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:

A built up roof system incorporating solar panel referenced "LG NeON 2"

Report No:

WF 372083

Issue No:

1

Prepared for:

SVH Energie 155 Rue Du Docteur Bauer 93400 Saint Ouen France

Date:

28th September 2016



1. Introduction

This classification report defines the classification assigned to a built up roof system incorporating solar panel referenced "LG NeON 2", 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, a built up roof system incorporating solar panel referenced "LG NeON 2", is defined as being suitable for roof covering applications.

2.2 Product description

The product, a built up roof system incorporating solar panel referenced "LG NeON 2", is fully described below and in the test reports provided in support of classification listed in Clause 3.1.

General description		In-roof mounting system for a solar panel		
Product reference of overall composite		No product reference was assigned to this		
		product		
Name of manufacturer of overall composite		GSE		
Thickness of overall composite		See Note 1 Below		
Weight per unit area of overall composite		See Note 1 Below		
	Generic type	Solar panel		
	Product reference	"LG NeON 2"		
	Detailed description	Solar panel made of aluminium, glass and monocrystal		
Solar panel	Name of manufacturer	LG		
	Thickness	40mm		
	Weight per unit area	See Note 1 Below		
	Flame retardant details	See Note 2 Below		
	Generic type	Concrete roofing tile		
	Product reference	"Marley Mendip Roofing Tile"		
	Name of supplier	"Marley Mendip"		
Concrete tile	Colour reference	"Brown"		
	Dimensions	30mm x 340mm (60mm to height of profile)		
	Weight per unit area	32kg/m ²		
	Flame retardant details	See Note 2 Below		
	Generic type	Polypropylene		
Moulded tray	Product reference	"GSE Portrait 1640/1001"		
	Name of manufacturer	GSE		
	Thickness	13mm		
	Weight per unit area	2.5kg/m ²		
	Colour reference	"Black"		
	Flame retardant details	See Note 2 Below		

Continued on next page

	Generic type	Wood battens
Timber battens	Product reference	"Pine Tree Battens"
	Name of manufacturer	See Note 3 Below
	Dimensions	25mm x 45mm
	Density	380kg/m ³
	Colour reference	"Natural"
	Flame retardant details	See Note 2 Below
	Generic type	Roof underlay
	Product reference	"Easytrim Master Breather Membrane"
	Name of supplier	Travis Perkins
Roofing felt	Colour reference	"Grey"
	Thickness	0.4mm
	Weight per unit area	117.5g/m ²
	Flame retardant details	See Note 2 Below
	Generic type	Wood battens
	Product reference	"Pine Tree Battens"
Timber joist	Name of manufacturer	See Note 3 Below
	Dimensions	45mm x 95mm
	Density	380kg/m ³
	Colour reference	"Natural"
	Flame retardant details	See Note 2 Below
Brief description of	manufacturing process	See Note 3 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 was unwilling to provide this information.

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	SVH Energie	WF 366132	ENV 1187:2002 Test 4

3.2 Test results

3.2.1 Test 4

Test pitch: 45 degrees

Substrate/Deck: N/A

Supporting structure: Timber Joist

Preliminary test (Stage 1):

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

Penetration test (Stage 2):

Domenton	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	Υ

^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, a built up roof system incorporating solar panel referenced "LG NeON 2", in relation to its external fire performance is classified:



4.3 Field of application

This classification is valid for the following conditions:

Range of pitches >10 degrees

Substrate/Deck N/A

Product configuration No variation allowed Product composition No variation allowed Product construction No variation allowed Product thickness No variation allowed Supporting structure No variation allowed

5. Limitations

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

SIGNED

APPROVED

Mathew Dale

Senior Certification Engineer Technical Department Janet Murrell

Technical Manager 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 pdf copy supplied is the sole authentic version of this document. All pdf versions of this report bear authentic signatures of the responsible **Exova Warringtonfire** staff.