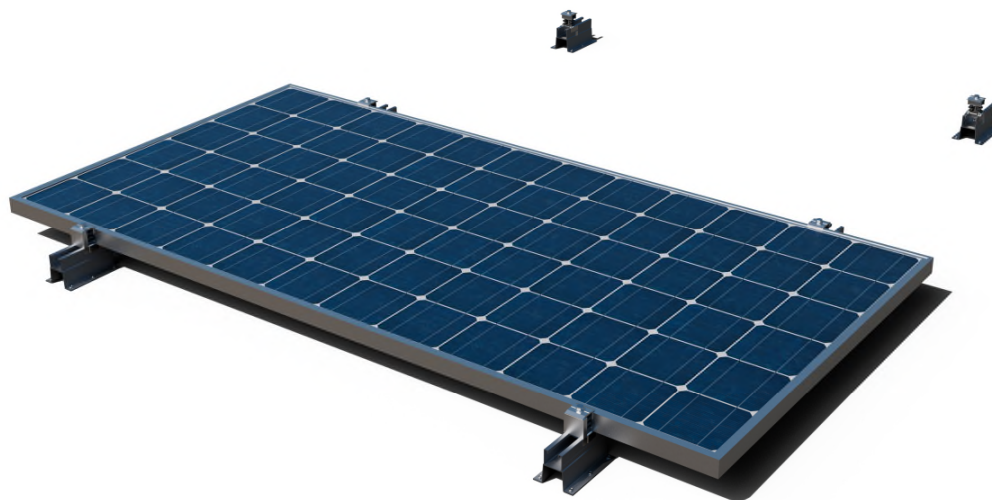


SC-PSV

SYSTEM DESCRIPTION



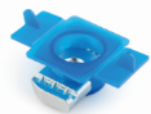

Coplanar mounting system with **PSA-AV** “Aluminium profile with wings for discontinuous direct valley fixing”, for the installation of solar panels



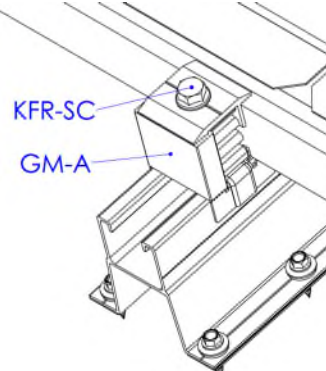
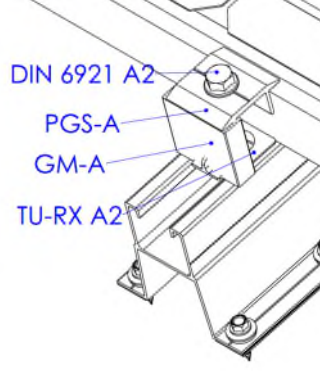
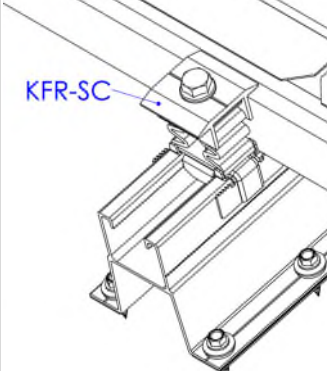
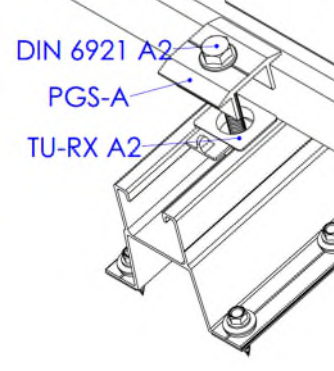
1. CHARACTERISTICS

Description:	Coplanar mounting system on aluminium profile with wings for discontinuous direct valley fixing
System inclination:	Coplanar mounting with parallel installation to the roof surface.
System orientation:	Facing SOUTH, EAST OR WEST depending on the roof orientation.
System materials:	Atlantis C4-M steel, stainless steel and EPDM.
Warranty:	Until 10 years depending on environmental conditions (excluding environments exposed to hydrogen sulphide). The warranty is only valid if the complete SC-PSV system is used.
Compatible solar panels:	
Solar panels type:	Solar panels with frame height between 30mm and 40mm.
Solar panels orientation:	Mounting orientation of landscape (horizontal) panels.
Solar panel size	Adaptable to standard market sizes.
Application area:	
Application area:	Sloping roofs.
Roof slope:	Installation on pitched roofs, slope between 10° and 60°.
Wind load:	Up to 240 km/h. The structure and fixing must be calculated according to local and roof conditions.
Snow load:	Up to 2 kN/m². The structure and fixing must be calculated according to local and roof conditions.

2. COMPONENTS

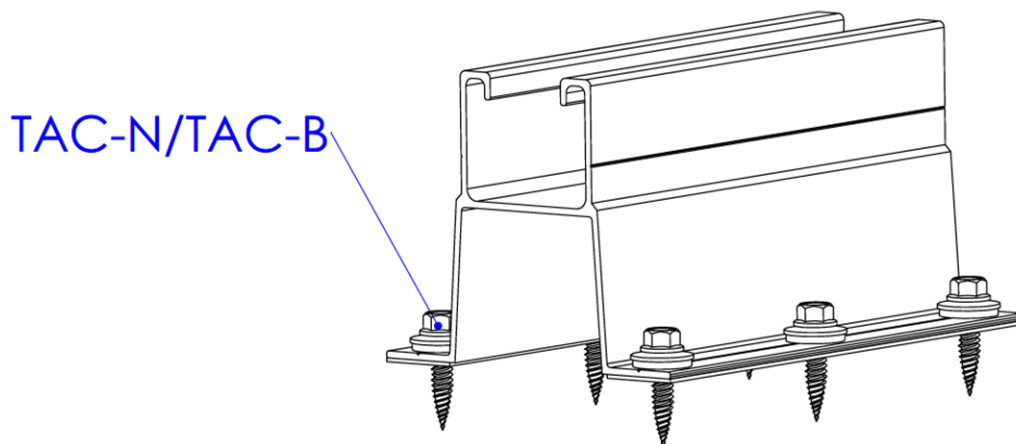
<p>Quick pre-assembled clamp</p>  <p>KFR-SC</p>	<p>Simple clamp</p>  <p>PGS-A</p>	<p>INDEXTRUT quick nut</p>  <p>TU-RXA2</p>	<p>Gauge for solar frame</p>  <p>GM-A</p>	<p>Aluminium profile with wings for discontinuous direct valley fixing</p>  <p>PSA-AV</p>
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2.1 Components: Clamps y gauges for mounting solar panels

Lateral position clam		Intermediate position clamp	
 <p>KFR-SC GM-A</p>	 <p>DIN 6921 A2 PGS-A GM-A TU-RX A2</p>	 <p>KFR-SC</p>	 <p>DIN 6921 A2 PGS-A TU-RX A2</p>
Option 1: Quick clamp	Option 2: Simple clamp	Option 1: Quick clamp	Option 2: Simple clamp

2.2 Components: mounting connectors for fixing accessories

Lower connection



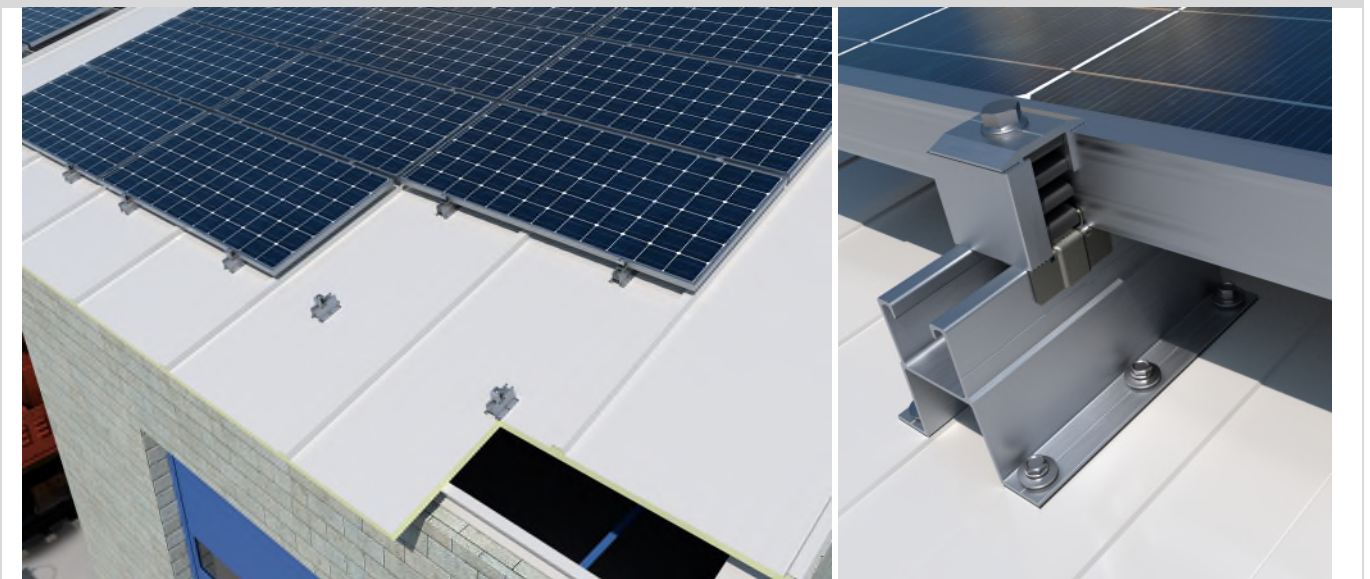
Fixing with Atlantis/Bimetal thin sheet screw (TAC-N/TAC-B)

3. TYPES OF FIXING

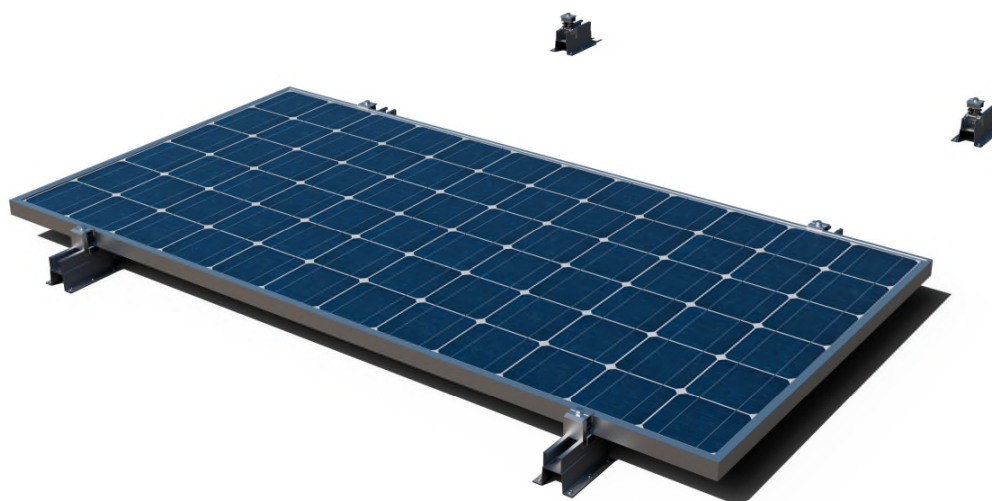
	ROOF	SUB-STRUCTURE	FIXING ACCESORIES		
TYPE 1	 METAL SHEET		 TAC-N / TAC-B Atlantis/Bimetal thin sheet screw	 AUENI Self-drilling screw	 RE-TE Watertight trebol rivet
	 SANDWICH PANEL				

4. EXAMPLE OF APPLICATION

Example: Sandwich panel roof / Fixing with thin sheet screw



5. INSTALLATION MANUAL

SC-PSV**Coplanar mounting system with PSA-AV
“Aluminium profile with wings for discontinuous
direct valley fixing”**

Read these installation instructions before starting installation and familiarise yourself with the system components. Installation must only be carried out by qualified and experienced personnel.

Installation guidelines:

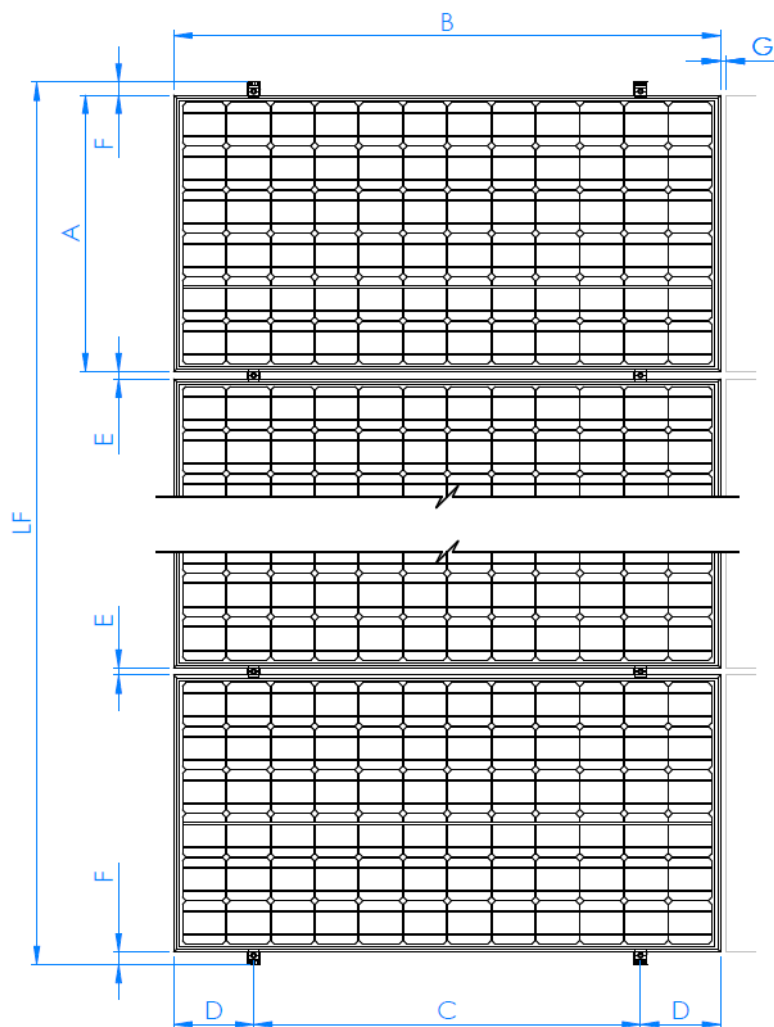
- Ensure that the roof construction is suitable for the introduction of forces at the fixing points and their subsequent transmission. The building must be able to safely receive the additional loads.
- A structural calculation must be carried out based on the local conditions at the installation site.
- The planning of the layout of the fixing points must be adapted to the requirements of the system and the roof.
- To compensate for thermal expansion, include a spacing every 12m when planning the PV system.
- The solar modules must be installed according to the manufacturer's instructions.
- Follow your local building regulations.
- Make sure to work in accordance with the health and safety regulations in force in your region, during installation and during roof work.
- Do not use the system or fixings as stairs.

INSTALLATION PROCESS:

STEP 1.- Consult installation drawing

Consult the installation drawing on the roof, where the distribution of the modules is defined as well as the structures that support them and their fixing points.

A. Plan view of SC-PSV system with horizontal module orientation (landscape type)

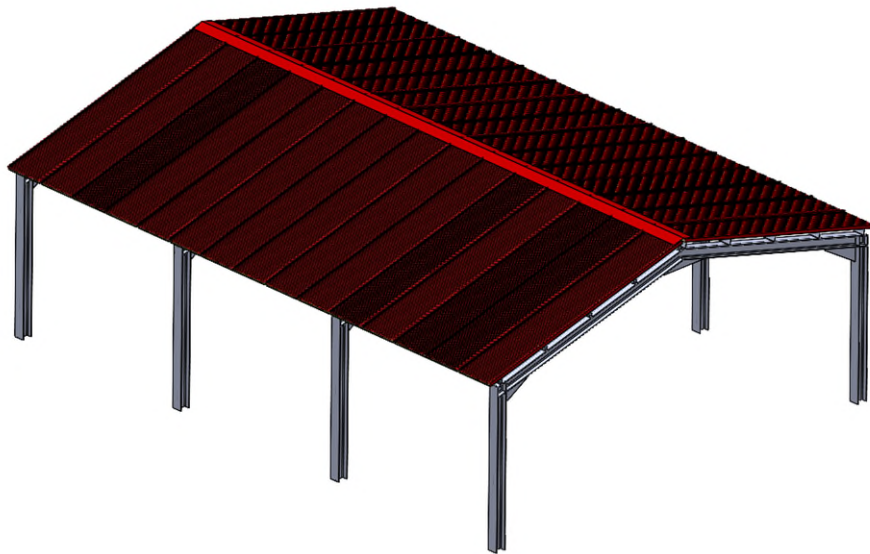


C	D	E (mm)	F (mm)	G (mm)	LF
$0,7B \leq C \leq 0,5B$	$(B-C) / 2$	26	min 35	min 20	$(n*B) + ((n-1) * E) + (2*F)$
C: consult the module manufacturer's recommendations.					
n: number of modules in the row.					

The type of fixing system and the location of its installation points shall be adapted to the needs of the supporting structures and at the same time to the needs of the roofs where they must be installed.

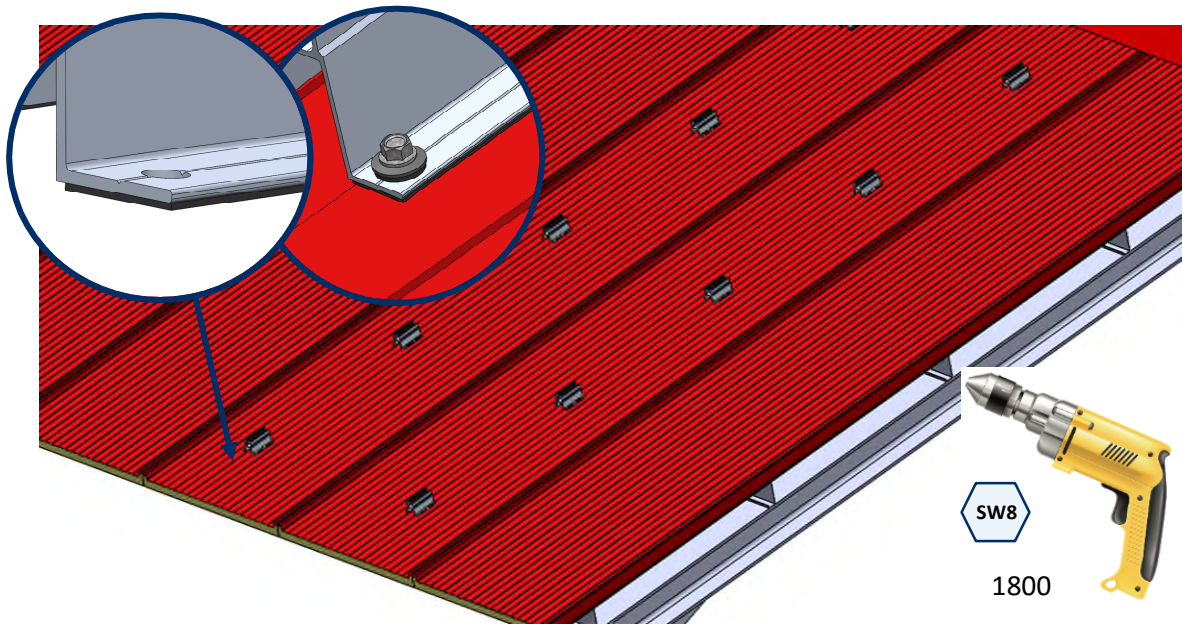
STEP 2.- Perform layout on the roof

Lay out on the roof the fixing points of each structure, checking the viability of the installation of each one depending on the chosen fixing system and the characteristics of the roof.



STEP 3.- Installation of the profiles

Pre-install the PSA-AV profiles by sticking the base onto the butylene tape and fix them with the thin sheet screws. For the installation of the thin sheet screws use an electric screwdriver equipped with hexagon socket SW-8, an installation speed of 1800 rpm is recommended.



TAC-N / TAC-B
Atlantis/Bimetal thin sheet screw

[Technical Data Sheet](#)



AUENI
Self-drilling screw



RE-TE
Watertight trebol rivet

[Technical Data Sheet](#)

STEP 4.- Pre-installation of clamps on the profiles

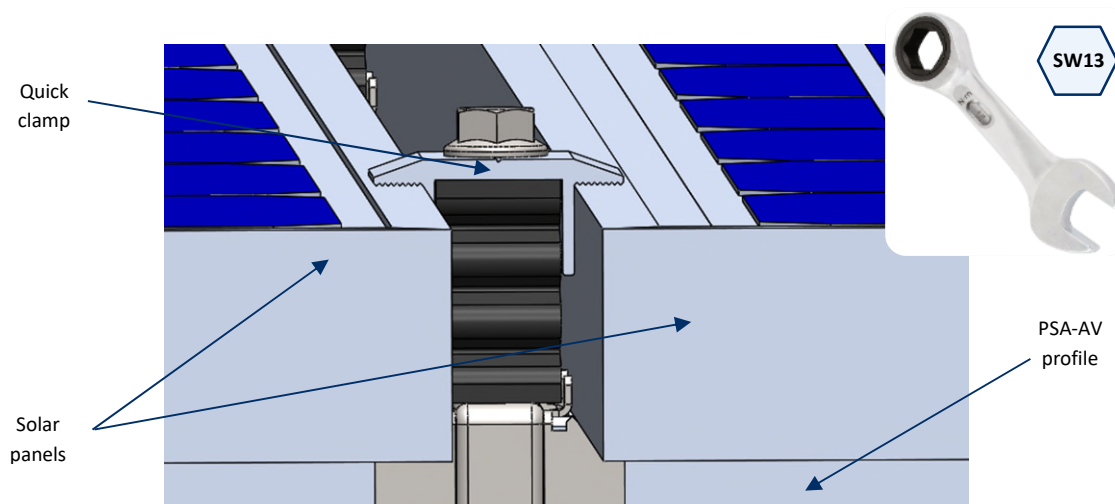
To mount the clamp on the profiles, the following steps are necessary:

<p>1. Place the clamp in the profile with the lower nut parallel to the profile.</p>	<p>2. To fix the clamp to the profile, the lower nut must be turned perpendicular to the profile by means of the screw, the screw head is pressed down and turned. The nut has a serrated rail to secure the fixing.</p>	<p>3. Insert the corresponding elements, two panels in the case of an intermediate clamp, or a panel and a gauge in the case of a lateral clamp.</p>	<p>4. To fix the inserted elements it is necessary to turn the screw until they meet the profile. Check that the lower nut remains perpendicular to the profile.</p>

Type of clamp depending on its position:

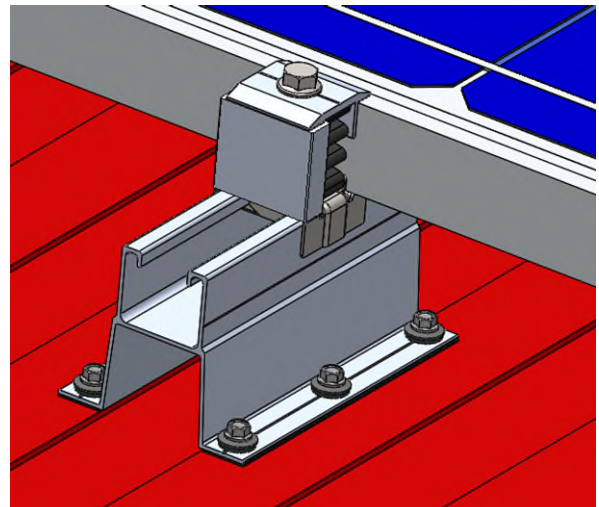
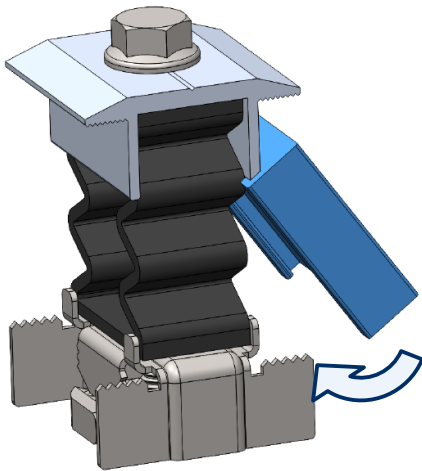
A. Intermediate clamp

- The intermediate clamp is used when passing from one module to another within the same row, fixing both panels to the structure. This assembly is carried out by means of the screw included in the clamp. A tightening torque of 14 Nm must be applied.



B. Lateral clamp

- Prepare 4 KFRSC3050 quick fixing clamps to be mounted at the ends of each row of panels. Each of these clamps is fitted with a GM-A gauge, mounted as shown in the figure:



The chosen gauge size must be equal to the frame of the solar panels to be installed.