# PV SLATE by GB·Sol

## Solar slates for beautiful solar roofs





GB-Sol's PV Slate is a discreet solar panel with the appearance of a natural slate tile while also generating solar electricity.

If you are already going to the expense of building or replacing your roof, why not fit a solar roof that will make your house more energy efficient and reduce your energy bills? There is no cheaper time to fit solar than when you already have the scaffolding up and a roofer at work.

- Compatible with traditional slates
- Traditional appearance for conservation areas & listed buildings
- Robust for all the UK weather can throw at it
- British manufactured in our spacious factory north of Cardiff
- Lightweight up to 50% less weight than traditional slates
- Stronger than traditional slates
- Warranty 25 years

GB·SOL

ARCHITECTURAL SOLAR POWER

#### PV Slate technical details:







### Seamless solar for sensitive aesthetics

The PV Slate is a small solar panel that looks like a row of 3 or 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 7.5 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.

PV Slates are suitable for conservation areas and have also been successfully used in AONBs and on listed buildings. No additional planning permission is necessary over that required for a traditional slate roof. For the best colour matching, we recommend light grey or blue grey 6mm natural slates. Please see our website for an up to date list of compatible slates.

#### Reliable & guaranteed

GB-Sol manufactured and installed the UK's first solar roof in 1994 and make many of the solar panels in use offshore around the British Isles, so we take our long term warranties seriously. We always use high quality toughened glass to protect our panels and we source components as locally to the factory as possible.

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

#### 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.

### **Battery storage systems**

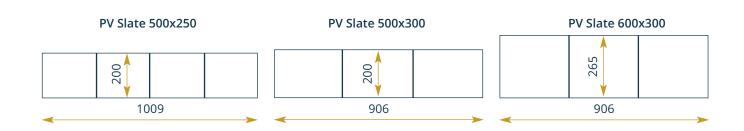
Like any other solar panels, PV Slates are compatible with battery storage systems from a wide range of manufacturers, whether it is to increase the use of the solar energy you generate or to provide protection from power cuts.



by GB·Sol

### 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	27.5 Wp	25.0Wp	35.0 Wp
Wp per m2 Roof Area*	136 Wp	138 Wp	144 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	265mm
Roof Pitch (Typical)	22.5°-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:**

	PV Slate 500x250	PV Slate 500x300	PV Slate 600x300
Nominal Output	27.5 Wp (+/-5%)	25.0 Wp (+/-5%)	35.0 Wp (+/-5%)
Short Circuit Current	4.3 A	4.3 A	6.8 A
Open Circuit Voltage	8.1 V	7.4 V	6.8 V
MPP Current	4.1 A	4.1 A	6.5 A
MPP Voltage	6.6 V	6.2 V	5.5 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:**

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)

















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Please note that visits to our premises are by appointment only.

#### **Head office and factory**

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