

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 "Sapphire Solar
SS250P/60"

Report No:

WF 372643

Issue No:

1

Prepared for:

SVH Energie
155 Rue Du Docteur Bauer
93400 Saint Ouen
France

Date:

24th October 2016



0249

1. Introduction

This classification report defines the classification assigned to a built up roof system incorporating solar panel referenced "Sapphire Solar SS250P/60", 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 "Sapphire Solar SS250P/60", is defined as being suitable for roof covering applications.

2.2 Product description

The product, a built up roof system incorporating solar panel referenced "Sapphire Solar SS250P/60", 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 |
| Solar panel | Generic type | Solar panel |
| | Product reference | "Sapphire Solar SS250P/60" |
| | Detailed description | Solar panel made of aluminium, glass and polycrystal |
| | Name of manufacturer | Sapphire |
| | Thickness | 35mm |
| | Weight per unit area | See Note 1 Below |
| | Flame retardant details | See Note 2 Below |
| 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 ² |
| | Flame retardant details | See Note 2 Below |
| Moulded tray | Generic type | Polypropylene |
| | Product reference | "GSE Portrait 1640/992" |
| | 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

| | | |
|--|-------------------------|-------------------------------------|
| 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 ³ |
| | Colour reference | "Natural" |
| | Flame retardant details | See Note 2 Below |
| 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 ² |
| | Flame retardant details | See Note 2 Below |
| Timber joist | Generic type | Wood battens |
| | Product reference | "Pine Tree Battens" |
| | 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 366300 | 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 _{ROOF} (t4) | Specimen 1 | Class B _{ROOF} (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 _{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, a built up roof system incorporating solar panel referenced "Sapphire Solar SS250P/60", 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 | >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

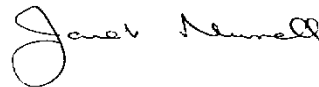
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SIGNED



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Mathew Dale
Senior Certification Engineer
Technical Department

APPROVED



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

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