Warringtonfire
Holmesfield Road
Warrington
WA1 2DS

T: +44 (0)1925 655 116
info.warrington@warringtonfire.com
warringtonfire.com

Title:

REVIEW REPORT

CLASSIFICATION OF REACTION TO FIRE PERFORMANCE
IN ACCORDANCE WITH
EN 13501-1:2018.

Notified Body No:

0833

Product Name:

"Lumex A – Coloured"

Report No:

WF 415987

Issue No:

1

Prepared for:

Foamalite Limited
Loch Gowna
Co. Cavan
Ireland

Date:

3rd September 2019

1. Introduction

This classification report defines the classification assigned to “Lumex A - Coloured”, a family of polyethylene terephthalate products, in line with the procedures given in EN 13501-1:2018.

1.1 Details of Review

To review and extend the validity period of Warringtonfire Classification Report No: 338900 which details the fire performance of the family of “Lumex A – Coloured” products following testing in accordance with BS EN 13823, EN ISO 11925-2 and Classification in accordance with EN 13501-1.

It has been confirmed in writing by Foamalite Limited that there have been no changes to the product description contained within this report and that the product which is currently being manufactured is identical in every respect to the specimens which were tested. It has also been confirmed in writing that no further fire testing of the product has been performed since the issue of the original report, and no other individual or organisation has been asked to provide a technical review of the reports.

The procedures adopted for the original test (BS EN 13823: 2010) have been re-examined and in most important aspects are similar to those currently in use (BS EN 13823: 2010 + A1: 2014). Amendment 1 to BS EN 13823: 2010 incorporated a change to the burner position (height) in relation to the test specimen. In order to investigate that this would not significantly affect the original results obtained, an additional indicative test on the material was performed in accordance with BS EN 13823: 1020 + A1: 2014. This test is reported under WF No. 416399 and has shown to provide results consistent with the original results.

This review is based on information used in the original test report. No other information or data has been submitted by Foamalite Limited, which could affect this review.

This review should be read in conjunction with original Classification Report No. WF 338900 and indicative letter WF No. 416399.

2. Details of classified product

2.1 General

The product, “Lumex A - Coloured”, a family of polyethylene terephthalate products, is defined as being suitable for construction applications, excluding flooring and linear pipe thermal insulation.

2.2 Product description

The product, "Lumex A - Coloured", a family of polyethylene terephthalate products, is fully described below and in the test reports provided in support of classification listed in Clause 3.1.

Generic type	Polyethylene terephthalate
Product reference	"Lumex A - Coloured"
Name of manufacturer	Foamalite
Thickness	1mm to 3mm (stated by sponsor)
Density	1.33g/cm³ (stated by sponsor) 1.34g/cm³ (determined by **Warringtonfire)**
Colour reference	White or Opal
Flame retardant details	**See Note 1 below**
Mounting and fixing details	The specimen was tested with the maximum depth airgap between the reverse face and the calcium silicate substrate (as specified in EN 13238: 2010)
Brief description of manufacturing process	Extrusion. The material enters the throat of the cylinder on to the flights of a rotating screw and travels through a heated cylinder, during this process the material is compressed to remove any remaining moisture or volatiles and mix the components. The material is then filtered and pumped through the rest of the melt pipes before passing through the feed-block and die. The cooled sheet is pulled down the line by a double set of rubber coated rolls and pushes it through the sizing saws. The required size of the sheet is achieved by the use of longitudinal circular saws for edge trimming and a cross cut circular saw for the required length.

Note 1: The sponsor of the test has confirmed that no flame retardant additives were utilised in the production of the product.

3. Test reports/extended application reports & test results in support of classification

3.1 Test reports/extended application reports

Name of Laboratory	Name of sponsor	Test reports/extended application report Nos.	Test method / extended application rules & date
Warringtonfire	Foamalite Limited	WF 338153 / Review Report WF 416111	EN ISO 11925-2
Warringtonfire	Foamalite Limited	WF 338149 / Review Report WF 416113, WF 338150 / Review Report WF 416114, WF 338151 / Review Report WF 416115 WF 416399	EN 13823
Warringtonfire	Foamalite Limited	WF 338900	EN 13501
Warringtonfire	Foamalite Limited	WF 338901 / Review Report WF 415986	EN/TS 15117

3.2 Test results

Test method & test number		Parameter	No. tests	Results	
				Continuous parameter - mean (m)	Compliance parameters
EN ISO 11925-2	30s exposure - surface	F_s	6	Nil	Compliant
		Flaming droplets/ particles		None	Compliant
	30s exposure – edge	F_s	6	29.2	Compliant
		Flaming droplets/ particles		None	Compliant
EN 13823		FIGRA $_{0.2MJ}$	**Formal test average**	0.00	Compliant
			Indicative 1	0.00	
			Indicative 2	0.00	
			Indicative 3 (review)	0.00	
		FIGRA $_{0.4MJ}$	**Formal test average**	0.00	Compliant
			Indicative 1	0.00	
			Indicative 2	0.00	
			Indicative 3 (review)	0.00	
		THR $_{600s}$	**Formal test average**	0.32	Compliant
			Indicative 1	0.03	
			Indicative 2	0.35	
			Indicative 3 (review)	0.73	
		LFS	**Formal test average**	None	Compliant
			Indicative 1	None	
			Indicative 2	None	
			Indicative 3 (review)	None	
		SMOGRA	**Formal test average**	0.00	Compliant
			Indicative 1	0.00	
			Indicative 2	0.00	
			Indicative 3 (review)	0.00	
		TSP_{600s}	**Formal test average**	2.04	Compliant
			Indicative 1	0.00	
			Indicative 2	3.59	
			Indicative 3 (review)	6.92	

4. Classification and field of application

4.1 Reference of classification

This classification has been carried out in accordance with clause 8 of EN 13501-1: 2018.

4.2 Classification

The product, “Lumex A - Coloured”, a family of polyethylene terephthalate products, in relation to its reaction to fire behaviour is classified:

B

The additional classification in relation to smoke production is:

s1

The additional classification in relation to flaming droplets / particles is:

d0

The format of the reaction to fire classification for construction applications, excluding flooring and linear pipe thermal insulation is:

Fire Behaviour		Smoke Production			Flaming Droplets	
B	-	s	1	,	d	0

i.e. B – s1 , d0

Reaction to fire classification: B – s1, d0

4.3 Field of application

This classification is valid for the following end use applications:

i) Construction applications used over any substrate with a density equal to or greater than 870kg/m^3, having a minimum thickness of 12mm and a fire performance of A2 or better (excluding paper faced gypsum plasterboard).

ii) Construction applications installed with an air gap.

This classification is also valid for the following product parameters:

Product thickness	1mm to 3mm
Product density	No variation allowed
Product colour	White or Opal
Product composition	No variation allowed
Product construction	No variation allowed

SIGNED

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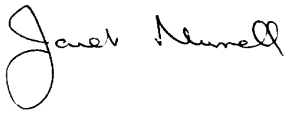
Matthew Dale
Senior Certification Engineer

APPROVED



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Janet Murrell
Technical Manager
on behalf of **Warringtonfire**