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# 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 "Sunpower SPR E20-327"

### **Report No:**

WF 372638

Issue No:

1

# Prepared for:

SVH Energie 155 Rue Du Docteur Bauer 93400 Saint Ouen France

# Date:

24<sup>th</sup> October 2016



## 1. Introduction

This classification report defines the classification assigned to a built up roof system incorporating solar panel referenced "Sunpower SPR E20-327", 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 "Sunpower SPR E20-327", is defined as being suitable for roof covering applications.

## 2.2 Product description

The product, a built up roof system incorporating solar panel referenced "Sunpower SPR E20-327", 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 overal	Il composite	See Note 1 Below		
Weight per unit area of overall composite		See Note 1 Below		
	Generic type	Solar panel		
	Product reference	"Sunpower SPR E20-327"		
Solar panel	Detailed description	Solar panel made of aluminium, glass and monocrystal		
	Name of manufacturer	Sunpower		
	Thickness	46mm		
	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 <sup>2</sup>		
	Flame retardant details	See Note 2 Below		
Moulded tray	Generic type	Polypropylene		
	Product reference	"GSE Portrait 1559/1046"		
	Name of manufacturer	GSE		
	Thickness	13mm		
	Weight per unit area	2.5kg/m <sup>2</sup>		
	Colour reference	"Black"		
	Flame retardant details	See Note 2 Below		

Continued on next page

Timber battens	Generic type	Wood battens
	Product reference	"Pine Tree Battens"
	Name of manufacturer	See Note 3 Below
	Dimensions	25mm x 45mm
	Density	380kg/m <sup>3</sup>
	Colour reference	"Natural"
	Flame retardant details	See Note 2 Below
	Generic type	Roof underlay
Roofing felt	Product reference	"Easytrim Master Breather Membrane"
	Name of supplier	Travis Perkins
	Colour reference	"Grey"
	Thickness	0.4mm
	Weight per unit area	117.5g/m <sup>2</sup>
	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 <sup>3</sup>
	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 364947	ENV 1187:2002 Test 4

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# 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	Specimon 1	Class	
	B <sub>ROOF</sub> (t4)	Specimen 1	B <sub>ROOF</sub> (t4)	
Burn time	<5min	NIL	Y	
Flame spread distance	<0,38m	NIL	Y	
Penetration	None	None	Y	

## Penetration test (Stage 2):

Deremeter	Criteria	Test Results			Complianc e	
Parameter	Class B <sub>ROOF</sub> (t4)	Specimen 1	Specimen 2	Specimen 3	Mean ª	Class B <sub>ROOF</sub> (t4)
Penetration time	≥60min	60min	60min	60min	60min	Y
<sup>a</sup> 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 "Sunpower SPR E20-327", in relation to its external fire performance is classified:

# B<sub>ROOF</sub> (t4)

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### 4.3 Field of application

This classification is valid for the following conditions:

Range of pitches Substrate/Deck Product configuration Product composition Product construction Product thickness Supporting structure >10 degrees N/A No variation allowed No variation allowed No variation allowed No variation allowed No variation allowed

## 5. Limitations

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

SIGNED

**APPROVED** 

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Technical Manager Technical Department on behalf of: Exova Warringtonfire

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