



# COMMERCIAL FIRE DOOR SAFETY IN REVIEW

INSIGHT, COMMENTARY, AND SPECIFICATION GUIDANCE  
FOR PROFESSIONALS IN COMMERCIAL BUILDINGS

**Briton**



# THE CURRENT ENVIRONMENT: COMMERCIAL BUILDINGS

Fire safety plays a crucial role in commercial properties, where protecting staff, customers and businesses is essential.

Our Briton experts have extensive experience within this sector, working alongside people like you to maintain the meticulous safety and security standards in commercial buildings. With reliable fire door hardware and trusted specification and installation advice, we aim to protect your non-domestic estates and those who work within them.

We understand that the responsibilities of fire safety and the crucial role of fire doors and fire door hardware remains unclear. Throughout this guide we aim to highlight some of the key fire safety issues and concerns in UK commercial environments and provide answers to how we can tackle them together.

## Goals and guidance.

We recognise the distinct nature of commercial properties, where fire safety is often a topic of debate between building owners and occupiers. However, many of the key challenges and concerns associated with fire safety are common.

This guide is focused on fire safety in commercial settings and our findings emphasise the key challenges and concerns that must be addressed. With this guide, our intention is to provide you with a broader understanding

of fire safety and the guidance and legislation you must adhere to in your commercial estates, before finding the appropriate solutions to the problems you may be facing.

For over 115 years, our goal at Briton has been to provide world class door control solutions to ensure safe and functional building environments. Should you need further information on fire door hardware and its specification, installation and maintenance, you can contact our expert advisors, or simply head to our website [briton.co.uk](http://briton.co.uk).





# RESEARCH FINDINGS: SPEAKING TO YOU

## Why we've conducted research.

Alarming, an investigation from the BWF Fire Door Alliance has revealed almost a third of those responsible for fire door safety do not understand their fire door responsibility under the revised Building Safety Act 2022.

Our experience within the commercial sector tells us a similar story, with a level of ambiguity displayed towards fire safety and the regulations and responsibilities associated with fire doors and their hardware. We believe it important to seek out the opinions that matter - finding real information from real sources, dealing with the reality of live environments.

And so, we set out to speak to a wide range of people within relevant commercial sector roles. During our research period we heard from general managers, head of estates and product experts. We spoke to people through in-depth, qualitative research interviews designed to dig deeper into fire safety within these environments. We then supplemented this information with online questionnaires to a wider sample group, helping us gain a deeper understanding of the complex nature of fire safety in commercial settings.

HERE'S WHAT WE FOUND:

**ALMOST  
40%**

**ARE NOT UP  
TO DATE WITH  
THE LATEST IN  
FIRE SAFETY  
REGULATIONS**

**1<sup>IN</sup> 4**

**IS NOT AWARE  
OF FIRE DOOR  
MAINTENANCE  
PROCEDURES  
AND HOW THIS  
MAY AFFECT A  
FIRE DOOR'S  
PERFORMANCE**

**1<sup>IN</sup> 4**

**DO NOT  
UNDERSTAND  
THE IMPORTANCE  
OF RETROFITTING  
HARDWARE  
PRODUCTS  
CORRECTLY**

**OVER  
10%**

**ARE UNSURE  
WHERE TO  
SEEK SUPPORT  
AND ADVICE  
ON FIRE DOOR  
INSPECTION AND  
MAINTENANCE**

# DIGGING DEEPER: THE IMPORTANCE OF FIRE DOOR SAFETY



WHEN CLOSED, **FIRE  
DOORS FORM A  
BARRIER** TO STOP  
THE SPREAD OF FIRE.



A fire door is an important element of your building's passive fire protection system, designed to compartmentalise and delay the spread of smoke and fire, protecting property and providing occupants with an opportunity to escape.

Certified fire doors are given a fire-resistance rating, which details the length of time the door and its components can withstand smoke and fire – for example a fire door that provides 30 minutes of resistance will be rated FD30. The rating of the door should reflect the environment where it is fitted. It is therefore critical that each, and every person involved in the process of specifying, installing, and maintaining fire doors understands the importance of fire doors so not to compromise fire safety.

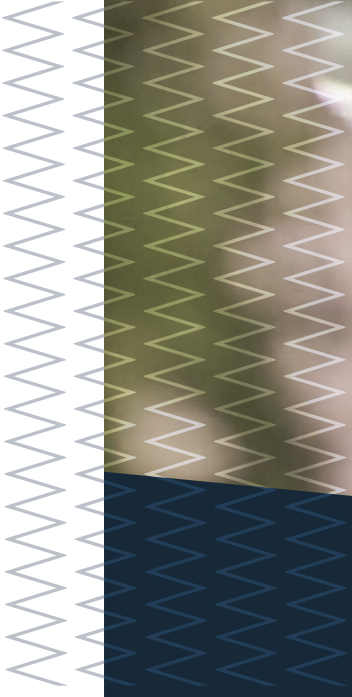
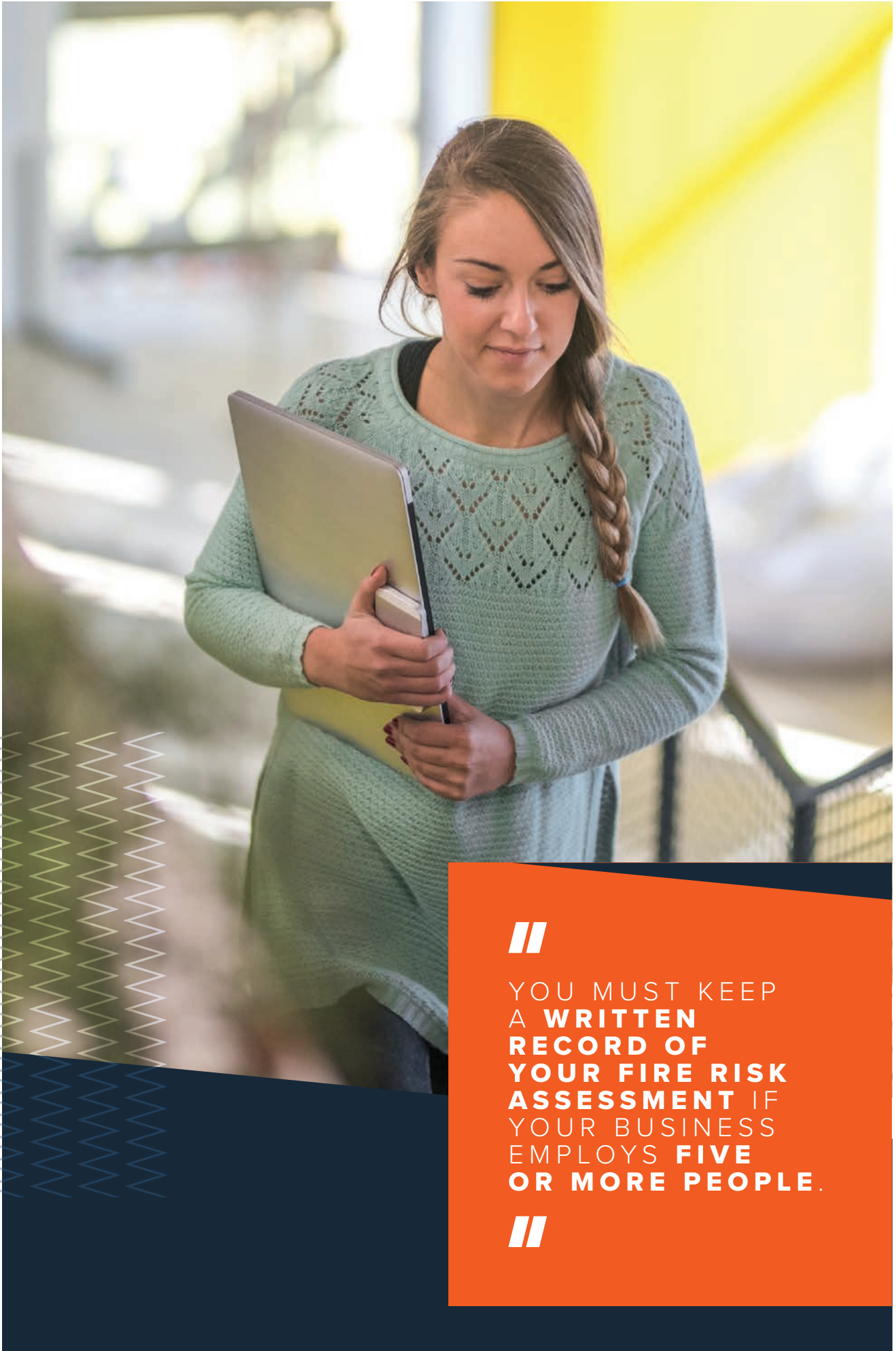
## Types of fire doors:

- 1. Fire Door Keep Shut** - self-closing doors used for the passage of people.
- 2. Fire Door Keep Locked** - doors used occasionally and mainly kept locked, such as cleaning supply cupboards.
- 3. Automatic Fire Door Keep Clear** - doors held open or swing-free, but revert to self-closing when the fire alarm sounds.

## Types of escape doors:

Usually found on the perimeter of the building, exit or escape doors are the last doors you pass through on the escape route to a place of safety.

- 1. Panic Exit Doors** - found in public buildings with 60+ users (without prior knowledge of operation), operated by a panic device that covers 60% of the width of the door. Tested to BS EN 1125.
- 2. Emergency Escape Doors** - found in non-public buildings with less than 60 users (trained and familiar with the escape drill), operated by push pad or lever handle. Tested to BS EN 179.



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YOU MUST KEEP  
A **WRITTEN  
RECORD OF  
YOUR FIRE RISK  
ASSESSMENT** IF  
YOUR BUSINESS  
EMPLOYS **FIVE  
OR MORE PEOPLE.**

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# FIRE SAFETY RESPONSIBILITY

Faulty or misused electrical equipment, kitchen appliances and other flammable materials are the primary cause of fires in commercial buildings.

In England and Wales, The Regulatory Reform (Fire Safety) Order, 2005 is the relevant legislation concerning fire safety in the workplace. The Order states that every commercial premises (property that is used for a non-domestic purpose) is required to elect at least one Responsible Person (RP) for matters associated with fire safety. As part of their obligations, the Responsible Person must possess robust knowledge of fire safety and must conduct regular fire risk assessments. For businesses with more than five employees, these assessments must be fully documented. Depending on the premises, fire safety responsibility may fall with the owner, the landlord, the employer or the occupier.

but will need to co-operate with other Responsible Persons and coordinate fire safety procedures to comply with the requirements of the Fire Safety Order, for example by informing each other of fire safety risks to make sure people on or around the premises are safe. It's vital that staff receive fire safety training on emergency evacuation procedures to prepare them for an emergency and understand the importance of fire doors and their correct usage.

New guidance under the Building Safety Bill, passed in April 2022 applies to commercial properties that stand over 18 metres or 7 storeys tall, all of which must be registered with the Building Safety Regulator by October 2023 if they meet this height threshold, as after this date - failure to do so is a criminal offence.

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THERE ARE APPROXIMATELY **TWENTY TWO THOUSAND FIRES IN COMMERCIAL BUILDINGS IN THE UK** EACH YEAR.

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The Responsible Person must be familiar with The Fire Safety Act 2021 and have an astute understanding of sections one and three of the legislation and update fire risk assessments accordingly.

For non-domestic properties that share premises, there is likely more than one Responsible Person in the building, this could be the landlord, freeholder or managing agent. Each business operating in the commercial building should have its own representative,





# ESSENTIAL HARDWARE

In the event of a fire, your buildings fire doors will not perform as intended unless all essential hardware has been correctly specified, installed and maintained.

## Fire door components:

A fire door is not just the door leaf. It is a complete assembly comprising:

- > The frame
- > Intumescent fire and smoke seals
- > Glazing
- > Signage
- > Door Hardware - such as hinges, door closers, locks and latches



When it comes to door hardware, the Responsible Person should consider the following:

## Hinges:

- > Fire doors must be hung on a minimum of 3 fire certified hinges
- > Hinges must comply to BS EN 1935 and be CE / UKCA marked with a fire identification stamp clearly visible
- > Hinges must be securely held in place with appropriately sized screws
- > Rising butt or spring hinges are NOT permitted for use on fire doors
- > There should be no sign of metal fragments, or oil leakage, these indicators point to worn hinges that will not perform as required and need to be replaced

## Locks and Latches:

- > Locks and latches must be fitted with intumescent protection to maintain the integrity of the fire door
- > Latch should hold the door firmly in place without rattling
- > Latch/deadbolt should engage fully into the strike plate
- > Latch bolts or strike plates with metal dust deposits indicate wear and tear and should be replaced

## Door Closers:

- > **All fire doors, except those to locked cupboards and service ducts should be fitted with a fire door closer**
- > Fire door closers must be capable of closing the door from any angle of opening and strong enough to overcome the resistance of any latch or seal
- > Door closers should close the door in no longer than 20 seconds
- > Door closers must confirm to BS EN 1154 and/or BS EN 1155 and be UKCA / CE marked
- > Fire doors can be fitted with Concealed, Overhead or Floor Mounted door closers
- > Concealed closers are fitted within the door leaf and frame and use a spring to close the door. It must be fitted with the correct intumescent material
- > Overhead door closers are fixed to the face of the door or frame and close the door from a fully open position

- > Floor spring closers are mounted into the floor screed to close the door
- > Electromagnetic fire door closers hold a fire door in the open position with an electrically powered magnet. Linked to the buildings fire alarm system, when the alarm is activated, the door automatically closes
- > Door closers must be free from damage and not leaking oil



IT IS RECOMMENDED  
THAT **ALL ESSENTIAL  
IRONMONGERY  
SHOULD BE TESTED  
BY A THIRD PARTY  
SUCH AS CERTIFIRE**





# RESEARCH FINDINGS: WHAT ELSE WE FOUND

## Fire safety footprints.

In the UK, there are around 22,000 commercial workplace fires each year, that's more than 420 fires each week, highlighting the importance of fire safety for businesses. Fires are among the most devastating accidents that can happen in commercial properties, both in terms of property damage and injuries or fatalities. It is vital that fire safety regulations are adhered to such as regular visual inspections and fire door checks to ensure precautions and preventive measures are in place to keep employees, customers, and clients safe.

Fire doors play a vital role in the fire safety of buildings and are a crucial part of the passive fire protection system of every commercial, public and multiple occupancy building. They are designed to contain fire in one part of the building to limit damage and protect escape routes so everyone can leave the building safely. Fire doors are therefore normally required in all doorways leading to escape routes and required for use on rooms that have a higher risk of a fire starting (for example, IT server rooms, boiler rooms or rooms containing flammable liquids).

The fire doors required in your building will be determined by the fire risk assessment, which indicates where fire doors should be used and what rating they should be. The 'Responsible Person' should ensure an up to date fire risk assessment has been carried out and that any fire doors are inspected correctly and maintained in order to

ensure compliance. Failure to do so can place property and lives at risk and is likely to result in criminal prosecution.

Our research shows fire door hardware is often viewed as an afterthought, incorrectly specified and neglected in application. Despite many recognising some elements of active fire protection such as extinguishers and sprinklers, fire doorsets are too readily fitted and forgotten. Fire doors are a crucial element of passive fire protection and require professional specification, installation and maintenance. A fire door consists of many components (see page 8 for more information), but when it comes to its operation in the event of a fire, a fully functioning door closer is essential, as an open door will not contain fire. As such, door closers must pass a series of standardised tests to confirm certification and reliability. At the product specification stage, the building's responsible person should confirm accreditations.

Careful consideration must go into the specification and installation of fire doors and their hardware. Commercial buildings can range in size, functionality and accessibility preferences, and the responsible person must consider this when approaching fire door safety. Between budgets, time constraints and a lack of subject knowledge, commercial property landlords and business owners often rely on outside expertise for hardware specification and installation. In some cases, a full-service approach works in the building's favour,

with fire safety managed professionally and formally by accredited third parties. As is their responsibility, a designated responsible person must always pay attention to what is happening inside their own building.

We advise responsible persons refer to the Code for Construction Product Information (CCPI), as is outlined in the Building Safety Bill 2022 and the regulatory framework known as the Golden Thread of Information. Our research for example, found that three in four understand the importance of retrofitting products correctly, yet it's a common occurrence for retrofit projects to be approached incorrectly in commercial settings. If fire door hardware is specified incorrectly or a fixing position isn't applied appropriately, a fire door could be rendered useless, putting your building at risk. Where the responsibility remains with you, it's vital to use tried and trusted methods.



WE HAVE A VERY  
**OLD PORTFOLIO  
OF PROPERTIES**  
AND WORK HAS  
NOT BEEN CARRIED  
OUT TO CURRENT  
DAY STANDARDS.



## Fire safety training.

Health and safety is often a top priority for building managers. However, throughout our research period, we found the safety of staff in commercial settings is often compromised from a fire safety perspective, as fire doors are misunderstood and, in some cases, misused.

The Health and Safety Act 1974 is the main piece of legislation that outlines the legal duties that employers have to protect the health, safety and welfare of employees in working environments in the UK. As is outlined in the legislation, employers must maintain the condition of their building and with that, the provision and maintenance of means of access and egress – ensuring they are safe and without risk to those within the premises.

Promisingly, when prompted on emergency fire procedures, most of our research respondents cited the importance of fire alarm tests, evacuation measures and assembly points. Whilst these elements are crucial, respondents were less educated on fire doors and how they play a fundamental role in the evacuation of a commercial premises.

As outlined in the Regulatory Reform (Fire Safety) Order 2005, there should be one or two alternative short escape routes in a building, leading to a final exit door. It's important to note that more than two exits are required if the number of employees, size of building, or arrangement of the workplace will not allow occupants to evacuate safely.

Outside of a building's evacuation procedures, it's clear that fire safety isn't taken as seriously as it should be. In various instances, we find fire doors propped open in commercial spaces, where 'open environments' are encouraged, ventilation is favoured in summer months, and out of hours cleaning teams look to improve their ease of access. Regardless of reason, when fire doors are wedged open, they are deemed obsolete.

As part of the fire risk assessment, the Responsible Person is held accountable for fire safety and must insist staff keep fire doors engaged, and escape routes and emergency exits clear and free from obstruction. Failing to do so could jeopardise the building's evacuation procedure.



**ON OCCASION, FIRE DOORS ARE PROPPED OR WEDGED OPEN TO AID MOVEMENT AROUND THE BUILDING.**



## Out of office, out of mind.

There's a misconception that fire safety stops when you leave a building. Throughout periods of closure, commercial buildings are prone to fire incidents and security breaches and our research has revealed that this sector is frequently compromised when it comes to fire door safety, with approximately a third of respondents telling us they encounter issues with fire doors and hardware within their building.

Door hardware plays an integral role in busy commercial environments, providing access and egress to staff and vis-

itors for long periods of each day. Fire doors continue to function throughout extended holiday periods and nightly closures - protecting your building from incidents such as arson attacks. Whether your commercial estate is occupied, or empty, ageing or damaged hardware may affect the operation of fire doors and must be addressed quickly and professionally.



**WE'VE ENCOUNTERED VERY OLD FIRE DOORS WITH A LACK OF HISTORICAL MAINTENANCE.**







# RETROFITTING IN COMMERCIAL ENVIRONMENTS: HOW TO APPROACH A RETROFIT PROJECT

In bustling commercial settings, where fire doors may be operated 100's to 1000's of times each working day, door hardware can become aged and damaged, risking the integrity of the building's fire safety.



**Karen Trigg Dip GAI**  
Business Development Manager,  
South East and specialist on door  
hardware specification.

Approached professionally, a retrofit project can make a considerable difference to a building's operation, but only when completed with high quality, like for like alternatives.

Retrofitting with a sub-standard door hardware component may result in:

- > A fire door not performing as intended or as it did when it was originally fire tested;
- > A breach of Regulatory Reform (Fire Safety) Order; and/or
- > A rise in additional costs - associated with replacing the upgraded component that performs worse than the original hardware.

## Here's how we recommend approaching a retrofit project:

**1. Identify the problem:** Understand why your hardware needs replacing. Is it damaged? Or perhaps unsuitable in its setting? Your replacement hardware needs to act as a solution, so it's key to recognise the problem and how your replacement hardware will solve it.

**2. Professional specification:** When it comes to selecting new hardware, your decisions must be well informed. Recognise the weight of your choices and ensure your selected replacement is of high quality, durable and suitable for application.

**3. Precise installation:** In accordance with standards, your new product must be fitted to the manufacturer's instructions and not just the existing fixing positions. For example, fitting to the same plane as the closing device will prevent the door leaf from warping.

**4. Follow the Golden Thread:** Throughout your project, refer to the Code for Construction Product Information (CCPI) for clear, accurate and up-to-date product information. Your selected door hardware must conform to UKCA and CE certifications and the associated declaration of Performance (DOPs) to show the product conforms to the correct standards.

*If you have any doubt or are uncertain about retrofitting, speak to one of our experts for assistance.*



**ONE IN FOUR OF OUR COMMERCIAL RESPONDENTS DID NOT UNDERSTAND THE IMPORTANCE OF RETROFITTING HARDWARE PRODUCTS CORRECTLY.**



# HOW TO SELECT THE RIGHT DOOR CLOSER



## 1. Establish whether your door is a **fire** or **non-fire** door

For fire doors, it's required that the door closer is fire tested to EN 1634, and UKCA & CE marked to EN 1154 for mechanical variants and EN 1155 for electromagnetic hold-open variants. It's also key to ensure you are making your selection based on the needs of your application.

If the door is a non-fire door, any closer can be selected. However, it's important to ensure the operation of the door is controlled, as this will prevent future damage to the door and frame. If the door is slamming, make sure the door and frame are installed correctly as door closers will not overcome a poor door installation.



## 2. Look for the **fire rating**

This is a vital step in the process. If you're installing a unit on a fire-rated door the closer must also be fire-rated. Look for a door closer that's UKCA & CE marked. This shows the product is fit for purpose and meets all of the legal fire safety requirements.



## 3. Determine the **size of door closer** that you need based on the **height and weight of the door**

Unusually high and heavy doors, or doors located in windy or draughty environments will require a closer with a higher power size in accordance with EN 1154. If you're unsure about sizing, it's best to choose a unit that can be adjusted during installation. It's also key to remember that fire doors must have a minimum Power Size EN 3 to conform to EN 1154 standard.



## 4. Decide whether you need a **surface-mounted** or **concealed** unit

Surface mounted closers are the most durable and common type of door closer. Mounted to the surface of the door or frame, they are simple and easy to install. Concealed door closers on the other hand, provide the functionality of a surface mounted closer, but are fitted within the door leaf and frame, and hidden from view enhancing aesthetics.



## 5. Review the **mounting** requirements

Door closers can be mounted in different ways depending on the applications for which they are being used. The 4 most common ways in which to fit a door closer are:

- Figure 1 Regular fixing (where the closer body is mounted on the pull face of the door).
- Figure 61 Transom mount push side (where the closer body is mounted on the push side of the door).
- Figure 66 Parallel mount push side (where the closer body is mounted on the push side of the door).
- Slide track fixing (where the closer with slide arm and track is door on the pull or push side of the door).



## 6. Evaluate whether **backcheck** is needed

Door closers with adjustable backcheck control the speed of the door slowing it down prior to making contact with a door stop or the fully opening position. Essentially, the function prevents or minimises damage to the door, hardware and adjacent walls caused by the door being flung open or caught by a gust of wind. Always check the Declaration of Performance (DoPs) and certification to make sure the closer has passed UKCA & CE standard EN1154.



## 7. Decide whether your closer should have **delayed action**

A delayed action closer offers a period of delay (which can be set for a maximum of 25 seconds) from when the door is opened to when it begins to close. This makes them ideal for environments that require easy passage, such as doors used by children, the elderly or wheelchair users.

Again, always check the DOPs to make sure that they have passed UKCA & CE Standard EN 1154 or EN 1155 for electromagnetic hold-open variants.



## 8. Compare **finish** options

Look for a closer that matches or complements the rest of your hardware. By matching your hardware selections you can add to the visual aesthetics of the room and the building.

For further support on selecting or installing Briton door closers email: [technicalsupportuk@allegion.com](mailto:technicalsupportuk@allegion.com)

# 4 THINGS TO CHECK FOR FIRE DOOR CLOSERS

1



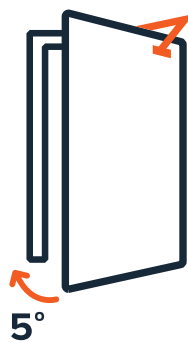
## Certification

It is recommended that a minimum **power size 3** door closer is used on a fire door and the closer is **UKCA / CE marked and fire rated**.

Remove the cover or slide the trimplate to check for the UKCA / CE logo and EN 1154 classification code marking.

Make sure the closer has been tested and UKCA / CE marked in the position it is fitted (ALWAYS refer to manufacturer instructions).

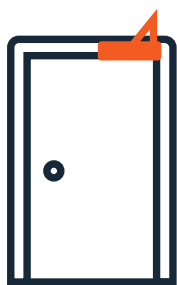
2



## Operation

Release the door from the fully open position and ensure the door closes correctly into the frame.

3

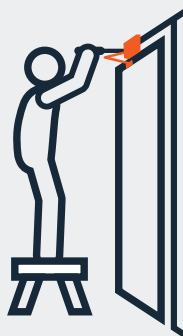


## Latching

Open the door to 5 degrees or 75mm (3 inches). Check that the closer **shuts the door onto the latch**.

If necessary:  
- check closing and latching speeds are correctly set.

4



## Maintenance

Door closers should be checked weekly and adjustments made where necessary.

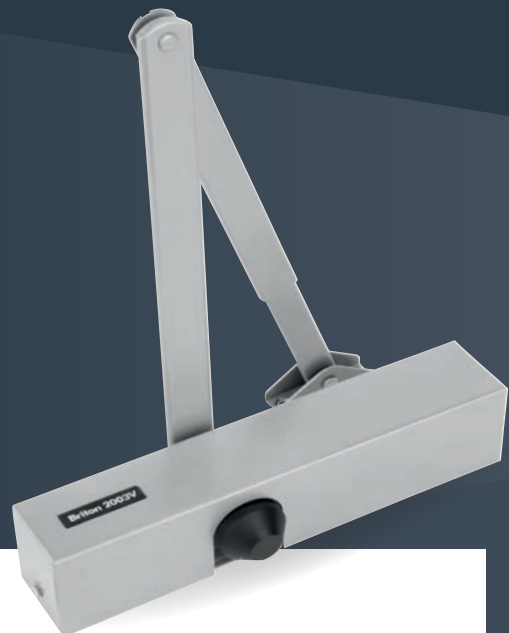
Still in doubt, or in need of replacement hardware?

Call us on 0330 8080 617



# ARE YOUR FIRE DOORS SAFE

THESE **SIMPLE CHECKS** COULD SAVE LIVES



## 1 Door Furniture

- Is the door handle loose or missing?
- Are all screws present and tight?
- Does the handle operate smoothly and freely return to horizontal position?
- If on an escape route does the door open in the direction of travel and without the use of a key?

## 2 Hinges

- Are there a minimum of 3 hinges with all the screws fitted securely?
- Are the hinges free of metal fragments and oil leakage which could be signs of wear?
- Are the hinges marked with a UKCA / CE stamp or BS EN 1935?

Note! Make a note of any fire door that is only hung on two hinges.

## 3 Locks and Latches

- Is the door furniture firmly fixed and working correctly?
- Does the latch hold the door firmly in place without rattling?
- Does the latch/deadbolt engage fully into the strike plate?
- Are there any metal dust deposits on the latch bolt or strike plate?

## 4 Door Closers

- Does the door fully close and shut tight by use of its own self closing device?
- Open the door to 5° or 75mm. Does it close and engage the latch?
- Is the closer correctly fitted to the door and frame?
- Is the closer free from damage and not leaking oil?
- If unlatched, does the closer hold the door in line with the frame and intumescent seal?

## 5 Hold Open Devices

- Is the electromagnetic hold open device operating correctly and releasing the door when the fire alarm is activated?
- Make sure that door hold open devices is not straining the door against its self closing device.

## 6 Signage

- Are 'Fire Door Keep Shut' (or Closed) signs fitted to both sides of the door?
- Are 'Automatic Fire Door Keep Clear' signs fitted to all fire doors with hold open devices linked to the fire alarm system?
- Are 'Fire Door Keep Locked' signs fitted to doors without self-closing devices such as cleaner's cupboards, store rooms and service ducts?

## 7 Exit Devices

- Is the panic or emergency exit device functioning correctly?
- Are all exits free from ties or restrictions of escape?
- Are the fixings of the operating device, bolts and strikes tight?

## 8 Door Seals

- Are the intumescent and/or smoke seals in good condition, intact and undamaged?
- Are the seals continuous around the frame or door leaf?
- Are the seals well attached inside the groove in the frame or door leaf?

**Still in doubt, or in need of  
replacement hardware?**

**Call us on 0330 8080 617**

# A FOCUS ON FIRE SAFETY EDUCATION

FIRE DOOR SAFETY – TIME TO BRIDGE THE GAP.

Fire safety doesn't happen by accident, it requires universal attention. Karen Trigg of Allegion UK explores why the importance of working fire doors is often overlooked and why now is an opportune time to bridge the gap between fire safety education and action.



**Karen Trigg Dip GAI**  
Business Development Manager,  
South East and specialist on door  
hardware specification.

Improving fire safety within UK buildings is a challenge we are all continuously facing. Irrelevant of sector, it's of the highest importance for any building type - from commercial office estates to industrial facilities. Because when it comes to fire, there are no exemptions.

Most of us are only made aware of the danger of fire from headline disasters and yet, in the year ending March 2022, fire response teams attended 152,608 fires in the UK, of which the average total response time to primary fires in England was 8 minutes and 50 seconds.

Fire doors play a fundamental role in these scenarios and are carefully constructed and rigorously tested to British Standards BS 476: Part 22 or BS EN 1634-1 to ensure they remain fire resistant for a minimum of 30 minutes (FD30) or 60 minutes (FD60) – holding out long enough to cover response times and evacuation.

Fire door safety is an area that should never be neglected. Often, fire doors are the first line of defense in protecting people and property in the event of a fire - but only when installed and

maintained appropriately. Yet, as incident reports repeatedly highlight, the significance of working fire doors remains habitually overlooked.

The latest in reformed guidelines hope to address this, with the introduction of the Fire Safety Act 2021 and the Building Safety Bill highlighting the diligent detail in which all responsible parties must approach the subject.

## Missing knowledge.

Fire doors fall under what's described as a building's passive fire protection system. At their most basic and when closed, they form a barrier and enable a building to compartmentalise the spread of fire and smoke. When open, they provide an essential means of escape. Yet there's nothing rudimentary about fire door safety.

However, danger commonly lies where fire door safety is misunderstood. Especially when you consider that for local authorities, a staggering 65% of 26,318 planned fire door maintenance and replacement phases did not



progress as scheduled in 2020 – leaving doors neglected and buildings vulnerable. And while some may dispute that 2020 fell to extenuating circumstances, there's no argument that fire door safety has become too easy to neglect.

### Closing the gap.

Evidently, the gap in fire door safety expertise is resulting in poor design choices, faltering standards and general lack of knowledge. While it's clear that expertise is lacking across various touchpoints - think product selection, installation and maintenance - there is momentum to incite real change and the resources to improve awareness and education.

In response, and leading by example, is the Architects Registration Board (ARB) which has published guidance to suggest fire safety is taught under architecture curriculum at universities.

And while this shows positive steps are being made, the onus can't solely be passed to the next generation of architectural professionals. All professional areas must commit and, in an age where information is almost instantaneous, there are several methods to gain a greater understanding of fire door safety – and all from trusted sources.

The British Woodworking Federation Group shares regular advice and useful toolkits on fire door safety; including a five-step checklist that's designed to support building owners in assessing their own fire doors (via certification, apertures, gaps and seals, closers and operation). Information pools like this provide modern building managers with

the know-how they need to monitor and act - making the decision to repair or replace fire doors where necessary.

For those actively involved in the maintenance stage, further guidance on topics such as certification and door closer adjustments is available online and by manufacturer request – showing fire door safety doesn't need to be tackled alone.

When it comes to product selection and installation, there's also a wealth of information and walkthroughs available in the form of detailed product datasheets and installation guides. These can often be found online and allow for a greater understanding on the hardware that's available, leading to better design decisions and more reliable installation. Aside from product manuals, installers and contractors are commonly offered specialist site visits, training portals and even hardware classification guides in a bid to assist with projects post-installation. With this, professionals can ensure that their standards don't slip after time passes, by understanding more about the rounded process that fire door safety is and being ready for maintenance periods when they approach. Today's associations, professional bodies and manufacturers are on hand more than ever to assist specifiers, installers and end users throughout the process that is fire door safety. The support is there, and the resources are readily available and so, there's now a real opportunity to improve fire safety awareness and education for the better.





# SPECIFICATION GUIDANCE FOR COMMERCIAL BUILDINGS

## THE KEY TO SAFE **DOOR CLOSER** SELECTION

Commercial buildings are diverse in nature and with that, a certain flexibility is needed when it comes to your choice of door hardware.

Between commercial hours, fire doors and their hardware promote accessibility and protect occupants as they traverse the building, and out of hours, they continue to keep buildings fire safe and secure.

**Door closers are essential safety measures for commercial and public buildings. Where doors are used 100's of times a day, durability and reliable is key.** A door closer with backcheck provides a cushioning effect, when fire doors are flung open, slowing the door down to prevent damage to the door or injury to persons standing behind it.

For this, we recommend:



### **BRITON 2003V**

Spring adjustable overhead closer

- > Adjustable power size EN 2-4
- > Tested and certified to EN 1154 & EN 1634
- > Certified for Regular, Transom and Parallel arm door applications
- > Adjustable soft closing speed and latch action
- > CE & UKCA marked with backcheck in all applications
- > Self-adhesive Accufit fitting template
- > Suitable for doors up to 1100mm and 80kg

**In commercial settings, heavy-duty door closers are recommended for larger, heavier fire doors to make sure the door can close securely each time it is used.**

For this, we recommend:



### **BRITON 1120B**

Spring adjustable overhead closer

- > Adjustable power size EN 2-4
- > Tested and certified to EN 1154 & EN 1634
- > Certified for Regular, Transom and Parallel arm door applications
- > Adjustable soft closing speed and latch action
- > CE & UKCA marked with backcheck in all applications
- > Suitable for doors up to 1100mm and 80kg



### **BRITON 1130B**

Spring adjustable overhead closer

- > Adjustable power size EN 2-6
- > Tested and certified to EN 1154 & EN 1634
- > Certified for Regular and Parallel arm door applications
- > Adjustable soft closing speed and quiet action
- > CE & UKCA marked with backcheck in door mount pull and parallel arm applications
- > Suitable for door up to 1400mm to 120kg



**For commercial facilities** looking to foster an open environment, holding doors open allows restriction-free movement through corridors and helps to prevent fire doors getting damaged. An electromechanical hold open closer is designed to keep fire doors open in a safe manner and linked to the building's fire alarm system, in the event of a fire, the power is cut, the closer firmly shuts the door into its frame.

For this, we recommend:

## BRITON 996

Fixed hold-open & free-swing closer



- > Fixed power size EN 3, EN 4 and EN 5
- > Tested and certified to EN 1154, EN 1155 & EN 1634
- > Satisfies the requirements of Approved Document M
- > Designed for use on low voltage circuits 24v DC linked to a fire alarm
- > Certified for Regular, Transom and Parallel arm door applications
- > Adjustable closing speed & latch action
- > Suitable for use on fire & smoke doors up to 1250mm wide and 100kg



## Door size chart - EN 1154

**It's important to select the right door closer for your application.** For fire door usage refer to Certifire certificates for details.

EN Closer Size	Recommended Door Sizes	
	Maximum Door Width	Maximum Door Weight
1	750mm	20kg
2	850mm	40kg
3	950mm	60kg
4	1100mm	80kg
5	1250mm	100kg
6	1400mm	120kg
7	1600mm	160kg

**IMPORTANT:** For fire door applications, power size 3 is a minimum requirement.

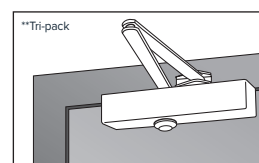
UKCA Marked to EN 1154 & EN 1155.	CE Marked to EN 1154 & EN 1155.
Certifire approved.	Capable of meeting BS8300 approved Document M requirements.
Fire tested to EN 1164 to achieve a rating on timber and metal doors.	Tested to ISO 14025 and EN 15804 environmental product declarations.

## Fixing Applications Guide

Most Briton door closers are supplied Tri-pack with the necessary brackets and fixings to enable them to be fitted in any of the applications below.

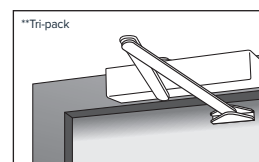
### Figure 1 Regular fixing\*\*

Closers are door mounted on the pull or opening face of the door.



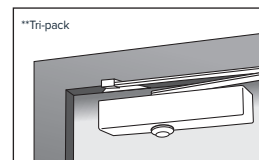
### Figure 61 Transom mount push\*\*

Closers are transom mounted on the push or closing face of the door.



### Figure 66 Parallel fixing application\*\*

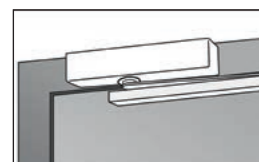
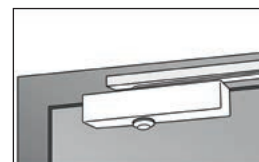
Closers are mounted on the push or closing face of the door.



### Slide Track Fixing

Closers with slide arm and track can be door or transom mounted on the pull or push side of the door.

Tracks can be mounted on the face or underside of the transom when mounted on the push side of the door.



**When it comes to commercial facilities, budgets can sometimes feel all all-encompassing.** If your budget is tight, consider opting for a cheaper finish on your door hardware. A silver finish is more cost effective than stainless and the quality of your closer is not compromised. For any fire rated rebated double doorsets, you will also require a door co-ordinator.

# SPECIFICATION GUIDANCE FOR COMMERCIAL BUILDINGS

THE KEY TO SAFE **EXIT DEVICE** SELECTION

Selecting the right exit hardware for your building can be a challenge. In commercial environments, where the size of the building and its workforce may vary, it's important to be aware of the different certification requirements for exit hardware.

Panic hardware is designed to provide safe and effective escape through doorways with minimum effort and is used in facilities where building users may not be familiar with exit routes.

**Panic bars, covering at least 60% of the overall door width and certified to EN 1125**, are very effective in commercial establishments where large numbers of people are attempting to travel at speed through a fire exit.

For this, we recommend:

## BRITON 377

Push bar panic exit device



- > Suitable for use on fire & smoke doors 1330mm to 2600mm wide and up to 2500mm high
- > Comprises of Briton 376 vertical panic bolt, 378 reversible rim panic latch and 378DDS double door strike in one convenient pack
- > Three-point locking for extra security
- > Anti-thrust device, prevents forced latch retraction
- > Adjustable top & bottom shoots



For this, we recommend:

## BRITON 378

Push bar rim panic latch



- > Suitable for use on fire & smoke doors 665mm to 1300mm wide and up to 2500mm high
- > One point locking for security
- > Rim panic latch with single point locking
- > Suitable for single doors and double rebated doors when used in combination with Briton 376 panic bolt and 378DDS double door strike



In spaces where opening width is limited, a non-intrusive touch bar can be practical. Its application is ideal for sports halls where minimal protrusion is required to prevent injury to anyone who is using the sports facility.

For this, we recommend:

## BRITON 570

Touch bar panic exit latch











- > For single and double non rebated doors
- > Suitable for use on fire & smoke doors up to 1300mm wide (minimum clear opening width down to 500mm – can be reduced to 350mm where side latches are not required)
- > Non handed for maximum flexibility
- > Grip on touch bar to allow the door to be pulled closed
- > Push bar and shoots can be cut on-site to suit door width and height



In commercial environments, you may also wish to gain access from the outside of any panic escape door.

Outside access devices can be installed with Briton panic hardware, with cylinders suitable for any existing system within the building.

 Located in a PUBLIC AREA - Certified to EN 1125.	 Located in a NON PUBLIC AREA - Certified to EN 179.
 UKCA Marked to relevant BS EN Standards.	 CE Marked to relevant EN Standards.
 Certifire Approved.	 Fire tested to EN 1634 to achieve a rating on timber and metal doors.
 Tested to ISO 14025 and EN 15804 environmental product declarations.	 Level of security (1-3) 1, 2 or 3 point locking.



## Need Access from Outside?

For single and double doors (fitted to the first opening leaf)

- > Lever or knob operated version.
- > Supplied with 40mm euro profile cylinder as standard (available masterkeyed or keyed alike).
- > Self-handed or site reversible.



1413.LE



1413.KE



# OUR EXPERTISE

Since 1907, Briton has been synonymous with trusted door control performance, delivering unrivalled consistency and convenience to customers.

Over a century later, Briton continues to provide safe and functional building environments, offering customers true peace of mind with highly durable, highly engineered solutions, each designed to endure constant use in demanding settings.

Today, Briton is proudly evolving, building upon its trusted heritage, with a group of trained experts who are skilled in guiding you to the most appropriate hardware solutions for the education sector, considering performance, certification, aesthetics and budget.

Through innovation, our solutions continue to expand on the brand's core principles of trust, performance and convenience – providing lasting quality and reliability where it truly matters.

Briton has a wealth of resources to help professionals undertake product selection, installation and maintenance checks on fire doors and their hardware. For further guidance on product selection and installation, please speak to our trusted advisors by calling **0800 834102**, emailing [technicalsupportuk@allegion.com](mailto:technicalsupportuk@allegion.com) or visiting [briton.co.uk](http://briton.co.uk).



## About Allegion

Allegion (NYSE: ALLE) is a global pioneer in seamless access, with leading brands like CISA®, Interflex®, LCN®, Schlage®, SimonsVoss® and Von Duprin®. Focusing on security around the door and adjacent areas, Allegion secures people and assets with a range of solutions for homes, businesses, schools and institutions.

For more, visit [www.allegion.com](http://www.allegion.com)

AXA ■ Brio ■ Briton ■  CISA ■ LCN ■  SCHLAGE ■ VON DUPRIN

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