

PV16 Solar Photovoltaic Panels



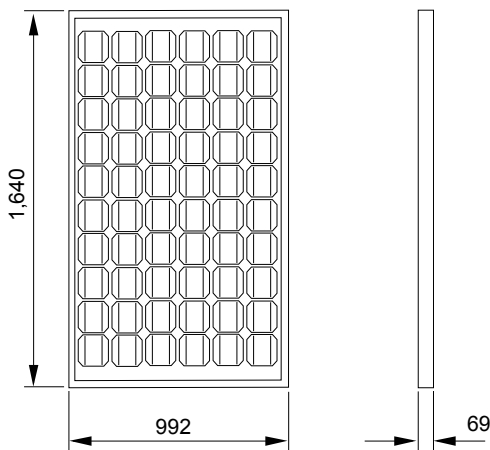
- Simple roof integration with clean, low-profile aesthetic for new build and retrofit
- Rapid installation times of less than 1hour/kWp easily achieved
- Compatible with the widest range of slate and tile including special fixings for Scottish slate roofs
- Fitted during the normal roofing programme,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

Mechanical Specification

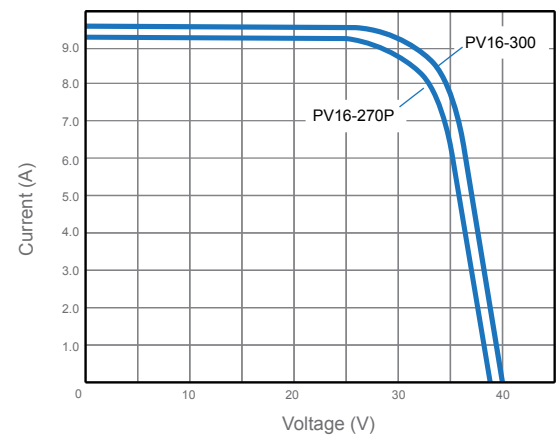
Model		PV16
Aperture Area	m ²	1.6
Width (across roof)	mm	992
Height (up roof)	mm	1,640
Thickness	mm	69
Weight	kg	21.0
Static roof loading (distributed)	kg / m ²	12.9
Characteristic Wind Resistance	kPa	5.32
Ultimate Design Load ¹	kPa	5.32
Fire Rating	CEN/TS 1187 BS 476-3	B _{ROOF} (t1, t2, t3, t4) AA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

Electrical Specification

Model	PV16-	270P	280	300
Peak Power ²	Wp	270	280	300
Module Efficiency ³	%	17.3	17.9	19.2
Number of Cells		60	60	60
Maximum Power Voltage (V _{mpp})	V	31.2	31.6	32.5
Maximum Power Current (I _{mpp})	A	8.7	8.9	9.2
Open Circuit Voltage (V _{oc})	V	37.3	38.8	40.1
Short Circuit Current (I _{sc})	A	9.3	9.3	9.6
NOCT ⁴	°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 _{DC}	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.

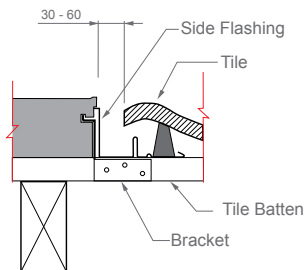
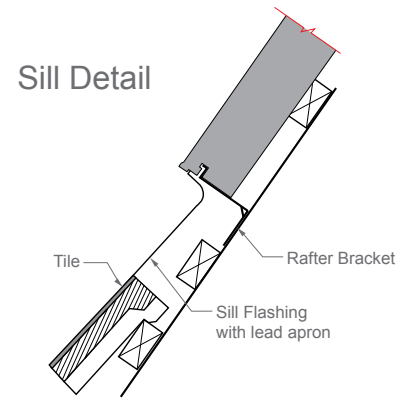
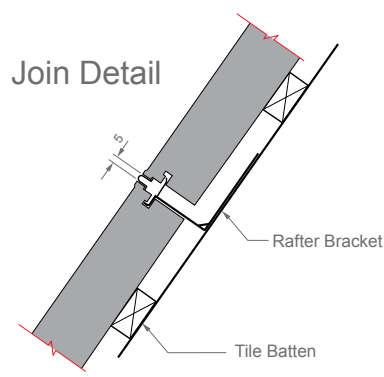
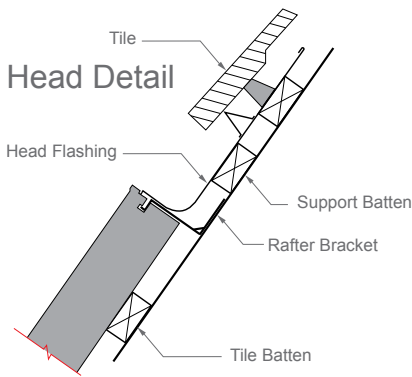
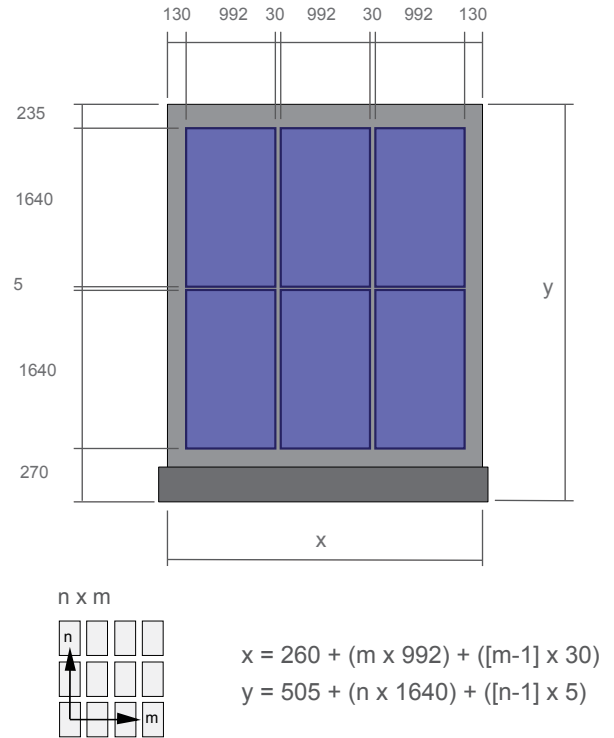
⁴ Nominal Operating Cell Temperature

Electrical specification measured under standard test conditions: Irradiation 1 kW/m² with light spectrum AM 1.5 and a cell temperature of 25°C.

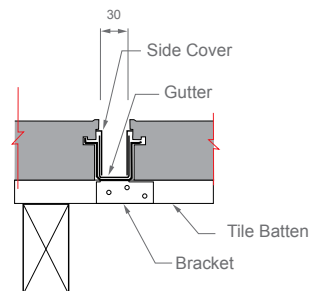
Pitched Roof Integration

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)