

HEALTHCARE FIRE DOOR SAFETY IN REVIEW

INSIGHT, COMMENTARY, AND SPECIFICATION GUIDANCE FOR PROFESSIONALS IN THE HEALTHCARE SECTOR

Briton



THE CURRENT ENVIRONMENT: HEALTHCARE BUILDINGS

Fire safety plays a critical role in healthcare settings, where protecting staff, visitors and potentially vulnerable patients is a continuous effort.

75% OF FIRE DOORS INSPECTED
BY THE FDIS IN
2021 FAILED TO
MEET THE REQUIRED
STANDARDS.

Our Briton experts have extensive experience within this sector, working alongside people like you to maintain and enhance fire safety and security in healthcare. With reliable fire door hardware and trusted specification advice and installation support, we aim to protect your buildings and those who reside within.

We understand the demanding nature of healthcare environments and that those responsible for fire doors encounter a daily conflict between functionality and fire safety. Throughout this guide we aim to highlight the core fire safety issues and concerns in UK healthcare settings and provide answers to how we can tackle them together.

Goals and guidance.

We recognise there is no 'one size fits all' solution when it comes to fire safety in healthcare. From multi-level hospital buildings to private dentist surgeries, healthcare facilities are inherently intricate and diverse and pose incredibly complex safety challenges for decision makers. However, when it comes to fire safety, many of the key challenges and concerns are common.

This guide acts as a dedicated review of fire safety in healthcare and our findings highlight the key issues you contend with. With this guide, we hope to provide you with a broader understanding of fire safety and the guidance and legislation you must adhere to, 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.



RESEARCH FINDINGS: SPEAKING TO YOU

Why we've conducted research.

Alarmingly, 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 healthcare sector tells us a similar story, with many showing uncertainty towards fire safety and the 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 operating in live healthcare environments.

And so, we set out to speak to a wide range of people within relevant healthcare roles. During our research we heard from care workers, building managers 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 that were distributed to a wider sample group, helping us attain a wider understanding of the complex nature of fire safety in healthcare.



DIGGING DEEPER:

THE IMPORTANCE OF FIRE DOOR SAFETY



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.

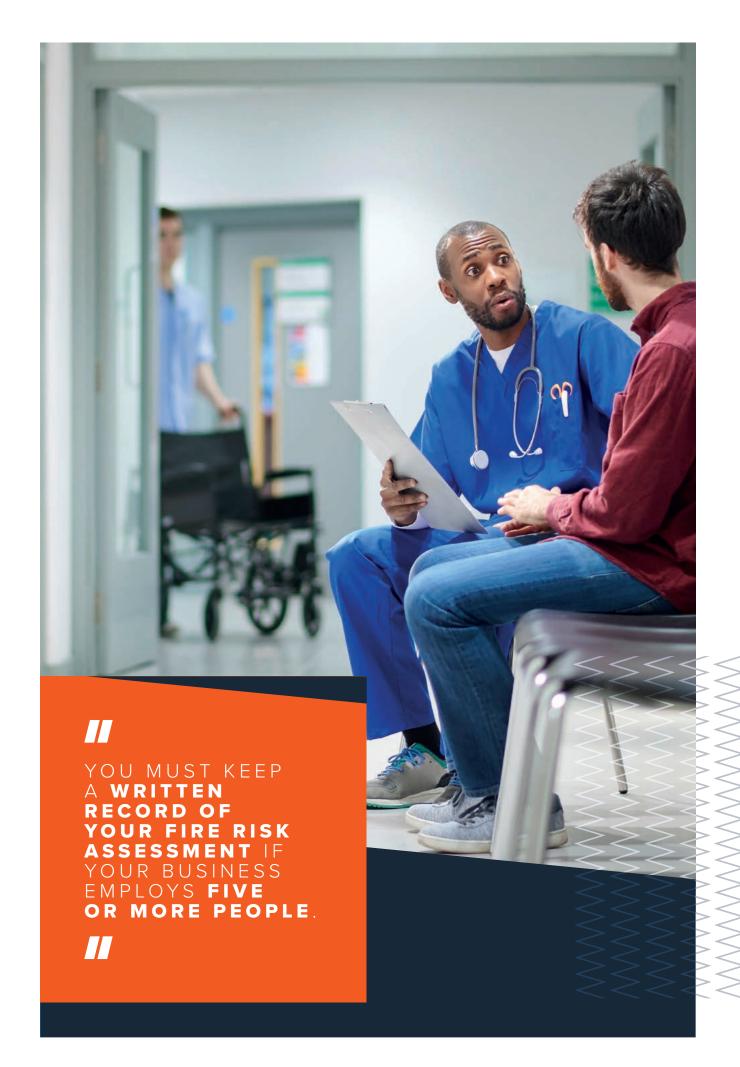
Types of fire doors:

- **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.



FIRE SAFETY RESPONSIBILITY

Fire is unpredictable and, in most cases, preventable. Good management of fire safety is essential to ensure that fires are unlikely to occur and if they do, necessary measures are in place to control and contain the fire quickly and effectively to allow everyone to escape safely.

Under The Regulatory Reform (Fire Safety) Order 2005, healthcare management have a responsibility to address fire safety within their building, ensuring staff, patients and visitors are safe. A Responsible Person (RP) must be elected for matters associated with fire safety, which include regular risk assessments. In some larger hospital institutions, you may find a dedicated facilities management department or healthcare/estates officier shares this responsibility.

ELECTRICAL
EQUIPMENT, KITCHEN
FACILITIES AND
SMOKING ARE THE
MOST COMMON
FIRE HAZARDS IN
HEALTHCARE.

In England and Wales, the Responsible Person must have a robust knowledge of fire safety and be familiar with The Fire Safety Act 2021. In particular sections one and three of the legislation, and should update fire risk assessments accordingly.

Section 1 of The Fire Safety Act amends article 6 of the Regulatory Reform (Fire Safety) Order Act 2005, and clarifies that should a building contain two or more sets of domestic premises, the RP must also take account of structure, external walls and flat entrances as part of the fire risk assessment.

Whereas, section 3 of the Fire Safety Act makes clear that if a RP has followed the article 50 commencement guidance, then they may be able to use evidence of this compliance to demonstrate that they have met their obligations under the Fire Safety Order.

For healthcare environments, the Building Safety Bill passed in April 2022, introduces a strengthened regulatory regime to improve safety, accountability and risk-management. Whilst focusing primarily on "higher risk" residential buildings that stand at least 18 metres in height or have at least 7 storeys; and contain at least two residential units. All hospitals and care homes meeting this height threshold must be registered with the Building Safety Regulator by October 2023 - after this date failure to do so will be a criminal offence.



EMERGENCY
EVACUATION PLANS
MUST BE UP-TO-DATE
AND APPROPRIATELY
PERSONALISED FOR
VULNERABLE PEOPLE.





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
- > 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

Keeping up with fire door safety.

Across the UK, there are over 1,200 NHS and private hospitals and over 17,000 care homes that house approximately 140,000 residents. Each is legally bound under British and European legislation to have fully functional fire doorsets – a fundamental element of a building's passive fire safety strategy.

Passive fire protection is an integral and important component of fire protection and fire safety in buildings. Effective fire compartmentation is required to preserve life and protect buildings, their contents and other assets, often paramount in healthcare premises due to the dependent nature of occupants and the importance of its activities.

Fire doors are a critical element of passive fire safety protection - alongside alarm systems and extinguishers – yet our research shows that they are often wrongly viewed as an afterthought, incorrectly specified or misused in application. Providing a barrier to prevent or delay the spread of fire and smoke, fire doors help maximise the time available for egress, to allow occupants to evacuate to a place of safety. The consequences of fire in hospital or other healthcare premises can be especially serious because of difficulties and dangers associated with the emergency evacuation of patients, many of whom may be dependent or have mobility impairment. It is therefore vital that fire doors are correctly specified, installed and regularly maintained.

A fire door consists of many components (see page 8), but when it comes to its operation, a fully functioning door closer is essential, as an open door will not contain fire. As such, a door closer must pass a series of standardised tests to confirm its certification and reliability. The building's responsible person should always verify accreditations at the product specification stage.

Healthcare estates are both large and varied, and so it's important that the Responsible person understands and considers the needs of the building's users when addressing fire door safety as well as time and budget constraints. Incorrect specification is lowering the fire safety standards in healthcare buildings so it's important to approach product specification on a case-bycase basis, seeking professional advice when required, and ensuring all occupants are accommodated in the process.

In smaller medical practice buildings, there is less footfall and fewer fire doors to install and maintain. Comparatively, larger hospital establishments may approach specification and installation differently to meet the needs of their busy entrances, lobbies and corridors. For high-use areas such as these, the use of electromagnetic hold-open devices that allow fire doors to shut once a fire alarm is activated is recommended. Linked to the building's fire detection system, an electromagnetic door closer will

automatically release the door in a safe and controlled manner allowing it to firmly shut the door into the frame. Cam -action closers with slide arms on the other hand are designed to require minimum effort when opening and closing, easing operation for users, whilst aiding the flow of traffic.





THE NHS IS STRUGGLING, AND EVERYTHING IS FALLING BEHIND UNDERSTANDABLY.



Managing patient care.

Patient safety is the number one priority for healthcare. Yet, our research has revealed that safety is often compromised from a fire safety perspective, with fire doors misused and abused and, in some cases, no longer fit for purpose.

In buildings with high footfall, it is not uncommon to find self-closing fire doors which have been restricted from closing by use of a door wedge or heavy object. In doing so the function of the fire door is compromised and therefore the fire safety protection afforded also compromised, putting the safety of staff, patients and visitors at risk.

Such actions not only demonstrate poor fire safety management but could potentially lead to action taken by the enforcing authority (normal the local Fire Authority). The more foot traffic which passes through these doors, the more likely they are to be wedged open for ease of operation.

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 the fire exit regulations recommend that there are at least two escape routes in a building, that are completely independent of each other, as this will ensure there is always a route that occupants can take to evacuate the building safely.

Throughout designated escape routes, fire exit signage is vital as it indicates the guickest route out of the building during a fire. The importance of fire door signage should also not be understated. 'Fire Door Keep Shut' signs must be fitted to both sides of fire doors to ensure they are kept shut. When fire doors are left open, if a fire breaks out, they will not prevent the spread of smoke and fire and the safety of patients, staff and visitors becomes compromised. 'Fire exit keep clear' and 'fire door keep locked' signs are also mandatory where applicable, and 'automatic fire door keep clear' signs are required if a fire exit door opens automatically.

Final exit doors are often fitted with panic exit devices, designed to provide safe and effective escape through the doorway with minimum effort, and without prior knowledge of its operation. As part of the fire risk assessment, the responsible person is accountable for fire door safety and must ensure fire doors remain operational, hardware components intact and escape routes and emergency exits are kept clear and without obstruction, as failing to do so could jeopardise a quick escape.



THE HEAVINESS OF FIRE DOORS CAN BE A PROBLEM FOR OUR WEAKER PATIENTS IF THE DOOR IS BROKEN OR NOT AUTOMATED.



Damage and maintenance.

Fire doors are just like any other door and often treated as such. Used 100's to 1000's of times each day, doors in healthcare settings are subject to high levels of traffic and, as a result, higher levels of misuse and abuse.

Daily use can lead to deterioration, wear and damage to fittings or door elements such as the seals, frame and edges, all of which are a vital part of any fire door to prevent the passage of fire and smoke.

Our research found three-quarters of respondents have encountered issues with fire doors in their buildings, with wear and tear being a common feature. Responsible persons should be aware of the grade of their chosen hardware, where higher quality products can add various benefits to their building in terms of functionality, reliability and costs. Furthermore, by

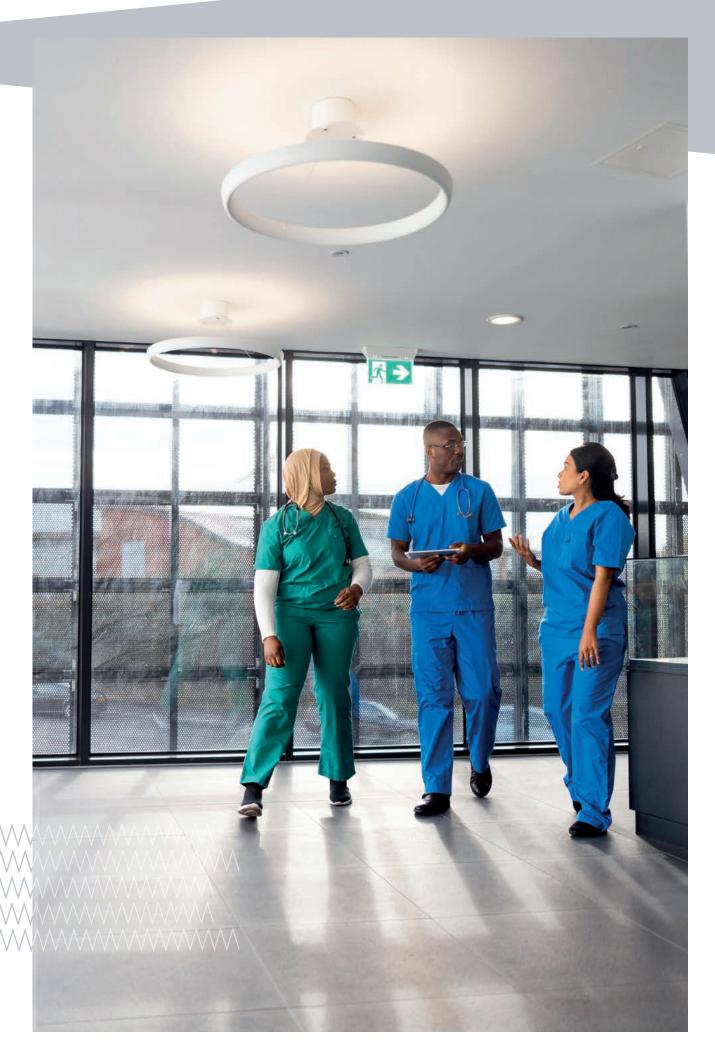
regularly assessing and recording the risks, you can take the appropriate steps to reduce or remove them. As part of regular fire risk assessments, fire doors should be routinely checked to ensure they continue to function correctly. See our simple, eight-step checklist on page 15 for guidance.

In healthcare environments, door hardware is often sourced based on cost rather than quality, and this can lead to ongoing maintenance and performance issues. With many people moving throughout the building 24 hours a day, poor quality or incorrectly specified door hardware can be prone to damage and abuse. Doors found in hospital corridors in particular are put to the test in emergencies as occupants aim to pass through the corridors quickly. In doing so, doors are often flung open without care causing damage to both the door, its hardware

and surrounding walls and frames. Hinges can become lose, overhead door closers can be damaged and doors can be broken. In this situation, when a door is opened quickly, a door closer with backcheck control will slow the door down prior to making contact with a door stop or the fully opened position to prevent or minimise damage.

Hospital corridors can also benefit from electromagnetic hold-open devices, or by combining wall magnets and existing door closers to aid ease of access, reduce unnecessary roughness and safeguard operation in a fire emergency.

Concealed closers offer aesthetic benefits and are particularly suitable for mental or behavioural health hospitals as they eliminate the possibility of patients injuring themselves on them.



RETROFITTING IN HEALTHCARE ENVIRONMENTS: HOW TO APPROACH A RETROFIT PROJECT

Hospitals and healthcare facilities are busy environments and over time door hardware can become broken or damaged andmay risk the integrity of the building's fire safety.

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

Replacing door hardware with unsuitable, low-cost, low-quality substitutes can further risk the integrity of your building's fire doors and the safety of occupants within.

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.



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

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 BS EN 1154, 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.



50% OF OUR HEALTHCARE RESPONDENTS STATE SUSTAINABILITY AND PRODUCT TRACEABILITY IS IMPORTANT TO THEM AND THEIR BUILDING.



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 surfacemounted 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

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



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?

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.

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?

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?

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.

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?

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?

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

APPROACHING FIRE DOOR SAFETY IN HEALTHCARE SETTINGS

Karen Trigg of
Allegion UK, provides
comment on the key
considerations for Fire
Doors and Doorsets
in healthcare facilities,
exploring the prominent
issues and challenges
facing fire safety within
healthcare.



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

Under the Regulatory Reform (Fire Safety) Order 2005, healthcare and hospital facilities have a responsibility to ensure staff and patients are safe within their premises. Fire safety falls under this remit, and so healthcare facilities are required to designate a 'responsible person', who has a legal responsibility to demonstrate effective fire safety procedures, undertake risk assessments and meet fire safety compliance.

Healthcare facilities pose incredibly complex safety challenges and fire doors can become subject to unforgiving environments (with high footfall and fast flowing foot traffic), and so regular door inspections are critical. A survey conducted by the Fire Door Inspection Scheme (FDIS) found that 75% of fire doors inspected in 2021 did not meet the required standard – of which healthcare and hospitals were of the top three sectors identified with plethora of fire door issues.

A key concern currently facing healthcare facilities is a lack of education and understanding towards the importance of fire doors and what they do. Fire doors are installed to protect lives and property by compartmentalising fire and smoke for a period of time, this allows for people to leave the building via an escape route if other routes are impacted by the effects of fire, but they can only do this effectively if they are working correctly. Too often, fire doors and their ironmongery are damaged - or in some cases doors are propped open — leaving closers disengaged and rendering the doorset useless in the event of a fire.

A 'responsible person' must also have a firm understanding of fire door maintenance. All fire doors are carefully constructed and rigorously tested to British Standards BS 476: Part 22 or BS EN 1634-1, ensuring they withstand fire and smoke for a minimum of 30 minutes (FD30) or 60 minutes (FD60). However, any break in their integrity could cause the door to fail. It's therefore imperative that healthcare facilities have a regular maintenance plan in place for fire doors and exits to highlight any early signs that a door is not performing as required, this will prevent irreparable damage to the door and its accompanying hardware, and



save the need for replacements further down the line.

For maximum safety and compliance, its also important that decision makers select high quality, third-party certified fire door components. Application, quality and certification considerations are essential, and 'responsible persons' are encouraged to use reputable suppliers with documentation (in the form of certificates or labels) to verify their classifications. Finally, it's important to remember that all working elements of a fire door, including its frame and ironmongery are vital to its operation. Only when all components are compatible and operational can a fire door perform successfully, and so much like a fire door itself, when it comes to fire safety in healthcare, adopting a holistic approach is central to success.

HEALTHCARE
FACILITIES POSE
INCREDIBLY COMPLEX
SAFETY CHALLENGES

AND FIRE DOORS CAN BECOME SUBJECT TO UNFORGIVING ENVIRONMENTS (WITH HIGH FOOTFALL AND FAST FLOWING FOOT TRAFFIC), AND SO REGULAR DOOR INSPECTIONS ARE CRITICAL.





SPECIFICATION GUIDANCE FOR HEALTHCARE FACILITIES

THE KEY TO SAFE DOOR CLOSER SELECTION

Healthcare environments are particularly tough on doors. With traffic flowing through them 24 hours a day, damage is inevitable, from porters' trolleys, beds, wheelchairs, staff and patients. Cracks, dents and tears in doors can not only reduce their effectiveness in a fire but can also harbour dirt and bacteria, compromising hygiene.

The ability of a hospital fire door to perform in a fire is dependent upon the condition and performance of the door and its hardware. For busy hospital corridors, holding doors open allows restriction-free movement 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, if power is cut, the closer firmly shuts the door into its frame.

For this, we recommend:

BRITON 996

Hold-open & Free-Swing

- > Fixed power size EN 3, EN 4 & EN 5
- > For doors linked to a fire alarm system
- > Certified for Regular, Transom and Parallel arm door applications
- > Adjustable soft closing speed and latch action
- > Ideal for environments covered by The Equality Act legislation as doors can be safely held open or allowed to swing free
- > Suitable for doors up to 1250mm to 100kg depending on power size













In a care home environment, where patients and residents may be less able to get out in the event of a blaze, a self-closing device can mean the difference between life and death. In these settings, cam action door closers are particularly good at fulfilling fire door regulations, whilst also providing ease of operation and accessibility for all users who might struggle to open a fire door with a closer on it.

For this, we recommend:



BRITON 2700BD.TE

Cam Action Electromagnetic Door Closer

- > Adjustable power size EN 2-5
- > Door mount Pull side/Transom push side mounting (2720B) and Door mount Push side/ Transom pull side mounting 2721B)
- > Adjustable soft closing speed and FAST power adjust dial to allow easy power adjustment to suit door conditions
- > UKCA & CE marked to EN 1154 & EN 1155

- > Built-in adjustable backcheck, delayed action and hold-open functions
- > Self-adhesive Accufit fitting template to ensure a quick, simple and accurate installation
- > Suitable for doors up to 1250mm and 100kg













Concealed cam action closers allow easy access for less able users whilst maintaining the closing forces needed for fire safety. Hidden from view these closers are ideal for applications such as hospital corridors as they reduce the temptation for tampering or vandalism.

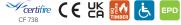
For this, we recommend:



BRITON 2420TE

Concealed closer

- > Adjustable power size EN 2-4
- > UKCA & CE marked to EN 1154
- > Capable of meeting BS8300 requirements for use on accessible routes
- > Adjustable closing speed and latch
- > Suitable for doors up to 1100mm and 80kg











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.

	Recommended Door Sizes	
EN Closer Size	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.



Sertifire Certifire approved.



Capable of meeting BS8300 approved Document M requirements.

EN 1154 & EN 1155.

CE Marked to



Fire tested to EN 1164 to achieve a rating on timber and metal doors.



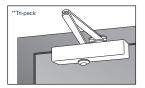
Tested to ISO 14025 and EN 15804 environmental product declarations.

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.



Firgure 61 Transom mount push side**

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

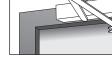
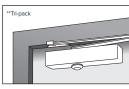


Figure 66 Parallel fixing application"

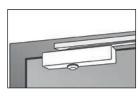
Closers are mounted on the push or closing face of the door.

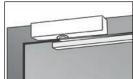


Slide Track Fixing

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 healthcare facilities, budgets can sometimes feel 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 HEALTHCARE FACILITIES

THE KEY TO SAFE **EXIT DEVICE** SELECTION

Selecting the right exit hardware for your building can be a challenge. In healthcare facilities, where exit doors can be used by untrained people or members of the public, panic exit hardware certified to BS EN 1125:2008 is a requirement for all fire exits and fire escape doors.

Panic exit hardware is designed to provide safe and effective escape through doorways with minimum effort and without prior knowledge of its operation. The horizontal panic bars must cover at least 60% of the door width as stipulated by BS EN 1125 and the code of practice of fire escape doors.

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















Push bar rim panic latch



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















In spaces where opening width is limited, a non-intrusive touch bar can be practical. Its application is ideal for areas where minimal protrusion is required to prevent injury.

For this, we recommend:

BRITON 570

Touch bar panic exit latch



- > For single and double non rebated
- > 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 onsite to suit door width and height













In healthcare 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





UKCA Marked to relevant BS EN Standards.



CE Marked to relevant EN Standards.



Fire tested to EN 1634 to achieve a rating on timber and metal doors.









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.KE

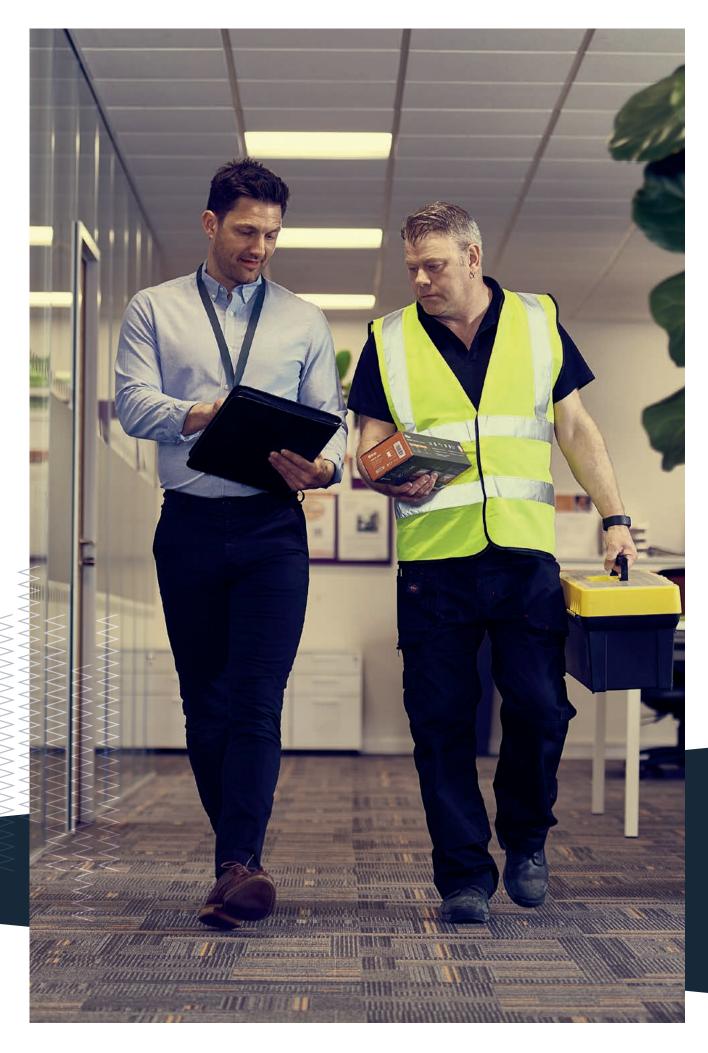


OUR EXPERTISE

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** or visiting 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

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

FOR TECHNICAL SUPPORT CONTACT OUR EXPERTS:

Tel: +44 (0) 800 834102

Email: technicalsupportuk@allegion.com

Allegion (UK) Limited 35 Rocky Lane Aston Birmingham B6 5RQ

Tel: 0330 8080 617

Email: contactuk@allegion.com

Web: briton.co.uk



