

Flat roof structures (FR)

Welded structure FR-W-PS-S/H/SA/MAX-LONG-X TYPE MODULE DIRECTION MODULE LAYOUT INSTALLATION MAX PV MODULE LENGTH Projected (PS) South (S) Horizontal (H) Short side (SA) Individual (X)



DESCRIPTION

- → A multi-part construction made of Magnelis™ sheet metal, designed for flat roofs without the need for additional ballast.
- → Created with the involvement of a specialist in membrane roof installation.
- → Its unique shape is designed to significantly reduce installation time and maximize the force required to tear out the base.
- → Non-invasive installation using welding technology with a so-called leister (for PVC) or a gas burner (for bitumen).
- → The high durability of the welded system is confirmed by specialized laboratory tests.
- → For proper installation, only one welded base is required per support.
- → Optionally a hybrid system that allows for welding the base and simultaneously loading the wind deflector with ballast (in roof zones particularly exposed to wind suction).

At the customer's request, each installation using a structure is calculated by our Technical Department in terms of its load for a given roof, the method of installation and the number of bases that must be welded to the membrane.



Flat roof structures (FR)



CHARACTERISTICS	FR-W-PS-S/H/SA/MAX-LONG-X
Roof type	Flat roof (FR)
Method of mounting the structure on the roof	Welded (W)
Type of construction	Projected (PS)
Module orientation	South (S)
Module layout	Horizontal (H)
How to install a PV module ¹	Short side (SA)
Application/substrate on which it is mounted	PVC membrane/bituminous membrane
Method of assembly	The base of the structure is welded to the roof surface
Does the structure require additional ballast?	No
Is it possible to apply the hybrid solution	Yes - possibility of additional ballasting of the wind tower
(weld + ballast)?	
Approximate weight of the structure per 1m² of installation	~13,5
without additional ballast (kg/m²)²	
Purlin length (mm)	X
Wind brace length (mm)	X
Maximum PV module length (mm) ³	X
How to install the clamps	Clamps mounted to the triangle - key system
Method of distribution	Custom construction made to order with a lead time of up to 4 weeks for modules with lengths as specified in the product sheet sent for quotation.

¹ the proposed installation method for a given type of module may differ from the installation method provided by the PV module manufacturer, whose recommendations and recommendations determine the proper installation.

² weight calculated for a system of three modules in one row with the maximum dimensions for a given type of structure

³ the given maximum size of the module and the proposed method of its installation may differ from the installation method provided by the PV module manufacturer, whose recommendations and recommendations determine



Flat roof structures (FR)

LIST OF PARTS - BASE OF CONSTRUCTION



Welded base for support

RBTSOLAR-KD-PZ



Hexagonal nut M10 IE

NM10Z



Hexagonal nut M8 IE

NM8Z



Washer M10 300HV ISO7093-1 IE

PSZM10Z



Washer M8 300HV ISO7093-1 IE

PPM8Z



Screw M8X97 IE

SM8X97Z



Hexagonal screw M10X20 IE

SM10X20Z



LIST OF PARTS - OTHER INSTALLATION ELEMENTS



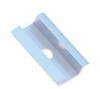
Sheet metal screw OC 5.5X25 EPDM

BLW55X25EPDMZ



End clamp 30/32/35/40 Nature/Black

KLK50/30(32/35/40)ALN KLK50/30(32/35/40)ALCZ



Middle clamp 50 universal Nature/Black

KLSR50ALN KLSR50ALCZ



Flange nut serrated M8 DIN6923 A2

NKM8A2



Allen screw M8X35 DIN912 A2

SIM8X35A2



Windchest South support L=X

RBTSOLAR-KD-W-X