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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:**

"Freefoam Roofline"

**Report No:**

337579

**Issue No:**

1

**Prepared for:**

Freefoam Plastics Limited,  
Central Commercial Park,  
Centre Park Road, Cork,  
Ireland

**Date:**

4<sup>th</sup> February 2014

## 1. Introduction

This classification report defines the classification assigned to "Freefoam Roofline", a range of fascia/reveal liners, full replacement and New Build fascia, in accordance with the procedures given in EN 13501-1:2007

## 2. Details of classified product

### 2.1 General

The product, "Freefoam Roofline", a range of fascia/reveal liners, full replacement and New Build fascia, is defined as unplasticized poly(vinyl chloride) (PVC-U) profiles and cellular unplasticized poly(vinyl chloride) (PVC-UE) profiles for interior and exterior wall and ceiling finishes as defined in EN 13245:2008 Incorporating corrigenda November 2009 and August 2010.

### 2.2 Product description

The product, "Freefoam Roofline", a range of fascia/reveal liners, full replacement and New Build fascia, is fully described below and in the test reports provided in support of classification listed in Clause 3.1.

General description		A PVC fascia mechanically fixed to a timber frame.
Trade name/ product reference		"Freefoam Roofline"
Thickness of cladding		8 – 25 mm
Density of cladding		400-550 kg/m <sup>3</sup>
Overall thickness of composite		53 - 70 mm
Overall weight per unit area of composite		8.78 – 14.00 kg/m <sup>2</sup>
Fascia	Generic type	PVC-UE
	Product reference	FL, FMX
	Detailed description	Lead free two part co extrusion made of a cellular foam core (PVC-UE) and a top coating of rigid PVC.
	Name of manufacturer	Freefoam Plastics Limited
	Thickness	8 – 25 mm
	Density	Between 400 and 550 kg/m <sup>3</sup>
	Colour reference	"White"
Flame retardant details		<b>See Note 1 Below</b>
Timber frame	Generic type	Softwood timber
	Dimensions	45 mm x 45 mm
Mounting and fixing details		The fascia panels were mechanically fixed to a timber frame and a calcium silicate backing board (in accordance with EN 13238: 2010) was butted up against the reverse face of the timber.
Brief description of manufacturing process		Standard extrusion, co-extrusion

**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 & test results in support of classification

### 3.1 Test reports

Name of Laboratory	Name of sponsor	Test reports/extended application report Nos.	Test method
Exova warringtonfire	Freefoam Plastics Limited	WFR 326507, WFR 326506, WFR 326505	EN 13823
Exova warringtonfire	Freefoam Plastics Limited	WFR 317738	EN ISO 11925-2

### 3.2 Test results

Test method & test number	Parameter	No. tests	Results	
			Continuous parameter - mean (m)	Compliance parameters
EN 13823	Figra <sub>0.4 MJ</sub> (W/s)	3 + 3 + 1	284	Compliant
	THR <sub>600 s</sub> (MJ)		23.1	Compliant
	Smogra (m <sup>2</sup> /s <sup>2</sup> )		227	Compliant
	TSP <sub>600 s</sub> (m <sup>2</sup> )		1355	Compliant
	LFS (y/n)		N	Compliant
	Flaming droplets (y/n)		Y	Compliant
	<10 s (y/n) >10 s (y/n)		Y	
EN ISO 11925-2 30 s surface exposure  30 s edge exposure	Flame spread (mm)	6	45	Compliant
	Flaming droplets (y/n)		none	Compliant
	Flame spread (mm)	6	36	Compliant
	Flaming droplets (y/n)		none	Compliant

The values listed in the table represent the 'worst case' situation to be used for classification, as prescribed in Table A.5 of EN 13245

## 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

### 4.2 Classification

The product, "Freefoam Roofline", a range of fascia/reveal liners, full replacement and New Build fascia, in relation to its reaction to fire behaviour is classified:

**Reaction to fire classification: D-s3, d2/AHM**

### 4.3 Field of application

This classification is valid for the following end use applications:

- i) Wall, ceiling and facade applications
- ii) Used over any substrate of class A2 or better with density of 870 kg/m<sup>3</sup> or higher, with an air gap, mechanically fixed onto a timber (or metal) support frame.

This classification is also valid for the following product parameters:

Colour	any colour
Product thickness	nominal 8 - 25 mm
Product composition	No variation allowed

"The classification assigned to the product in this report is appropriate to a declaration of conformity by the manufacturer within the context of system 3 attestation of conformity and CE marking under the Construction Products Directive. The manufacturer has made a declaration, which is held on file. This confirms that the products design requires no specific processes, procedures or stages (e.g. no addition of flame-retardants, limitation of organic content, or addition of fillers) that are aimed at enhancing the fire performance in order to obtain the classification achieved. As a consequence the manufacturer has concluded that system 3 attestation is appropriate. The test laboratory has, therefore, played no part in sampling the product for the test, although it holds appropriate references, supplied by the manufacturer, to provide for traceability of the samples tested."

**SIGNED**

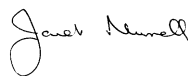


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**APPROVED**



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