# breglobal

## BS476-6:1989+A1:2009 test on BUFA Firestop 3355-W-3

Prepared for: BÜFA Gelcoat Plus GmbH Hohe Looge 2-8 26180 Rastede Germany

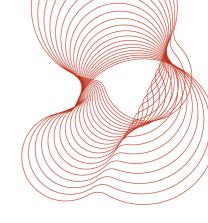
29<sup>th</sup> August 2012

Test report number 281531



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Protecting People, Property and the Planet



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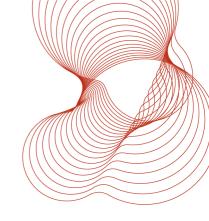
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# 1 Objective

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 A1 ; 2009<sup>1</sup>.

## 2 Sample

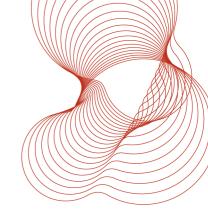
## 2.1 Traceability

The test samples were supplied by the test sponsor. BRE Global were not involved in the sample selection process and therefore cannot comment upon the relationship between the samples supplied for test and the product supplied to market.

## 2.2 Description of sample and test format.

Test Sponsor	BÜFA Gelcoat Plus GmbH Hohe Looge 2-8 26180 Rastede Germany
Manufacturer of sample	As above
Sample name/reference	BÜFA Firestop 3355-W-3
Sample description (as	BÜFA Firestop 3355-W-3 (BÜFA FR 28/12-4)
provided by test sponsor/manufacturer)	No further details of the sample have been given
Description of sample (as received)	White grp sheet, smooth on one face
Mean weight per unit area (kg/m <sup>2</sup> )	4.0
Mean thickness (mm)	2.6
Sample receipt date	20 <sup>th</sup> August 2012
Test face	Smooth face
Date of test	24 <sup>th</sup> August 2012

Unless otherwise stated all measurements are nominal.



#### Conditioning 3

The specimens were conditioned as required by the standard.

#### 4 Results

#### 4.1 **Temperature measurement**

Table 1 shows the Temperature rise for calibration sheet and specimens

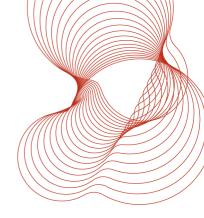
Table 2 shows the Index of performance for each specimen

### Table 1 – temperature rise

Time	Temperature rise - °C				
t	Calibration	Specimens			
min	sheet	а	b	с	
0.5	14.0	12.5	10.9	11.6	
1	18.8	21.8	19.3	23.3	
1.5	23.4	33.4	31.2	33.5	
2	27.1	43.3	40.2	45.1	
2.5	30.6	50.8	48.4	52.8	
3	34.5	58.3	53.4	58.6	
4	58.6	85.3	86.4	96.9	
5	88.3	146.6	144.3	152.2	
6	115.2	179.9	181.2	185.4	
7	139.9	205.7	214.4	214.9	
8	158.3	237.7	245.1	242.0	
9	173.1	253.6	252.5	251.8	
10	186.6	251.2	251.3	246.9	
12	202.6	238.9	240.2	238.3	
14	214.9	235.2	239.0	234.6	
16	222.3	237.7	243.9	234.6	
18	228.5	237.7	243.9	235.8	
20	232.1	237.7	241.5	235.8	

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	S <sub>1</sub>	<b>S</b> <sub>2</sub>	S <sub>3</sub>
а	10.4	3.4	6.4	0.6
b	10.0	2.6	6.6	0.8
с	11.3	3.7	7.0	0.6

## 4.2 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.

## 5 Conclusions

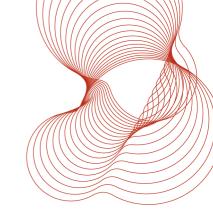
A sample as described in this report, when tested in accordance with BS 476 : Part 6 : 1989 Amendment A1 ; 2009, achieved:

fire propagation index	=	10.6
sub-indices	i <sub>1</sub> =	3.2
	i <sub>2</sub> =	6.7
	i <sub>3</sub> =	0.7

## 6 Validity

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

The specification and interpretation of fire test methods are the subject of ongoing development and refinement. Changes in associated legislation may also occur. For these reasons it is recommended that the relevance of test reports over 5 years old should be considered by the user. The laboratory that issued the report will be able to offer, on behalf of the legal owner, a review of the procedures adopted for a particular test to ensure that they are consistent with current practices, and if required may endorse the test report.



# 7 Reference

1 Fire tests on building materials and structures. Part 6. Fire propagation test for products. British Standard 476 : Part 6 : 1989. British Standards Institution, London, 1989 with Amendment A1:2009.