

Advice Leaflet 23 Doors – General

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INTRODUCTION

In order that buildings other than domestic premises occupied as a private dwelling may be evacuated effectively in the event of a fire, doors on the escape routes must satisfy certain criteria. They must be unobstructed and easily open-able without the use of a key. It should not be necessary to manipulate more than one mechanism to release the door, ie it should be "simple action".

Protected escape routes (ie staircases and certain corridors) are constructed with fire resisting materials to allow persons to escape without being obstructed by fire, heat and smoke. Doors within these escape routes will also have to be fire resisting and fitted with self-closing devices. The period required for fire resistance on escape routes is usually at least 30 minutes.

OTHER AUTHORITIES YOU MAY NEED TO CONSULT

If the premises are being constructed or altered, it is likely that the approval of the local authority building control department will be required.

There are also other enforcing authorities, which have legislative control over certain premises, which may need to be consulted, before any works are undertaken.

These may include:

- a) Health and Safety Executive
- b) Environmental Health Department (local authority)

GENERAL PRINCIPLES

a) Improving Fire Resistance Of Existing Doors And Frames

Advice on improving the fire resistance of existing doors and frames is contained in:

- i) Building Research Establishment Information Paper 8/82 Increasing the fire resistance of existing timber doors and
- ii) Timber Research and Development Association's Wood Information Sheet, Section 1, Sheet 32, "Fire Resisting Doorsets by Upgrading.

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There is also a West Yorkshire Fire & Rescue Service Public Advice Leaflet No FS-PAN025 on the subject – “Doors – Upgrading The Fire Resistance Of Existing Doors”.

NB: An existing timber door can only have its fire resistance improved to a maximum of 30 minutes.

b) New Fire Doors

New doors and frames, which are being installed as a "set", should comply with the relevant parts of BS 476.

The gap between the door edge and its frame should not exceed 3mm. Where smoke control is required, flexible cold smoke seals should be fitted in addition to intumescent seals

c) Automatic Sliding Doors

Where automatic sliding doors are to be installed, whether electrically or pneumatically operated, they should comply with British Standard 7036 and the following fail safe arrangements should be incorporated:

- i) the doors should fail safe in the open position; or
- ii) the doors should be able to pivot outwards in the direction of exit. Pivoting sliding doors should display a notice "In emergency push to open" in conspicuous plain letters.

d) Mechanical Revolving Doors

In general, revolving doors are not acceptable for means of escape purposes, thus installations using revolving doors must include suitable pass doors of a conventional pattern and of adequate width.

Revolving doors, which convert into fire exit doors, will only be accepted for means of escape in case of fire after full consultation with the Fire Authority.

e) Swing Leaf Doors

A door used for means of escape should normally open in the direction of exit. It should always do so.

- i) if it is from a room in which a fire may develop very rapidly (eg a spray booth), or
- ii) if the door serves an area from which more than 50 persons may need to escape. Where an outward opening final exit door cannot be provided, eg because it would obstruct a public right of way, the inward opening door may need to be kept locked in the open position whilst the premises is in use.

f) Sliding Doors (Manually Operated)

Such sliding doors are only suitable for doors on escape routes, where they will be used solely by members of staff. In every case the door must be made and maintained so that it can be opened easily by hand.

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g) Rolling Steel Shutters, Iron Doors And Collapsible Gates

Rolling steel shutters, iron doors, collapsible gates and similarly filled openings do not normally provide satisfactory exits for means of escape in case of fire. However, there may be instances in buildings (or parts of buildings) of low or normal fire risk where it will be possible to regard them as such provided that they are not likely to be obstructed and can be opened manually even if normally power operated. Where these doors are used as a means of escape they should be capable of being easily and immediately opened by persons escaping.

h) "Up And Over" Doors

"Up and Over" doors are not generally acceptable for means of escape in case of fire, but may be used by small numbers of staff. It must be possible to open them easily by hand.

i) Wicket Doors

Full size wicket doors should be provided in large sliding doors and in large rolling shutters on escape routes. Such doors should be clearly visible and conspicuously marked as a fire exits. Where a wicket door is not of full size it may not be suitable for the number of persons that may require to escape.

j) General

Suitable arrangements should be made to ensure that furniture or heavy articles are not placed across a door which is required for means of escape, especially a door communicating between two rooms.

Doors required for means of escape in case of fire must be kept available for immediate use at all material times.

The needs of disabled people should be considered: lever type door handles are easier to operate than door knobs and the clear width of an open door should not be less than 800mm.

Raised thresholds should not be encountered on any escape routes or circulation areas. Fire exit notices, fire door kept shut notices and other notices may have to be provided on doors.

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BIBLIOGRAPHY

Detailed guidance on fire doors and doors required for means of escape may be obtained from the following bibliography.

Listed alongside each document is the organisation from which it may be obtained:

TITLE	AVAILABLE FROM
Building Regulations 1992 Approved Document B	TSO
BS 476: Part 22: Methods for Determination of the Fire Resistance of Non-Loading Bearing Elements of Construction	BSI
BS 476: Part 31: Smoke Stopping of Fire Doors	BSI
BS 5588: Part 1: Code of Practice for Residential Buildings	BSI
BS 5588: Part 5: Code of Practice for Fire Fighting Staircases and Lifts	BSI
BS 5588-11: 1997 Fire precautions in the design, construction and use of buildings. Part 11: Code of practice for shops, offices, industrial storage and other similar buildings	BSI
BS 8214: 1990: Fire Door Assemblies with Non-Metallic Leaves	BSI
Timber Research and Development Wood Information Sheet 1-32 Fire Resisting Doorsets by Upgrading	TRADA
Fire Safety Risk Assessment series of guides issued to accompany the Regulatory Reform (Fire Safety) Order 2005	TSO
Information Paper 8/82 Increasing the fire resistance of existing timber doors	BRE

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The publications can be obtained from the following addresses:

<p>The Stationery Office Ltd PO BOX 29 Norwich NR3 1GN Or Blackwells 21 Blenheim Terrace Leeds LS2 9HJ</p>	<p>Tel: 0870 600 5522 Fax: 0870 600 5533 e-mail: customer.services@tso.co.uk web: www.tso.co.uk/bookshop/bookstore.asp</p> <p>Tel: 0113 245 2623 Fax: 0113 242 5641 e-mail: osleeds@blackwellsbookshops.co.uk</p> <p>Opening hours: Mon–Sat: 09.00 – 17.30</p>
<p>British Standards Institution (Sales) Linford Wood Milton Keynes MK14 6LE</p>	<p>Tel: 01908 220022 e-mail: cservices@bsi-global.com web: www.bsi.org.uk</p>
<p>TRADA Technology Ltd Stocking Lane Hughendon Valley High Wycombe Bucks HP14 4ND</p>	<p>Tel: 01494 569600 Fax: 01494 565487 e-mail: information@trada.co.uk web: www.trada.co.uk</p>
<p>Building Research Establishment Garston Watford WD25 9XX</p>	<p>Tel: 01923 894040 e-mail: enquiries@bre.co.uk web: www.bre.co.uk</p>

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Further advice on "doors - general principles" may be obtained from your local building control officer or from your local district office – see contact details below;

BRADFORD	City of Bradford MC Building Control Services 3rd Floor Jacob's Well Nelson Street Bradford BD1 5RW	Tel: 01274 433807 Fax: 01274 435081
CALDERDALE	Calderdale Metropolitan Council Calderdale Building Control Services Westgate House Westgate Halifax HX1 1PS	Tel: 01422 392223 Fax: 01422 392203 e-mail: building.control@calderdale.gov.uk
KIRKLEES	Kirklees Metropolitan Council Building Control Kirklees MC Civic Centre 3 High Street Huddersfield HD1 2NA	Tel: 01484 221519 e-mail: building.control@kirklees.gov.uk
LEEDS	Leeds City Council Development enquiry centre Leonardo Building, 2 Rossington Street Leeds, LS2 8HD	Tel: 0113 247 8000 e-mail: PLAN.Building.Control@leeds.gov.uk
WAKEFIELD	City of Wakefield Metropolitan Council Building Control Services Newton Bar, Leeds Road, Wakefield WF1 2TX	Tel: 01924 306580 e-mail: buildingcontrol@wakefield.gov.uk

Other related WYFS Public Advice Notes:

FS-PAN025 Doors - upgrading the fire resistance of existing doors

FS-PAN032 Fire resistance - general standards

FS-PAN033 Floors - upgrading the fire resistance of existing floors

FS-PAN046 Walls - upgrading the fire resistance of existing walls

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Local District Fire Safety Offices

District Manager - Bradford Fire Safety Office - 01274 385430
FAX: 01274 385469

Station Manager - Leeds Fire Safety Office - 0113 290 4800
FAX: 0113 290 4838

District Manager - Halifax Fire Safety Office - 01422 386830
FAX: 01422 386849

Station Manager - Huddersfield Fire Safety Office - 01484 551820
FAX: 01484 551835

Station Manager - Wakefield Fire Safety Office - 01924 334040
FAX: 01924 334069