

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 "BenQ AUO  
PM096B00,  
(mono crystalline)"

**Report No:**

WF 372043

**Issue No:**

1

**Prepared for:**

SVH Energie  
155 Rue Du Docteur Bauer  
93400 Saint Ouen  
France

**Date:**

5<sup>th</sup> October 2016



## 1. Introduction

This classification report defines the classification assigned to a built up roof system incorporating solar panel referenced "BenQ AUO PM096B00 (mono crystalline)", 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 "BenQ AUO PM096B00 (mono crystalline)", is defined as being suitable for roof covering applications.

### 2.2 Product description

The product, a built up roof system incorporating solar panel referenced "BenQ AUO PM096B00 (mono crystalline)", 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		<b>See Note 1 Below</b>
Weight per unit area of overall composite		<b>See Note 1 Below</b>
Solar panel	Generic type	Solar panel
	Product reference	"BenQ AUO PM096B00" (mono crystalline)
	Detailed description	Solar panel made of aluminium, glass and monocrystal
	Name of manufacturer	BenQ Solar
	Thickness	46mm
	Weight per unit area	<b>See Note 1 Below</b>
	Flame retardant details	<b>See Note 2 Below</b>
Concrete tile	Generic type	Concrete roofing tile
	Product reference	"Marley Mendip Roofing Tile"
	Name of supplier	"Marley Mendip"
	Colour reference	"Brown"
	Dimensions	30mm x 340mm 60mm to height of profile)
	Weight per unit area	32kg/m <sup>2</sup>
	Flame retardant details	<b>See Note 2 Below</b>
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	<b>See Note 2 Below</b>

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Timber battens	Generic type	Wood battens
	Product reference	"Pine Tree Battens"
	Name of manufacturer	<b>See Note 3 Below</b>
	Dimensions	25mm x 45mm
	Density	380kg/m <sup>3</sup>
	Colour reference	"Natural"
	Flame retardant details	<b>See Note 2 Below</b>
Roofing felt	Generic type	Roof underlay
	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	<b>See Note 2 Below</b>
Timber joist	Generic type	Wood battens
	Product reference	"Pine Tree Battens"
	Name of manufacturer	<b>See Note 3 Below</b>
	Dimensions	45mm x 95mm
	Density	380kg/m <sup>3</sup>
	Colour reference	"Natural"
	Flame retardant details	<b>See Note 2 Below</b>
Brief description of manufacturing process		<b>See Note 3 Below</b>

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 366299 (Issue 2)	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):

Parameter	Criteria	Test Results	Compliance
	Class B <sub>ROOF</sub> (t4)	Specimen 1	Class 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):

Parameter	Criteria	Test Results				Compliance
	Class B <sub>ROOF</sub> (t4)	Specimen 1	Specimen 2	Specimen 3	Mean <sup>a</sup>	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 "BenQ AUO PM096B00 (mono crystalline)", in relation to its external fire performance is classified:

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

### 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

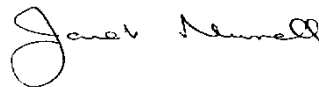
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#### SIGNED



.....  
**Mathew Dale**  
Senior Certification Engineer  
Technical Department

#### APPROVED



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

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