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Testing. Advising. Assuring.

**Title:**

CLASSIFICATION OF  
REACTION TO FIRE  
PERFORMANCE  
IN ACCORDANCE WITH  
EN 13501-1:2007+A1: 2009.

**Notified Body No:**

0833

**Product Name:**

"Lumex G"

**Report No:**

WF 336544

**Issue No:**

1

**Prepared for:**

Foamalite Limited  
Loch Gowna  
Co. Cavan  
Ireland

**Date:**

28<sup>th</sup> January 2014



## 1. Introduction

This classification report defines the classification assigned to "Lumex G", a family of Polyethylene terephthalate sheet products, in line with the procedures given in EN 13501-1:2007+A1: 2009.

## 2. Details of classified product

### 2.1 General

The products, "Lumex G", a family of Polyethylene terephthalate sheet products, are defined as being suitable for construction applications, excluding flooring and linear pipe thermal insulation.

### 2.2 Product description

The products, "Lumex G", a family of Polyethylene terephthalate sheet products, are 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 G"
Name of manufacturer	Foamalite
Thickness	0.8mm to 10mm
Density	1.27g/cm <sup>3</sup> (stated by sponsor) 1.29g/cm <sup>3</sup> (determined by <b>Exova Warringtonfire</b> )
Colour reference	"Clear"
Flame retardant details	<b>See Note 1 below</b>
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)
Brief description of manufacturing process	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
Exova warringtonfire	Foamalite Limited	WF 336438	EN ISO 11925-2
Exova warringtonfire	Foamalite Limited	WF 336436 & WF 336437	EN 13823
Exova warringtonfire	Foamalite Limited	WF 336543	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	6	$F_s$	Nil	Compliant
			Flaming droplets/particles	None	Compliant
	30s exposure - edge	6	$F_s$	35.8	Compliant
			Flaming droplets/particles	None	Compliant
EN 13823	FIGRA <sub>0.2MJ</sub>	Formal test average	64.61	Compliant	
		Indicative test	0.00		
	FIGRA <sub>0.4MJ</sub>	Formal test average	64.61	Compliant	
		Indicative test	0.00		
	THR <sub>600s</sub>	Formal test average	2.21	Compliant	
		Indicative test	0.19		
	LFS	Formal test average	None	Compliant	
		Indicative test	None		
	SMOGRA	Formal test average	0.00	Compliant	
		Indicative test	0.00		
	TSP <sub>600s</sub>	Formal test average	12.18	Compliant	
		Indicative test	1.73		

## 4. Classification and field of application



#### 4.1 Reference of classification

This classification has been carried out in accordance with clause 8 of EN 13501-1:2007+A1:2009.

#### 4.2 Classification

The products, "Lumex G", a family of Polyethylene terephthalate sheet products, in relation to their reaction to fire behaviour are 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>B</b>	-	<b>s</b>	<b>1</b>	,	<b>d</b>	<b>0</b>

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<sup>3</sup>, having a minimum thickness of 6 mm and a fire performance of A2 or better (excluding paper faced gypsum plasterboard).
- ii) Construction applications mechanically installed without the presence of a substrate with an air gap.

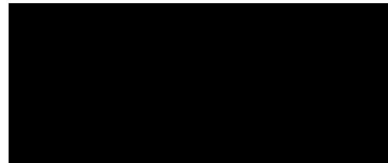
This classification is also valid for the following product parameters:



Product thickness	0.8mm to 10mm
Product weight per unit area	No variation allowed
Product colour/pattern	No variation allowed
Product composition	No variation allowed
Product construction	No variation allowed

**SIGNED**

**APPROVED**



.....  
**Matthew Dale**  
Certification Engineer  
Technical Department

.....  
**Janet Murrell**  
Technical Manager  
Technical Department  
on behalf of **Exova warringtonfire**

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