

Advice Leaflet 25 Doors – Upgrading Fire Resistance Of Existing Doors

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INTRODUCTION

Increasing the fire resistance of existing doors is not normally acceptable and it will usually be more cost effective to install a new door set conforming with British Standard 476: Part 22: 1987. However, in certain instances, it may be necessary to retain an existing door eg in a listed building. Where the reasons are considered valid by an enforcing Authority, it may be appropriate to modify the doors in order to provide an improved standard of fire resistance.

APPLYING FIRE RESISTANCE

Guidance on how to improve the fire resistance of existing timber doors can be found in:

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

NB:

- a) An existing timber door can only have its fire resistance improved to a maximum of 30 minutes.
- b) It is unwise to flush over one face of a door leaf with a sheet of fire resisting material because this puts an uneven load on the door, which can cause it to distort out of its frame, affecting its potential fire resistance.
- c) It may be possible to upgrade a door by applying an intumescent coating to the door, providing that the manufacturer's instructions for applying the coating are followed precisely. Such coatings need careful maintenance following application.
- d) Not all doors can be upgraded. Possible upgrading depends on the strength and construction of the door. The following doors are unsuitable for upgrading:
 - Unframed, hollow core, flush type.
 - Lugged and braced type.
- e) The door should be a good fit in its frame (gaps not exceeding 3mm and an intumescent seal should be fitted (with a flexible cold smoke seal if smoke control is required).
- f) Any architraves should be removed to check that there are no gaps between the doorframe and the surrounding structure.
- g) Hardware used on fire doors should have a melting point in excess of 800 °C. Letterboxes should be of a proprietary fire resisting type.

Advice Leaflet 25
Doors – Upgrading Fire Resistance Of Existing Doors

h) The door should be marked "FIRE DOOR - KEEP SHUT" on each face unless it is a door to a store room in which case it should be marked "FIRE DOOR - KEEP LOCKED SHUT" on the outer face. The size, shape and colouring of the notice should comply with BS 5499 Part 1: 1990 for "Mandatory Signs".

i) An assessment of likely performance should be obtained from a test laboratory, which is registered with NAMAS (National Measurement Accreditation Service).

BIBLIOGRAPHY

Detailed guidance on how to upgrade fire doors 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 2000 Approved Document B	TSO
BS 476: Part 20: 1987 AMD 1 Fire tests on building materials and structures. Part 20: Method for determination of the fire resistance of elements of construction (general principles) (AMD 6487) dated 30 April 1990	BSI
BS 476: Part 22: Methods for Determination of the Fire Resistance of Non-Load Bearing Elements of Construction	BSI
BS 5499: Part 1: 1990 Mandatory Signs	BSI
Building Research Establishment Information paper IP 8/82: Increasing the Fire Resistance of Existing Timber Doors	BRE
Timber Research and Development Association Wood Information Sheet 1-32: Fire Resisting Doorsets by Upgrading	TRADA

The above publications are current at the time of preparation of this Public Advice Note.

Advice Leaflet 25
Doors – Upgrading Fire Resistance Of Existing Doors

The publications can be obtained from the following addresses:

HMSO	<p>The Stationery Office Ltd PO BOX 29 Norwich NR3 1GN</p> <p>Or</p> <p>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>
BSI	<p>British Standards Institution (Sales) 389 Chiswick High Road LONDON W44 AR</p>	<p>Tel: 0208 996 7000</p>
BRE	<p>Building Research Establishment Bucknalls Lane Garston Watford WD25 9XX</p>	<p>Tel: 01923 894040 e-mail: enquiries@bre.co.uk web: www.bre.co.uk</p>
TRADA	<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>

Advice Leaflet 25
Doors – Upgrading Fire Resistance Of Existing Doors

4. FURTHER ADVICE

Further advice on achieving fire-resisting standards may be obtained from:

The Timber Research and Development Association (address given in the Bibliography)

Your local Fire Safety district office – contact details below.

The local authority building control office at the address given 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 Public Advice Notes

FS-PAN023 Doors - general

FS-PAN032 Fire resistance - general standards

FS-PAN034 Floors - upgrading the fire resistance of existing floors

FS-PAN46 Walls - upgrading the fire resistance of existing walls

Advice Leaflet 25
Doors – Upgrading Fire Resistance Of Existing Doors

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