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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:

FSF250, FSF254, F312 and
F112 Freefoam Plastics
Hollow Soffit

Report No:

331764

Issue No:

1

Prepared for:

Freefoam Plastics (UK) Limited
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Northampton
NN5 5JP

Date:

29th July 2013

1. Introduction

This classification report defines the classification assigned to FSF250, FSF254, F312 and F112 Freefoam Plastics Hollow Soffit, PVCU panels in line with the procedures given in EN 13501-1:2007+A1: 2009.

2. Details of classified product

2.1 General

The product, FSF250, FSF254, F312 and F112 Freefoam Plastics Hollow Soffit, PVCU panels consisting of hollow multi-channel soffit boards, fixed to a timber frame, are 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, FSF250, FSF254, F312 and F112 Freefoam Plastics Hollow Soffit, PVCU panels, are fully described below and in the test reports provided in support of classification listed in Clause 3.1. A schematic representation of some of the products is added at the end of this document.

General description		Hollow PVC-U profiles
Trade name/ product reference		"FSF250, FSF254, F312 and F112 Freefoam Plastics Hollow Soffit"
UPVC profile	Overall thickness	10 mm
	Weight per unit area	2.12 – 2.27 kg/m ²
	Wall thickness	0.6 ± 0.05 mm
	Rib thickness	0.5 ± 0.05 mm
	Spacing between ribs	13.4 – 16.7 mm
	Specific gravity	1.41 g/cm ³
	Colour	"White"
Flame retardant details		See Note 1 below
Timber frame	Generic type	Softwood timber
	Dimensions	40mm x 40mm
Mounting and fixing details		The PVC panels were mechanically fixed to a timber frame and a calcium silicate backing board was butted up against the reverse face of the timber.
Brief description of production process		Standard extrusion, co-extrusion and embossing

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

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 / extended application rules & date
Exova Warringtonfire	Freefoam Plastics Limited	WFR 319040	EN ISO 11925-2
Exova Warringtonfire	Freefoam Plastics Limited	WFR 328852, WFR 319041, WFR 326504	EN 13823
Exova Warringtonfire	Freefoam Plastics Limited	WFR 331763	EN/TS 15117

3.2 Test results

Test method & test number	Parameter	No. tests	Results	
			Continuous parameter - mean (m)	Compliance parameters
EN 13823	Figra _{0.4 MJ} (W/s)	3+1+2	509	Compliant
	THR _{600 s} (MJ)		21.1	Compliant
	Smogra (m ² /s ²)		356	Compliant
	TSP _{600 s} (m ²)		601	Compliant
	LFS (y/n)		N	Compliant
	Flaming droplets (y/n)		Y	Compliant
	<10 s (y/n) >10 s (y/n)		Y	Compliant
EN ISO 11925-2 30 s surface exposure	Flame spread (mm)	6	60	Compliant
	Flaming droplets (y/n)		none	Compliant
	Flame spread (mm)	6	27	Compliant
	Flaming droplets (y/n)		none	Compliant
30 s edge exposure				

The listed values indicate the worst (average) results in a full formal test.

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 product FSF250, FSF254, F312 and F112 Freefoam Plastics Hollow Soffit, PVCU panels, in relation to its reaction to fire behaviour is classified:

D

The additional classification in relation to smoke production is:

s3

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

d2

Reaction to fire classification: D – s3, d2 - AHM

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, mechanically installed with a minimum air gap of 40mm.

This classification is also valid for the following product parameters:

Colour	any colour
Area weight	2.12 – 2.27 kg/m ²
Product thickness	10 mm
Product composition	No variation allowed

Products in this range are: FSF250, FSF254, F312 and F112 Freefoam Plastics Hollow Soffit.

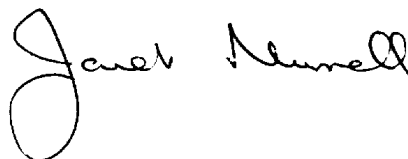
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Frans Paap

Certification Engineer
Technical Department

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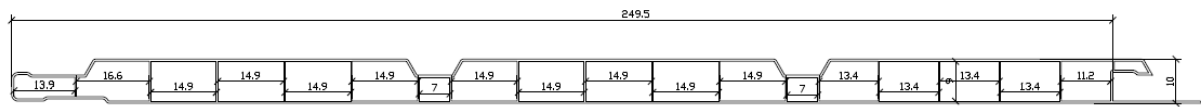
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Technical Manager
Technical Department
on behalf of **Exova warringtonfire**

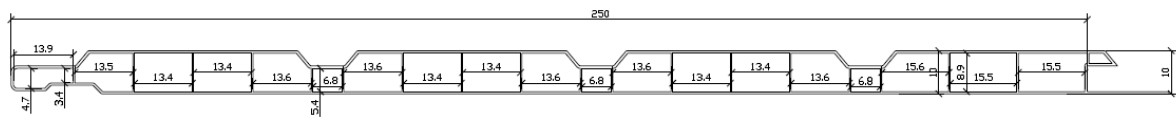
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