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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:

Fortex Cladding

Report No:

335536

Issue No:

1

Prepared for:

Freefoam Plastics (UK) Limited
77-83 St James Mill Road
Northampton
NN5 5JP

Date:

11th December 2013

1. Introduction

This classification report defines the classification assigned to Fortex Cladding, PVCU panels in line with the procedures given in EN 13501-1:2007+A1: 2009.

2. Details of classified product

2.1 General

The products, Fortex Cladding, are PVCU panels manufactured by a two part co-extrusion process consisting of a cellular foam core (pvc-ue) with a top coating of rigid PVC, 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.

The products covered in this ranged are referenced FCP250, FCF170 (also known as FCZ170 and FCF170EC32), FCD300, FCD333, FCG182, FC151, FC150, FV100 (also known as (FCV100) and the (E) versions of these products. The products can be supplied in different lengths, which does not influence the reaction to fire behaviour.

2.2 Product description

The products, Fortex Cladding, 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 the products is added at the end of this document.

General description		Co-extruded PVC-U profiles consisting of a cellular foam core and a top coating of rigid PVC
Trade name/ product reference		"Fortex Cladding"
Thickness of cladding		5 - 8 mm (stated by sponsor)
Density of cladding		400-550 kg/m ³ (stated by sponsor)
Decorative facing	Product reference	"Freefoam PVC Skin"
	Generic type	PVCu (Unplasticised Polyvinyl Chloride)
	Name of manufacturer	Freefoam Plastics Limited
	Thickness	0.6 mm
	Flame retardant details	See Note 1
Core	Product reference	"PVC Material"
	Generic type	PVCuE
	Thickness	4.4 - 7.4 mm
	Name of manufacturer	Freefoam Plastics Limited
	Flame retardant details	See Note 1
Timber frame	Generic type	Softwood timber
	Dimensions	40 mm x 40 mm
Brief description of manufacturing process		Standard extrusion, co-extrusion and embossing
Mounting and fixing details		The PVC cladding panels were mechanically fixed to a timber frame and a calcium silicate backing board was butted up against the reverse face of the timber.

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 312340, WFR 317738	EN ISO 11925-2
Exova Warringtonfire	Freefoam Plastics Limited	WFR 316410, WFR 316408, WFR 316409, WFR 316411, WFR 333602	EN 13823
Exova Warringtonfire	Freefoam Plastics Limited	WFR 335535	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)	9	493	Compliant
	THR _{600 s} (MJ)		34.2	Compliant
	Smogra (m ² /s ²)		351	Compliant
	TSP _{600 s} (m ²)		1505	Compliant
	LFS (y/n)		N	Compliant
	Flaming droplets (y/n) <10 s (y/n) >10 s (y/n)		Y Y Y	Compliant Compliant Compliant
EN ISO 11925-2 30 s surface exposure	Flame spread (mm)	12	45	Compliant
	Flaming droplets (y/n)		none	Compliant
30 s edge exposure	Flame spread (mm)	12	36	Compliant
	Flaming droplets (y/n)		none	Compliant



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 products Fortex Cladding, PVCU panels, in relation to their reaction to fire behaviour are 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) Used over any substrate of class A2 or better with density of 870 kg/m³ or higher, with an air gap, mechanically fixed onto a timber (or metal) support frame.
- ii) Construction applications, mechanically installed with an air gap.

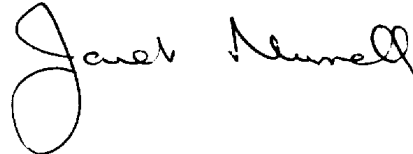
This classification is also valid for the following product parameters:

Colour	any colour
Surface structure	smooth or embossed
Board width	100 mm or more
Joint geometry	shiplap or feather edge
Product thickness	5 - 8 mm
Product composition	No variation allowed

The products covered in this ranged are referenced FCP250, FCF170 (also known as FCZ170 and FCF170EC32), FCD300, FCD333, FCG182, FC151, FC150, FV100 (also known as (FCV100) and the (E) versions of these products. The products are schematically represented in the appendix.

SIGNED

APPROVED



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Frans Paap
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on behalf of **Exova warringtonfire**

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Cladding Profiles

(All products can be Smooth or Embossed)

FCP250 (E) = 1.00 KG/PER M



FCF170E (also known as FCZ170E and FCF170EC32) = 0.63 KG/PER M



FCD300 (E) = 1.20 KG/PER M



FCD333 (E) = 1.332 KG/PER M



FCG182 (E) = 0.728 KG/PER M



FC151 (E) = 0.585 KG/PER M



FC150 (E) = 0.583 KG/PER M



FV100 (also known as FCV100) = 0.39 KG/PER M

