

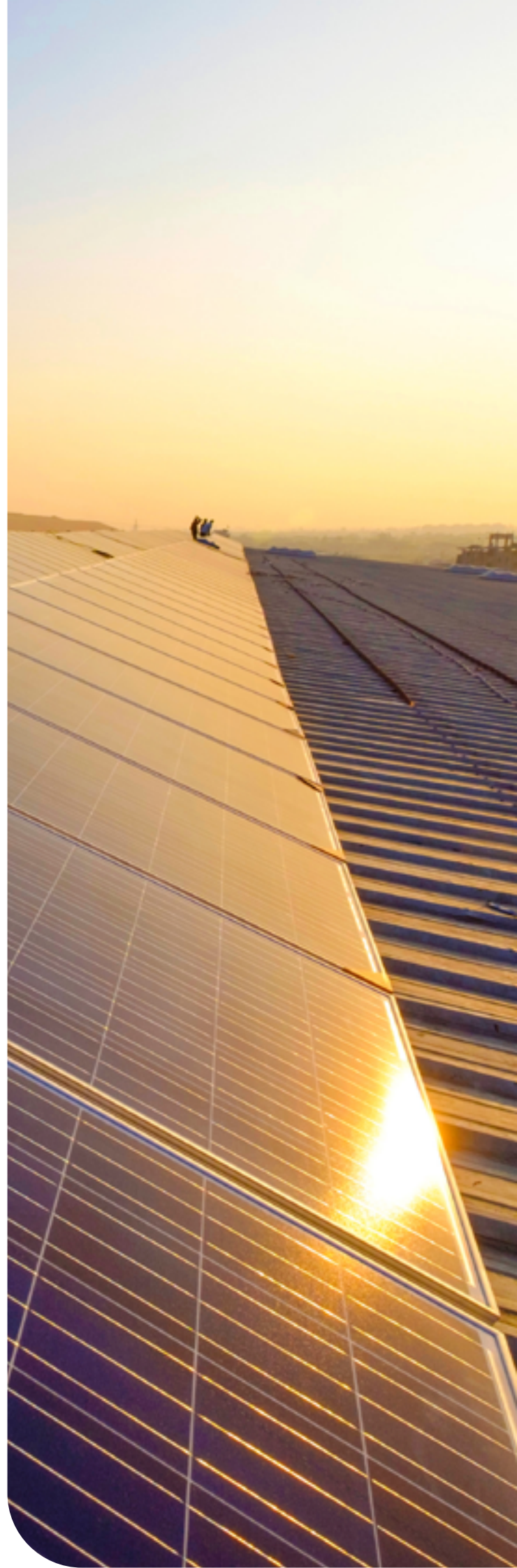


ASCENT
Kliplok

RAIL-LESS METAL MOUNTING SYSTEM

KLIPOK

Version 1



General information

ASCENT provides a new, rail-less mounting system developed as universal PV mounting systems for Kliplok roof sheeting. The system includes aluminium profiles with special hollow structures and connections, making it easy to install.

Ascent products are:

- Easy to install
- Innovative and engineered to speed up installation time
- Backed by a 10-year warranty and AS/NZS1170.2.2011 AMDT 3 -2012 compliant

Applications:

- Commercial and residential buildings

Features:

- Extruded from anodised Al 6005-T6 (aluminium)
- Can be preassembled, making installation quick and easy
- Suitable for a variety of conditions and for use with current, popular PV panels
- Inherent corrosion resistance results in lower maintenance and extended product life
- 10-year limited warranty

Material standard:

Material	Yield strength (MPa)	
	Tensile Strength	Yield Strength
Al 6005-T6	295	263

Product Information

This ASCENT product is a clamping system designed to fit PV panels to Kliplok metal roofing material. The clamping system consists of end clamps and mid clamps that are designed to fit into a base clamp, fixing the panels in place. An earthing clip is also included in the system.



Figure 1 ASCENT mounting structure for Kliplok roofing sheets

Product features

- Can withstand windy conditions of up to 35m/s
- Can be used with most 35mm & 40mm frame modules
- Designed for use in large systems

The clamp is fitted and fastened over the Kliplok seam, spaced to have two clamps along each side of each panel, as seen in Figure 1. Adjoining panels are fastened with mid clamps. The mid clamps are shaped like an inverted top hat, fitting two panels in place when bolted into the clamp. The end clamps are Z-shaped to keep the panels at the end of a row in place. These clamping methods can be seen in Figure 2.



Figure 2 ASCENT Kliplok mounting using the mid clamp to clamp 2 panels, and the end clamp to clamp the panels at the end of a string

Components

Part Name	ASCENT Part Number	Picture
ASCENT Rail-less Rooftop clamp 100mm Kliplok	A3001030	
ASCENT Rail-less Rooftop Mid clamp Kliplok	A3001000	
ASCENT Rail-less Rooftop End clamp Kliplok	A3001010	
ASCENT Rail-less Rooftop Earthing Clip Kliplok	A0001012	
ASCENT Grounding lug	A0001000	

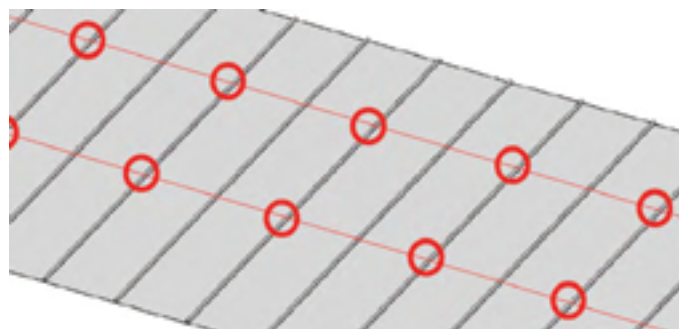
Installation manual

Tools required for this installation:

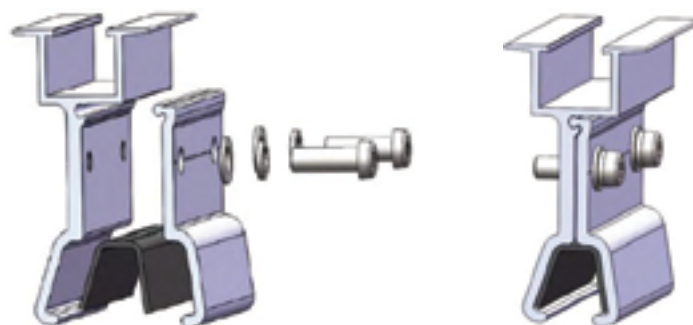
8mm Allen key or hexagonal driver bit	Hexagonal file kit (For ST6.3 self tapping screw)	Torque wrench (For M8 bolts or nuts)
Monakey spanner	Wooden hammer	Drill tools 5mm
Power tool	Measure tape	Rope

Installation Instructions

1. Ensure that the parts fit the roofing style – this product is designed for KliplokMetal Roof Sheeting.
2. Mark the positions of the clamps (A3001030) according to the drawings and make sure all the clamps are installed on the same horizontal line.



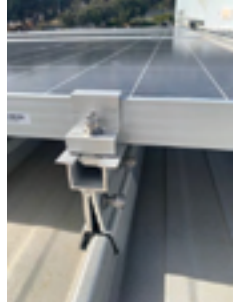
3. Assemble the clamp (A3001030) with an M8x25 hexagon socket bolt, M8 springwasher, M8 flat washer and a rubber gasket.



4. Use a torque value on your torque wrench of 10-12Nm to install and tighten the clamps at each of the markings on the site.



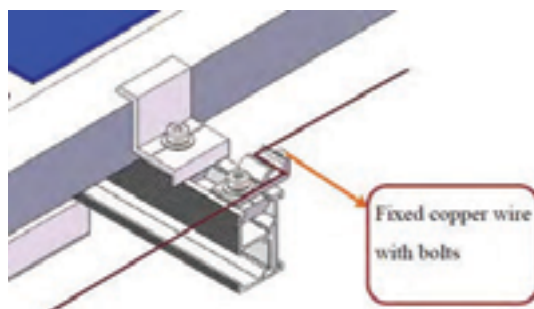
- Set the torque wrench to a value of 8-9Nm. Place the end panels on the first 4 clamps (A3001030) and fit in place with the end clamps (A3001010). Use the end clamps for all panels at the end of each string. Use the mid clamps (A3001000) to fit the panels next to one another in the string.



- If earthing clips (A0001012) are required, place them between the rails while installing the mid clamps.



- Install the grounding lug (A0001000) at the end of the rail and fix it in place with an M8 hexagon socket bolt, M8 spring washer, M8 flat washer and a T module.
- Connect each of the grounding lugs (A0001000) with a copper wire, connected with an M6 bolt. Ground the ends of the copper wire.





Installation precautions

Dimensions

The specific dimensions of the installation are subject to the engineering construction drawings from the project engineer and the module manufacturer's installation rules.

Fastener

If used inappropriately, nuts and bolts may lock-up. To avoid this:

- Reduce the friction coefficient by ensuring the thread is clean and using a lubricant during installation
- Ensure that the fasteners are installed correctly, perpendicular to the axis of the screw thread. Apply even force throughout the tightening process. Use torque or socket wrenches where possible. Do not tighten fasteners at high temperatures or with electric equipment resulting in a rapid rise in temperature

Drawing is for illustrative purposes only, design will differ with other module dimensions.

