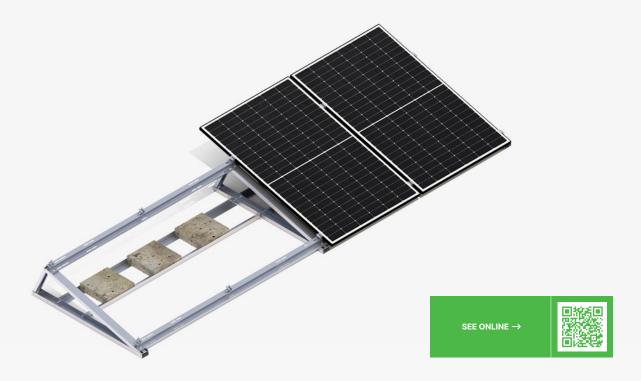


# Flat roof structures (FR)

# Ballast structure FR-B-PS-S/V/LAZ/MAX-LONG1950 TYPE MODULE DIRECTION MODULE LAYOUT INSTALLATION MAX PV MODULE LENGTH Projected (PS) South (S) Vertical (V) Long side (LAZ) 1950



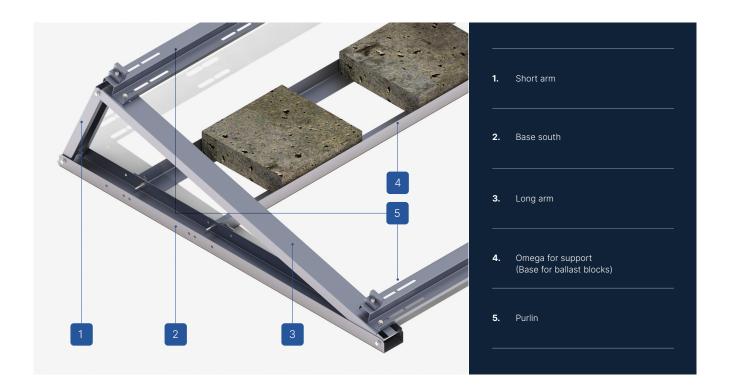
### DESCRIPTION

- → A multi-part construction made of Magnelis<sup>™</sup> sheet metal, designed for flat roofs requiring additional ballast, without the possibility of using a welded structure.
- → Non-invasive installation using an appropriate amount of ballast blocks, according to the ballast plan.
- → The system allows for loading 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.



# Flat roof structures (FR)



CHARACTERISTICS	FR-B-PS-S/V/LAZ/MAX-LONG1950

Roof type	Flat roof (FR)
Method of mounting the structure on the roof	Ballast (B)
Type of construction	Projected (PS)
Module orientation	South (S)
Module layout	Vertical (V)
How to install a PV module <sup>1</sup>	Long side (LAZ)
Application/substrate on which it is mounted	PVC membrane/bituminous membrane
Method of assembly	The base of the structure is placed on the roof covering and then additionally
	ballasted using concrete blocks placed on a ballast platform
Does the structure require additional ballast?	Yes
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 1m <sup>2</sup> of installation	~17,5
without additional ballast (kg/m²)²	
Purlin length (mm)	X
Wind brace length (mm)	X
Maximum PV module length (mm) <sup>3</sup>	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.

<sup>&</sup>lt;sup>1</sup> 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.

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

<sup>3</sup> 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



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



Middle clamp 50 universal Nature/Black

KLSR50ALN KLSR50ALCZ



Allen screw M8X35 DIN912 A2

SIM8X35A2



Flange nut serrated M8 DIN6923 A2

NKM8A2



Windchest South support L=X

RBTSOLAR-KD-W-X