07 Welded structure

FR-W-PS-S/H/LAZ/MAX-LONG-X

TYPE	MODULE DIRECTION	MODULE LAYOUT	INSTALLATION	MAX PV MODULE LENGTH
Projected (PS)	South (S)	Horizontal (H)	Long side (LAZ)	Individual (X)

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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).
- In the case of installing PV modules in a horizontal layout, an additional element is the ZET profiles with slot holes, to which the modules are mounted using clamps and M8 hex socket screws.

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.

Installation requires a wind deflector, which limits the effect of wind on the structure and ensures its rigidity.

Flat roof structures (FR)

1. Short arm
2. Long arm
3. Welded base for support
4. Base south
5. Purlin

CHARACTERISTICS	FR-W-PS-S/H/LAZ/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]	Long side (LAZ)
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 (weld + ballast)?	Yes - possibility of additional ballasting of the wind tower
Approximate weight of the structure per 1m² of installation without additional ballast (kg/m²)[2]	~16,5
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.

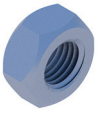
[1] the proposed installation method for a given type of module may differ from the installation method provided by the PV module manufacturer, whose recommendations and recommendations determine the proper installation.
[2] weight calculated for a system of three modules in one row with the maximum 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 the proper installation

Flat roof structures (FR)

LIST OF PARTS - BASE OF CONSTRUCTION

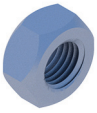
Welded base
for support

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
M8X25 IE

SM8X25Z

Hexagonal screw
M10X20 IE

SM10X20Z

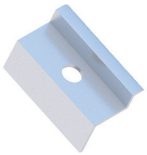
Purlin for support
L=X

RBTSOLAR-KD-PL-X

LIST OF PARTS - OTHER INSTALLATION ELEMENTS

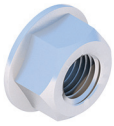
Sheet metal screw
OC 5.5X25 EPDM

BLW55X25EPDMZ



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

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

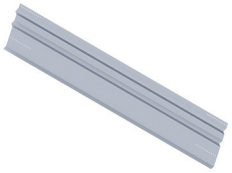


Flange nut
serrated
M8 DIN6923 A2

NKM8A2

Allen screw
M8X35 DIN912 A2

SIM8X35A2



Windchest
South support
L=X

RBTSOLAR-KD-W-X