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 roofing system comprising "Sunmodule Plus SW 250 Poly", a solar panel and "Marley Mendip Roofing Tile"

Report No:

WF 337936

Issue No:

1

Prepared for:

SVH Energie 155 Rue Du Docteur Bauer 93400 Saint Ouen France

Date:

25th February 2014

1. Introduction

This classification report defines the classification assigned to a built up roofing system comprising "Sunmodule Plus SW 250 Poly", a solar panel and "Marley Mendip Roofing Tile", a concrete roofing tile, 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, to a built up roofing system comprising "Sunmodule Plus SW 250 Poly", a solar panel and "Marley Mendip Roofing Tile", a concrete roofing tile, is defined as being suitable for roof covering applications.

2.2 Product description

The product, to a built up roofing system comprising "Sunmodule Plus SW 250 Poly", a solar panel and "Marley Mendip Roofing Tile", a concrete roofing tile 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 manufactu | rer of overall composite | GSE | |
| Thickness of overal | | See Note 1 Below | |
| Weight per unit are | a of overall composite | See Note 1 Below | |
| | Generic type | Solar panel | |
| | Product reference | "Sunmodule Plus SW 250 Poly" | |
| | Detailed description | Solar panel made of aluminium, glass and | |
| Solar panel | | polycrystal | |
| Solai pariei | Name of manufacturer | Solarworld | |
| | Thickness | 31mm | |
| | Weight per unit area | 12.71kg/m ² | |
| | 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" | |
| | Thickness | 60mm | |
| | Weight per unit area | 32kg/m ² | |
| | Flame retardant details | See Note 2 Below | |
| | Generic type | Polypropylene | |
| Moulded tray | 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

| | Generic type | Aluminium flashing | | | |
|--|-------------------------|------------------------------------|--|--|--|
| Aluminium flashing | Product reference | "GSE Alu Flashing" | | | |
| | Name of manufacturer | GSE | | | |
| | Colour reference | "Silver" | | | |
| | Thickness | 0.8mm | | | |
| | Weight per unit area | 2.5kg/m ² | | | |
| | Flame retardant details | This component is inherently flame | | | |
| | | retardant | | | |
| | Generic type | Wood battens | | | |
| | Product reference | "Pine Tree Battens" | | | |
| Timber battens | Name of manufacturer | See Note 3 Below | | | |
| | Thickness | 27mm | | | |
| | Density | 380kg/m ³ | | | |
| | Colour reference | "Natural" | | | |
| | Flame retardant details | See Note 2 Below | | | |
| | Generic type | Roof underlay | | | |
| | Product reference | "Spirtech +300" | | | |
| | Name of supplier | Monier | | | |
| Roofing felt | Colour reference | "Black" | | | |
| | Thickness | 0.5mm | | | |
| | Weight per unit area | 150g/m ² | | | |
| | Flame retardant details | See Note 2 Below | | | |
| | Generic type | Wood battens | | | |
| Timber joist | Product reference | "Pine Tree Battens" | | | |
| | Name of manufacturer | See Note 3 Below | | | |
| | Thickness | 50mm | | | |
| | 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 337865 | ENV 1187:2002 Test 4 |

3.2 Test results

3.2.1 Test 4

Test pitch: 45 degrees

Substrate/Deck: N/A

Supporting structure: N/A

Preliminary test (Stage 1):

| | Criteria | Test Results | Compliance | |
|--------------------------|---------------------------------|--------------|---------------------------------|--|
| Parameter | Class B _{ROOF} (t4) | Specimen 1 | Class B _{ROOF} (t4) | |
| Burn time | <5min | NIL | Y | |
| Flame spread distance | <0,38m | 0.076m | Y | |
| Penetration | None | None | Υ | |

Penetration test (Stage 2):

| Parameter | Criteria | Test Results | | | Complianc e | |
|------------------|---------------------------------|---------------|------------|------------|----------------|---------------------------------|
| | Class B _{ROOF} (t4) | Specimen 1 | Specimen 2 | Specimen 3 | Mean | 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, to a built up roofing system comprising "Sunmodule Plus SW 250 Poly", a solar panel and "Marley Mendip Roofing Tile", a concrete roofing tile, in relation to its external fire performance is classified:

B_{ROOF} (t4)

This classification is valid for the following conditions:

Range of pitches 10 degrees or greater Product configuration No variation allowed Product composition No variation allowed Product thickness No variation allowed No Variation allowed Product colour N/A

Supporting structure

5. Limitations

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

SIGNED

APPROVED

Mathew Dale Certification Engineer

Technical Department

Janet Murrell **Technical Manager Technical Department** on behalf of:

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Exova Warringtonfire

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