

Flat roof structures (FR)

27

Screw-on structure

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

TYPE

Projected (PS)

MODULE DIRECTION

South (S)

MODULE LAYOUT

Horizontal (H)

INSTALLATION

Long side (LAZ)

MAX PV MODULE LENGTH

Individual (X)



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DESCRIPTION

- A multi-part construction made of Magnelis™ sheet metal, designed for flat or sloped roofs, without the need for additional ballast and without the possibility of using a welded structure.
- An invasive installation system, by fastening to the roof substructure using an appropriate number of screws.
- In the case of installing PV modules in a vertical layout or with a side length exceeding 2100 mm 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. Base south

4. Purlin

CHARACTERISTICS

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

Roof type	Flat roof (FR)
Method of mounting the structure on the roof	Screw-on (S)
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/sandwich panel/trapezoidal sheet
Method of assembly	The base of the structure is attached to the roof substructure
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 1m ² of installation without additional ballast (kg/m ²) ²	~16
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.

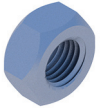
¹ the proposed installation method for a given type of module may differ from the installation method provided by the PV module manufacturer, whose recommendations and recommendations determine the proper installation.

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

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LIST OF PARTS - BASE OF CONSTRUCTION



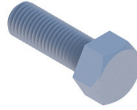
Hexagonal nut
M8 IE

NM8Z



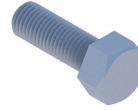
Washer M8 300HV
ISO7093-1 IE

PPM8Z



Screw
M8X97 IE

SM8X97Z



Hexagonal screw
M8X25 IE

SM8X25Z



Purlin for support
L=X

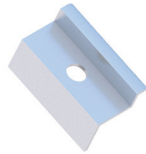
RBTSOLAR-KD-PL-X

LIST OF PARTS - OTHER INSTALLATION ELEMENTS



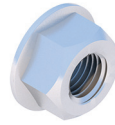
Sheet metal screw
OC 5.5X25 EPDM

BLW55X25EPDMZ



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

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



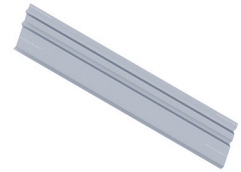
Flange nut
serrated
M8 DIN6923 A2

NKM8A2



Allen screw
M8X35 DIN912 A2

SIM8X35A2



Windchest
South support
L=X

RBTSOLAR-KD-W-X



M10 double thread screw
200/250/300

RBTSOLAR-KD-DWUG200/250/300