

PV16 Solar Photovoltaic Panels



(PV16-250)

- 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

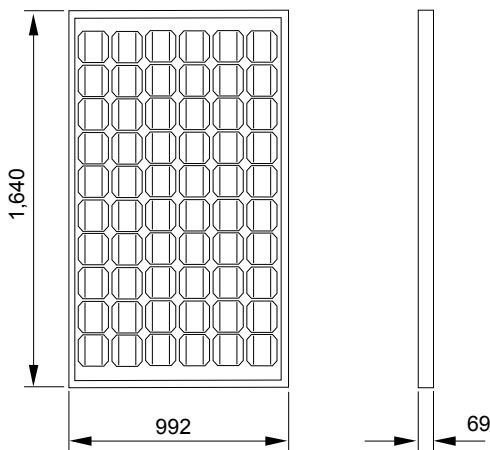
Mechanical Specification

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 to BS 476-3		AA
Power Warranty	% rated	90% 10 years, 80% 25 years
Standards		IEC61215, 61730, TUV, MCS05, MCS12

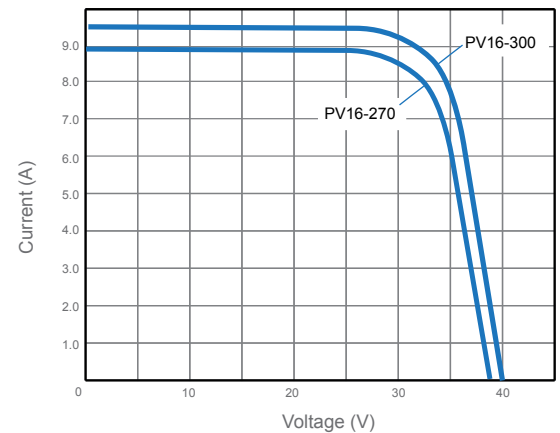
Clearline PV solar panels have been thoroughly tested, not only as energy generating equipment, but also as a building component.

Electrical Specification

Model	PV16-	260P	270	300
Peak Power ²	Wp	260	270	300
Module Efficiency ³	%	16.6	17.3	19.2
Number of Cells		60	60	60
Maximum Power Voltage (V _{mpp})	V	30.0	31.7	32.5
Maximum Power Current (I _{mpp})	A	8.7	8.5	9.2
Open Circuit Voltage (V _{oc})	V	37.8	38.4	40.1
Short Circuit Current (I _{sc})	A	9.0	9.0	9.6
NOCT ⁴	°C	43.4	45.0	
Cell Type (-crystalline Silicon)		Poly-		Mono-
Power Temperature Coefficient	% / °C	-0.403		-0.450
Current Temperature Coefficient	% / °C	0.054		0.060
Voltage Temperature Coefficient	% / °C	-0.296		-0.340
Maximum System Voltage	V _{DC}	1,000		
Safety Classification		Class II		



I-V Curves



300/270

260P-B

260P-W

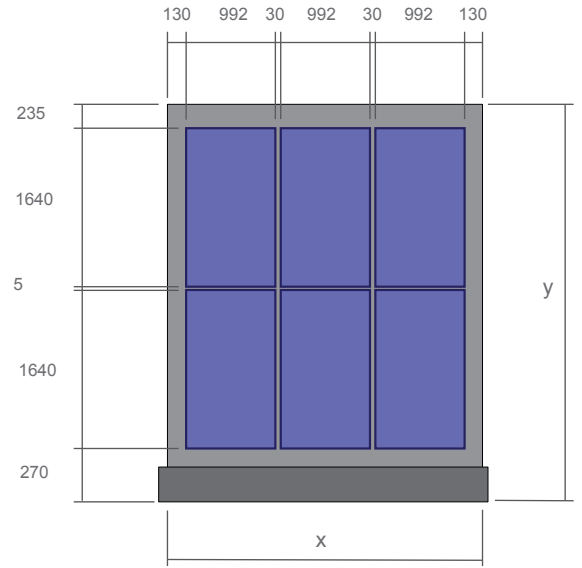


1 Design resistance to ultimate loads includes a partial material safety factor of 1.0
 2 Subject to a manufacturing tolerance of +0 /+3%.
 3 Based on aperture area.
 4 Nominal Operating Cell Temperature
 Electrical specification measured under standard test conditions: Irradiation 1 kW/m² with light spectrum AM 1.5 and a cell temperature of 25°C.

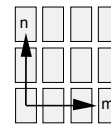
Pitched Roof Integration

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.

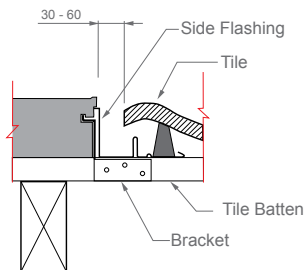
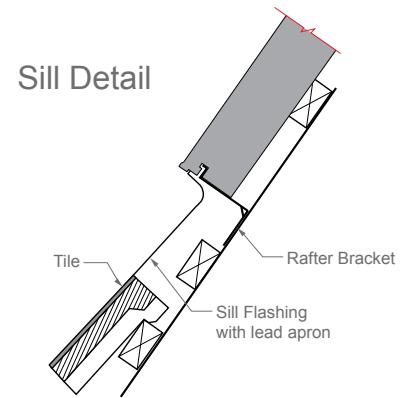
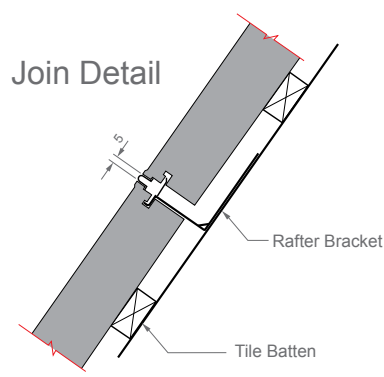
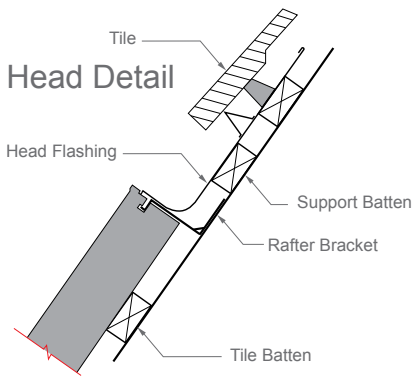


n x m

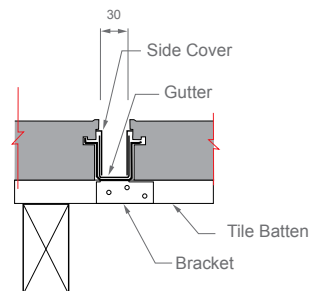


$$x = 260 + (m \times 992) + ((m-1) \times 30)$$

$$y = 505 + (n \times 1640) + ((n-1) \times 5)$$



Side Detail



Gutter Detail
(joined flashings)