

Installation on roof - Instructions manual - PowAR Snap® S Fastening & Bonding clip for Framed PV Modules

Ref: 233147

General conditions of use

- This notice takes care of the installation of Photovoltaic modules on strut rails, on roofs in landscape or portrait installations.
- PowAR Snap® S is for single use. In case of solar panel change, always use new PowAR snap®
- PV module frame specifications : see Tab1 and Fig1.

| Tab1 | mm | inches |
|------|------------|----------------|
| A | 1.5 to 2.2 | 0.060 to 0.086 |
| B | min. 16 | min. 0.630 |
| C | min. 30 | min. 1.182 |

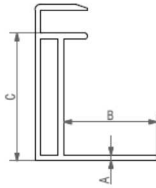


Fig1 : PV frame module specifications

- Rail specifications : steel strut rails with design and dimensions according to Tab2 and Fig2.

| Tab2 | mm | inches |
|------|---------------|-----------------|
| D | min. 34 | min. 1 11/32 |
| E | min. 39.5 | min. 1 9/16 |
| F | 7.1 (+/-0.6) | 9/32 (+/-0.023) |
| G | 22.2 (+/-1.2) | 7/8 (+/-0.047) |

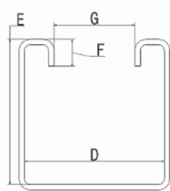


Fig2 : rail specifications

Material



PowAR Snap® S
Ref 233147



PowAR Snap® S - stopper
Ref 232579
for landscape configuration

Assembly



2 people

Protective equipment
recommended : safety gloves

Tools recommended

None

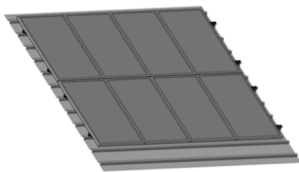
More info

Contact us on www.araymond-energies.com

Preparation

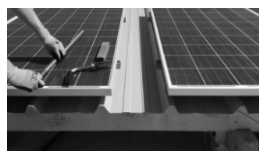
2 types of solar fields are feasible :

① **Portrait installation:** rails are set-up perpendicular to the roof slope - Solar panels are in portrait configuration

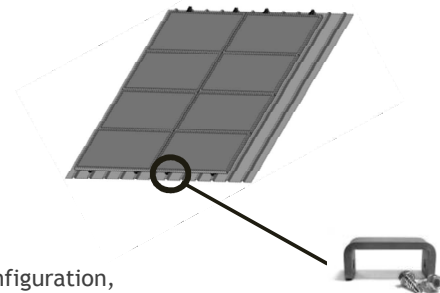


For large area installation: in order to ease the maintenance, please manage a space on a regular basis (**every 10 modules**) of about **25 cm width** between the modules and discontinued rails.

When maintenances are needed, this allows walking safely on the roof without stepping on the module. It also allows removing a module that has to be exchanged, thanks to the use of slider removal tool (Ref. 237942001)



② **Landscape installation:** rails are set-up parallel to the roof slope - Solar panels are in landscape configuration



In this configuration, **stoppers** have to be installed at the bottom of each strut rails (see reference above)

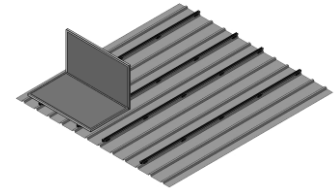
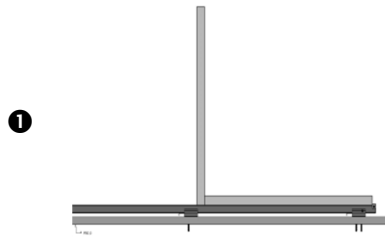


Just scan to watch video of installation on roof

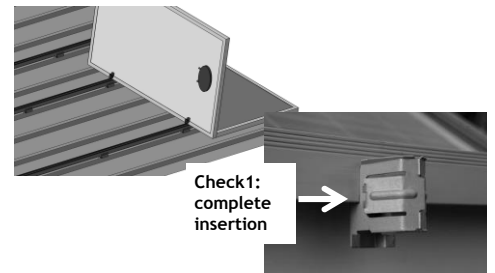
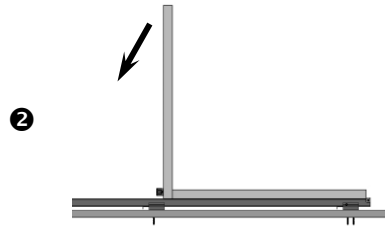
To set distances between rails, please refer to module manufacturers instructions manual & recommendations.

Installation of the PV modules

- 1 Place the module vertically and align it with the neighbor module (or for the first module with alignments required)



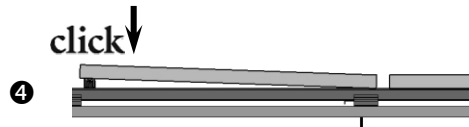
- 2 Position 2 PowAR Snap® above the rail and insert both PowAR Snap® into the module frame. Make sure the clip is fully engaged onto the lip (check1). Do the electrical connection of solar panel.



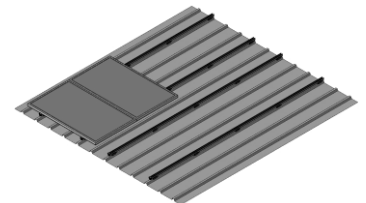
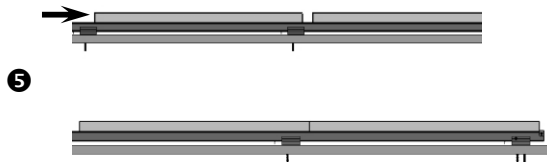
- 3 Move down the module until you hear the "click" meaning that snaps are properly into the rail.



- 4 Slightly move up the module and place 2 PowAR Snap® clips right above the rail and insert them into the module frame (check1). Move down the module until hearing the "click". Check visually that module is fully sitting onto the rails (check2).



- 5 Slide the module next to the one already set.

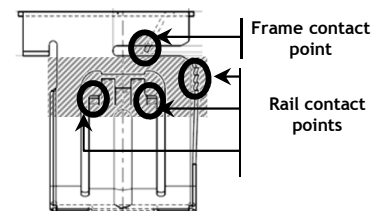


Repeat same instructions for others modules.

Please note that modules are perfectly aligned although rails are not straight.

Grounding details

Grounding path from the module frame to its supporting structure is ensured by the part itself as it maintains a stable electrical contact between the aluminum module frame and the steel rail at several contact points.



Dismounting

Please refer to disassembly instructions of PowAR Snap® S.



Disassembly with no back access
Using the slider - ref 237942



Disassembly per back access
Using the plier - ref 235216