

# **SC-PSI**

### SYSTEM DESCRIPTION

Coplanar mounting system with **PSE-C** "aluminium profile for side mounting", for the installation of solar panels.



1			CC
	K A I	IFR	

Description:	Coplanar mounting system on PSE-C profile in discontinuous format				
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:	Aluminium, 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-PSD 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/m <sup>2</sup> . The structure and fixing must be calculated according to local and roof conditions.				



## 2. COMPONENTS



### **SC-PSI INSTALLATION MANUAL**



**3. TYPES OF FIXINGS** 



## 4. EXAMPLES OF APPLICATION

Example: Sandwich panel roof / Fixing with thin sheet screew









## **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-PSI system with horizontal module orientation (landscape type).



	D	E (mm)	<b>F</b> (mm)	<b>G</b> (mm)	LF				
0,7B ≤ <b>C</b> ≥0,5B	<b>(B-C)</b> /2	26	min 35	min 20	(n* <b>B</b> ) + ((n-1) * <b>E</b> ) + (2* <b>F</b> )				
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**

B. Place the butylene tape on the high areas of the ribs where the discontinuous PSA-A profiles are to be placed.



### **SC-PSI INSTALLATION MANUAL**



**C.** Pre-install the PSA-A 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.



Ref. FTA\_GS\_M\_SC-PSI-en Rev: 0

1. Place the clamp in the

profile with the lower nut

parallel to the profile.

3. Insert the corresponding

elements, two panels in the

case of an intermediate clamp,

or a panel and gauge in the case

of lateral clamp.

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.

remains

4. To fix the inserted elements it is

necessary to turn the crew until

they meet the profile. Check that

nut

lower

perpendicular to the profile.

the



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 height of the solar panels to be installed.