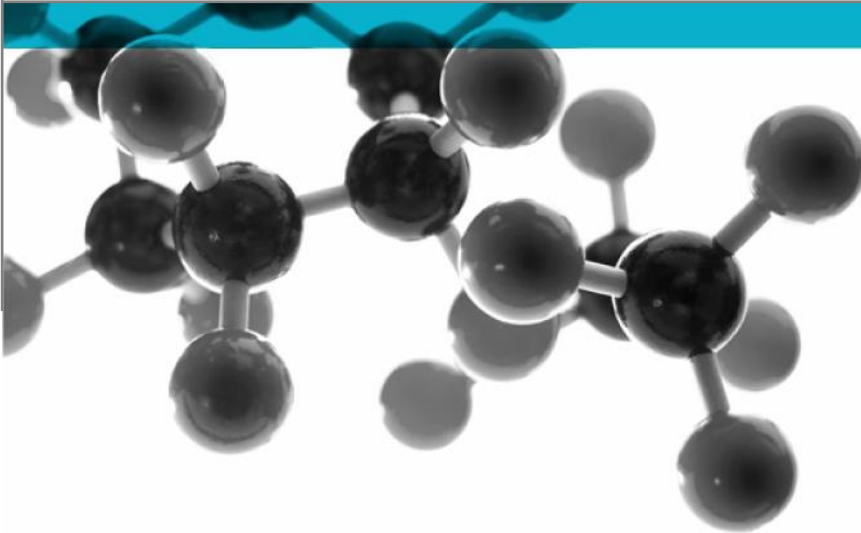


Indicative testing to the principles of BS EN 1634-3: 2004



Test of: Fire Rated Foam

Indicative Smoke control test for fire rated foam

A Report To:
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Results of Test: WYC386549

PMC – Craylon Ltd

14 Ryefield Way
Kingswinford
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This document confirms that performance testing was conducted on 26th July 2017. Testing was conducted to the principles of BS EN 1634-3: 2004 Incorporating corrigendum no. 1 Fire resistance and smoke control tests for door and shutter assemblies, openable windows and elements of building hardware – Part 3: Smoke control test for door and shutter assemblies.

The following results were achieved:

Product tested	Blue 60 Fire Rated Frame Foam		
Summary of testing procedure			Result
BS EN 1634-3: 2004	Pressure (Pa)	Leakage (m ³ /h)	Leakage (m ³ /m/h)
Results under positive chamber (door leaf opening away from chamber)	10	2.36	0.45
	25	5.99	1.13
	50	11.83	2.23
Results under negative chamber (door leaf opening away from chamber)	10	5.33	1.00
	25	9.28	1.75
	50	17.14	3.23

Testing was carried out at ambient temperature only: temperature of the test chamber was measured using a calibrated digital thermometer before and after testing. From approved document B Fire Safety, doors should have a leakage rate not exceeding 3m³/m/hour (head and jamb only) when tested at 25Pa.

For the purpose of this test, the doorset was not tested. Instead the perimeter length, was calculated using the external edges of where the foam was fitted. The perimeter length of this was 5.3m.

The results relate only to the specimens tested, as detailed in the technical specification

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Introduction

The purpose of the test was to determine the smoke leakage of the fire rated foam, used between the door frame and supporting construction.

The foam was tested to the principles of BS EN 1634-3. A doorset was installed into the supporting construction, with 30mm wide Blue 60 foam filled between the frame and supporting construction. As the doorset seals was not tested, the outer edge of where the blue 60 foam was fitted was measured to calculate the 'perimeter length'. The doorset was caulked up throughout the testing.

The foam was tested at 10Pa, 25Pa and 50Pa at both positive and negative pressure.

2 Specimen verification

The specimen was delivered to Exova on 25th July 2017. The component parts of the specimens were identified based on nominal information provided by the sponsor. These details are outlined in the specimen construction section of this report (section 4).

2.1 Conditioning

The specimen was conditioned for a minimum of 24 hours at 21°C and 61% relative humidity.

2.2 Sampling

Not Applicable

3 Description of supporting construction

The partition was constructed of nominal 50mm x 30mm steel studs at 600mm centres with one layer of 15mm plasterboard on each face. The stud wall cavities were filled with 50mm thick Rockwool insulation.

4 Description of construction

Blue 60 fire rated frame foam was fitted between structural opening and door frame (gap width 30mm) in conjunction with Blue 60 fire rated packers at fixing points.

The overall dimensions of the foam were 1075mm wide x 2110mm high x 30 thick x 100mm deep.



The doorset (which was not tested), consisted of a Vicaima GDC leaf, fitted in a softwood frame. The overall frame dimensions were 1000mm wide x 2100mm high x 100mm deep and the leaf dimensions were 926mm wide x 2040mm high x 44mm deep.

5 Pre-test measurements

Due to being indicative testing of the foam only, no doorset pre-tests were conducted.

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