



With the launch of the envirotile PV solar roof tile, we are pleased to introduce the first fully integrated solar roofing system that delivers on both form and function by giving an aesthetically pleasing appearance as compared with traditional solar panels that are attached to an existing roof covering.

envirotile PV has been conceived and designed to fully integrate into our existing market leading lightweight roof tile system, envirotile, incorporating exactly the same patented and award winning 8 point fixing system BEIX, making our solar solution both attractive, functional and also extremely resistant to high winds conditions.







- Tested to MCS Standards MCS012 for weather tightness and wind uplift.
- Must be used in combination with an envirotile roofing system and our fire tested Envirolay and our fire.
- In the unlikely event of a failed or damaged PV module, this can be replaced without the need to remove any tiles.
- Includes cables and MC4 connections to connect to adjacent tiles.
- Sold in boxes of 8 tiles, provides 200w per box (25w per tile).
- Overall tile dimensions 605mm x 362mm x 20mm (PV unit 593mm x 271mm).
- Allow for 610mm width per tile when installing (5mm allowed for expansion).

**envirotile PV** power generation and appliance consumption examples; 5 tiles receiving 8 hours of sunlight per day, will provide an indicative 1KWp of power per day.

- 1 tile can run 3 LED light bulbs.
- 2 tiles can power a laptop, or a ceiling fan.

A 5kw system, would equate to 200 EnvirotilePV tiles and this would generate between 5,400 to 9,000 kWh per year, which is typically enough power for the average three-person UK household that has normal power usage habits.



## **Ecotile Roofing Ltd**

128 City Road, London, EC1V 2NX

0330 043 6122 www.ecotileroofing.com





# SOLAR PV PANEL TECHNICAL INFORMATION

### **KEY FEATURES**



Expected power tolerance: +3%

Anti-reflective and self-cleaning glass surface, reduces power loss from dirt and dust

Excellent performance under low light environments, create better kWh/kW ratio producing on average 2-3% more electricity

# **PV PANEL MECHANICAL DRAWINGS**



#### PREMIUM QUALITY

- Junction box and bypass diodes guarantee the modules do not overheat and avoid the "hot spot effect"
- 100% EL dual inspection ensures reliability and optimal performance.

### PV PANEL MECHANICAL SPECIFICATION

| Cell Type       | MONO Crystalline 78×39mm                |  |
|-----------------|---|--|
| Number of cells | 42pcs                                   |  |
| Dimensions      | 593×271×6.1mm                           |  |
| Front Glass     | 3.2mm Low iron tempered glass           |  |
| Frame           | Aluminium Alloy Groove                  |  |
| Junction Box    | PV-LH0806                               |  |
| Output Cables   | 0.6m, 4mm <sup>2</sup> , MC4 Compatible |  |

### **ELECTRICAL CHARACTERISTICS**

PERFORMANCE AT STANDARD TEST CONDITION ( STC: 1000W/m<sup>2</sup>, 25°C, AM1.5 )

| Module Series                 | TPS-105S(42)-25W |
|-------------------------------|------------------|
| Maximum Power at STC (Pmax)   | 25W ( +3% )      |
| Short Circuit Current ( Isc ) | 3.82A            |
| Open Circuit Voltage ( Voc )  | 8.40V            |
| Maximum Power Current ( Imp ) | 3.57A            |
| Maximum Power Voltage (Vmp)   | 7.00V            |

#### MAXIMUM TEMPERATURE LIMITS

| Parameters             | Unit | Rating     |
|------------------------|------|------------|
| Operating Temperatures | °C   | -40 to +85 |
| Storage Temperature    | °C   | -40 to +85 |

### WARRANTY

#### 25 Year Warranty



### CERTIFICATION

