

Fire Doors- Guidance on identification and what to check

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Lead contact:	Richard Norris

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1. Scope

This guidance is intended to assist you when carrying out your Fire Risk Assessment (FRS) and shows you what to look for with regard to fire doors.

2. Introduction

Fire doors are provided to prevent the spread of smoke and flame in the event of a fire. No surprises there! They have been a requirement for many years and during that time standards have improved so that what was classed as suitable some years ago will look a lot different from a door built and installed this year. Unfortunately there is no requirement to bring older fire doors to current standards unless the area they are in is being refurbished. So you will encounter fire doors of differing standards across the University and possibly in your building. NOTE: Many listed buildings will not have fire doors constructed to the standards listed below. However, the buildings are likely to be installed with a fire alarm system that will provide sufficient early detection and warning to allow safe escape.

Whichever standard the doors in your building are constructed to they must all do the same thing.

3. Fire doors

3.1 Can fire doors be held open?

Fire doors should not normally be held open except by a proper device like "DorGuard" or if it has an automatic door closer linked to the fire alarm system.

You will find fire doors held open by unofficial devices like a wedge, fire extinguisher, tied to a radiator. This is **NOT** acceptable, as an open fire door effectively is not a fire door at all - it's a void for the smoke and flame to pass through.

Example of how a Dorgard can be used



So in general terms, fire doors should not be held open except by official methods as mentioned above.

There are exceptions to this general rule:

- it is acceptable for cleaning staff to temporarily wedge open a fire door while cleaning or removing waste
- It is acceptable to temporarily wedge open a fire door when furniture or equipment is being brought into or out of a room or floor.

But in all instances people must remove the wedge immediately after the work is done.

Fire doors that remain wedged open will become defective over time - the door closer will weaken, the door will twist. Should a fire door become twisted the frames must be replaced as well and this is expensive.

3.2 Where you could find a fire door

Fire doors are provided to protect escape routes from activities that occur next to them. For example, where a kitchen opens on to an escape route the door from the kitchen must be a fire door as the kitchen is a high risk compared to the corridor. They are also used to sub-divide longer corridors and be used to protect the occupants of a room from the higher-risk activities of an inner room. However, not all doors are fire doors and knowing where you are likely to find them will help in deciding if a door is a fire door or not.

Places where a fire door should be installed

- At the exit from a floor onto stairs. May be installed as two sets of doors to form a lobby.
- Separating a protected corridor from rooms or voids (risers) opening on to it, particularly dead-end corridors where there is only one direction of escape. The corridor walls will also be constructed of fire-resisting material, especially if there is no automatic smoke detection.
- Sub-dividing long corridors. These fire doors must have vision panels in them.
- Doors in a fire-compartment wall (generally concrete or brick) to maintain the compartment integrity but see 2nd bullet point above.

3.3 Doors not required to be fire doors

- Those opening onto a corridor that has more than one direction of escape and where early warning is provided by automatic smoke detection
- Final exit doors, main entrance, exit doors

Final exit doors (those from the building out to fresh air) do not need to be constructed as fire doors. They may be classed as security doors in which case there needs to be a way of opening the door safely in an escape. This could take the form of a "panic bar", Redlam bolt (glass bolt with a hammer) or similar. A thumb latch is acceptable.

You will often find green break-glass alongside doors that are installed for security reasons. These doors may be operated by a keypad or swipe card from the entrance side but must have a simple means of operation in the direction of escape. If failing to safety causes a security risk then a green break-glass on the escape side will operate the release mechanism or allow access to a latch. The door can then be opened to allow escape but will close afterwards to maintain security. You will find doors within corridors that operate this way.

3.4 Which way should a fire door open?

Ideally in the direction of escape but circumstances may dictate otherwise.

- If a few people will use that door to escape it is acceptable for it to open inwards.
- If the door opens directly onto an escape route or corridor so as to partly obstruct the corridor, as long as it will not delay escape unduly, the fire door can open inwards.
- Some final exit doors or entrance doors need to open inwards to protect passers-by.

3.5 Signs for doors that protect emergency escape routes



These small signs with a solid blue circle pictogram with white text inserted. These are fixed at eye-level to relevant fire doors (older versions are still in use as well see below):

- On infrequently visited rooms adjoining fire escape routes "Fire door-keep locked shut"
- On rooms adjoining means of escape routes "Fire door-keep shut"
- Within corridors and onto staircase landings and lobbies "Fire door-keep shut"
- Within corridors that are held open by hold-backs linked to the fire alarm system "Automatic fire door-keep clear"

You are likely to find plastic, stick-on sign in this colour scheme. You may also find diamond-shaped red and white ones. Either way, the signs must be fitted to both sides of the door except riser doors. If double doors, both sides of both doors.

3.6 Vision panels in fire doors

Vision panels are provided in fire doors to aid visibility! In corridor doors they allow people approaching the door to see if someone is approaching from the other side. In doors to rooms off corridors, where vision panels are installed they must be kept free of obstruction: don't hang coats over the vision panels; don't cover it with a poster or other material "for privacy/security". The panels allow for a Fire Warden to look into the room while carrying out their sweep-to see there is no fire before opening the door.

Wherever vision panels are installed in fire doors the glass needs to be fire-resistant and fit snugly in the frame. If the glass is loose and a fire occurs, smoke and flames

can seep through the gaps around the glass, thus overcoming the fire-integrity of the door, or to check the room has been vacated.

3.7 What to look for on a fire door

- Fire doors will be fitted with door closing devices
- The door should close fully against the door jamb
- If fitted with cold smoke seals these should be intact (gaps allowed for locks and hinges) and the seal should touch the door frame or second door
- If vision panels are installed they should be free of obstruction and fit tightly in the door. The vision panel in new doors should extend low enough so that a person in a wheelchair can see through (or be seen).
- Fire doors can be fitted with security devices as long as there is a fail-safe system or a means to override the security.
- "Fire door keep shut" signs must be fitted to both sides of each door.
- Riser fire doors should be fitted with "Fire door keep locked" signs
- Fire doors fitted with automatic closing devices should be fitted with "Automatic fire door keep clear" signs.
- Fire doors can be fitted with air-transfer grills. They should have an intumescent seal installed.

3.8 Defects on a fire door

Note: Unless otherwise stated report fire door defects to the Facilities Manager for your building.

Note: Unless otherwise stated report fire door defects to the Maintenance Services helpdesk on 8989

DEFECT	POSSIBLE CAUSE
Door won't close	Door closer out of adjustment, worn or disconnected Door hinges worn, loose or doorframe loose Uneven floor surface
Door held open unofficially	Wedges, ties or other means used by people to keep the door open for convenience. Report it to the appropriate DSA Building Manager.
Vision panel covered over	People want their privacy. Ask the room occupants to remove the cover, explaining why. Report persistent offenders to the SSA or Facilities Manager.
Vision panel loose	Beading loose or missing. Dried or missing seal. Glass damaged or removed.
Missing or damaged cold smoke seal	Impact damage when pushing trolleys etc through doors.

	2. Friction where doors have slipped and rub together too much.
Gap between pairs of doors too large (>5mm)	Doors require adjustment or, in the worst cases, replacement
Missing or badly faded or damaged signs	Older signs that are still legible are acceptable. Missing or illegible signs need to be replaced.
Holes in the door	Where locks have been removed – these can be filled and covered with a finger plate on both sides of the door.
Significant damage to the door	Other damage or holes need assessment by Maintenance Services

Feel free to contact the Fire Safety Adviser if you want advice on this or any other query regarding fire doors.

Richard Norris

Senior Health and Safety Adviser (Fire Safety)

University of Bristol

Health and Safety Office

Richard.norris@bristol.ac.uk

Tel. 0117 9288784

Mob 07786 397655