A building manager's guide to fire compartmentation

What you need to know about your legal obligations and how to preserve the integrity of this crucial life safety system





COMPLETE FIRE SAFETY SOLUTIONS

NEO and Indepth Services are united in delivering excellence in fire safety and ventilation solutions. Together, we harness PTSG's nationwide capabilities, decades of specialist expertise, and unwavering commitment to the highest standards in fire safety.

Fire safety in buildings demands a comprehensive, professional approach. As part of PTSG Fire Solutions, NEO and Indepth Services deliver complete fire safety and ventilation solutions to ensure your building remains compliant and your occupants stay protected.

Our combined expertise offers you a single point of contact for all your fire safety and ventilation needs. From compartmentation surveys and fire stopping to specialised ventilation services, our teams work together to provide seamless fire safety solutions.

NEO specialises in the structural aspects of fire safety, delivering expert compartmentation surveys, professional fire stopping services, and comprehensive fire door solutions including surveys, remedial works, and new installations.

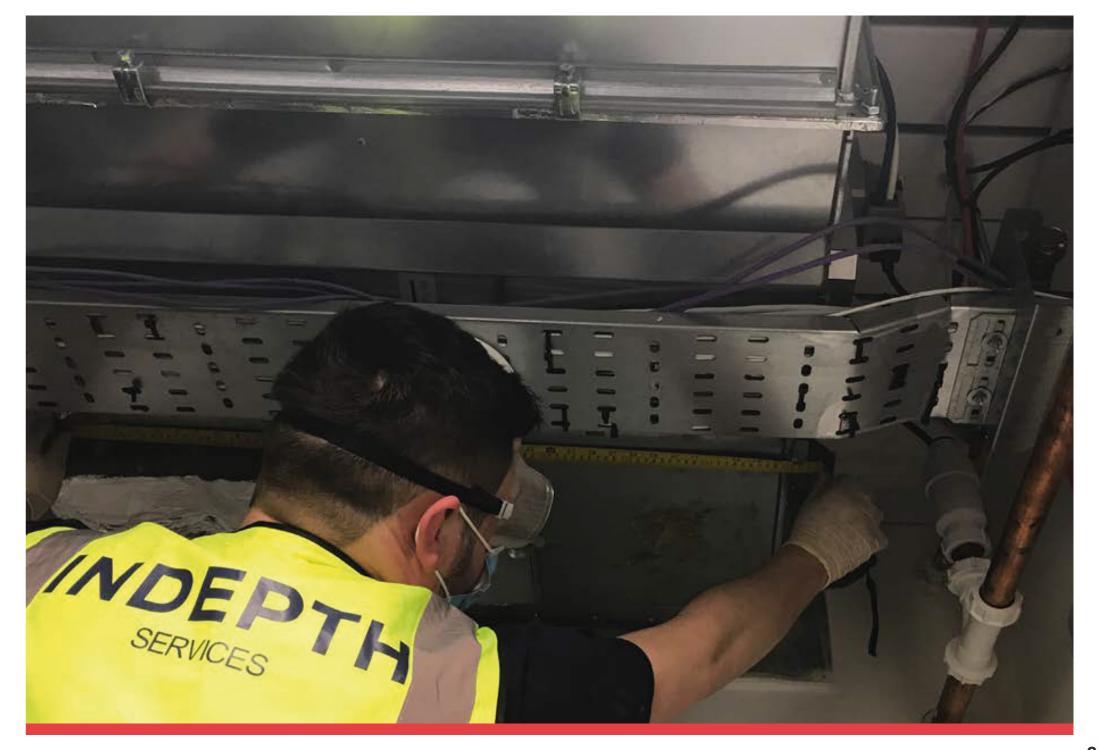
Indepth brings technical expertise in ventilation safety, providing thorough fire and smoke damper inspections, professional ductwork and grease extract cleaning, and detailed indoor air quality assessments. Our BESA-trained technicians ensure your building's ventilation systems meet the highest safety standards.

Together, we offer:

- Compartmentation surveys and fire stopping
- Complete fire door services
- Fire and smoke damper testing
- Ventilation system cleaning and maintenance
- Indoor air quality management
- Professional certification and documentation

By choosing PTSG Fire Solutions, you benefit from the combined strength of two industry leaders, backed by PTSG's national infrastructure, proven track record, and commitment to excellence in everything we do.

Our shared values, expertise, and resources ensure you receive the most comprehensive fire safety service available in the UK today.





Ticking boxes and taking names

Fire safety can be seen as a box-ticking exercise. In truth, documentation should be the start of the process. Your records ought to be used to guide your health and safety team in their best next steps to achieve the safest possible working or living environment.

The Responsible/Accountable Person is typically the building owner or operator. If that's you, you're likely not a trained fire safety professional and we understand you rely on the competency and professionalism of fire safety experts to support you in achieving a safe environment. In fire safety legislation the "Responsible Person" takes ownership, the Building Safety Act gives accountability to "an Accountable Person" and there is overlap between the two. Irrespective of the title, the responsibility for fire safety standards will sit with an individual or an organisation.

This guide is intended for building owners and/or occupiers who have a responsibility for the health and safety of the building occupants. It is not exhaustive and not a replacement for professional advice. To speak to an expert, please refer to the contact details on the back cover of this guide.



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Fire compartmentation – what it is

Fire compartmentation inhibits the spread of fire and smoke in a building.

Fire-resistant compartments are part of a building's life safety structural design. Their critical function is to slow the spread of fire and smoke and assist occupants' safe egress should a fire break out. Compartmentation also assists property preservation, as fire is more effectively contained, supporting the efforts of emergency services.

Compartmentation is used to:

- Divide or sub-divide escape routes in a building, such as stairwells and corridors
- Decrease the risk for emergency services
- Contain fire in smaller areas, such as a single residence in a high-rise block, alleviating the urgency of the complete evacuation of a building
- Provide multiple options for the safe evacuation in more significant buildings, preventing bottlenecks in escape routes. For example, hospitals can move patients "across" a building before proceeding to lower floors.

A fire compartment is typically constructed with:











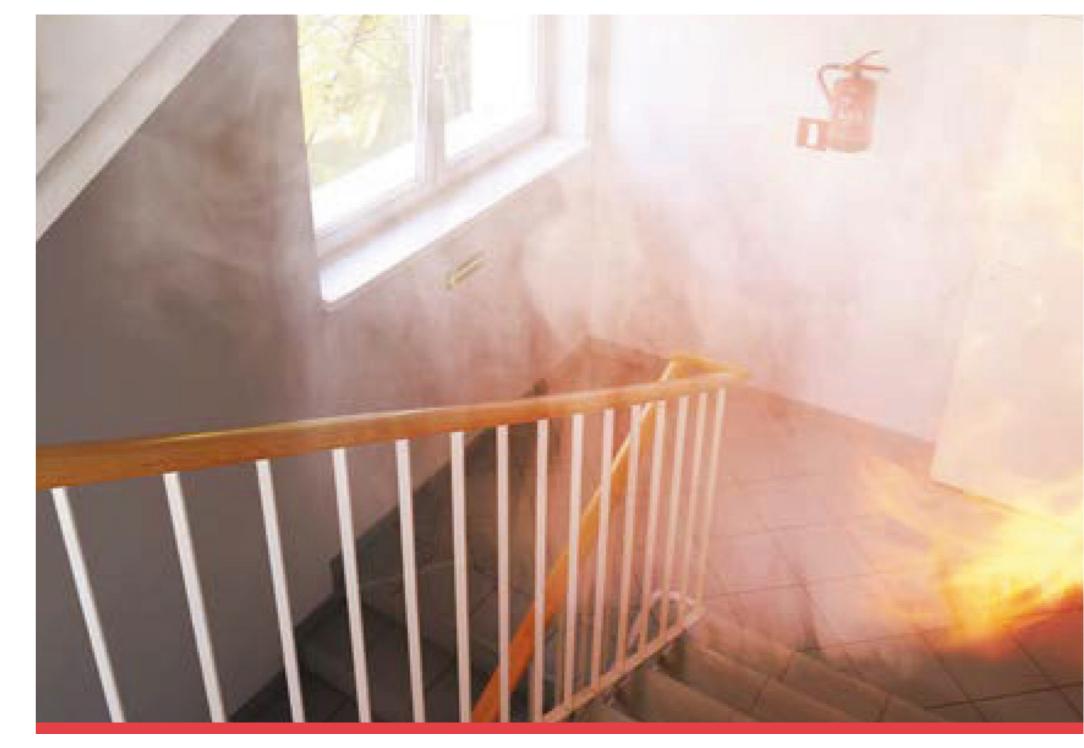
Walls

Floor slabs

Soffits

Fire doors

Fire-rated glazing





Preserving the fire compartment



Joints around the perimeter of each component are sealed using fire-stopping materials to maintain the fire rating of the compartment



if site services are forced to breach the compartment, for example, air conditioning, fire and smoke dampers are installed in the ductwork.



Learn more about fire-stopping and fire damper services on our website indepthservices.co.uk





Know Your Building – Compartmentation Plans

Not all buildings were constructed with a formal fire strategy. However, a clear understanding of how fire is intended to be contained is critical for maintaining safety. Where fire strategy documents do exist, they typically form part of the health and safety file and outline the layout and fire resistance ratings of each compartment. These ratings, usually expressed in minutes, indicate how long each compartment should resist fire and smoke spread.

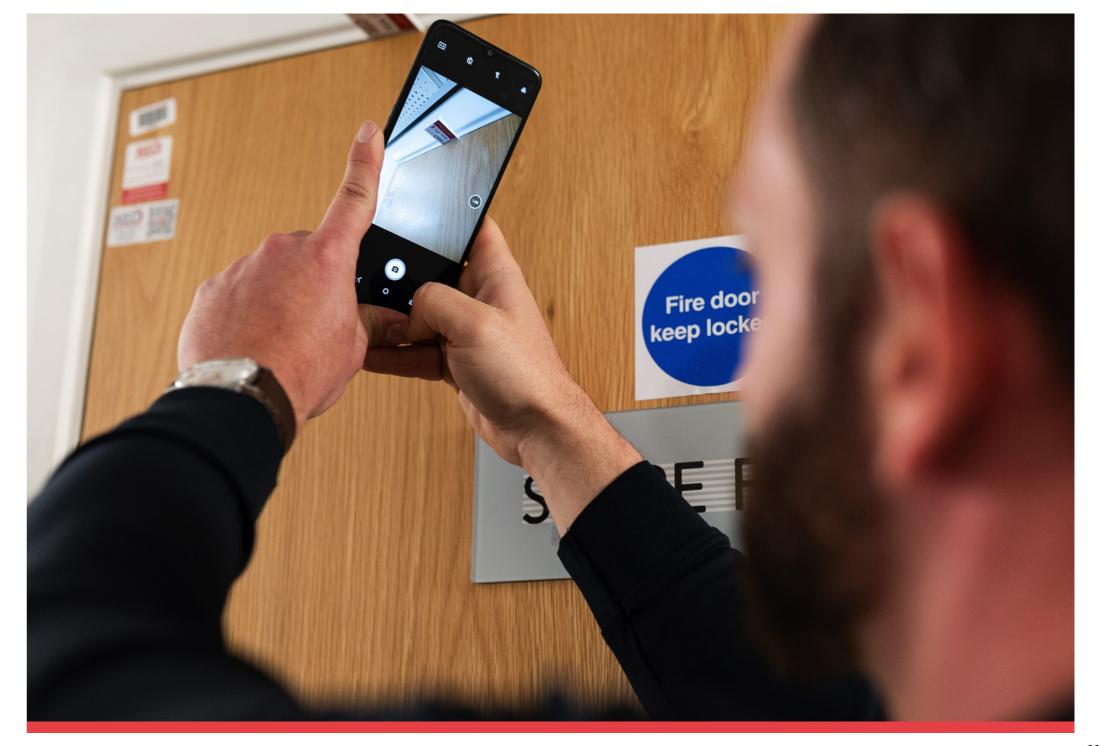
If a strategy is missing, outdated or unclear - which is common in older buildings - the Responsible Person must take steps to establish or update it. This often begins with a fire risk assessment and compartmentation survey, which together provide the evidence needed to develop an effective strategy and guide future compliance.



What documentation should you retain?

Building information held by the Responsible Person under Article 38 of the Building Regulations may include:

- Fire strategy documents
- Operations and maintenance manuals
- Fire compartmentation plans, showing areas of compartmentation marked on floor layout plans and the standard of fireresistance required The most recent fire risk assessment report
- Certification relating to the fire ratings of any materials used for fire compartmentation, including fire-stopping/sealing materials
- A fire-stopping register
- Manufacturer's certification for any fire doors and a fire door asset register
- Details of any approved fire engineered solution which compensates for departures from Building Regulations requirements (if not provided within the fire strategy document)
- Details of known alterations to the building construction or layout which have been made post-construction
- Previous compartmentation survey reports
- Records of any remedial work undertaken





Most building owners and managers have insufficient records to give a clear picture of the fire compartmentation in their buildings. In our experience, the records held are typically incomplete, or worse, non-existent.

This leaves building operators like you with a conundrum. How do you comply with the latest legislation – specifically, ensuring that the integrity of the fire compartment is maintained – when you have no evidence as to the specification of that compartment?

No paper trail is no excuse

Inspecting your fire compartmentation and rectifying issues is critical for fire safety compliance, even if your building's compartmentation plan is lost, incomplete or inaccurate.

The options available to building owners and operators who do not have complete records vary from a comprehensive fire safety survey, including forensic analysis of components to test their fire rating, to a basic survey to identify generic issues from a visual inspection, and variations in between.

Your fire assessment, findings and recommendations will inform you on the most appropriate way forward.

The purpose, desired outcome, and directives of your survey should be agreed upon in advance. This ensures you achieve the level of reporting and documentation you need.

In the absence of accurate records, a professional judgement will be required to establish where fire compartmentation should be in place throughout the building. The judgement should be made by a suitably qualified person who will inspect the building and apply Building Regulations requirements.

In the absence of technical data or certification, the surveyor will use specialist knowledge of known construction and fire-stopping materials, as well as current approved standards/guidance applicable to your building type.



The Building Safety Act 2022 introduces the 'golden thread' of information, where management will be able to access accurate and up to date information about a building to keep it safe. Fire compartmentation records will be part of the 'golden thread' for your building.

Paperwork is powerless

Paperwork alone doesn't create change, it is, however, imperative that the records you keep accurately reflect the works undertaken to achieve compliance. In the event of an investigation, your paperwork should evidence how you have met your obligations to provide a safe environment.

Regulation pushing for the best possible documentation to be in place is not new. The challenge has always been enforcement, which historically has been weak. Sadly, scrutiny is only applied in times of crisis or the aftermath of a disaster. Most people will immediately think back to the tragedy at Grenfell as a horrific example of when fire safety standards are neglected. It shouldn't be forgotten that there are countless other avoidable losses of life due to poor fire safety practices.



Regulation and legislation

Rules and regulations are an essential part of all health and safety management – there must be benchmarks to measure against, or else we would have no way to determine if our efforts have achieved the desired safety standard. So, legislation and regulation are the answer. However, it can feel overwhelming – there's certainly a lot to digest. And, the legislation manages to be both complex and generic, simultaneously

While health and safety legislation is broad, there are a few specific areas we recommend familiarising yourself with in relation to fire safety in buildings:

- Regulatory Reform (Fire Safety) Order 2005
- Building Safety Act 2022
- Fire Safety (England) Regulations 2022 additional guidance for high-rise residential buildings of 18m and over
- Building Regulations 2010 Regulation 38 Fire safety information.

Clarity on your obligation

The aims of fire safety are clear in legislation; however, if you are not fire safety orientated the steps to compliance will likely be confusing. This is where we can help.

As a guide for the person taking ownership of fire safety, we urge you to seek support from accredited companies.





Accredited Fire-Stopping Products

Choosing the right fire-stopping products is essential but using them correctly is just as important. All products should be tested as part of a complete system, not in isolation, and must be matched to the application they are intended for. Generic solutions or mixing products from different manufacturers can compromise fire performance, as they will not have been tested together and may not behave predictably in a fire.

To ensure compliance:

- Use **tested systems** that are appropriate for the specific penetrations and wall/floor types in your building.
- Stick to a **single-manufacturer solution** wherever possible this ensures the fire-stopping system replicates the original tested setup.
- Verify that products are **certified to current standards**, such as BS EN 1366-3 and BS 476-20.
- Ensure installation is carried out **in accordance with the manufacturer's instructions** by trained personnel.
- Demand full product documentation, test evidence, and installation records in the final handover pack, in line with Article 38 of the Building Regulations and the principles of the Golden Thread.





Necessary breaches to the fire compartment

Fire doors

Where doors breach a fire compartment, fire doors must be fitted. They are designed to resist the spread of fire and toxic gases to meet the requirements of BS 476-22 and/or BS EN 1634-1.

Fire doors must be regularly inspected to ensure they are still fit for purpose and fulfil your fire risk assessment requirements.

Your legal obligations in relation to fire door inspections will depend on a number of factors:

- The size of the property
- The type of building
- The occupancy rate.

New installations require a thorough inspection to ensure they have been fitted correctly and their performance meets the requirements as set out in the building compartmentation plan.

Routine maintenance and fire door checks should be carried out at regular intervals. This ensures the doors fitted in your building will perform as expected in the event of a fire. Routine wear and tear, especially in high traffic areas, can lead to damage to the door itself, or its fitting – both of which are crucial for performance in the event of a fire.

For further information on fire door inspection contact the team on 0843 455 4455.

For more information about Fire Door Maintenance, Neo has produced a free guide. You can download a free copy at this link www.neo-ps.com





Current legislation dictates the responsibility for fire safety standards falls with the Accountable/Responsible Person.

Building compartmentation plans show the fire rating for different areas of a building. These ratings must be maintained to achieve compliance.

In the absence of a compartmentation plan, professional advice will be required to survey the building and provide suitable documentation.

Documentation alone is insufficient to achieve compliance. Remedial works must adhere to the fire rating standards stipulated. It is further recommended that remedial works are undertaken by qualified individuals, using suitably graded products for your fire compartment, and photographic/video evidence of works is retained.





Getting professional support

Our experienced team are here to help, from simple advice to compartmentation plan surveys, remedial works and more.

For support with fire compartmentation, fire stopping and fire doors, contact NEO Property Solutions

For support with Fire Damper Services, contact Indepth Services

Indepth Services

Indepth House, Wellesley Road, Sutton, Surrey SM2 5BW

020 8661 7888

www.indepthservices.co.uk

Neo Property Solutions Limited

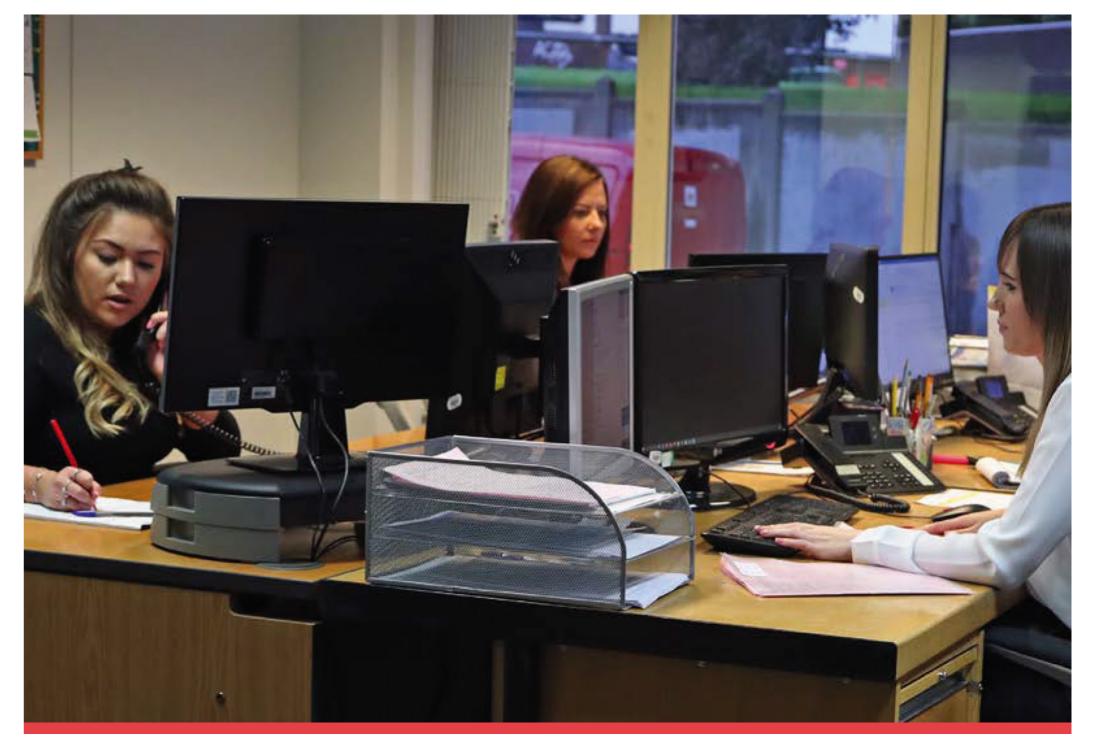
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