

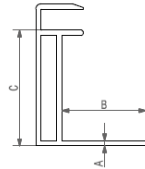
# Installation on roof - Instructions manual - PowAR Snap® S+ Fastening & Bonding clip for Framed PV Modules

Ref: 252387

## 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® S+
- PV module frame specifications : see *Tab. 1 et Fig. 1*

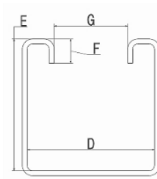
Tab. 1	mm	inches
A	1.5 à 2.2	0.060 to 0.086
B	min. 16	min. 0.630
C	min. 30	min. 1.182



Tab. 1 / Fig. 1 : PV module specifications

- **Rail specifications** : steel strut rails with dimensions according to *Tab. 2 et Fig. 2*.

Tab. 2	mm	inches
D	min. 34	min. 1 11/32
E	min. 29.5	min. 1 5/32
F	7.1 (+/-0.6)	9/32 (+/-0.023)
G	22.2 (+/-1.2)	7/8 (+/-0.047)



Tab. 2 / Fig. 2 : rail specifications

## Material



PowAR Snap® S+  
Réf 252387



PowAR Snap® S+ - stopper  
for landscape configuration only  
Réf. 232579

## Assembly



2 people

Protective equipment  
recommended : safety gloves

## Tools recommended

Screw gun if landscape configuration

## More info

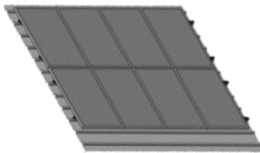
Contact us on [www.araymond-energies.fr](http://www.araymond-energies.fr)

## Preparation

Two types of panel orientation are feasible:

### ❶ 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 (*Fig. 3*).

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 disassembly tool per top access (réf. 254279).

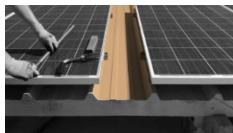
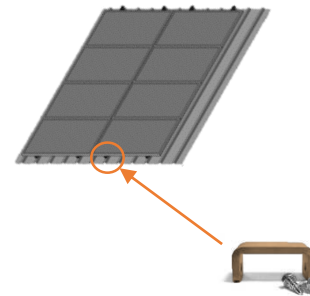


Fig. 3

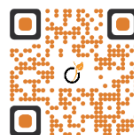
### ❷ Landscape installation :

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 (ref. 232579)

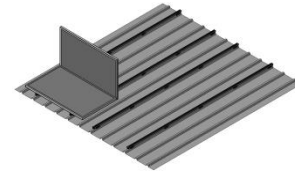
To set distances between rails, please refer to module manufacturers instructions manual & recommendations.



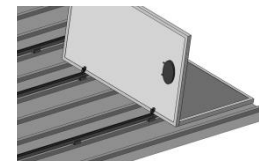
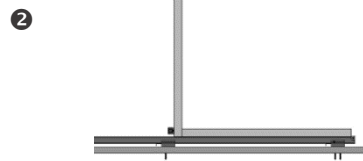
Just scan to watch video of  
installation on roof

## Installation of the PV modules

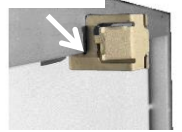
- ❶ Place the module vertically and align it with the neighbor module.  
The first panel is placed thanks to the alignment required by the drawing



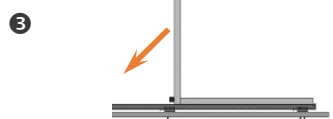
- ❷ Position 2 PowAR Snap® S+ on the bottom lip, align to the rails opening .  
Make sure the clip is fully engaged onto the lip (check 1)  
Do the electrical connection of solar panel.



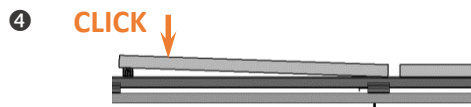
Check 1:  
complete  
insertion



- ❸ Move down the module until your hear the “click” meaning that PowAR Snap® S+ are properly into the rail.



- ❹ Slightly move up the module and place 2 PowAR Snap® S+ right above the rail and insert them into the module frame lip.  
Make sure of the complete insertion (check 1)  
Check visually that module is fully sitting onto the rails (check 2).



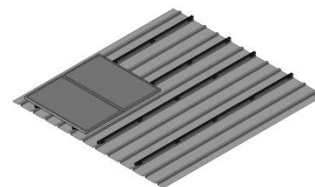
Check 2:  
complete insertion

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



Repeat same instructions for others modules.

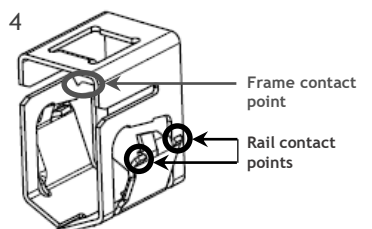
Please note that modules are perfectly aligned although rails are not straight.



## 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 (Fig. 4).

Fig. 4



## Dismounting

Please refer to disassembly instructions of PowAR Snap® S+

Disassembly per top access  
Using the slider - ref 254279



Disassembly per back access  
Using the slider réf 235216