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**Agrément Certificate**

**24/7280**

Product Sheet 1 Issue 1

## MARLEY SOLAR TILE

### MARLEY SOLAR TILE RANGE

This Agrément Certificate Product Sheet<sup>(1)</sup> relates to the Marley Solar Tile Range, a system of roof flashing kits and solar panels, for use as electricity generation from sunlight, in new and existing pitched roofs of domestic and non-domestic buildings of between 20 and 60° in pitch, subject to the loadbearing capacity of the roof construction.

(1) Hereinafter referred to as 'Certificate'.

#### The assessment includes

##### Product factors:

- compliance with Building Regulations
- compliance with additional regulatory or non-regulatory information where applicable
- evaluation against technical specifications
- assessment criteria and technical investigations
- uses and design considerations

##### Process factors:

- compliance with Scheme requirements
- installation, delivery, handling and storage
- production and quality controls
- maintenance and repair

##### Ongoing contractual Scheme elements†:

- regular assessment of production
- formal 3-yearly review



#### KEY FACTORS ASSESSED

- Section 1. Mechanical resistance and stability
- Section 2. Safety in case of fire
- Section 3. Hygiene, health and the environment
- Section 4. Safety and accessibility in use
- Section 5. Protection against noise
- Section 6. Energy economy and heat retention
- Section 7. Sustainable use of natural resources
- Section 8. Durability

The BBA has awarded this Certificate to the company named above for the products described herein. These products have been assessed by the BBA as being fit for their intended use provided they are installed, used and maintained as set out in this Certificate.

On behalf of the British Board of Agrément

Date of issue: 11 November 2024

Hardy Giesler  
Chief Executive Officer

*This BBA Agrément Certificate is issued under the BBA's Inspection Body accreditation to ISO/IEC 17020. Sections marked with † are not issued under accreditation.*

*The BBA is a UKAS accredited Inspection Body (No. 4345), Certification Body (No. 0113) and Testing Laboratory (No. 0357).*

*Readers MUST check that this is the latest issue of this Agrément Certificate by either referring to the BBA website or contacting the BBA directly.*

*The Certificate should be read in full as it may be misleading to read clauses in isolation.*

*Any photographs are for illustrative purposes only, do not constitute advice and should not be relied upon.*

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## SUMMARY OF ASSESSMENT AND COMPLIANCE

This section provides a summary of the assessment conclusions; readers should refer to the later sections of this Certificate for information about the assessments carried out.

### Compliance with Regulations

Having assessed the key factors, the opinion of the BBA is that the Marley Solar Tile Range, if installed, used and maintained in accordance with this Certificate, can satisfy or contribute to satisfying the relevant requirements of the following Building Regulations:



#### The Building Regulations 2010 (England and Wales) (as amended)

<b>Requirement:</b>	<b>A1(1)(b)</b>	<b>Loading</b>
Comment:	The products adequately transmit self-weight and imposed loads to a roof structure. See section 1 of this Certificate.	
<b>Requirement:</b>	<b>B4(2)</b>	<b>External fire spread</b>
Comment:	The products are unrestricted by this Requirement. See section 2 of this Certificate.	
<b>Requirement:</b>	<b>C2(b)</b>	<b>Resistance to moisture</b>
Comment:	The products can contribute to satisfying this Requirement. See section 3 of this Certificate.	
<b>Regulation:</b>	<b>7(1)</b>	<b>Materials and workmanship</b>
Comment:	The products are acceptable. See sections 8 and 9 of this Certificate.	
<b>Regulation:</b>	<b>25B</b>	<b>Nearly zero-energy requirements for new buildings</b>
<b>Regulation:</b>	<b>26</b>	<b>CO<sub>2</sub> emission roles for new buildings</b>
<b>Regulation:</b>	<b>26C</b>	<b>Target primary energy rates for new buildings (applicable to England only)</b>
<b>Regulation:</b>	<b>26C</b>	<b>Minimum energy efficiency rating (applicable to Wales only)</b>
Comment:	The products can contribute to reducing the total carbon dioxide emissions of the building. See section 6 of the Certificate.	



#### The Building (Scotland) Regulations 2004 (as amended)

<b>Regulation:</b>	<b>8(1)(2)</b>	<b>Fitness and durability of materials and workmanship</b>
Comment:	The products are acceptable. See sections 8 and 9 of this Certificate.	
<b>Regulation:</b>	<b>9</b>	<b>Building standards – construction</b>
Standard:	<b>1.1b</b>	<b>Structure</b>
Comment:	The products can have sufficient strength and stiffness to sustain design loads, with reference to clauses 1.1.0 <sup>(1)</sup> and 1.1.1 <sup>(1)</sup> . See section 1 of this Certificate.	
Standard:	<b>2.8</b>	<b>Spread from neighbouring buildings</b>
Comment:	The products are unrestricted by this Standard, with reference to clause 2.8.1 <sup>(1)(2)</sup> . See section 2 of this Certificate.	
Standard:	<b>3.10</b>	<b>Precipitation</b>
Comment:	The products can contribute to satisfying this Standard, with reference to clause 3.10.7 <sup>(1)(2)</sup> . See section 3 of this Certificate.	
Standard:	<b>6.1(b)(c)</b>	<b>Carbon dioxide emissions</b>
Comment:	The products can contribute to reducing to satisfying this Standard, with reference to clauses 6.1.2 <sup>(1)</sup> and 6.1.4 <sup>(2)</sup> . See section 6 of this Certificate.	

Standard: Comment:	6.7	Commissioning building services Electrical wiring must be carried out by a suitably qualified and competent person in accordance with the requirements of Technical Standard 6.7.1 <sup>(1)(2)</sup> .
Standard: Comment:	6.8	Written information The building occupier must be provided with appropriate written information in accordance with the requirements of Technical Standards 6.8.1 <sup>(1)(2)</sup> and 6.8.2 <sup>(1)</sup>
Standard: Comment:	7(a)(b)	Statement of sustainability The products can contribute to satisfying the relevant requirements of Regulation 9, Standards 1 to 6, and therefore will contribute to a construction meeting a bronze or bronze active level of sustainability as defined in this Standard. In addition, the products can contribute to a construction meeting a higher level of sustainability as defined in this Standard, with reference to clauses 7.1.3 <sup>(1)(2)</sup> , 7.1.4 <sup>(1)(2)</sup> , 7.1.5 <sup>(1)(2)</sup> , 7.1.6 <sup>(1)(2)</sup> and 7.1.7 <sup>(1)(2)</sup> . See section 6 of this Certificate.
<b>Regulation:</b> Comment:	<b>12</b>	<b>Building standards – conversion</b> All comments given for the products under Regulation 9, Standards 1 to 6, also apply to this Regulation, with reference to clause 0.12.1 <sup>(1)(2)</sup> and Schedule 6 <sup>(1)(2)</sup> .
		(1) Technical Handbook (Domestic). (2) Technical Handbook (Non-Domestic).



## The Building Regulations (Northern Ireland) 2012 (as amended)

<b>Regulation:</b> Comment:	<b>23(1)(a)</b> <b>(i)(iii)</b> <b>(b)(i)(ii)</b>	<b>Fitness of materials and workmanship</b> The products are acceptable. See sections 8 and 9 of this Certificate.
<b>Regulation:</b> Comment:	<b>28(b)</b>	<b>Resistance to moisture and weather</b> The products can contribute to satisfying this Regulation. See section 3 of this Certificate.
<b>Regulation:</b> Comment:	<b>30(a)(b)</b>	<b>Stability</b> The products can contribute to satisfying this Regulation. See section 1 of this Certificate.
<b>Regulation:</b> Comment:	<b>36(b)</b>	<b>External fire spread</b> The products are unrestricted by this Regulation. See section 2 of this Certificate.
<b>Regulation:</b> Comment:	<b>40(1)(2)</b>	<b>Target carbon dioxide emission rate</b> The products will contribute to satisfying this Regulation. See section 6 of this Certificate.

## Additional Information

### NHBC Standards 2024

In the opinion of the BBA, the Marley Solar Tile Range, if installed, used and maintained in accordance with this Certificate, can satisfy or contribute to satisfying the relevant requirements in relation to *NHBC Standards*, Chapters 7.2 *Pitched Roofs* and 8.2 *Low or zero carbon technologies*.

## Fulfilment of Requirements

The BBA has judged the Marley Solar Tile Range to be satisfactory for use as described in this Certificate. The products have been assessed as a roof mounting system and an electricity generation system for use in new and existing pitched roofs of domestic and non-domestic buildings of between 20 and 60° in pitch, subject to the loadbearing capacity of the roof construction.

## ASSESSMENT

### Product description and intended use

The Certificate holder provided the following description for the products under assessment. The Marley Solar Tile Range consists of:

- Roof integrated Photovoltaic (PV) panels — made up of 60, 60 × 2, or 54 × 2 poly and mono-crystalline PV cells with a glass front cover and an aluminium frame. This component has been assessed by the BBA as meeting the requirements of the Microgeneration Certification Scheme, MCS 005, Product Certification Scheme Requirements: Solar Photovoltaic Modules (Certificate number BBA MCS 7070)

*Table 1 Nominal characteristics of Marley Solar Tiles*

Characteristic (unit)	Components
	410
Panel length (up roof) (m)	1.722
Panel width (across roof) (m)	1.134
Panel thickness (mm)	70
Aperture area (m <sup>2</sup> )	1.885
Panel weight (kg)	25
Nominal peak power rating (W)	410

- Roof Flashing kits — manufactured from coated aluminium alloy including mounting brackets and fixings and the appropriate flashings for the application.

*Table 2 Nominal characteristics of Marley Solar Tile – Flashing Kits*

Conditions	Slated/Tiled/Sarking roofs		Sarking roof brackets
	Portrait	Landscape	Portrait/Landscape
Flashing kit	MAVAT16, MAF F16-TL, MAF F16-TC, MAF F16-TR, MAF F16-TY, MAF F16-J	MAVAL16, MAF F16-LL, MAF F16-LC, MAF F16-LR, MAF F16-LY, MAF F16-LJ	SB16-L, SB16-C, SB16-R, SB16-Y, SB16-J, SB16-AT

This component has been assessed by the BBA as meeting the requirements of the Microgeneration Certification Scheme, MCS 012, Product Certification Scheme Requirements: Pitched Roof Installation Kits (Certificate number BBA MCS 7071).

#### Ancillary Items

The products are satisfactory for installation in tiled or slated pitched roofs with pitches between 20° and 60°.

#### Ancillary Items

The Certificate holder recommends the following ancillary items for use with the products, but these materials have not been assessed by the BBA and are outside the scope of this Certificate:

- DC to AC power inverter
- Consumer unit
- Generation meter
- Connecting cables.

## Product assessment – key factors

The products were assessed for the following key factors, and the outcome of the assessment is shown below. Conclusions relating to the Building Regulations apply to the whole of the UK unless otherwise stated.

### 1 Mechanical resistance and stability

Data were assessed for the following characteristic.

#### 1.1 Properties in relation to loading

1.1.1 Results of load resistance tests are given in Table 3.

*Table 3 Load resistance tests*

Product assessed	Assessment method	Requirement	Result
Complete test installation (slates and tiles)	MCS 012 Issue 2.4	Value achieved	Design imposed load 5.32 kN·m <sup>-2</sup>
Complete test installation (sarking boards)	MCS 012 Issue 2.4	Value achieved	Design imposed load 5.32 kN·m <sup>-2</sup>
Complete test installation (slates and tiles) for 405	MCS 012 Issue 2.4	Value achieved	Design imposed load 4.24 kN·m <sup>-2</sup>
Complete test installation (sarking boards) for 405	MCS 012 Issue 2.4	Value achieved	Design imposed load 4.24 kN·m <sup>-2</sup>

### 2 Safety in case of fire

Data were assessed for the following characteristic.

#### 2.1 External fire spread

2.1.1 The results of a test for external fire exposure to roofs is given in Table 4.

*Table 4 External fire exposure test*

Product assessed	Assessment method	Requirement	Result
Marley Solar Tile and Marley Solar Tile - Flashing Kits	CEN/TS 1187 : 2012	Classification achieved	B <sub>Roof</sub> (t4)

2.1.2 On the basis of data assessed, the Marley Solar Tiles are suitable for pitched roofs with pitches between 20 and 60 degrees.

### 3 Hygiene, health and the environment

Data were assessed for the following characteristics.

#### 3.1 Resistance to weather

*Table 5 Resistance to weather testing*

Product assessed	Assessment method	Requirement	Result
Complete Marley Solar Tile Installation	MCS 012	No leaks	Pass
Marley Solar Tile - Flashing Kit (slates and tiles, sarking boards)	MCS 012 Clause 6.2.3.1 Weathertightness of the penetrations through the outer surface	No water penetration	Pass

3.1.1 On the basis of data assessed, completed roofs will provide adequate resistance to weather ingress.

3.1.2 Particular attention must be paid to the correct fitting of all components and to the detailing and positioning of gaskets and areas where cables enter the building.

### 3.2 Resistance to wind uplift

*Table 6 Resistance to wind uplift*

Product assessed	Assessment method	Requirement	Result
Marley Solar Tile - Flashing Kit (slates and tiles, sarking boards)	BS EN 14437 : 2004 Determination of the uplift resistance of installed clay or concrete tiles for roofing – roof system test method	Determine characteristic uplift resistance	Characteristic uplift resistance of the roofing tiles Slates and tiles = 5.32 kN·m <sup>-2</sup> Sarking boards = 5.32 kN·m <sup>-2</sup>
Marley Solar Tile - Flashing Kit (slates and tiles, sarking boards) for 405	BS EN 14437 : 2004 Determination of the uplift resistance of installed clay or concrete tiles for roofing – roof system test method	Determine characteristic uplift resistance	Characteristic uplift resistance of the roofing tiles Slates and tiles = 4.24 kN·m <sup>-2</sup> Sarking boards = 4.24 kN·m <sup>-2</sup>

## 4 Safety and accessibility in use

Data were assessed for the following characteristics.

### 4.1 Safety in use

Results of Design qualification and type approval tests are given in Table 7.

*Table 7 Design qualification and type approval*

Product assessed	Assessment method	Requirement	Result
Marley Solar Tile	IEC 61215-1 : 2016	Requirements as listed in IEC 61215-1 : 2016	Pass

## 5 Protection against noise

Not applicable.

## 6 Energy economy and heat retention

Data were assessed for the following characteristics.

### 6.1 Energy performance

6.1.1 The performance of the products was evaluated against IEC 61215-1-1 : 2016 in accordance with MCS 005. The results of the tests are given in Table 8.

*Table 8 Energy Performance*

Product assessed	Assessment method	Requirement	Result
Marley Solar Tile	BS EN 61215-1-1 : 2016 BS EN 61730-1 : 2007 BS EN 61730-2 : 2007	Perform in line with declaration	Pass

6.1.2 The electrical characteristics and performance of the module under standard test conditions are given in Table 9.

**Table 9 Characteristic electrical output**

Characteristic <sup>(1)</sup>	Photovoltaic panel type
	410
Nominal power rating (W)	410
Tolerance (%)	-5%, +5%
Open circuit voltage (V)	37.2
Maximum power voltage (V)	31.0
Short circuit current (A)	13.6
Maximum power current (A)	13.1
Module efficiency (%) <sup>(2)</sup>	21.5
Maximum system voltage (V)	1,000
Series fuse rating (A)	25

(1) Performance at standard test conditions: irradiance 1000 W·m<sup>-2</sup>, cell temperature 25°C, AM 1.5 Spectrum

(2) Based on aperture area.

6.1.3 The nominal peak power output of the modules given in Table 9 must be used in carbon emissions calculations in accordance with the documents supporting the relevant national Building Regulations.

## 7 Sustainable use of natural resources

Not applicable.

## 8 Durability

8.1 The potential mechanisms for degradation and the known performance characteristics of the materials in these products were assessed.

### 8.2 Service life

8.2.1 Under normal service conditions, the products will have a structural life of at least equivalent to the structure in which they are incorporated, provided they are designed, installed and maintained in accordance with this Certificate and the Certificate holder's instructions.

8.2.2 Under normal service conditions, in common with other photovoltaic panels, the peak electrical output will reduce with time. The Certificate holder warrants the power output to 90% of nominal after 10 years and 80% after 25 years. The terms of this warranty are outside the scope of this Certificate.

## PROCESS ASSESSMENT

Information provided by the Certificate holder was assessed for the following factors:

## 9 Design, installation, workmanship and maintenance

### 9.1 Design

9.1.1 The design process was assessed by the BBA, and the following requirements apply in order to satisfy the performance specified in this Certificate.

9.1.2 It is the responsibility of the system designer and installer to ensure the installed system is able to resist the anticipated loads for each project. The system has a characteristic value of resistance to wind uplift of 5.32 kPa. For design purposes, this value should be divided by a partial material factor of 1.00 to give a design resistance to ultimate loads of 5.32 kPa.

9.1.3 The condition and structural adequacy of the roof into which the products are to be mounted must be evaluated by a site survey and assessed by a suitably experienced and competent individual. The roof must be sufficiently robust to resist the additional loads resulting from the installation of the modules. The maximum rafter spacing is 600 mm (between centres) and the minimum batten size is 50 x 25 mm.

9.1.4 Imposed loads due to wind and snow must be determined by a suitably experienced and competent individual for each project in accordance with BS EN 1991-1-3 : 2003 and BS EN 1991-1-4 : 2005. Further guidance is given in BRE Digest 489 : 2004 . The derived loads must be multiplied by an appropriate partial load factor.

9.1.5 The building's location and the orientation of the modules will have a significant effect on the power generated by the products. A south facing elevation at 30° pitch is ideal (south-east or south-west elevations can also achieve favourable results). Installers must provide an estimate of annual power production for individual sites based on a site survey. If panels are fitted to more than one roof elevation, they must be connected to separate inverters. Annual solar radiation for different roof pitches and orientation can be calculated as per SAP 2012, Appendix U.

9.1.6 Shade, such as that cast from trees or neighbouring buildings, can have a significant impact on the performance of the panels and must be considered when deciding the suitability of a particular site.

9.1.7 Modules connected in series must be installed with the same orientation and tilt. Varying orientations or angles may result in reduced efficiency.

## 9.2 Installation

9.2.1 Installation instructions provided by the Certificate holder were assessed and judged to be appropriate and adequate.

9.2.2 Installation must be carried out in accordance with this Certificate and the Certificate holder's instructions. A summary of instructions and guidance is provided in Annex A.

9.2.3 The electrical wiring must be installed in accordance with BS 7671 : 2018. Additionally, in England and Wales, it must be installed in accordance with the requirements of Part P of the Building Regulations 2010 and, in Scotland, with the relevant requirements of Technical Standard 4.5.

9.2.4 Installation of the panels must not be carried out in very windy or wet conditions.

9.2.5 The modules must be protected from damage during installation.

9.2.6 It must be ensured that other system components do not exert damaging mechanical or electrical influences on the modules. When connected, modules must all have the same voltage and must not be connected together to create a voltage higher than the permitted system voltage.

## 9.3 Workmanship

9.3.1 Practicability of installation was assessed by the BBA, on the basis of the Certificate holder's information. To achieve the performance described in this Certificate, installation of the products must only be installed by a trained and qualified installer, experienced in the installation of these types of products.

9.3.2 The electrical connections must be made by a competent electrician in accordance with the IET Wiring Regulations BS 7671 : 2018.

## 9.4 Maintenance and repair

9.4.1 Ongoing satisfactory performance of the products in use requires that they are suitably maintained. The guidance provided by the Certificate holder was assessed by the BBA and found to be appropriate and adequate.

The following requirements apply in order to satisfy the performance assessed in this Certificate:



9.4.2 Appropriate safety precautions in relation to working at height and the risk of electric shock must be taken when carrying out maintenance on the panels. The front surface of the module must be covered by an opaque cloth or other material before work commences. Appropriate safety equipment (eg insulated tools and gloves) must be used and direct contact with live parts of the cables and connectors avoided where possible.

9.4.3 The panels must be inspected for damage at regular intervals. The Certificate holder must be consulted if damaged panels are discovered in order to decide on the most appropriate method of repair, but such advice is outside the scope of this Certificate.

9.4.4 It is important that the panels are clean to maintain maximum efficiency. It is not normally necessary to clean the modules as rainfall generally has a cleansing effect. Where heavy soiling occurs, the modules may be hosed with plain water (ie without cleaning agents) and gently wiped with a sponge. Abrasives must not be used and dirt must never be scraped or scrubbed away when dry as this may cause scratching.

9.4.5 Security of mountings, cable connections and components must be checked regularly.

9.4.6 Individual PV components (eg the diode, junction box and plug connectors) must not be changed in isolation. If replacement is necessary, the entire unit and associated components must be changed.

## **10 Manufacture**

10.1 The production processes for the products have been assessed, and provide assurance that the quality controls are satisfactory according to the following factors:

10.1.1 The manufacturer has provided documented information on the materials, processes, testing and control factors.

10.1.2 The quality control operated over batches of incoming materials has been assessed and deemed appropriate and adequate.

10.1.3 The quality control procedures and product testing to be undertaken have been assessed and deemed appropriate and adequate.

10.1.4 The process for management of non-conformities has been assessed and deemed appropriate and adequate.

10.1.5 An audit of each production location was undertaken, and it was confirmed that the production process was in accordance with the documented process, and that equipment has been properly tested and calibrated.

10.1.6 An audit of each production location was undertaken, and it was confirmed that the production process was in accordance with MCS 010.

† 10.2 The BBA has undertaken to review the above measures on a regular basis through a surveillance process, to verify that the specifications and quality control operated by the manufacturer are being maintained.

## **11 Delivery and site handling**

11.1 The Certificate holder stated that the products are delivered to site in packaging bearing the product name, Certificate holder's name, batch number, health and safety information and weight of contents.

11.2 Delivery and site handling must be performed in accordance with the Certificate holder's instructions and this Certificate, including:

11.2.1 The photovoltaic panels must be stored on a level, clean, dry surface and remain in the packaging until installation. Other ancillary items must be stored inside and treated as electrical items.

11.2.2 Modules must be carried in an upright position and must not be allowed to bend under their own weight or be subjected to any loading. Normal precautions for manual handling must be observed. The weights of modules are given in Table 1.

11.2.3 Sharp implements or edges must be avoided as they could damage the surface of the panels.

11.2.4 Site preparations and delivery must be arranged to minimise site storage time prior to installation. Should it be necessary to store the panels temporarily, a dry, ventilated room must be used. All electrical contacts must be kept clean and dry.

11.2.5 Damaged modules must not be used.

Supporting information in this Annex is relevant to the products but has not formed part of the material assessed for the Certificate.

### Construction (Design and Management) Regulations 2015

### Construction (Design and Management) Regulations (Northern Ireland) 2016

Information in this Certificate may assist the client, designer (including Principal Designer) and contractor (including Principal Contractor) to address their obligations under these Regulations.

### Management Systems Certification for production

The management system of the manufacturer has been assessed and registered as meeting the requirements of ISO 9001 : 2015 by British Assessment Bureau (Certificate 222962).

### Additional information on installation

#### **Roofing works**

A.1 The photovoltaic panels must be fitted to the roof structure only when roof tile underlay and tile battens are secured in place. The panels must be secured to the battens and rafters using the fixing components provided. Tile battens must be secured to the roof structure following the relevant recommendations of BS 5534 : 2014 and BS 8000-6 : 2013. If there is any doubt about the condition or security of the battens, they must be replaced with suitably treated battens.

A.2 The panels should be fixed into position with rafter brackets at the top and bottom. Where the panel is located above two rafters, four brackets should be used and where it is located above one rafter, two brackets should be used. Each bracket is secured onto the rafter using two 4 by 50 mm screws supplied with the fixing kit.

A.3 Adjacent panels are positioned with a gap of 30 mm between panels.

A.4 The panels are attached to the battens using side brackets with three each side for portrait panels and two each side for landscape panels. Each bracket is secured to the batten using two 4 by 25 mm screws supplied with the fixing kit. Adjacent panels should be secured to alternate battens.

A.5 The cables from the panels are passed through laps in the underlay and carefully secured to the roof structure to ensure a minimal gap is created in the lapped joint of the underlay.

A.6 Once the panels are secured to the roof structure, the appropriate flashing kits are installed. This is commenced with the sill flashings, starting from the left hand panel. Once in place, these can then be followed by the gutters between panels, side flashings or soakers at the sides, and then the top flashings.

A.7 The slating or tiling is then completed, overlapping the flashings.

#### **Electrical works**

A.8 Electrical wiring is completed and the system commissioned and correct operation verified. This must be carried out by a suitably qualified and competent person.

A.9 The building occupier should be provided with appropriate written information including details of how the system operates and the maintenance requirements.

## Bibliography

- CEN/TS 1187 : 2012 *Test methods for external fire exposure to roofs*
- BS 5534 : 2014 + A2 : 2018 *Slating and tiling for pitched roofs and vertical cladding. Code of Practice*
- BS 7671 : 2018 + A3 : 2024 *Requirements for electrical installations — IET Wiring Regulations — Eighteenth edition*
- BS 8000-6 : 2013 *Workmanship on building sites — Code of practice for slating and tiling of roofs and claddings*
- BS EN 1991-1-3 : 2003 + A1 : 2015 *Eurocode 1 — Actions on structures — General actions — Snow loads*
- BS EN 1991-1-4 : 2005 + A1 : 2010 *Eurocode 1 — Actions on structures — General actions — Wind actions*
- BS EN IEC 61730-1 : 2018 *Photovoltaic (PV) module safety qualification — Requirements for construction*
- BS EN IEC 61730-2 : 2018 *Photovoltaic (PV) module safety qualification — Requirements for testing*
- IEC 61215-1 : 2016 *Terrestrial Photovoltaic (PV) modules – design qualification and type approval – Part 1 : Test Requirements*
- IEC 61215-1-1 : 2016 *Terrestrial Photovoltaic (PV) modules – design qualification and type approval – Part 1-1 : Special requirements for testing of crystalline silicon photovoltaic (PV) modules*
- BS EN 14437 : 2004 *Determination of uplift resistance of installed clay or concrete tiles for roofing. Roof system test method*
- BRE Digest 489 : 2004 *Wind loads on roof-mounted photovoltaic and solar thermal systems (revised 2014)*
- ISO 9001 : 2015 *Quality management systems — Requirements*
- MCS 005 *Product Certification Scheme Requirements : Solar Photovoltaic Modules 3.1*
- MCS 010 *Product Certification Scheme Requirements : Generic Factory Production Control and Product Quality Requirements*
- MCS 012 *Product Certification Scheme Requirements : Solar Mounting Kits 3.0*

## Conditions of Certificate

### Conditions

1 This Certificate:

- relates only to the product that is named and described on the front page
- is issued only to the company, firm, organisation or person named on the front page – no other company, firm, organisation or person may hold or claim that this Certificate has been issued to them
- is valid only within the UK
- has to be read, considered and used as a whole document – it may be misleading and will be incomplete to be selective
- is copyright of the BBA
- is subject to English Law.

2 Publications, documents, specifications, legislation, regulations, standards and the like referenced in this Certificate are those that were current and/or deemed relevant by the BBA at the date of issue or reissue of this Certificate.

3 This Certificate will remain valid for an unlimited period provided that the product/system and its manufacture and/or fabrication, including all related and relevant parts and processes thereof:

- are maintained at or above the levels which have been assessed and found to be satisfactory by the BBA
- continue to be checked as and when deemed appropriate by the BBA under arrangements that it will determine
- are reviewed by the BBA as and when it considers appropriate.

4 The BBA has used due skill, care and diligence in preparing this Certificate, but no warranty is provided.

5 In issuing this Certificate the BBA is not responsible and is excluded from any liability to any company, firm, organisation or person, for any matters arising directly or indirectly from:

- the presence or absence of any patent, intellectual property or similar rights subsisting in the product or any other product
- the right of the Certificate holder to manufacture, supply, install, maintain or market the product
- actual installations of the product, including their nature, design, methods, performance, workmanship and maintenance
- any works and constructions in which the product is installed, including their nature, design, methods, performance, workmanship and maintenance
- any loss or damage, including personal injury, howsoever caused by the product, including its manufacture, supply, installation, use, maintenance and removal
- any claims by the manufacturer relating to UKCA marking and CE marking.

6 Any information relating to the manufacture, supply, installation, use, maintenance and removal of this product which is contained or referred to in this Certificate is the minimum required to be met when the product is manufactured, supplied, installed, used, maintained and removed. It does not purport in any way to restate the requirements of the Health and Safety at Work etc. Act 1974, or of any other statutory, common law or other duty which may exist at the date of issue or reissue of this Certificate; nor is conformity with such information to be taken as satisfying the requirements of the 1974 Act or of any statutory, common law or other duty of care.

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