

# Solar slates for beautiful solar roofs




**PV SLATE**

by GB-Sol

[www.gb-sol.co.uk](http://www.gb-sol.co.uk)



A close-up photograph of a roof covered in grey PV slates. The slates are rectangular and arranged in a traditional overlapping pattern. The background is a soft, out-of-focus blue-grey color.

**PV Slate by GB-Sol** – The integration of tradition and solar innovation with exceptional power generation capacity.

With its discreet, traditional slate appearance, PV Slate is made using toughened glass, stainless steel and marine grade aluminium ensuring optimal performance and durability.

- **Compatible** with traditional slates.
- **Traditional** appearance for conservation areas & listed buildings.
- **Robust** for all the UK weather can throw at it.
- **MCS Accredited** since 2018 and hundreds of installations across Great Britain.
- **AA rating** in roof fire tests, the highest rating and equivalent to Broof(t4).
- **Lightweight** up to 50% less weight than traditional slates.
- **Stronger** than traditional slates.
- **Warranty** 25 years.



# Seamless solar for sensitive aesthetics

The PV Slate is a small solar panel that looks like a row of 4 natural slates. PV Slates can be installed by an experienced roofer once trained. Each unit has a robust metal frame which interlocks with the surrounding slates for waterproofing and is fitted to traditional roof battens with stainless steel screws.

Electrically, the PV Slates are connected together using industry standard MC4 connectors and then wired back to the inverter for conversion to mains power, like any other solar installation. PV Slates can provide a peak solar output of 1kW from a roof area of around 7 square metres.



## Compatible with natural slates

PV Slates are compatible with traditional slates, so they can be fitted into a traditional roof construction without any extra roofing accessories. This is cost-effective and enables you to choose how much of your roof you would like to invest in solar, with remainder as traditional slate.

## Colour matching

PV Slates are available in a light grey colour only, so they blend well with the lightest grey or blue-grey slate in most slate manufacturer's product ranges.

To date, the best colour matches we have found are the Cupa 12 & Siga 39 natural slates. In most weather conditions, the colour match is exceptional, and people are usually amazed to find out that they are looking at a solar roof.

PV Slates contrast from natural slates more under blue skies, when the natural slates taken on a darker tone, but the PV Slates maintain their light grey look.



*Please see our website for an up to date list of compatible slates.*









# A tough & beautiful product

**Each PV Slate comes with a comprehensive 25 year warranty on product, performance and weatherproofing.**

PV Slates are primarily made of toughened glass and marine grade aluminium. Essentially, they are made in a similar way to conventional solar panels and have an expected life far longer than their 25 year warranty period. PV Slates are held in place by stainless steel screws and black stainless steel roof hooks, so they are strongly mechanically fixed to the roof.



Many competing products rely on plastics and adhesives for their construction, hence they are often only able to offer warranty periods of 10 years.

## **MCS accredited**

PV Slates are accredited under the Microgeneration Certification Scheme, so they can help reduce the official EPC rating of your property and be a cost-effective way to comply with Part L of the Building Regulations. MCS accreditation also means that any surplus power from your PV Slates qualifies for extra income under the Smart Export Guarantee scheme.

## **Full roof PV Slate - edge to edge**

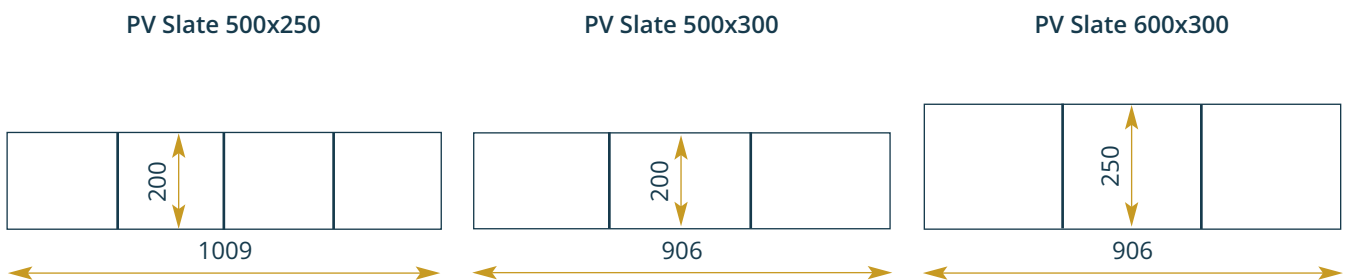
PV Slate looks even more amazing when we take it "edge-to-edge" with custom infill slates to complete the sides of the roofs. A full roof PV Slate roof is almost indistinguishable from a natural slate roof.

This is only available for rectangular roofs, as diagonal cuts are not possible for hips and valleys.



## Roofing & Mechanical Data:

	PV Slate 500x250	PV Slate 500x300	PV Slate 600x300
Natural Slate Compatibility	500mm x 250mm x 6mm	500mm x 300mm x 6mm	600mm x 300mm x 6mm
Natural Slates Replaced	4	3	3
Nominal Output	28.0 Wp	25.0Wp	30.0 Wp
Wp per m2 Roof Area*	138 Wp	138 Wp	132 Wp
Dimensions (Length x Width ) - visible on roof	1009mm x 200mm	906mm x 200mm	906mm x 265mm
Weight	3.2Kg	3.0Kg	3.8Kg
Minimum Natural Slates on Roof	Two natural slates are required around all edges of the roof and features such as roof windows.		
Natural Slate Colour Compatibility	Use light grey or blue-grey slates for the best colour match. Please see our website for an up to date list of suggested makes & models.		
Batten Gauge	200mm	200mm	250mm
Roof Pitch (Typical)	25°-90° - Dependent on location - contact us for more details		



Dimensions show the visible area of a single PV Slate unit on the roof.

## Electrical Data:

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	PV Slate 500x250	PV Slate 500x300	PV Slate 600x300
Nominal Output	28.0 Wp (+/-5%)	25.0 Wp (+/-5%)	30.0 Wp (+/-5%)
Short Circuit Current	8.60 A	4.60 A	6.14 A
Open Circuit Voltage	4.05 V	7.50 V	6.83 V
MPP Current	8.43 A	4.11 A	6.01 A
MPP Voltage	3.32 V	6.09 V	5.53 V
Temperature Coefficient of Power	-0.40%/K	-0.40%/K	-0.40%/K
Temperature Coefficient of Voltage	-0.32%/K	-0.32%/K	-0.32%/K
Temperature Coefficient of Current	0.042%/K	-0.042%/K	-0.042%/K
Maximum Permissible System Voltage	600 V	600 V	600 V

## General Data:

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Weatherproofing Warranty	25 Years
Product Warranty	25 Years
Power Output Warranty	90% of nominal power output for 10 years and 80% for 25 years
Product Certification & Testing	MCS 012 (BABT 8752-02) & MCS 005 (BABT 8501-15), EN 15601:2015 (Weathertightness), EN 13501-5:2005 (Fire), CEN/TS 1187:2012 (Fire), BS 476-3:2004 (Fire - EXT.S.AA Rating), BS EN 14437:2004 (Wind Uplift) BS EN 61215, BS EN 61730







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