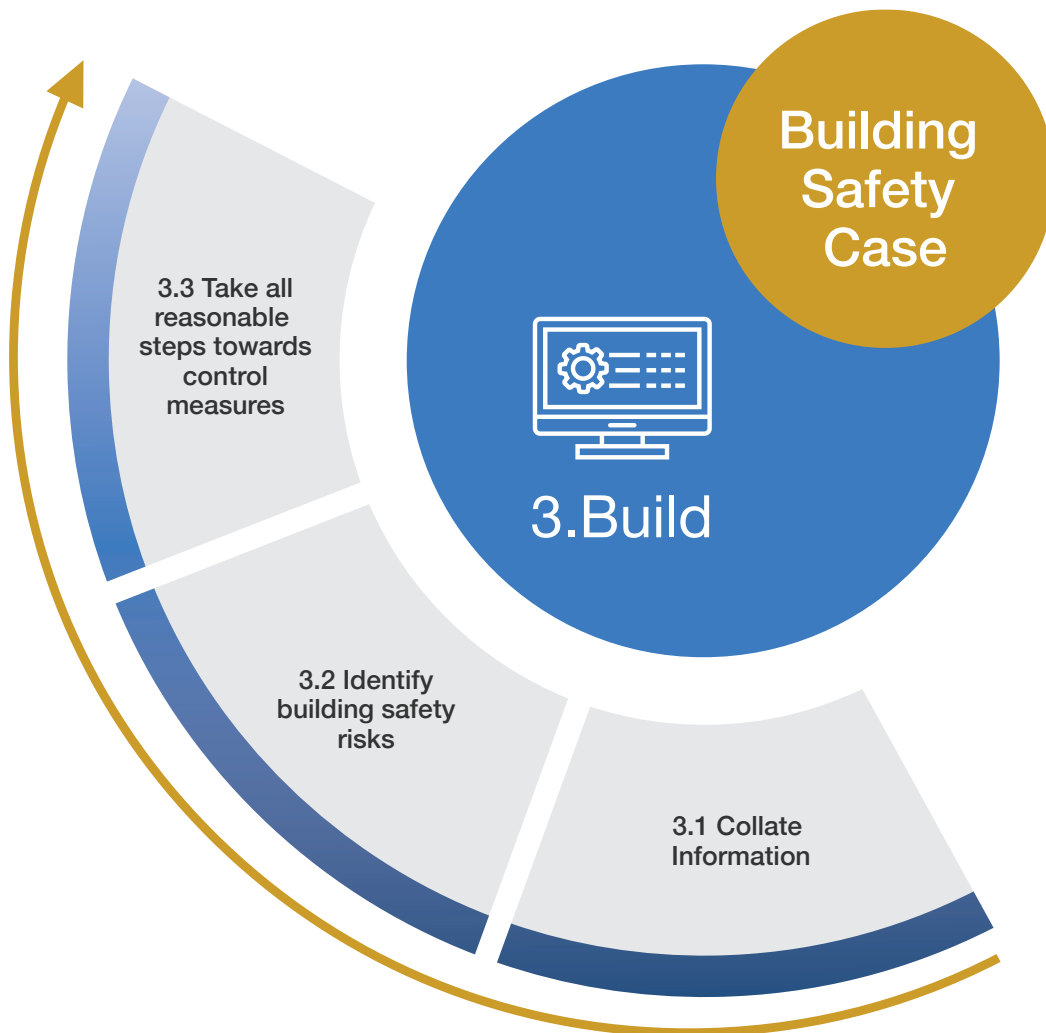
2.5 Set up information management system

Based on the outcome of your review in the initial stage of this process, you will need to set up digital information management systems and processes to manage your information and documents digitally. This system will support your safety case and host your Golden Thread, as well as share information with stakeholders at various points during the building's lifecycle.

There are several solutions available which vary in sophistication, from simple electronic document management systems to tools which can support digital twin processes and provide you with access to your information through a 3D environment. To be compliant with the Building Safety Act and meet the requirements set out by the Building Safety Regulator, the system just needs to be able to support your Golden Thread as a baseline.

In addition to the questions you asked yourself when reviewing your existing procedures, you can also consider what would be value adding to your operations to help you choose a solution.

3 Build



The next stage is for the Accountable Person to collate and capture the information in a structured, digital format to enable you to build and maintain your Golden Thread and therefore your Safety Case. How you collate and capture the information will depend on whether your building is new or old and what information currently exists. The key to this stage is to develop the Golden Thread throughout all project work phases and continuing to maintain the information into occupation.

Once you have suitable systems and processes in place and have collated the information required, it is then time to start building the Safety Case. This will require undertaking a risk assessment specific to the requirements of the Building Safety Act, focusing on safety risks pertaining to structural safety and spread of fire.

3. Build



3.1 Collate information

Existing buildings are inherently more complex than new builds, particularly if your building is older or has changed ownership several times in its life, as information will likely not be readily available.

You must collate any existing documentation and ensure it is captured digitally. This could involve scanning or photographing paper drawings and manuals or extracting information by typing or using optical character recognition, if the source document is solely text based. If there is missing information and it is considered important for managing building safety within the context of your building, then you will need to take reasonable steps to capture this information. This may require further work or consultation, such as commissioning surveys or reports, to ensure you have an appropriate level of detail for your Safety Case.

3.2 Identify building safety risks

The first step in building your Safety Case requires your Accountable Person to identify the building safety risks in each occupied in scope building. This will help you understand what you need to do to keep your residents safe and to understand the different levels of risks throughout your building. For example, there will likely be different fire hazards in a plant room or a lobby, compared to the fire hazards in an individual flat. It is also important to remember that risks will change over time and that changes to your building, or even individual units, may affect its risk profile.

To identify risks, you need to think about different scenarios and ask yourself plenty of 'what if' questions. For example, what if the fire stopping for your pipework between compartments is insufficient? What if your fire doors become damaged? What if a leak occurs that compromises the building's structure? This will help you understand what you need to know about your building and what kind of measures you can put in place to mitigate these risks.

Identifying building safety risks will likely not be a one person job.

The task should be completed by a team of people who are competent on areas such as fire safety and structural safety. There also is not one prescribed method of risk assessment, if the methods undertaken are thorough and systematic to ensure full coverage of your building, then this should be sufficient.

3.3 Take all reasonable steps towards control measures

Your Accountable Person must demonstrate that all reasonable steps have been taken to prevent and mitigate building safety risks. This will include reviewing any existing control measures to make sure these remain effective.

What is considered reasonable will be unique to each building and be influenced by several factors, such as whether they may create additional risks (such as blocked evacuation routes) or are disproportionately expensive. All decisions and actions must be clearly recorded as demonstration of what you consider to be reasonable steps. Information to store and maintain on control measures will include how they have been designed and installed, what condition they are in, their maintenance regime and whether any changes have been made to them over the building's lifecycle.

4 Maintain



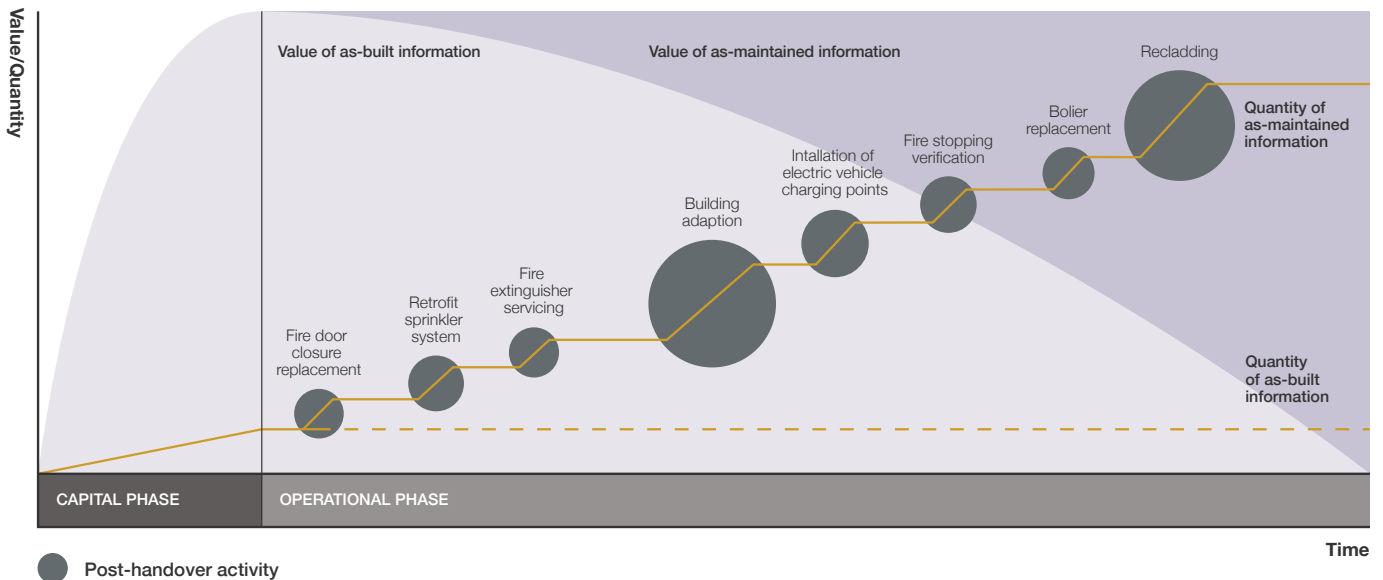
The final stage is to not only maintain the information, but to demonstrate that you are managing building safety risks, and the information supporting these processes, on an ongoing basis. This requires you to maintain the safety case and resident engagement strategy for each of your in

scope buildings, to submit a safety case report regularly and when requested, to apply for a building assessment certificate when directed, and to report significant fire or structural safety issues to the Building Safety Regulator.

4. Maintain



The value of as-built versus as-maintained information



4.1 Maintain your safety case

The safety case, and the golden thread that supports it, is an evolving body of information. When key maintenance events happen or material changes are made to the building or an individual unit, more information will be generated and need to be managed. Historical information should be retained and archived to provide you with a complete audit trail of the decisions made and a documented history of the building and its maintainable assets. For example, a boiler replacement will require information about the new model of boiler being installed, the date on which it was installed, its serial number, and operation and maintenance information such as instruction manuals and commissioning certificates.

By maintaining your safety case, you will be storing as maintained information, rather than as-built information. Over time, your as-built information naturally degrades in value as the digital asset information becomes further removed from the physical asset. However, if maintained, your asset information will remain reliable and ultimately valuable throughout the building's lifecycle. This is demonstrated in the figure above.

4.2 Maintain your resident engagement strategy

As with the safety case, it is important for you to keep the resident engagement strategy under review, to ensure it is reflective of the current state of the building and the resident profile.

4. Maintain



4.3 Submit your Safety Case Report upon request

A Safety Case Report is required to be submitted to the Building Safety Regulator by the Accountable Person every five years.

The report can also be requested from the Building Safety Regulator at any point throughout the occupation of a building, therefore highlighting the need to keep your information consistent, valid and up to date. The Safety Case Report is not simply a collation of all information contained within the Safety Case, but rather a summary of the information gathered and assessed. The Safety Case Report can be better thought of as a statement of claims and arguments, with references and clear links being made back to the information contained within the Safety Case as appropriate.

4.4 Report any safety occurrences to the regulator

It is mandatory for any safety occurrences (ie. significant fire and structural safety issues) to be reported the Building Safety Regulator.

Not every incident will need to be reported, only those considered to compromise the safety of residents, such as a fire breaching compartmentation or the discovery of a structural defect. Safety occurrences should also be included as part of the Safety Case Report.

Execute your Building Safety Case with confidence

BIM Academy is a global digital consultancy delivering project success and enhanced operational performance across the built environment.

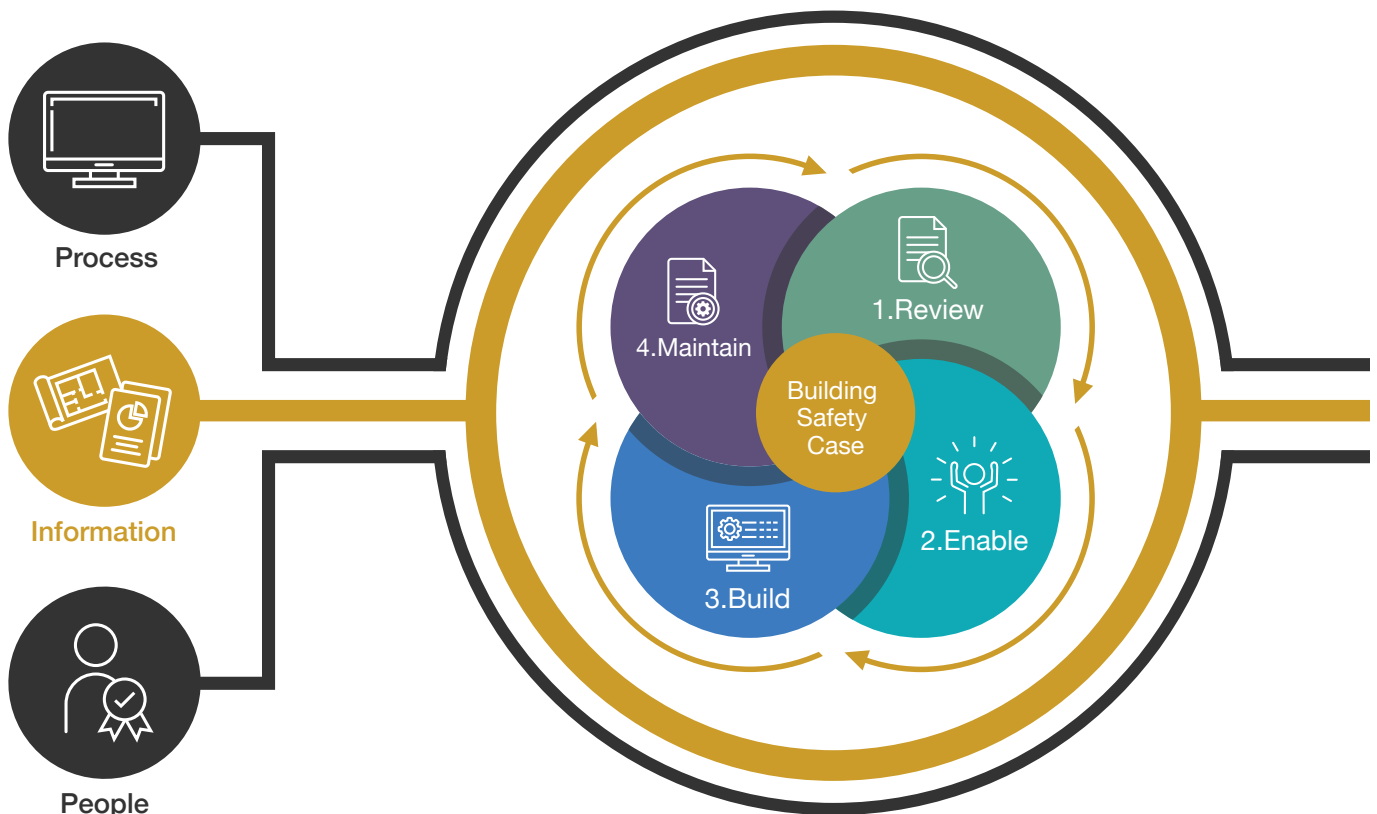
We support clients with their strategic transformation through the development of a new organisation wide digital culture. We prove the value of investing in digital through accelerated growth, the development of new skills and the realisation of superior business and project performance.

The process presented in this book helps you develop your Building Safety Case by bringing the elements of people, process and information together.

By using these elements to frame the process, you can achieve a holistic understanding of where you are now, what you need to do and how you need to do it.

By closing that gap between as built and as maintained information, you will create your golden thread.

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Building Safety Case developed on a framework of people, process and information



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