

Fire Resistant Doors (Upgrading)

Upgrading the fire resistance of existing doors

A “fire resisting door” means a door, or pair of doors in conjunction with the frame, which has a certain level of fire resistance. The door must satisfy the requirements of British Standard 476.

Doors which satisfy these requirements:

- Solid timber doors of 44mm nominal thickness,
- Solid core laminated timber doors of 44mm nominal thickness and
- Purpose made certified fire doors.

Where existing timber doors are of the panelled type, with stiles and rails not less than 44mm thick, they may be protected to the required standard if the face of the panels is entirely covered on the room or risk side of the door with a minimum of 6mm of an approved fire resisting board e.g. Masterboard or Supalux fitted flush with the framing of the door.

The edge of the fire resistant board should be covered with hardwood beading, with both board and beading nailed at 40mm centres.

If the thickness of the rails and stiles is less than 44mm but more than 37mm, the face of the panels may be covered with a fire resisting board at least 6mm thick, fixed securely using 32mm x No.8 wood screws at 300 centres around the perimeter of the door.

Additional fixings to centre lines or rails are recommended. In the case of Masterboard and Supalux, see the manufacturers fixing instructions.

Existing flush timber doors of substantial construction may be retained if the entire face of the door on the room or risk side is covered with a fire resisting board of at least 6mm thickness and securely fixed as mentioned above.

Hinges

Hinges must be capable of taking the increased weight of the door. Plastic and low melting point hinges are not suitable. No part of a fire door's hinge should be made of either a combustible material or a non-combustible material, which has a melting point of less than 800⁰C, when it is providing the sole means of support at the hanging edge.

Self Closers

The fire door should be fitted with a self closing device, other than rising butt hinges. Self-closers should be of a type which can not be easily removed or tampered with, which will completely close a door and overcome the resistance of a latch fitted, from a fully open or partially open position.

In the absence of a suitable latch or other positive device for holding the door shut in its frame, the self closer must be of a type that has been shown, by test in accordance with British Standard 476: Part 22, to be capable of holding the door closed in its frame for a sufficient period of time for the closing role to be taken over by a heat activated sealing device, such as an intumescent seal, or throughout the full period of exposure if such seals are not incorporated. Where unlatched doors are used for smoke control purposes the selection of the self-closing device is critical.

Intumescent Seal

If required, an intumescent seal should be fitted across the head of the door and down the sides of the door. Alternatively the seal can be fitted in the frame of the door.

Where doors are required for means of escape purposes, the provision of a brush or blade to resist the passage of smoke may also be required. A threshold is not required under a fire door. However, it is advisable to avoid flammable floor coverings running uninterrupted under a door. A metal carpet-edging strip will achieve a firebreak.

Fire resisting materials

If fire resisting materials other than Masterboard or Supalux are used, details of the materials, manufacturers instructions and appropriate test certification should be submitted to justify the use of the materials to upgrade the fire resistance of the doors in question.

Glazing within doors

If the door has glazing then this must be upgraded by replacing existing glass with 6mm thick Georgian wired glass. This glass should be held in a solid timber frame and secured in place with non combustible beading. Intumescent tape or paste must also be placed between the beading and the glass (not between the glass and the frame) and the beading secured by adequately sized screws.

If glazing is present above the door then this must also be upgraded by replacing existing glass with 6mm thick Georgian wired glass.

This glass should be held in a solid timber frame and secured in place with non combustible beading, or sloping hardwood beads of at least 15mm. Intumescent tape or paste must be placed between the beading and the glass (not between the glass and the frame) and the beading secured by adequately sized screws.

Listed Buildings

Please consult listed buildings, if appropriate, for information on whether the door is subject to listed building requirements.

Nb. If you have been asked to upgrade your door then the schedule of works will specify what is required in your property i.e. whether an intumescent seal should be fitted.

For further information please contact Avon Fire and Rescue on 0117 926 2061 or the Housing Standards Team on 01225 396418

This document/publication/leaflet about 'Fire Resisting Doors' can be made available in a range of community languages, large print, Braille, on tape, electronic and accessible formats from the Information Officer (information_officer@bathnes.gov.uk) - Tel (01225 477983) Minicom (01225 477043)