Interscience Fire Laboratory
Building 63
Haslar Marine Technology Park
Haslar Road, Gosport
Hampshire PO12 2AG
United Kingdom
Tel. : +44 (0) 20 8692 5050
Fax.: +44 (0) 20 8692 5155
Email: firetesting@intersciencecomms.co.uk

Test Report: ICL/H17/7961

BS 476 Part 6:1989+A1:2009 (2015)
Fire tests on building materials and structures
Part 6: Method of test for fire propagation for products

Sponsored By

LP Technology Ltd
Albert Works
Stanley Street
Coline BB8 9AE

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1 Purpose of Test

To determine the fire propagation index of the sample specified in Section 2 when subjected to the fire propagation test specified in British Standard 476: Part 6 : 1989 + Amendment Al; 2009 (2015).

2 Description of Test Specimen

The description of the specimen given below has been prepared from information provided by the sponsor of the test and Interscience Communications Ltd was not involved in any selection or sampling procedure.

The product was a 31mm thick sheet coated with a black paint.
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The sponsor of the test did not provide further details relating to the composition of the sheet, the composition of the paint and rate and method of application.

3 Conditioning of Test Specimens

The specimens were received on 11th August 2017.

The sample was conditioned to constant mass at a temperature of 23±2°C and a relative humidity of 50±10% and maintained in this condition until required for testing.

4 Date of Test

The test was performed on 21st September 2017.

5 Test Procedure

The test was carried out in accordance with BS 476: Part 6+A1:2009 (2015), and this report should be read in conjunction with this standard.
Note: This test was subcontracted to another UKAS accredited test laboratory.

6 Test Results

The test results relate only to the burning behaviour of the specimens of the product under the particular conditions of test; they are not intended to be the sole criterion for assessing the potential fire hazard of the product in use.

The test results relate only to the specimens of the product in the form in which they were tested. Small differences in the composition or thickness of the product may significantly affect the performance during the test and may therefore invalidate the test results.

Table 1 shows the Temperature rise for calibration sheet and specimens
Table 2 shows the Index of performance for each specimen

Time (t)	Temperature Rise -^{o}C			
Mins	Calibration	**Specimens**		
	Sheet	**a**	**b**	c
0.5	18	27	22	21
1	21	26	24	23
1.5	24	27	24	22
2	26	29	27	24
2.5	29	33	31	26
3	33	36	34	29
4	66	45	41	59
5	103	116	131	137
6	129	118	136	128
7	150	143	131	215
8	169	188	174	227
9	181	212	206	230
10	191	230	216	238
12	207	256	245	259
14	221	247	240	252
16	230	238	231	243
18	233	239	240	246
20	242	240	239	244

t - time in minutes from the time at which the gas jets were ignited.
a, b and c -represent individual specimens giving valid test results.

Table 2: Index of performance

Specimen	s_1	s_2	s_3
a	2.5	11.9	7.0
b	1.1	11.9	6.7
c	0.2	14.7	7.2

7 Observations

No intumescence or deformation of any specimen occurred that affected the required gas input. No melting or slumping occurred that prevented the material from being exposed to the heating conditions. Air flow through the apparatus was not restricted by fallen material or by soot accumulation in the chimney.

8 Conclusion

A sample as described in this report, when tested in accordance with BS 476: Part 6: 1989 Amendment Al ; 2009 , achieved:

Fire propagation index, I = 21.1

sub-indices i_1 = 1.3
i_2 = 12.8
i_3 = 7.0

Prepared by

C. B. Chong
Fire Scientist

Approved by

S. Kumar
Technical Manager

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