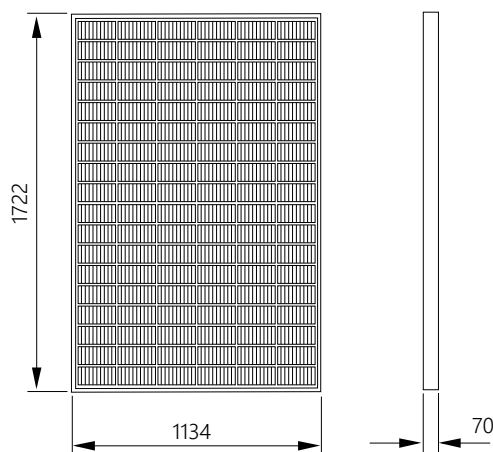


M10 Solar Photovoltaic Panels

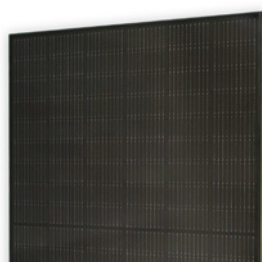


PV16-405

- Simple roof integration with clean, low-profile aesthetic for new build and retrofit
- Rapid installation times of less than 45 min/kWp easily achieved
- Compatible with the widest range of slate and tile including special fixings for different batten thickness
- 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



PV16-405



Mechanical Specification

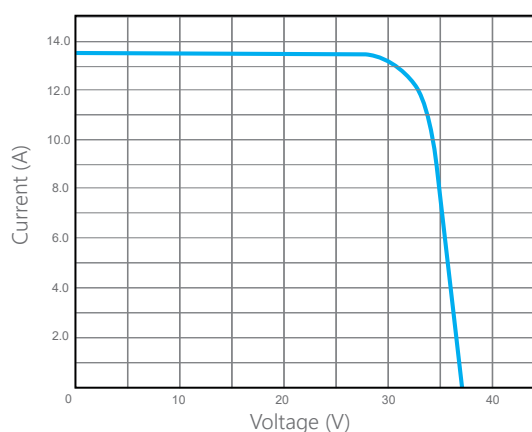
Model	Clearline PV16-XXX*	
Aperture Area	m ²	1.885
Width	mm	1,134
Length	mm	1,722
Thickness	mm	70.2
Weight	kg	25.0
Static roof loading (distributed)	kg / m ²	12.8
Characteristic Wind Resistance	kPa	4.24
Ultimate Design Load ¹	kPa	4.24
Positive/Negative Design Load (IEC 61215) ¹	kPa	5.40
Fire Classification (IEC 61730)		Class C
Power Warranty	% rated	90%10 years, 80% 25 years
Product Warranty		20 years
Standards		IEC61215, 61730, TUV, MCS05, MCS12

*where XXX refers to the power of the PV module

Electrical Specification

Model	Clearline PV16-XXX*				
Peak Power ²	Wp	400	405	410	415
Module Efficiency ³	%	21.2	21.5	21.8	22.0
Number of Cells		54x2	54x2	54x2	54x2
Maximum Power Voltage (V _{mpp})	V	30.85	31.02	31.18	31.35
Maximum Power Current (I _{mpp})	A	12.97	13.06	13.15	13.24
Open Circuit Voltage (V _{oc})	V	36.87	37.05	37.23	37.42
Short Circuit Current (I _{sc})	A	13.52	13.62	13.72	13.8 2
NOCT ⁴	°C	45.0			
Cell Type		Monocrystalline Silicon			
Power Temperature Coefficient	% / °C	-0.35			
Current Temperature Coefficient	% / °C	0.05			
Voltage Temperature Coefficient	% / °C	-0.28			
Maximum System Voltage	VDC	1,000			
Maximum Fuse Rating	A	25			
Safety Classification		Class II			
Electrical Connectors		Stäubli MC4 PV-KST4/6X-UR, PV-KBT4/6X-UR			

I-V Curve



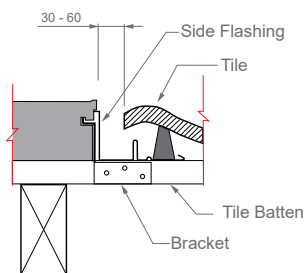
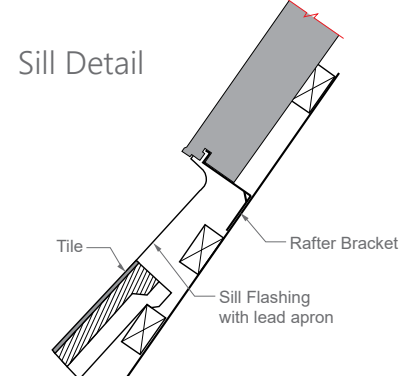
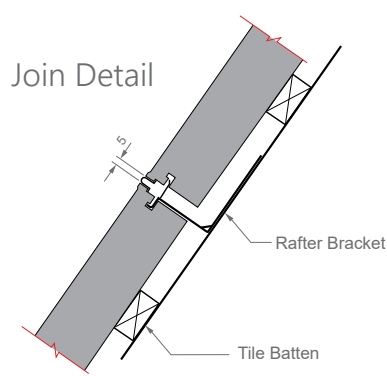
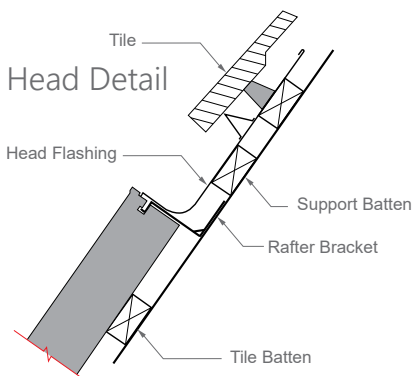
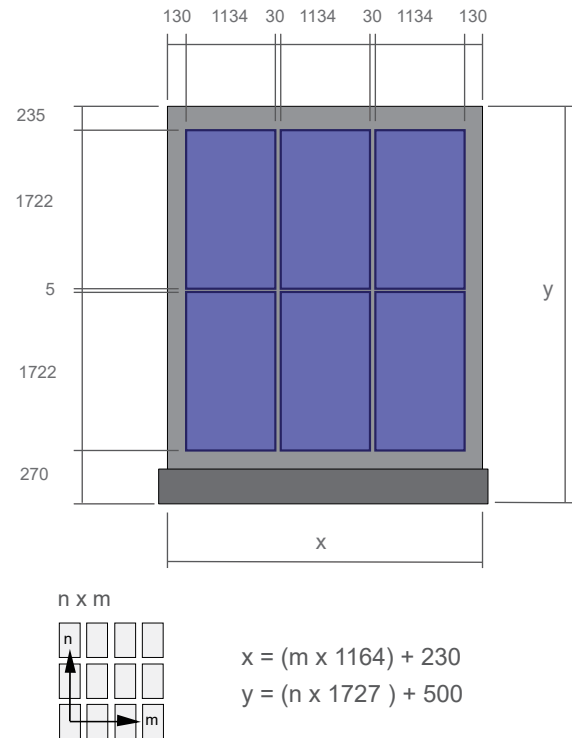
1 Design resistance to ultimate loads includes a partial material safety factor of 1.0. Design load to IEC61215 has a safety factor of 1.5
 2 Subject to a manufacturing and measurement tolerance of +/- 5%. Binning tolerance +/-5W. Pmax tolerance +/-3% to IEC61215
 3 Based on aperture area.
 4 Nominal 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.

M10 Solar Photovoltaic Panels

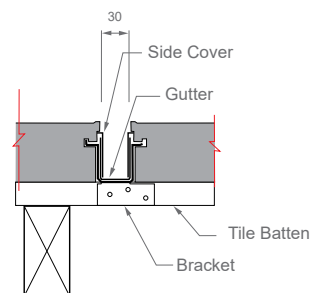
Pitched Roof Integration

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)