Exova Warringtonfire Holmesfield Road Warrington WA1 2DS United Kingdom T : +44 (0) 1925 655 116 F : +44 (0) 1925 655 419 E : warrington@exova.com W: www.exova.com

Testing. Advising. Assuring.



Title:

The fire resistance performance of two specimens of single-acting, single-leaf doorsets, tested in accordance with BS EN 1634-1: 2014

Report No: 371591



Prepared for:

Consort Architectural Hardware Limited 29-31 Lower Loveday St, Birmingham B19 3SB

Date: 1st February 2017

Notified Body No:

0833



Summary

Objective

To determine the fire resistance performance of two single-acting, single-leaf steel based doorsets, incorporating items of building hardware mounted within a high density rigid supporting construction, when tested in accordance with BS EN 1634-1: 2014.

Test Sponsor

Consort Architectural Hardware Limited, 29-31 Lower Loveday St, Birmingham, B19 3SB.

Summary Of Tested Specimens

The doorsets were referenced Doorset A and Doorset B for the purpose of the test.

Doorset A had overall dimensions of 2090 mm high by 1090 mm wide and incorporated a door leaf 2051 mm high by 1024 mm wide by 46 mm thick. The door leaf was of a mild steel, single skin construction nominally 1.5 mm thick and comprised a 25 mm² honeycomb core within the leaf. The door leaf was hung within a profiled 1.5 mm thick, galvanised mild steel frame on three galvanised mild steel hinges. The doorset was latched for the purpose of the test and installed such that its leaf opened away from the heating conditions of the test.

Doorset B had overall dimensions of 2090 mm high by 1090 mm wide and incorporated a door leaf 2051 mm high by 1024 mm wide by 46 mm thick. The door leaf was of a mild steel, single skin construction nominally 1.5 mm thick and comprised a 25 mm² honeycomb core within the leaf. The door leaf was hung within a profiled 1.5 mm thick, galvanised mild steel frame on three galvanised mild steel hinges. The doorset was latched for the purpose of the test and installed such that its leaf opened away from the heating conditions of the test.

Both door leaves incorporated various items of building hardware listed (Item 3 to 11) within the schedule of components.

Prior to testing, the doorsets were subjected to 25 manually operated opening and closing cycles as specified in EN 14600: 2005.

Test Results:		D	oorset A	Doorset B	
Integrity performance	Sustained flamir	ng 26	60 minutes*	260 minutes*	
	Gap gauge	26	60 minutes*	260 minutes*	
	Cotton Pad	33 minutes		35 minutes	
Insulation performance		10 minutes		9 minutes	
Radiation Performance	5 kW/m²	10 kW/m ²	15 kVV/m²	20 kW/m ²	25 kW/m²
Doorset A	43 minutes	94 minutes	201 minutes	260 minutes*	260 minutes*
Doorset B	28 minutes	65 minutes	110 minutes	209 minutes	260 minutes*

^{*} The test duration. The test was discontinued after 260 minutes.

Date of Test 1st December 2016

This report may only be reproduced in full. Extracts or abridgements of reports shall not be published without permission of Exova Warringtonfire.

Signatories

Responsible Officer

N. Howard*
Technical Officer

Approved S. Gilfedder*

Certification Engineer

Head of Department

S. Hankey*

Operations Manager

* For and on behalf of Exova Warringtonfire.

Report Issued

Date: 1st February 2017

This copy has been produced from a .pdf format electronic file that has been provided by **Exova Warringtonfire** to the sponsor of the report and must only be reproduced in full. Extracts or abridgements of reports must not be published without permission of **Exova Warringtonfire**. The pdf copy supplied is the sole authentic version of this document. All pdf versions of this report bear authentic signatures of the responsible **Exova Warringtonfire** staff.