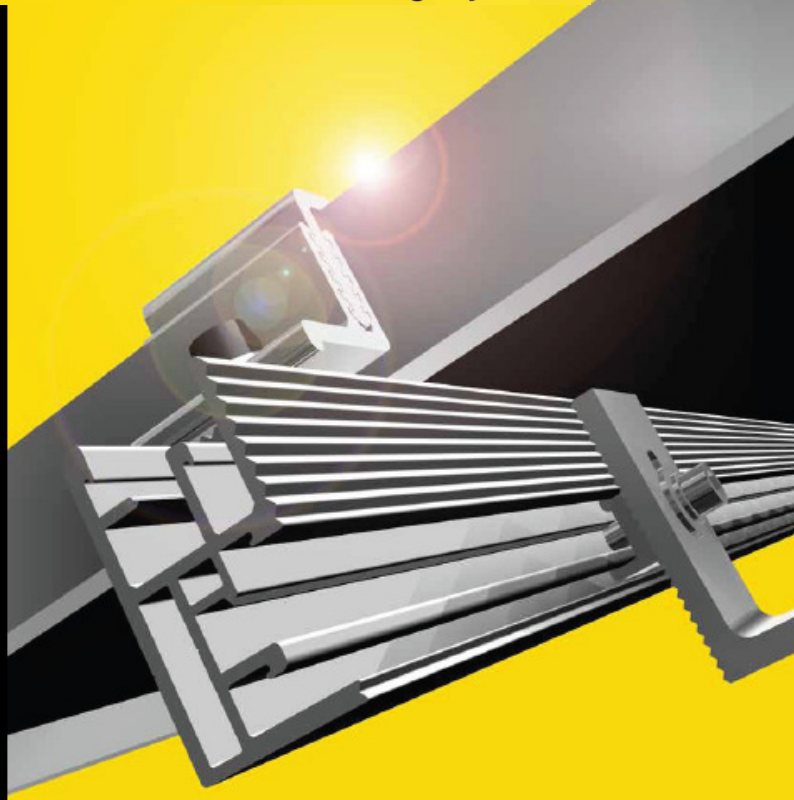


SUNLOCK

Solar Panel Mounting System



Solar panel installation made simple

Sunlock is an Australian designed and manufactured solar panel mounting system. Utilising custom built aluminium extrusions and components, the Sunlock system's design streamlines construction and improves frame strength to greatly simplify solar panel installation.

Sunlock's significantly higher strength-to-weight ratio allows more efficient use and greater spans. Its highly versatile design offers adjustability and expandability to suit any size job.

Sunlock is backed by a 10 year warranty and is fully compliant with the Australian/New Zealand standard on wind actions AS/NZS1170.2, making it suitable for a wide variety of building types and climatic zones.

Design Features

- Aluminium 6106T6 extrusion made from 100% recycled material.
- Building height up to 200m
- Roof slope range 10° to 65°
- Static load capacity up to 1800N
- Optional tilt legs for greater solar efficiency
- Corrosion resistant, providing low maintenance and extended product life cycle.
- Can be used to secure a vast array of solar panel thicknesses.
- Easy to install with adjustable locking devices.
- Installation site: residential, commercial, remote area and marine applications.

Longevity: Corrosion resistant, providing low maintenance and extended product life cycle.

Efficiency: Sunlock's significantly higher strength to weight ratio allows for more efficient use and greater spans.

Flexibility: Using adjustable clamps the Sunlock system can be used to secure a vast array of solar panel thicknesses.

Advantage: Modular design allows trouble free installation and expandability.

Expandability: Sunlock rail joiner can be used to extend the solar frame to any length required.



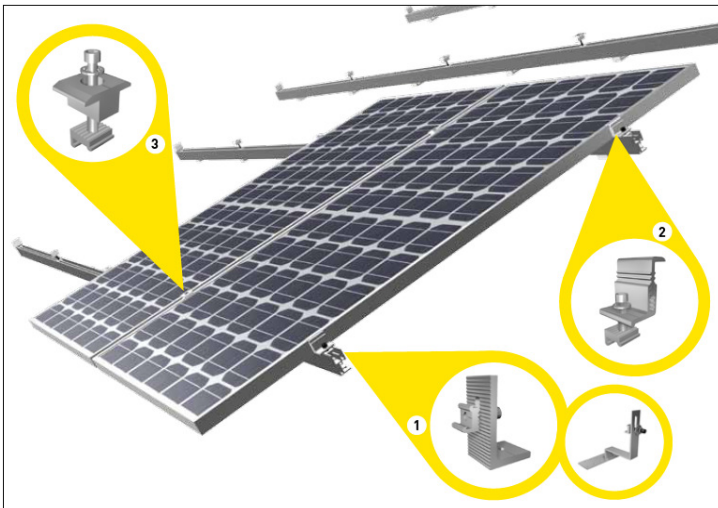
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- 1 – Roof mounts:** Roof mounts are used to secure the solar framing to the roof and are suitable for steel or tile roofed buildings.
- 2 – End clamp:** Adjustable end clamps are used to secure solar modules of varying thicknesses.
- 3 – Middle clamp:** Adjustable middle clamps are used to easily secure modules together in the array.



Technical Specifications

Material	Extruded Aluminium 6106T6	
Tensile strength	Ultimate	235 MPa
	Yield	210 MPa
Installation site	Australia / NZ	
Roof types	steel, tile and slate	
Modules thickness	35 to 50mm	
Module arrangement	portrait or landscape	
Roof slope	3° to 65°	
Building height	Up to 200m	
Mounting structure	timber or steel substructure	

Ultimate Wind Load Capacity

Structural design analysis confirms the following ultimate wind loads supported by Sunlock framing.

Fixing centres mm	Ult Wind Load - KPa kg/m ²	
	Sunlock Rail Spacing	
	600mm	750mm
650	22.9 2335	18.37 1873
850	13.4 1366	10.7 1091
1000	9.7 989	7.7 785
1200	6.8 693	5.4 550

Maximum Serviceable Wind Loading

The table below describes the maximum serviceable wind loading that Sunlock rails can support in reference to a maximum deflection of span/200

(Span/200 is considered the maximum acceptable deflection limit for Sunlock rails supporting solar panels).

Fixing centres mm	Max Deflection - mm L/200	Max Service Wind Load - Kpa kg/m ²	
		600mm Sunlock Rail Spacing	
		600mm	750mm
650	3.5	15.3 1560	12.2 1244
850	4.25	8.9 907	7.1 723
1000	5	6.4 652	5.1 520
1200	6	4.4 448	3.5 356

Components for Solar Frames

for 4 Trina or Kyocera Panels:

2 x SunLock Rails 3410mm 8 x SunLock L-foot 4 x SunLock End Clamps (32-46mm) 6 x SunLock Mid Clamps

for 8 Trina Panels:

4 x SunLock Rails 3410mm 16 x SunLock L-foot 8 x SunLock End Clamps (32-46mm)
14 x SunLock Mid Clamps (32-46mm) 2 x SunLock Rail Joiners

for 8 Kyocera Panels:

2 x SunLock Rails 2600mm 2 x SunLock Rail 3410mm 14 x SunLock L-foot
4 x SunLock End Clamps (32-50mm) 14 x SunLock Mid Clamps (32-46mm) 2 x SunLock Rail Joiners

for 12 Kyocera Panels:

5 x SunLock Rails 3410mm 20 x SunLock L-foot
8 x SunLock End Clamps (32-50mm) 22 x SunLock Mid Clamps (32-46mm) 4 x SunLock Rail Joiners

Optional Accessories:

SFR-S40 End Clamps (32-50mm) SFR-S70 Tile Bracket SFR-S880 Tilt legs 2x800mm + 150mm + foot fixings