

# PV16 Solar Photovoltaic Panels



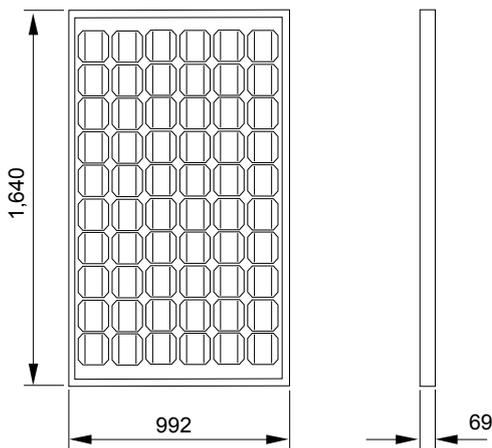
- Simple roof integration with clean, low-profile aesthetic for new build and retrofit
- Rapid installation times of less than 1hour/kWp easily achieved
- Compatible with the widest range of slate and tile including special fixings for Scottish slate roofs
- Fitted during the normal roofing programme, enabling clarity of responsibility and safe working practices
- Achieves highest fire rating and wind resistance without modifications to the roof

## Mechanical Specification

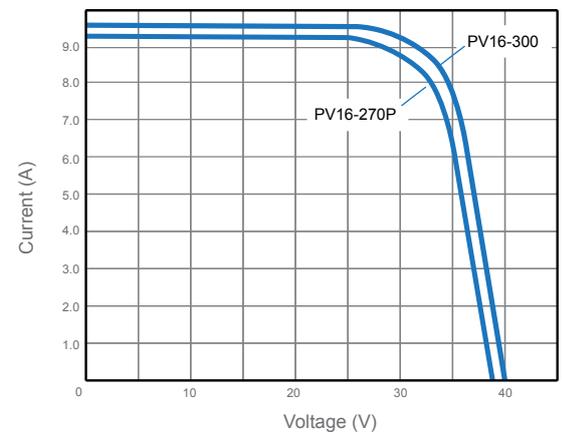
Model		<b>PV16</b>
Aperture Area	m <sup>2</sup>	1.6
Width (across roof)	mm	992
Height (up roof)	mm	1,640
Thickness	mm	69
Weight	kg	21.0
Static roof loading (distributed)	kg / m <sup>2</sup>	12.9
Characteristic Wind Resistance	kPa	5.32
Ultimate Design Load <sup>1</sup>	kPa	5.32
Fire Rating	CEN/TS 1187 BS 476-3	B <sub>ROOF</sub> (t1, t2, t3, t4) AA
Power Warranty	% rated	90% 10 years, 80% 25 years
Standards		IEC61215, 61730, TUV, MCS05 , MCS12

## Electrical Specification

Model	<b>PV16-</b>	<b>270P</b>	<b>280</b>	<b>300</b>
Peak Power <sup>2</sup>	Wp	270	280	300
Module Efficiency <sup>3</sup>	%	17.3	17.9	19.2
Number of Cells		60	60	60
Maximum Power Voltage (V <sub>mpp</sub> )	V	31.2	31.6	32.5
Maximum Power Current (I <sub>mpp</sub> )	A	8.7	8.9	9.2
Open Circuit Voltage (V <sub>oc</sub> )	V	37.3	38.8	40.1
Short Circuit Current (I <sub>sc</sub> )	A	9.3	9.3	9.6
NOCT <sup>4</sup>	°C	45.0	45.0	
Cell Type ( -crystalline Silicon)		Poly-	Mono-	
Power Temperature Coefficient	% / °C	-0.40	-0.45	
Current Temperature Coefficient	% / °C	0.06	0.06	
Voltage Temperature Coefficient	% / °C	-0.30	-0.34	
Maximum System Voltage	V <sub>DC</sub>	1,000		
Safety Classification		Class II		



## I-V Curves



300/280

270P-B

270P-W



1 Design resistance to ultimate loads includes a partial material safety factor of 1.0

2 Subject to a manufacturing tolerance of +/- 3%.

3 Based on aperture area.

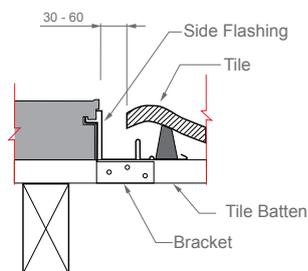
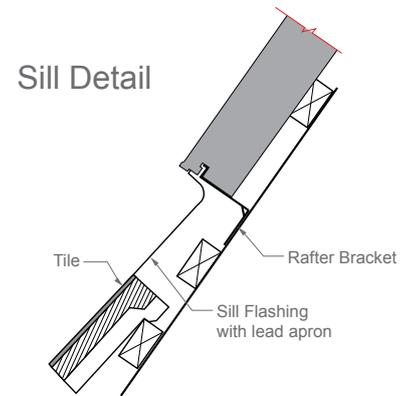
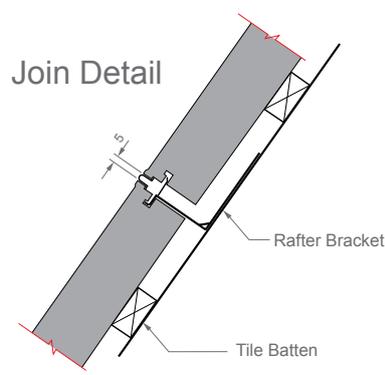
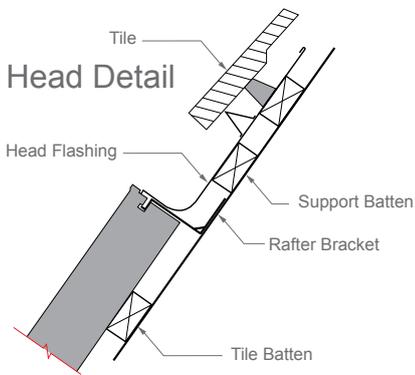
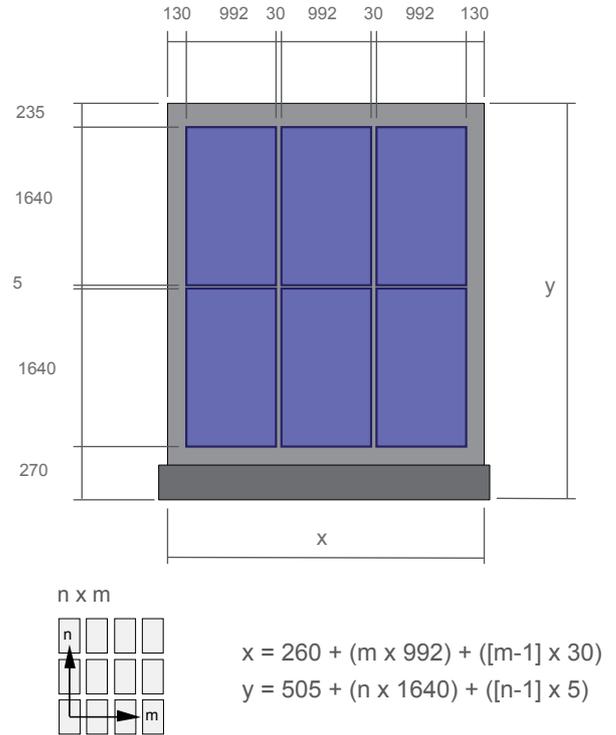
4 Nominal Operating Cell Temperature

Electrical specification measured under standard test conditions: Irradiation 1 kW/m<sup>2</sup> with light spectrum AM 1.5 and a cell temperature of 25°C.

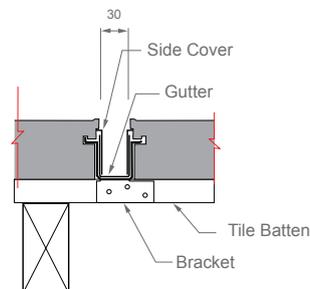
### Pitched Roof Integration

Sleek, low-profile integrated solar that replaces the roof covering for an improved aesthetic and for simple roof maintenance, now at similar cost to above-roof panels. Simple, beautiful, durable.

Solar never looked so good.



Side Detail



Gutter Detail  
(joined flashings)