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Testing. Advising. Assuring.

Title:

CLASSIFICATION REPORT FOR ROOFS/ROOF COVERINGS EXPOSED TO EXTERNAL FIRE
EN 13501-5: 2005 +A1: 2009

Notified Body No:

0833

Product Names:

"PIR Ply Faced"

Report No:

317759

Issue No:

1

Prepared for:

Carlisle Syntec Europe B.V.
P.O. Box 110
AC Zevenaar
6900, The Netherlands

Date:

11th May 2012

1. Introduction

This classification report defines the classification assigned to "PIR Ply Faced", a composite roofing material, which is fully described in paragraph 2.2, in accordance with the procedures given in EN 13501-5: 2005: + A1: 2009

2. Details of classified product

2.1 General

The product, "PIR Ply Faced", a composite roofing material, is defined as being suitable for roof covering applications.

2.2 Product description

The product, "PIR Ply Faced", a composite roofing material is fully described below and in the test reports provided in support of classification listed in Clause 3.1.

General description	A composite waterproof roofing material
Product reference	"PIR Ply Faced"
Overall thickness	148mm (stated by sponsor) 146.2mm (determined by **Exova Warringtonfire**)
Overall weight per unit area	19.5kg/m^2 (stated by sponsor) 21.3kg/m^2 (determined by **Exova Warringtonfire**)
Specimen configuration	• RubberBond FleeceBack EPDM • Adhesive • Plywood faced PIR • Mechanical fixing • OSB3

Continued on next page

Waterproof membrane	Generic type		Waterproof membrane comprising EPDM coated polyester fleece
	Product reference		"RubberBond FleeceBack EPDM"
	Name of manufacturer		Carlisle Syntec
	Thickness		2.54mm
	Weight per unit area		2.1kg/m^2
	EPDM	Generic type	EPDM
		Product reference	**See Note 1 below**
		Name of manufacturer	**See Note 1 below**
		Number of coats	One
		Thickness per coat	1.14mm
		Weight per unit area / density	**See Note 1 below**
		Colour reference	"Slate Grey"
		Flame retardant details	**See Note 2 below**
	Polyester fleece	Generic type	Polyester fleece
		Product reference	**See Note 1 below**
		Name of manufacturer	**See Note 1 below**
		Thickness	1.4mm
		Weight per unit area / density	**See Note 1 below**
		Colour reference	**See Note 1 below**
		Flame retardant details	**See Note 2 below**
	Adhesive	Product reference	"WBA"
		Generic type	Acrylic adhesive
		Name of manufacturer	**See Note 3 below**
		Application rate	250ml/m^2
		Colour reference	"White"
		Flame retardant details	**See Note 2 below**
Plywood faced insulation	Generic type		Plywood faced PIR insulation
	Product reference		"PIR Ply Faced"
	Name of manufacturer		**See Note 3 below**
	Thickness		126mm
	Weight per unit area		6.3kg/m^2
	Product configuration		Plywood Insulation
	Plywood facing	Product reference	**See Note 1 below**
		Generic type	Plywood
		Name of manufacturer	**See Note 1 below**
		Thickness	6mm
		Number of ply's	**See Note 1 below**
		Density / weight per unit area	**See Note 1 below**
		Colour reference	"Brown"
		Flame retardant details	**See Note 2 below**
	Bonding details		The facing is auto-adhesively bonded to the foam during the manufacturing process
	Insulation	Product reference	**See Note 1 below**
		Generic type	PIR insulation
		Name of manufacturer	**See Note 1 below**
		Thickness	**See Note 1 below**
		Density / weight per unit area	**See Note 1 below**
		Colour reference	"Yellow"
		Flame retardant details	**See Note 2 below**

Mechanical fixings (Insulation layer to OSB deck)	Product reference	"Carlisle HP Fasteners / 75mm Plate Washers"
	Generic type	Steel fastener / plate washers
	Name of manufacturer	Carlisle Syntec
	Application rate	3 per m^2
	Colour reference	"Grey"
	Flame retardant details	**See Note 2 below**
Deck (reverse face)	Product reference	"OSB3"
	Generic type	OSB3
	Species	**See Note 1 below**
	Name of manufacturer	**See Note 1 below**
	Weight per unit area	11.1kg/m^2
	Thickness	18mm
	Flame retardant details	**See Note 2 below**
Brief description of manufacturing process		**See Note 1 below**

Note 1. The sponsor was unable to provide this information.

Note 2. The sponsor of the test has confirmed that no flame retardant additives were utilised in the production of the product / component.

Note 3. The sponsor of the test has provided this information but at the specific request of the sponsor, these details have been omitted from the report and are instead held on the confidential file relating to this investigation.

The description of the specimens as given above is not as detailed as would usually be the case for descriptions included in **Exova Warringtonfire** test reports and the description may not fully comply with the requirements of the test standard. In all other respects however the tests were conducted fully in accordance with the requirements of the test standard and the test results are valid**.**

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	Carlisle Syntec Europe B.V.	WF 316071	ENV 1187:2002 Test 4

3.2 Test results

3.2.1 Test 4

Test pitch: 0 degrees

Substrate/Deck: 18mm thick OSB board

Supporting structure: N/A

Preliminary test (Stage 1):

Parameter	Criteria	Test Results	Compliance
	Class B_{ROOF} (t4)	Specimen 1	Class B_{ROOF} (t4)
Burn time	<5min	02:00	Y
Flame spread distance	<0,38m	NIL	Y
Penetration	None	None	Y

Penetration test (Stage 2):

Parameter	Criteria	Test Results				Compliance
	Class B_{ROOF} (t4)	Specimen 1	Specimen 2	Specimen 3	Mean [a]	Class B_{ROOF} (t4)
Penetration time	≥60min	60min	60min	60min	60min	Y
[a] If one or two of the specimens have not failed at one hour, a time of 60min shall be used in calculating the mean time of penetration.						

4. Classification and field of application

4.1 Reference of classification

This classification has been carried out in accordance with EN 13501-5: 2005: + A1: 2009

4.2 Classification

The product, "PIR Ply Faced", a composite roofing material, in relation to its external fire performance is classified:

B_{ROOF} (t4)

4.3 Field of application

This classification is valid for the following conditions:

Range of pitches	0 - 10 degrees
Substrate/Deck	18mm OSB board
Product configuration	No variation allowed
Product composition	No variation allowed
Product application method	No variation allowed
Product thickness	No variation allowed
Product colour	No Variation allowed
Supporting structure	N/A

5. Limitations

This document does not represent type approval or certification of the product

SIGNED

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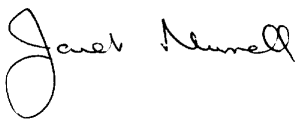
Mathew Dale
Certification Engineer
Technical Department

APPROVED



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Janet Murrell
Technical Manager
Technical Department
on behalf of:
Exova Warringtonfire