

# **BRE Global Test Report**

BS 476-7: 1997 Surface spread of flame test on Mylands FR Emulsion White

Prepared for: John Myland Ltd
Date: 30 March 2023

Report Number: P124539-1002 Issue 1

BRE Global Ltd Bucknalls Lane Watford, Herts WD25 9XX

Customer Services 0333 321 8811

From outside the UK: T + 44 (0) 1923 664000 E enquiries@bregroup.com www.bregroup.com Prepared for:

John Myland Ltd 26 Rothschild Street London SE27 0HQ



Commercial in Confidence © BRE Global Ltd 2023 Page 1 of 10



#### Prepared by

Name F Tuffney

Position Technician

Signature

#### **Authorised by**

Name J Hunter

Position Section Leader, Reaction to Fire

Date 30 March 2023

Signature

This report is made on behalf of BRE Global and may only be distributed in its entirety, without amendment, and with attribution to BRE Global Ltd to the extent permitted by the terms and conditions of the contract. Test results relate only to the specimens tested. BRE Global has no responsibility for the design, materials, workmanship or performance of the product or specimens tested. This report does not constitute an approval, certification or endorsement of the product tested and no such claims should be made on websites, marketing materials, etc. Any reference to the results contained in this report should be accompanied by a copy of the full report, or a link to a copy of the full report.

BRE Global's liability in respect of this report and reliance thereupon shall be as per the terms and conditions of contract with the client and BRE Global shall have no liability to third parties to the extent permitted in law.

Opinions and interpretations expressed herein are outside the scope of UKAS Accreditation.



## **Table of Contents**

1		Objectiv	e	4
2		Sample		4
	2.1	Trac	eability	4
	2.2	Desc	cription of sample and test format	4
3		Conditio	ning	5
4		Results		5
	4.1	Flam	e spread data	5
	4.2	Obse	ervations	6
5		Classific	ation	6
6		Conclus	ion	7
7		Validity		7
8		Reference	ee	7
A	pper	ndix A	Product description provided by the test sponsor	8
Α	pper	ndix B	Sample photographs	10



#### 1 Objective

To classify the surface spread of flame characteristics of the sample described in Section 2 using the test method and criteria specified in British Standard 476: Part 7: 1997<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 samples supplied for test and the product supplied to market. The test results relate to the samples as received.

#### 2.2 Description of sample and test format

Unless otherwise stated all measurements are nominal.

Test Sponsor	John Myland Ltd, 26 Rothschild Street, London SE27 0HQ
Manufacturer of sample	As above
Sample name/reference	Mylands FR Emulsion White
Sample description (as provided by test sponsor/manufacturer)	Mylands FR Emulsion White  Full product description of the sample provided by the test sponsor is given in Appendix A.
Description of sample (as received by BRE Global)	Plasterboard with white coating Photographs of the sample are given in Appendix B.
Mean sample weight per unit area (kg/m²) (determined by BRE Global)	8.7
Mean sample thickness (mm) (determined by BRE Global)	12.5
Sample receipt date	12 January 2023 (BRE Ref E14638)
Test face	Coated face
Test format	The specimens were tested with 12mm calcium silicate boards behind them.
Date of test	27 February 2023



#### 3 Conditioning

The specimens were conditioned as required by the standard.

#### 4 Results

#### 4.1 Flame spread data

Table 1 shows the observed spread of flame for each specimen at 1.5 minutes, 10 minutes and time to reach maximum flame spread distance.

Table 2 shows the time it takes to reach each reference point in minutes and seconds if applicable.

Table 1

Specimen	Maximum flame spread distance in 1.5 minutes (mm)	Maximum flame spread distance in 10 minutes (mm)	Time to reach maximum flame spread distance (minutes : seconds)
1	60	60	0:35
2	60	60	0:30
3	60	60	0:30
4	60	60	0:38
5	60	60	0:34
6	60	60	0:42

#### Table 2

Specimen			Tim	ne to re	ach ea	ch refe	rence p	oint (m	nm) in r	ninutes	s : seco	nds		
	75	165	190	215	240	265	290	375	455	500	525	600	675	710
1	-													
2	-													
3	-													
4	-													
5	-													
6	-													



#### 4.2 Observations

Specimen	Observations
1	60mm at 35 seconds. Visible flaming ceased at 60 seconds with the extinction of the pilot flame.
2	60mm at 30 seconds. Visible flaming ceased at 60 seconds with the extinction of the pilot flame.
3	60mm at 30 seconds. Visible flaming ceased at 60 seconds with the extinction of the pilot flame.
4	60mm at 38 seconds. Visible flaming ceased at 60 seconds with the extinction of the pilot flame.
5	70mm at 34 seconds. Visible flaming ceased at 60 seconds with the extinction of the pilot flame.
6	60mm at 42 seconds. Visible flaming ceased at 60 seconds with the extinction of the pilot flame.

## 5 Classification

Exposed surfaces of materials used as linings for walls and ceilings are classified in Section 11 of the standard according to the rate and distance of spread of flame as shown in Table 3.

Table 3

Classification	Spread	of flame at 1.5min	Final spread of flame		
	Limit	Limit for one specimen in sample	Limit	Limit for one specimen in sample	
	mm	mm	mm	mm	
Class 1	165	165 + 25	165	165 + 25	
Class 2	215	215 + 25	455	455 + 45	
Class 3	265	265 + 25	710	710 + 75	
Class 4	Exceedi	ng the limits of Class 3	1		



#### 6 Conclusion

The results show that the sample described in Section 2 of this report, when tested and classified in accordance with BS 476: Part 7: 1997, achieved **Class 1**.

### 7 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 information in section 2.2 and Appendix A of this report, other than that indicated otherwise, has been supplied by the test sponsor and has not been independently verified by BRE Global. The validity of the results is conditional on the accuracy of that data.

Because of the nature of reaction to fire testing and the consequent difficulty in quantifying the uncertainty of measurement of reaction to fire, it is not possible to provide a stated degree of accuracy of the results.

#### 8 Reference

British Standard 476: Part 7: 1997. Fire tests on building materials and structures. Part 7 Method of test to determine the classification of the surface spread of flame of products. British Standards Institution, London 2014.



# Appendix A Product description provided by the test sponsor

Company: Johr	n Myland Ltd.				
Parameter		Details (if applicable)			
Trade name		Mylands FR Emulsion White			
General descript	ion				
	ess of manufacturer of product	John Myland Ltd, 26 Rothschild Street, London, SE27 0HQ			
Place of manufa	cture	John Myland Ltd, 26 Rothschild Street, London, SE27 0HQ			
Product reference	e/number	FR Emulsion White			
Thickness (overa	all system)	160 micron WFT			
Density (overall	system)	2.3 kg/L			
Mass per unit are	ea (overall system)	2.3 kg/L			
Generic type of	product				
limited during pro	treatment added or organic content oduction (yes/no), if yes give details	No			
European produc	ct standard, if applicable	N/A			
Industry/in-house	e product standard, if applicable	N/A			
Attestation of co	nformity systems, if applicable	N/A			
Top coat (1)	- Generic type	Emulsion paint			
(test face)	- Product reference	FR Emulsion White			
	- Manufacturer	Mylands			
	- Colour	White			
	- Specific density (wet)	1.45			
	<ul> <li>Application rate (wet) (m²/litre)</li> </ul>	14 m <sup>2</sup> / L			
	- Dry film thickness (dft)	30 micron			
	- Mass per unit area/density (dry)	2.3 kg/L			
	<ul> <li>Inert filler (type, amount, density) (if applicable)</li> </ul>	Note 1			
	- Trade name flame retardant	Note 1			
	- Generic type flame retardant	Note 1			
1(6)	- Amount flame retardant	Note 1			
Layer (2)	- Generic type	Emulsion Paint			
	- Product reference	FR Emulsion White			
	- Manufacturer - Colour	Mylands White			
		1.45			
	<ul> <li>Specific density (wet)</li> <li>Application rate (wet) (m²/litre)</li> </ul>	1.45 12 m <sup>2</sup> / L			
	- Dry film thickness (dft)	25 micron			
	- Mass per unit area/density (dry)	2.3 kg/L			
	- Inert filler (type, amount,	Note 1			
	density) (if applicable)				
	- Trade name flame retardant	Note 1			
	- Generic type flame retardant	Note 1			
	- Amount flame retardant	Note 1			
Substrate	- Generic type	Plasterboard			
(if applicable)	- Product standard	EN 520			
(see EN 13238)	- Product name/reference	Gyproc Plasterboard			

Commercial in Confidence © BRE Global Ltd 2023 Page 8 of 10



Parameter	Details (if applicable)
- Manufacturer	British Gypsum
- Thickness	12.5mm
- Density or mass per unit area	700 kg/m <sup>2</sup>
- Class (EN 13501-1)	EN 520
Face to be tested	Front
Orientation aspects	N/A
Sampling Identification Reference	On the back of the board
Additional information:	N/A

Note 1: This information was not provided by the test sponsor.



# Appendix B Sample photographs



Front test face



Back