Exova Warringtonfire Holmesfield Road Warrington WA1 2DS United Kingdom T:+44 (0) 1925 655 116 F:+44 (0) 1925 655 419 E: warrington@exova.com W: www.exova.com

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 Glass Tissue"

Report No:

317758

Issue No:

1

Prepared for:

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

Date:

11^h May 2012

1. Introduction

This classification report defines the classification assigned to "PIR Glass Tissue", 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 Glass Tissue", a composite roofing material, is defined as being suitable for roof covering applications.

2.2 Product description

The product, "PIR Glass Tissue", 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 Glass Tissue"			
Overall thickness	142mm (stated by sponsor) 141.3mm (determined by Exova Warringtonfire)			
Overall weight per unit area	18.8kg/m ² (stated by sponsor) 18.9kg/m ² (determined by Exova Warringtonfire)			
Specimen configuration	 RubberBond FleeceBack EPDM Adhesive PIR glass tissue Mechanical fixing VCL Mechanical fixing OSB3 			

Continued on next page

	Generic type	2	Waterproof membrane comprising EPDM coated polyester fleece				
- - -	Product reference		"RubberBond FleeceBack EPDM"				
	Name of manufacturer		Carlisle Syntec				
	Thickness	. Talactar cr	2.54mm				
	Weight per u	ınit area	2.1kg/m ²				
	Weight per t	Generic type	EPDM				
ne		Product reference	See Note 1 below				
ora		Name of manufacturer	See Note 1 below				
l Hi		Number of coats	One				
Waterproof membrane	EPDM	Thickness per coat	1.14mm				
of		Weight per unit area / density	See Note 1 below				
prc		Colour reference	"Slate Grey"				
ter		Flame retardant details	See Note 2 below				
Wa		Generic type	Polyester fleece				
		Product reference	See Note 1 below				
		Name of manufacturer	See Note 1 below				
	Polyester	Thickness	1.4mm				
	fleece	Weight per unit area / density	See Note 1 below				
		Colour reference	See Note 1 below				
		Flame retardant details	See Note 1 below				
		Product reference	"WBA"				
		Generic type	Acrylic adhesive				
		Name of manufacturer	See Note 3 below				
	Adhesive		250ml/m ²				
		Application rate Colour reference	"White"				
			See Note 2 below				
	Flame retardant details		Glass tissue faced PIR insulation				
	Generic type Product ref		"PIR Glass Tissue"				
		ianufacturer	See Note 3 below				
	Thickness	landracturei	120mm				
	Weight per	· unit area	5.6kg/m ²				
			Glass tissue				
	Product configuration		Insulation				
_			Glass tissue				
읉		Product reference	See Note 1 below				
	Glass tissue facing	Generic type	Glass tissue				
ins		Name of manufacturer	See Note 1 below				
ed		Thickness	See Note 1 below				
fac		Density / weight per unit area	See Note 1 below				
e e		Colour reference	See Note 1 below				
Glass tissue faced insulation		Flame retardant details	See Note 1 below				
	Donding details		The facing is auto-adhesively bonded to the				
	Bonding details		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"				
I		Flame retardant details	See Note 1 below				

_	Product reference	"Carlisle HP Fasteners / 75mm Plate				
Mechanical		Washers"				
fixings	Generic type	Steel fastener / plate washers				
(Insulation to	Name of manufacturer	Carlisle Syntec				
vapour control	Application rate	3 per m ²				
layer)	Colour reference	"Grey"				
	Flame retardant details	See Note 2 below				
	Product reference	"VCL"				
	Generic type	Polythene				
Vangur control	Name of manufacturer	See Note 4 below				
Vapour control	Weight per unit area	0.02kg/m ²				
layer	Thickness	0.25mm				
	Colour reference	"Black"				
	Flame retardant details	See Note 2 below				
	Product reference	"Carlisle HP Fasteners / 75mm Plate				
Mechanical		Washers"				
fixings	Generic type	Steel fastener / plate washers				
(vapour control	Name of manufacturer	Carlisle Syntec				
layer to OSB	Application rate	3 per m ²				
deck)	Colour reference	Grey				
	Flame retardant details	See Note 2 below				
	Product reference	"OSB3"				
	Generic type	OSB3				
5 .	Species	See Note 1 below				
Deck	Name of manufacturer	See Note 1 below				
(reverse face)	Weight per unit area	11.1kg/m ²				
	Thickness	18mm				
	Flame retardant details	See Note 2 below				
		See Note 2 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.
- Note 4. The sponsor was unwilling to provide this information.

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 316069	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):

	Criteria	Test Results	Compliance	
Parameter	Class	Specimen 1	Class	
	B _{ROOF} (t4)	Specimen 1	B _{ROOF} (t4)	
Burn time	<5min	01:50	Υ	
Flame spread distance	<0,38m	NIL	Y	
Penetration	None	None	Υ	

Penetration test (Stage 2):

Parameter	Criteria Test Results			Complianc e		
Parameter	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 Glass Tissue", 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 APPROVED

Mathew Dale Janet Murrell

Certification Engineer Technical Department Technical Department Technical Department

on behalf of: **Exova Warringtonfire**

This copy has been produced from a .pdf format electronic file that has been provided by Exova Warringtonfire to the sponsor of the report and must only be reproduced in full. Extracts or abridgements of reports must not be published without permission of Exova Warringtonfire. The original signed paper version of this report is the sole authentic version. Only the original paper versions of this report bear authentic signatures of the responsible Exova Warringtonfire staff.