



Confidential Report

Our Ref: **27/04940/02/19**



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Notified Body
for PPE Directive,
Construction Products Regulation
& Marine Equipment Directive
I.D. No. 0338 & 0339



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Date: 21 March 2019
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Client: Camira Fabrics Ltd
The Watermill
Wheatley Park
Hopton
Mirfield
WF14 8HE

Job Title: Fire Test on One Sample of Fabric

Client's Order No: 83A03000

Date of Receipt: 28 February 2019

Description of Sample(s): One sample of fabric referenced;
Quality: Blazer Lite
Run No: 413795
Colour: Haven (HLTH40)

Work Requested: We were asked to make the following test(s):
BS 476 Part 6 (adhered)

Note: This report relates only to the samples submitted and as described in the report.

- * subcontracted test, UKAS accredited
- ** subcontracted test, EN ISO/IEC 17025 accredited
- *** not UKAS accredited



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FIRE TESTS ACCORDING TO BS 476-6:1989+A1:2009 (2015)

Fire tests on building materials and structures. Method of test for fire propagation for products

Date of Test: 20/03/2019

Test Method

The test was carried out in accordance with BS 476-6:1989+A1:2009 (2015).

Prior to testing the sample the calibration of the equipment was determined to ensure compliance with the test limits set out in the standard.

The test was carried out in accordance with BS 476-7:1987. The specimens were tested adhered to a 12mm calcium silicate board, using Murabnd Heavy adhesive.

Temperatures of the flue gases were measured to the nearest degree centigrade at the time intervals and periods set out below, taking zero time as the moment of ignition of the gas supply. The temperature was measured by means of two thermocouples with their measuring junctions located in the cowl of the apparatus as required by the standard.

The relevant temperature-time intervals were observed for each individual specimen and the calibration board according to the ranges 0 to 3 minutes every 30 seconds, 4 to 10 minutes every 1 minute and 12 to 20 minutes every 2 minutes to give 3 time periods.

N.B: The shrinkage in the plane of the calibration board was not determined after heat soaking at 1000°C.



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Calculation of Results

At each time interval the temperature of the calibration board was subtracted from that of the individual specimen temperature, this was then divided by ten multiplied by the time interval.

The sum of each individual value in each time period was then calculated to give an index of performance, s , for each specimen.

The fire propagation index of the product is calculated from the average of the individual s values for the total number of specimens in each time period.

$$\text{Total } I = i_1 + i_2 + i_3$$

A definitive classification is based on a sample of at least three specimens.

Requirements

A Class 0 is the highest National product performance classification for lining materials. To meet Class 0 a material has to meet the requirements laid down in the UK Building Regulations 2010, Approved Document B, Appendix A that states that a composite material is either:

- a) composed throughout of materials of limited combustibility; or
- b) a class 1 material which has a propagation index (I) of not more than 12 and a sub index (i_1) of not more than 6 when tested to BS 476 Part 6.



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Results

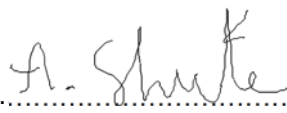
Number of specimens tested	Sub-index i_1	Sub-index i_2	Sub-index i_3	Total Fire propagation index I
3	5.6	3.3	0.8	9.7

Comments

In our opinion:-

- 1) The test results relate only to the behaviour of the test 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.
- a) The results indicate the sample meets the definition of Class 0 of the propagation index (I) of not being more than 12 as stated in the UK Building Regulations 2010, Approved Document B, Appendix A. However, it should be noted that this is the maximum allowed and if the uncertainty of measurement was taken into consideration, the sample could fail.
- 2) It should be noted that to meet the BS 476 Part 6 requirements the above material has also to meet Class 1 at BS 476 Part 7.

The relevant uncertainty value is included as an annex which forms an integral part of the report.

Reported by:.....  A Shute, Senior Lab Technician

Countersigned by:.....  P Doherty, Manager

Enquiries concerning this report should be addressed to Customer Services.



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Uncertainty Budget - Annex

The overall uncertainty budget for BS 476-6:1989+A1:2009 (2015) is as follows:-

Overall: $\pm 6\%$



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