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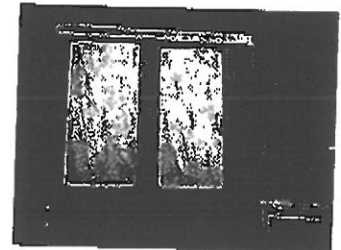


Title:

The fire resistance performance of two specimens of single-acting, single-leaf doorsets incorporating various items of building hardware when tested in accordance with BS EN 1634-1: 2008

Report No:

312693



Prepared for:

UK Doorsets Limited

Unit 6-11,
Spartan Industrial Centre,
Brickhouse Lane,
West Bromwich,
B70 0DH

Date:

9th February 2012

Notified Body No:

0833



Summary

Objective	To determine the fire resistance performance of two specimens of single-acting, single-leaf timber based doorsets, incorporating various items of building hardware mounted within a low-density rigid supporting construction, when tested in accordance with BS EN 1634-1: 2008.
Test Sponsor	UK Doorsets Limited , Unit 6-11, Spartan Industrial Centre, Brickhouse Lane, West Bromwich, B70 0DH
Summary of Tested Specimens	For the purposes of the test the doorsets were referenced Doorset A and Doorset B.

Doorset A had overall dimensions of 2240 mm high by 1095 mm wide and incorporated a door leaf of overall dimensions 2198 mm high by 1026 mm wide by 45 mm thick. The door leaf was hung within a Medium Density Fibreboard (MDF) door frame on three steel hinges, referenced 'Nico 4717 dog bolt'. The door leaf was formed from graduated density chipboard core with hardwood lippings to the vertical edges. The doorset was fitted with a Multi-Point Lockset referenced 'AV2 - Multi point lock' complete with a lever handles. The doorset was orientated such that the leaf opened away from the heating conditions of the test.

Doorset B had overall dimensions of 2250 mm high by 1115 mm wide and incorporated a door leaf of overall dimensions 2220 mm high by 1026 mm wide by 55 mm thick. The door leaf was hung within a hardwood door frame on three steel hinges, referenced 'Nico 4717 dog bolt'. The door leaf was formed from graduated density chipboard core with hardwood lippings to the vertical edges. The doorset was fitted with a Multi-Point Lockset referenced 'AV2 - Multi point lock' complete with a lever handles. The doorset was orientated such that the leaf opened towards the heating conditions of the test.

Test Results:		Doorset A	Doorset B
Integrity performance	Sustained flaming	37 minutes [#]	47 minutes
	Gap gauge	37 minutes [#]	47 minutes
	Cotton Pad	37 minutes [#]	47 minutes
Insulation performance		37 minutes [#]	47 minutes


The test was discontinued after a period of 60 minutes.


[#]Doorset blanked off to allow for further examination of Doorset B

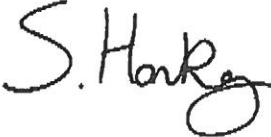
Date of Test 16th December 2011

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Signatories


Responsible Officer N. Howard* Testing Officer


Approved D. Hankinson* Principal Certification Engineer


Head of Department S. Hankey* Operations Manager

* For and on behalf of **Exova Warringtonfire**.

Report Issued Date: 9th February 2012
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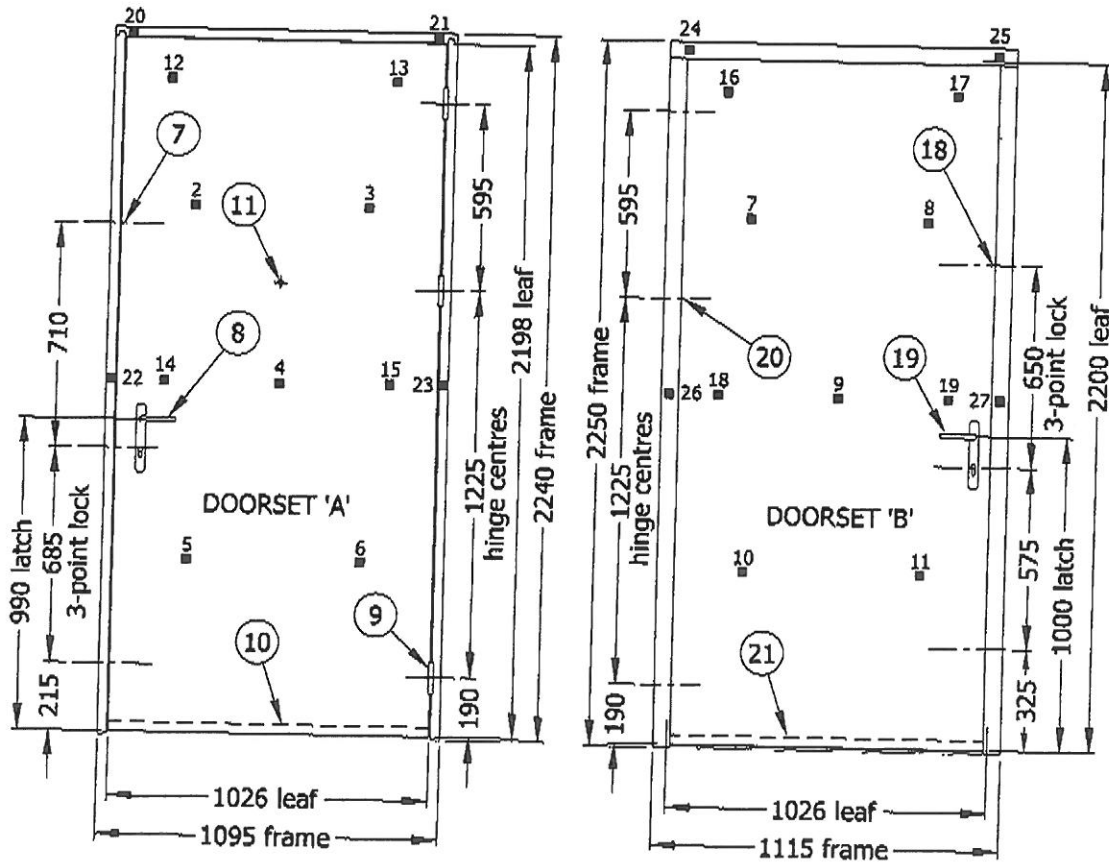


Test Procedure

- Introduction** The doorsets are required to provide a fire separating function and were therefore tested in accordance with BS EN 1634-1: 2008 'Fire resistance tests for doors and shutter assemblies - Part 1: Fire doors and shutters'. This test report should be read in conjunction with that Standard and with BS EN 1363-1: 1999, 'Fire resistance tests - Part 1: General requirements' and BS EN 1363-2: 1999, 'Fire resistance tests - Part 2: Alternative and additional procedures'.
- The specimens were judged on their ability to comply with the performance criteria for integrity and insulation, as required by BS EN 1634-1: 2008.
- The specific purpose of the test was to evaluate the effects of the inclusion of various items of building hardware with a previously tested doorset construction. Because of this, no direct field of application for the doorsets is included in this report.
- Fire Test Study Group/EGOLF** Certain aspects of some fire test specifications are open to different interpretations. The Fire Test Study Group and EGOLF have identified a number of such areas and have agreed Resolutions, which define common agreement of interpretations between fire test laboratories, which are members of the Groups. Where such Resolutions are applicable to this test they have been followed.
- Instruction To test** The test was conducted on the 16th December 2011 on behalf of **UK Doorsets Limited**, the test sponsor.
- Mr. W. Humphreys and Mr. R. Gough representatives of the test sponsor witnessed the test.
- Test Specimen Construction** A comprehensive description of the test construction is given in the Schedule of Components. The description is based on a detailed survey of the specimens and information supplied by the sponsor of the test.
- The doorsets' installation and test preparation took place in the test laboratory between the 14th and 15th December 2011.
- Installation** The doorsets were mounted within apertures provided within a low-density rigid supporting construction. Representatives of **Exova Warringtonfire** conducted installation on the 14th and 15th December 2011.
- Sampling** The specimen doorsets for the test were sampled by a representative of **Warrington Certification Ltd** on the 5th December 2011.
- Conditioning** The specimens' storage, construction, and test preparation took place in the test laboratory over a total, combined time of 5 days. Throughout this period of time both the temperature and the humidity of the laboratory were measured and recorded as being within a range of from 11°C to 19°C and 44% to 88% respectively.

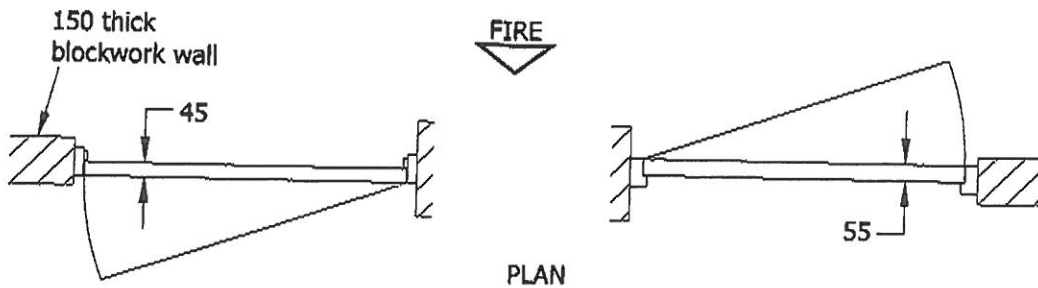
Test Specimen

Figure 1- General Elevation of Test Specimen and Unexposed Face Thermocouples



GENERAL ELEVATION OF UNEXPOSED FACE

■ Positions of thermocouples



Do not scale. All dimensions are in mm

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<u>Item</u>	<u>Description</u>
9. Hinges - continued	
Quantity	: 3 no. hinges
Details of Fixings (as supplied with hinges)	
i. type	: Countersunk head 'spax' screws
ii. material	: Steel
iii. size	: M5 x 30 mm long
iv. number off per blade	: 4 no. screws
10. Automatic Drop Seal	
Manufacturer	: CCE
Reference	: Top plus
Material	
i. casing	: Aluminium
ii. gasket	: Rubber
Length	: 1026 mm (width of door leaf)
Fixing method	: Recess fitted within bottom edge of the door leaf using screws (as supplied).
11. Door Viewer	
Manufacturer	: ASG
Reference	: Eyeviewer14
Material	: Aluminium
Size	: 14 mm diameter
Details of Doorset 'B' (items 12 to 22)	
12. Door frame Jambs and Head	
Material	: Hardwood, species Sapele
Density	: 620 kg/m ³ (stated)
Overall section size	: 90 mm x 55 mm, with a 15 mm deep rebate
Jambs to head jointing method	: Butt joint, glued and screwed
Details of Glue	
i. reference	: Rakoll
ii. material type	: Polyvinyl acetate (PVA)
Details of Screws	
i. type	: Countersunk head 'spax' screws
ii. material	: Steel
iii. size	: 80 mm long x M5
iv. Quantity	: 3 no. screws per joint
Details of Fixings to masonry surround	
i. type	: Countersunk head steel screws into plastic plugs
ii. size	: 100 mm long x 5.5 mm (No.12) diameter screws
iii. quantity	: 4 no. screws along height of closing jamb (180 mm up from base, and then at 650 mm max centres). 6 no. screws along hinged jamb (2 no. screws at 300 mm nominal centres about each hinge position).