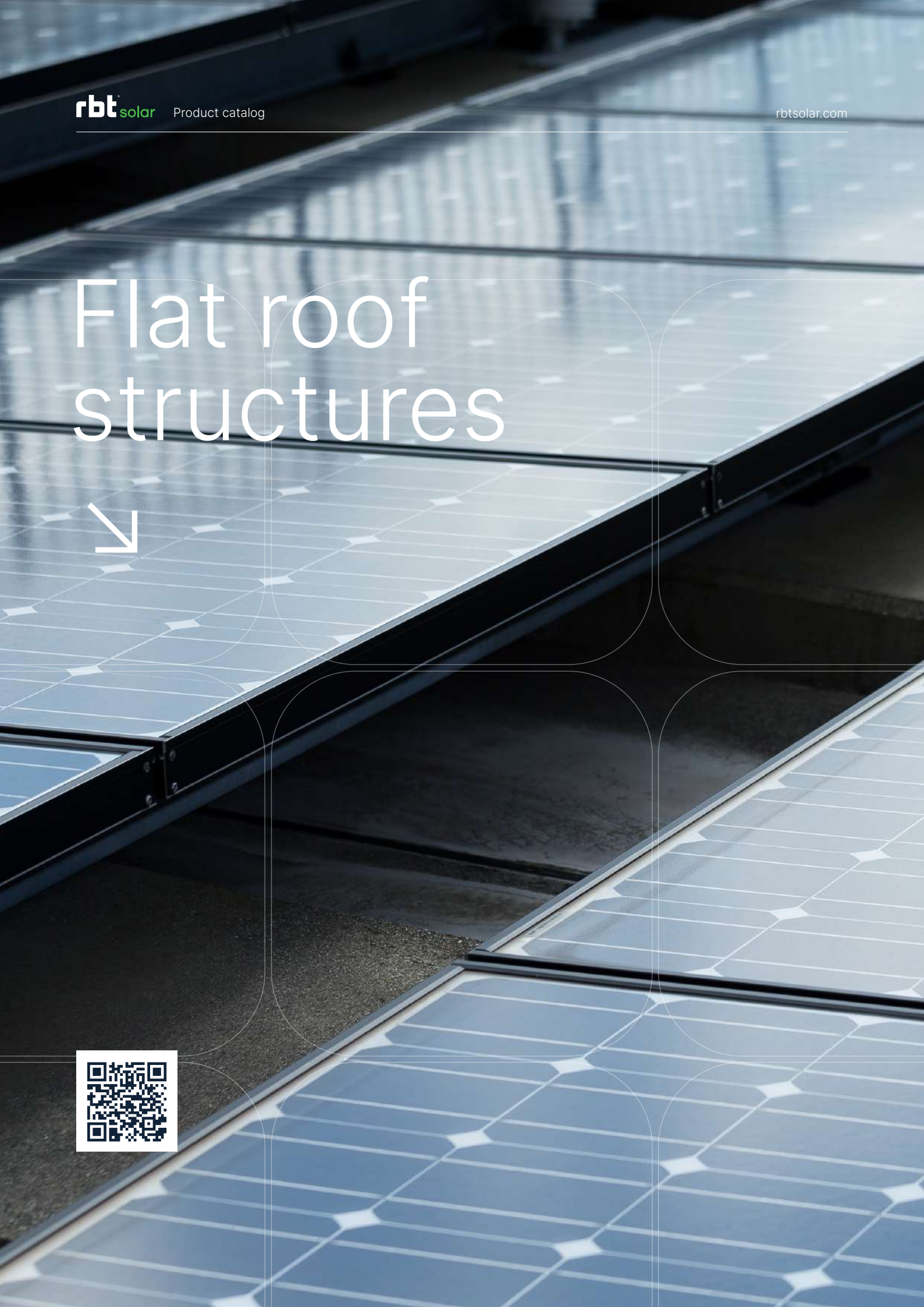
Flat roof structures



Flat roof structures (FR)

STRUCTURE	CARD NO.	CONSTRUCION TYPE	MODULE DIRECTION	MODULE LAYOUT	INSTALLATION	MAX PV MODULE LENGTH	PAGE
Welded structure (FR-W)	01	Universal (US)	South (S)	Horizontal (H)	Short side (SA)	2100	3
	02	Universal (US)	South (S)	Horizontal (H)	Long side (LAZ)	2100	6
						2300	
						2500	
	03	Universal (US)	South (S)	Vertical (V)	Long side (LAZ)	1950	9
	04	Universal (US)	East-west (EW)	Horizontal (H)	Short side (SA)	2100	12
	05	Universal (US)	East-west (EW)	Horizontal (H)	Long side (LAZ)	2100	15
						2300	
						2500	
	06	Projected (PS)	South (S)	Horizontal (H)	Short side (SA)	Individual	
	07	Projected (PS)	South (S)	Horizontal (H)	Long side (LAZ)	Individual	
	08	Projected (PS)	South (S)	Vertical (V)	Long side (LAZ)	Individual	
	09	Projected (PS)	East-west (EW)	Horizontal (H)	Short side (SA)	Individual	
	10	Projected (PS)	East-west (EW)	Horizontal (H)	Long side (LAZ)	Individual	
Ballast structure (FR-B)	11	Universal (US)	South (S)	Horizontal (H)	Short side (SA)	2100	18
	12	Universal (US)	South (S)	Horizontal (H)	Long side (LAZ)	2100	21
		Universal (US)	South (S)	Horizontal (H)		2300	
		Universal (US)	South (S)	Horizontal (H)		2500	
	13	Universal (US)	South (S)	Vertical (V)	Long side (LAZ)	1950	24
	14	Universal (US)	East-west (EW)	Horizontal (H)	Short side (SA)	2100	27
	15	Universal (US)	East-west (EW)	Horizontal (H)	Long side (LAZ)	2100	30
		Universal (US)	East-west (EW)	Horizontal (H)		2300	
		Universal (US)	East-west (EW)	Horizontal (H)		2500	
	16	Projected (PS)	South (S)	Horizontal (H)	Short side (SA)	Individual	
	17	Projected (PS)	South (S)	Horizontal (H)	Long side (LAZ)	Individual	
	18	Projected (PS)	South (S)	Vertical (V)	Long side (LAZ)	Individual	
	19	Projected (PS)	East-west (EW)	Horizontal (H)	Short side (SA)	Individual	
	20	Projected (PS)	East-west (EW)	Horizontal (H)	Long side (LAZ)	Individual	
Screw-on structure (FR-S)	21	Universal (US)	South (S)	Horizontal (H)	Short side (SA)	2100	33
	22	Universal (US)	South (S)	Horizontal (H)	Long side (LAZ)	2100	36
		Universal (US)	South (S)	Horizontal (H)		2300	
		Universal (US)	South (S)	Horizontal (H)		2500	
	23	Universal (US)	South (S)	Vertical (V)	Long side (LAZ)	1950	39
	24	Universal (US)	East-west (EW)	Horizontal (H)	Short side (SA)	2100	42
	25	Universal (US)	East-west (EW)	Horizontal (H)	Long side (LAZ)	2100	45
		Universal (US)	East-west (EW)	Horizontal (H)		2300	
		Universal (US)	East-west (EW)	Horizontal (H)		2500	
	26	Projected (PS)	South (S)	Horizontal (H)	Short side (SA)	Individual	
	27	Projected (PS)	South (S)	Horizontal (H)	Long side (LAZ)	Individual	
	28	Projected (PS)	South (S)	Vertical (V)	Long side (LAZ)	Individual	
	29	Projected (PS)	East-west (EW)	Horizontal (H)	Short side (SA)	Individual	
	30	Projected (PS)	East-west (EW)	Horizontal (H)	Long side (LAZ)	Individual	

Find a representative → Legal note →

Projected structures are made for an individual order with 4 week production period.
Universal structures are currently in stock and available on hand.

01 Welded structure

FR-W-US-S/H/SA/MAX-LONG2100

TYPE	MODULE DIRECTION	MODULE LAYOUT	INSTALLATION	MAX PV MODULE LENGTH
Universal (US)	South (S)	Horizontal (H)	Short side (SA)	2100

SEE ONLINE →

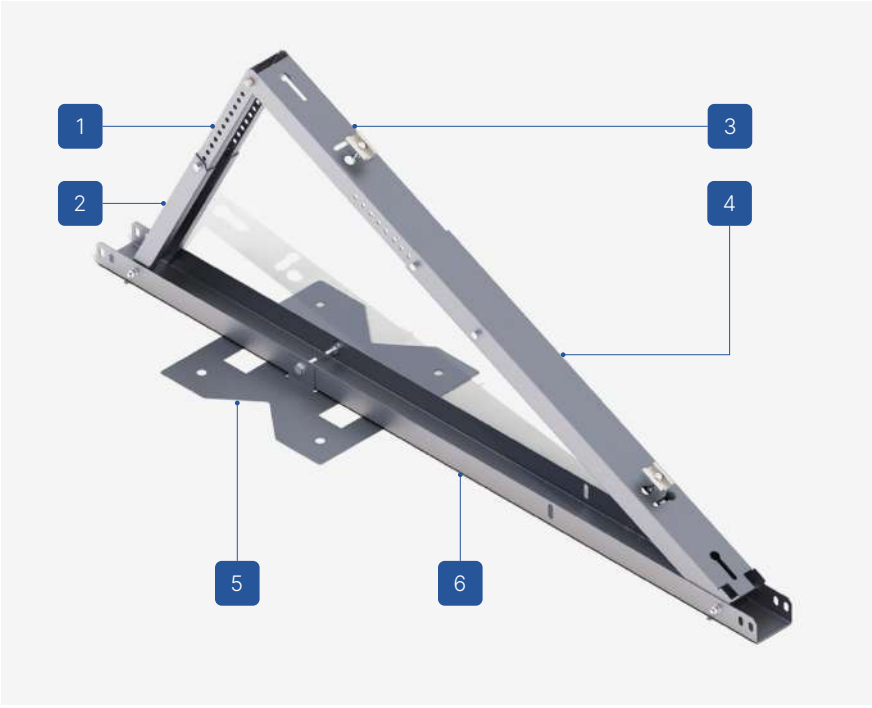
DESCRIPTION

- Multi-part structure, made of Magnelis™ sheet metal, intended for flat roofs, without the need additional ballast.
- Created with the participation of a specialist in the installation ofmembrane coverings.
- Its unique shape has been designed to significantly reduce assembly time and maximize the force necessary to remove the base.
- Non-invasive assembly with welding technology using the, so called, leister (in the case of PVC) or a gas burner (in the case of bitumen felt).
- High durability of the welded system is confirmed by specialized laboratory tests.
- Ready to be used for modules of various power and sizes, thanks to the use of two adjustable telescopic arms.
- Only one welded base per support is required for proper installation.
- Optionally - a hybrid system that allows the base to be welded and at the same time to load the wind deflector with ballast (in roof areas 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.

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

Flat roof structures (FR)



1. Upper telescope - short side
   RBTSOLAR-KDPT_5_365
2. Lower telescope - short side
   RBTSOLAR-KDPT_4_350
3. Upper telescope - long side
   RBTSOLAR-KDT_3_825
4. Lower telescope - long side
   RBTSOLAR-KDR_2_825
5. Welded base for support
   RBTSOLAR-KD-PZ
6. Base south
   RBTSOLAR-KDPP_1_1560

CHARACTERISTICS	FR-W-US-S/H/SA/MAX-LONG2100
Roof type	Flat roof (FR)
Method of mounting the structure on the roof	Welded (W)
Type of construction	Universal (US)
Module orientation	South (S)
Module layout	Horizontal (H)
How to install a PV module	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 (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	5,54
Purlin length (mm)	Without purlins
Wind brace length (mm)	2175
Maximum PV module length (mm)³	2100
How to install the clamps	Clamps mounted to the triangle - key system
Method of distribution	Available in stock

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

LIST OF PARTS - BASE OF CONSTRUCTION

Universal triangle
South

RBTSOLAR-FR-US-S

Welded base
for support

RBTSOLAR-KD-PZ

Self-locking nut
M8 DIN985 A2

NSHM8A2

Hexagonal nut
M10 IE

NM10Z

Washer M10 300HV
ISO7093-1 IE

PSZM10Z

Round washer
A2 8.4 DIN125A

PPM8A2

Allen screw
M8X100 DIN912 A2

SIM8X100A2

Hexagonal screw
M10X20 IE

SM10X20Z

LIST OF PARTS - OTHER INSTALLATION ELEMENTS

Sheet metal screw
OC 5.5X25 EPDM

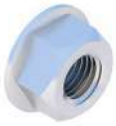
BLW55X25EPDMZ

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=2175/2355/2703mm

RBTSOLAR-KD-W-2175/2355/2703

Ballast wind shelter
South support
L=2175/2355/2703mm

RBTSOLAR-KD-WB-2175/2355/2703

02 Welded structure

FR-W-US-S/H/LAZ/MAX-LONG2100
FR-W-US-S/H/LAZ/MAX-LONG2300
FR-W-US-S/H/LAZ/MAX-LONG2500

TYPE	MODULE DIRECTION	MODULE LAYOUT	INSTALLATION	MAX PV MODULE LENGTH
Universal (US)	South (S)	Horizontal (H)	Long side (LAZ)	2100 / 2300 / 2500

SEE ONLINE →

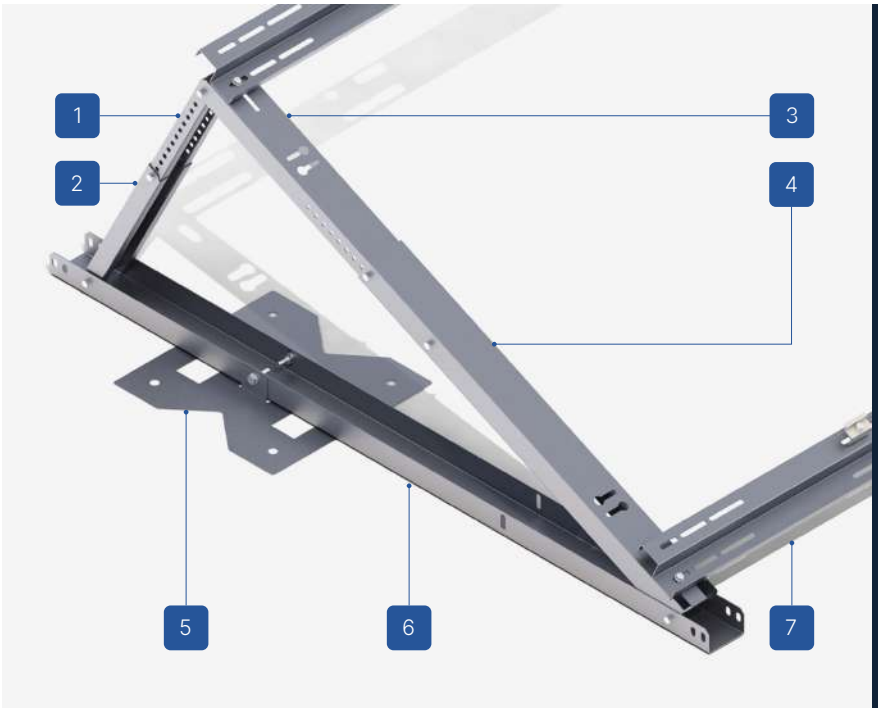
DESCRIPTION

- Multi-part structure, made of Magnelis™ sheet metal, intended for flat roofs, without the need additional ballast.
- Created with the participation of a specialist in the installation of membrane coverings.
- Its unique shape has been designed to significantly reduce assembly time and maximize the force necessary to remove the base.
- Non-invasive assembly with welding technology using the, so called, leister (in the case of PVC) or a gas burner (in the case of bitumen felt).
- High durability of the welded system is confirmed by specialized laboratory tests.
- Ready to be used for modules of various power and sizes, thanks to the use of two adjustable telescopic arms.
- Only one welded base per support is required for proper installation.
- Optionally - a hybrid system that allows the base to be welded and at the same time to load the wind deflector with ballast (in roof areas particularly exposed to wind suction).
- In case of mounting PV modules in a horizontal arrangement, an additional element are ZET profiles with bean holes, to which the modules are mounted using clamps and an M8 Allen screw.

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. Upper telescope - short side
   RBTSOLAR-KDPT_5_365
2. Lower telescope - short side
   RBTSOLAR-KDPT_4_350
3. Upper telescope - long side
   RBTSOLAR-KDT_3_825
4. Lower telescope - long side
   RBTSOLAR-KDR_2_825
5. Welded base for support
   RBTSOLAR-KD-PZ
6. Base south
   RBTSOLAR-KDPP_1_1560
7. Purlin for support L=2175/2380/2728
   RBTSOLAR-KD-PL-2175/2380/2728

CHARACTERISTICS	FR-W-US-S/H/LAZ
Roof type	Flat roof (FR)
Method of mounting the structure on the roof	Welded (W)
Type of construction	Universal (US)
Module orientation	South (S)
Module layout	Horizontal (H)
How to install a PV module	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
How to install the clamps	Clamps mounted to purlins - bean system
Method of distribution	Available in stock

	MAX-LONG2100	MAX-LONG2300	MAX-LONG2500
Approximate weight of the structure per 1m2 of installation without additional ballast (kg/m2)2	9,76	8,54	7,26
Purlin length (mm)	2175	2380	2728
Wind brace length (mm)	2175	2355	2703
Maximum PV module length (mm)3	2100	2300	2500

[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

LIST OF PARTS - BASE OF CONSTRUCTION

Universal triangle
South

RBTSOLAR-FR-US-S

Welded base
for support

RBTSOLAR-KD-PZ

Self-locking nut
M8 DIN985 A2

NSHM8A2

Hexagonal nut
M10 IE

NM10Z

Washer M10 300HV
ISO7093-1 IE

PSZM10Z

Round washer
A2 8.4 DIN125A

PPM8A2

Allen screw
M8X100 DIN912 A2

SIM8X100A2

Hexagonal screw
M10X20 IE

SM10X20Z

Hexagonal screw
M8X20 DIN933 A2

SM8X20A2

Purlin for support
L=2175/2380/2728

RBTSOLAR-KD-PL-2175/2380/2728

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

Windchest
South support
L=2175/2355/2703mm

RBTSOLAR-KD-W-2175/2355/2703

Ballast wind shelter
South support
L=2175/2355/2703mm

RBTSOLAR-KD-WB-2175/2355/2703

03 Welded structure

FR-W-US-S/V/LAZ/MAX-LONG1950

TYPE	MODULE DIRECTION	MODULE LAYOUT	INSTALLATION	MAX PV MODULE LENGTH
Universal (US)	South (S)	Vertical (V)	Long side (LAZ)	1950

SEE ONLINE →

DESCRIPTION

- Multi-part structure, made of Magnelis™ sheet metal, intended for flat roofs, without the need additional ballast.
- Created with the participation of a specialist in the installation ofmembrane coverings.
- Its unique shape has been designed to significantly reduce assembly time and maximize the force necessary to remove the base.
- Non-invasive assembly with welding technology using the, so called, leister (in the case of PVC) or a gas burner (in the case of bitumen felt).
- High durability of the welded system is confirmed by specialized laboratory tests.
- Ready to be used for modules of various power and sizes, thanks to the use of two adjustable telescopic arms.
- Only one welded base per support is required for proper installation.
- Optionally - a hybrid system that allows the base to be welded and at the same time to load the wind deflector with ballast (in roof areas 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.

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

Flat roof structures (FR)

1. Upper telescope - short side
   RBTSOLAR-KDPT_5_365
2. Lower telescope - short side
   RBTSOLAR-KDPT_4_350
3. Upper telescope - long side
   RBTSOLAR-KDT_3_825
4. Lower telescope - long side
   RBTSOLAR-KDR_2_825
5. Welded base for support
   RBTSOLAR-KD-PZ
6. Base south
   RBTSOLAR-KDPP_1_1560
7. Purlin for support L=2380
   RBTSOLAR-KD-PL-2380

CHARACTERISTICS	FR-W-US-S/V/LAZ/MAX-LONG1950
Roof type	Flat roof (FR)
Method of mounting the structure on the roof	Welded (W)
Type of construction	Universal (US)
Module orientation	South (S)
Module layout	Vertical (V)
How to install a PV module	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]	5,54
Purlin length (mm)	2380
Wind brace length (mm)	2355
Maximum PV module length (mm)[3]	1950
How to install the clamps	Clamps mounted to purlins - bean system
Method of distribution	Available in stock

[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

LIST OF PARTS - BASE OF CONSTRUCTION

Universal triangle
South

RBTSOLAR-FR-US-S

Welded base
for support

RBTSOLAR-KD-PZ

Self-locking nut
M8 DIN985 A2

NSHM8A2

Hexagonal nut
M10 IE

NM10Z

Washer M10 300HV
ISO7093-1 IE

PSZM10Z

Round washer
A2 8.4 DIN125A

PPM8A2

Allen screw
M8X100 DIN912 A2

SIM8X100A2

Hexagonal screw
M10X20 IE

SM10X20Z

Hexagonal screw
M8X20 DIN933 A2

SM8X20A2

Purlin for support
L=2380

RBTSOLAR-KD-PL-2380

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

Windchest
South support
L=2355

RBTSOLAR-KD-W-2355

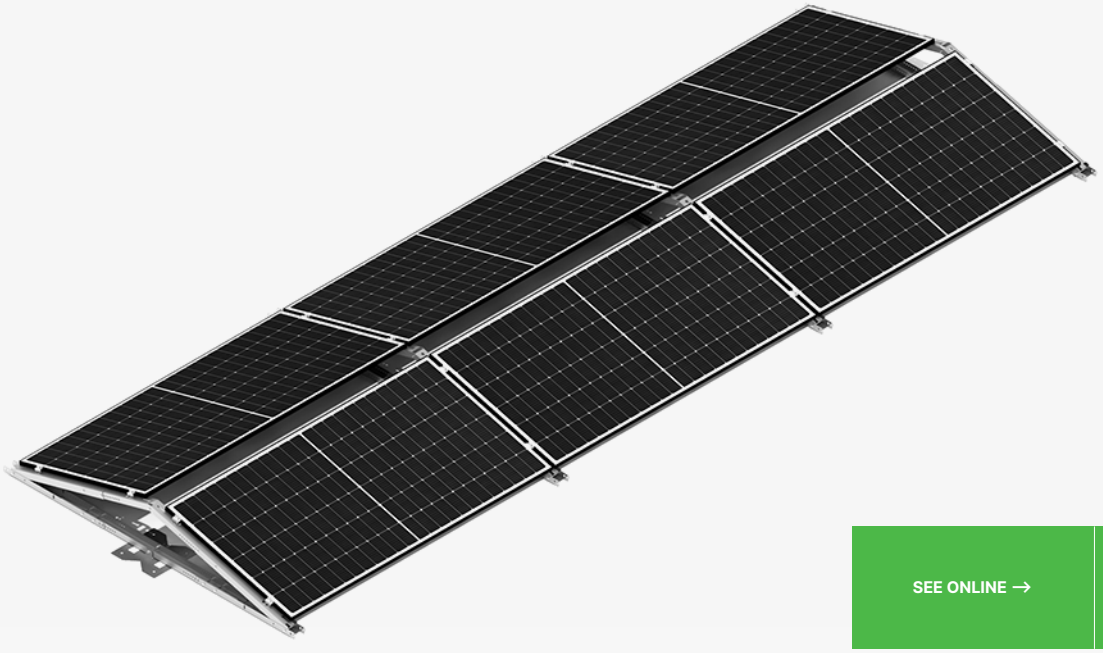
Ballast wind shelter
South support
L=2355

RBTSOLAR-KD-WB-2355

04 Welded structure

FR-W-US-EW/H/SA/MAX-LONG2100

TYPE	MODULE DIRECTION	MODULE LAYOUT	INSTALLATION	MAX PV MODULE LENGTH
Universal (US)	East-west (EW)	Horizontal (H)	Short side (SA)	2100



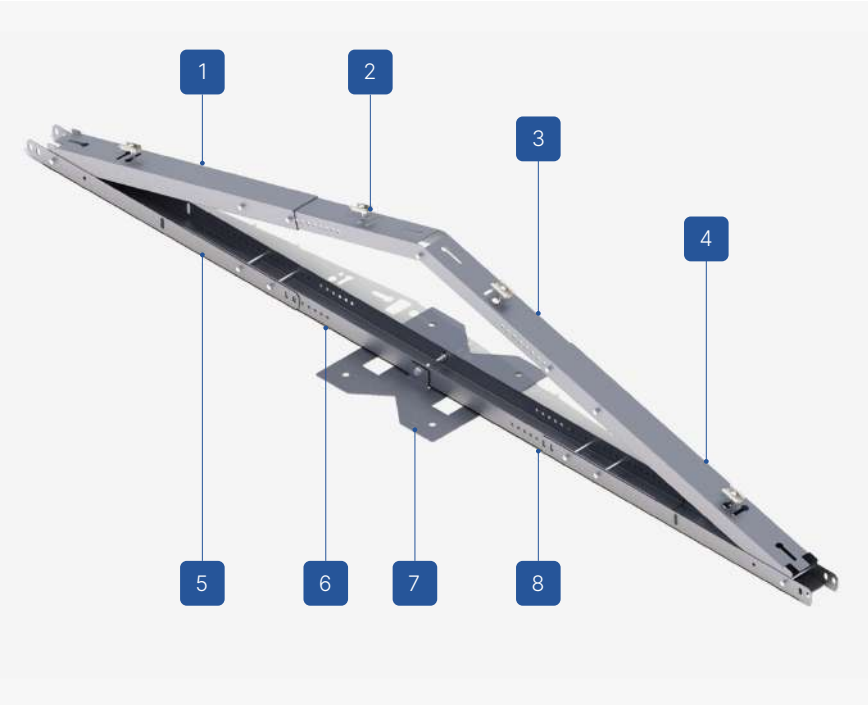
SEE ONLINE →

DESCRIPTION

- Multi-part structure, made of Magnelis™ sheet metal, intended for flat roofs, without the need additional ballast.
- Created with the participation of a specialist in the installation of membrane coverings.
- Its unique shape has been designed to significantly reduce assembly time and maximize the force necessary to remove the base.
- Non-invasive assembly with welding technology using the, so called, leister (in the case of PVC) or a gas burner (in the case of bitumen felt),
- High durability of the welded system is confirmed by specialized laboratory tests.
- Ready to be used for modules of various power and sizes, thanks to the use of two adjustable telescopic arms.
- Only one welded base per support is required for proper installation.

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)



1. Lower telescope - long side
   RBTSOLAR-KDR_2_825
2. Upper telescope - long side
   RBTSOLAR-KDT_3_825
3. Upper telescope - long side
   RBTSOLAR-KDT_3_825
4. Lower telescope - long side
   RBTSOLAR-KDR_2_825
5. End telescope - base
   RBTSOLAR-KDWZP_6_880
6. Middle telescope - base
   RBTSOLAR-KDWZL_7_1544
7. Welded base for support
   RBTSOLAR-KD-PZ
8. End telescope - base
   RBTSOLAR-KDWZP_6_880

CHARACTERISTICS	FR-W-US-EW/H/SA/MAX-LONG2100
Roof type	Flat roof (FR)
Method of mounting the structure on the roof	Welded (W)
Type of construction	Universal (US)
Module orientation	East-west (EW)
Module layout	Horizontal (H)
How to install a PV module	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 (weld + ballast)?	No
Approximate weight of the structure per 1m² of installation without additional ballast (kg/m²)[2]	9,49
Purlin length (mm)	Without purlins
Wind brace length (mm)	Without wind guard
Maximum PV module length (mm)[3]	2100
How to install the clamps	Clamps mounted to the triangle - key system
Method of distribution	Available in stock

[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

LIST OF PARTS - BASE OF CONSTRUCTION

Universal triangle
East-west

RBTSOLAR-FR-US-EW

Welded base
for support

RBTSOLAR-KD-PZ

Self-locking nut
M8 DIN985 A2

NSHM8A2

Hexagonal nut
M10 IE

NM10Z

Washer M10 300HV
ISO7093-1 IE

PSZM10Z

Round washer
A2 8.4 DIN125A

PPM8A2

Allen screw
M8X100 DIN912 A2

SIM8X100A2

Hexagonal screw
M10X20 IE

SM10X20Z

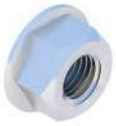
LIST OF PARTS - OTHER INSTALLATION ELEMENTS

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

05 Welded structure

FR-W-US-EW/H/LAZ/MAX-LONG2100
FR-W-US-EW/H/LAZ/MAX-LONG2300
FR-W-US-EW/H/LAZ/MAX-LONG2500

TYPE	MODULE DIRECTION	MODULE LAYOUT	INSTALLATION	MAX PV MODULE LENGTH
Universal (US)	East-west (EW)	Horizontal (H)	Long side (LAZ)	2100 / 2300 / 2500

SEE ONLINE →

DESCRIPTION

- Multi-part structure, made of Magnelis™ sheet metal, intended for flat roofs, without the needadditional ballast.
- Created with the participation of a specialist in the installation of membrane coverings.
- Its unique shape has been designed to significantly reduce assembly time and maximize the force necessary to remove the base.
- Non-invasive assembly with welding technology using the, so called, leister (in the case of PVC) or a gas burner (in the case of bitumen felt),
- High durability of the welded system is confirmed by specialized laboratory tests.
- Ready to be used for modules of various power and sizes, thanks to the use of two adjustable telescopic arms.
- Only one welded base per support is required for proper installation,
- Optionally - a hybrid system that allows the base to be welded and at the same time to load the wind deflector with ballast (in roof areas particularly exposed to wind suction).
- In the case of mounting PV modules in a horizontal arrangement, an additional element are ZET profiles with bean holes, to which the modules are mounted using clamps and an M8 Allen screw.

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)

1. Lower telescope - long side
   RBTSOLAR-KDR_2_825
2. Upper telescope - long side
   RBTSOLAR-KDT_3_825
3. Upper telescope - long side
   RBTSOLAR-KDT_3_825
4. Purlin for support L=2175/2380/2728
   RBTSOLAR-KD-PL-2175/2380/2728
5. Lower telescope - long side
   RBTSOLAR-KDR_2_825
6. End telescope - base
   RBTSOLAR-KDWZP_6_880
7. Middle telescope - base
   RBTSOLAR-KDWZL_7_1544
8. Welded base for support
   RBTSOLAR-KD-PZ
9. End telescope - base
   RBTSOLAR-KDWZP_6_880

CHARACTERISTICS	FR-W-US-EW/H/LAZ
Roof type	Flat roof (FR)
Method of mounting the structure on the roof	Welded (W)
Type of construction	Universal (US)
Module orientation	East-west (EW)
Module layout	Horizontal (H)
How to install a PV module	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)?	No
How to install the clamps	Clamps mounted to purlins - bean system
Method of distribution	Available in stock

	MAX-LONG2100	MAX-LONG2300	MAX-LONG2500
Approximate weight of the structure per 1m2 of installation without additional ballast (kg/m2)2	16,80	15,05	12,89
Purlin length (mm)	2175	2380	2728
Wind brace length (mm)	Without wind guard	Without wind guard	Without wind guard
Maximum PV module length (mm)3	2100	2300	2500

[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

LIST OF PARTS - BASE OF CONSTRUCTION

Universal triangle
East-west

RBTSOLAR-FR-US-EW

Welded base
for support

RBTSOLAR-KD-PZ

Self-locking nut
M8 DIN985 A2

NSHM8A2

Hexagonal nut
M10 IE

NM10Z

Washer M10 300HV
ISO7093-1 IE

PSZM10Z

Round washer
A2 8.4 DIN125A

PPM8A2

Allen screw
M8X100 DIN912 A2

SIM8X100A2

Hexagonal screw
M10X20 IE

SM10X20Z

Hexagonal screw
M8X20 DIN933 A2

SM8X20A2

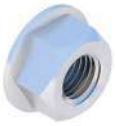
Purlin for support
L=2175/2380/2728

RBTSOLAR-KD-PL-2175/2380/2728

LIST OF PARTS - OTHER INSTALLATION ELEMENTS

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

11 Ballast structure

FR-B-US-S/H/SA/MAX-LONG2100

TYPE	MODULE DIRECTION	MODULE LAYOUT	INSTALLATION	MAX PV MODULE LENGTH
Universal (US)	South (S)	Horizontal (H)	Short side (SA)	2100

SEE ONLINE →

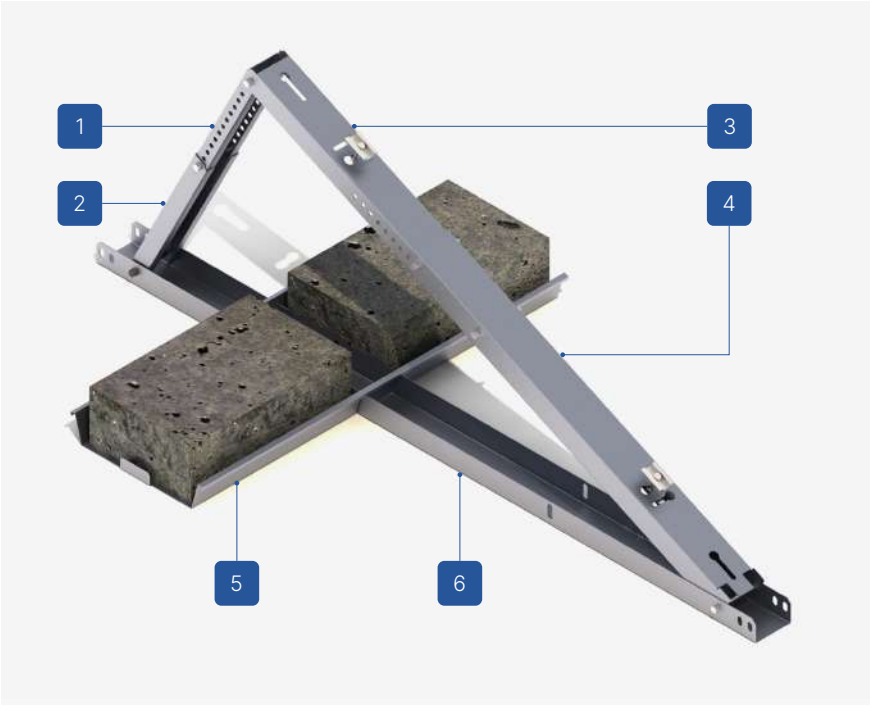
DESCRIPTION

- → Multi-part structure, made of Magnelis™ sheet metal, intended for flat roofs, where additional ballast is neccessary, without the possibility of using a welded structure.
- → Non-invasive assembly, using the appropriate number of ballast blocks, in accordance with the ballast plan.
- → Ready to be used for modules of various power and sizes, thanks to the use of two adjustable telescopic arms.
- → The system allows you to add weight to the base and simultaneously load the wind deflector with ballast (in roof areas 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 mounted.

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

Flat roof structures (FR)



1. Upper telescope - short side
   RBTSOLAR-KDPT_5_365
2. Lower telescope - short side
   RBTSOLAR-KDPT_4_350
3. Upper telescope - long side
   RBTSOLAR-KDT_3_825
4. Lower telescope - long side
   RBTSOLAR-KDR_2_825
5. Omega for support
   (Base for ballast blocks)
   RBTSOLAR-KD-PB
6. Base south
   RBTSOLAR-KDPP_1_1560

CHARACTERISTICS	FR-B-US-S/H/SA/MAX-LONG2100
Roof type	Flat roof (FR)
Method of mounting the structure on the roof	Ballast (B)
Type of construction	Universal (US)
Module orientation	South (S)
Module layout	Horizontal (H)
How to install a PV module	Short side (SA)
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 (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]	6,40
Purlin length (mm)	Without purlins
Wind brace length (mm)	2175
Maximum PV module length (mm)[3]	2100
How to install the clamps	Clamps mounted to the triangle - key system
Method of distribution	Available in stock

[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

LIST OF PARTS - BASE OF CONSTRUCTION

Universal triangle
South

RBTSOLAR-FR-US-S

Omega dla podpory
(Podstawa dla bloczków
balastowych)

RBTSOLAR-KD-PB

Self-locking nut
M8 DIN985 A2

NSHM8A2

Round washer
A2 8.4 DIN125A

PPM8A2

Allen screw
M8X100 DIN912 A2

SIM8X100A2

LIST OF PARTS - OTHER INSTALLATION ELEMENTS

Sheet metal screw
OC 5.5X25 EPDM

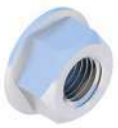
BLW55X25EPDMZ

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=2175/2355/2703mm

RBTSOLAR-KD-W-2175/2355/2703

Ballast wind shelter
South support
L=2175/2355/2703mm

RBTSOLAR-KD-WB-2175/2355/2703

12 Ballast structure

FR-B-US-S/H/LAZ/MAX-LONG2100
FR-B-US-S/H/LAZ/MAX-LONG2300
FR-B-US-S/H/LAZ/MAX-LONG2500

TYPE	MODULE DIRECTION	MODULE LAYOUT	INSTALLATION	MAX PV MODULE LENGTH
Universal (US)	South (S)	Horizontal (H)	Long side (LAZ)	2100 / 2300 / 2500

SEE ONLINE →

DESCRIPTION

- Multi-part structure, made of Magnelis™ sheet metal, intended for flat roofs, where necessary additional ballast, without the possibility of using a welded structure.
- Non-invasive assembly, using the appropriate number of ballast blocks, in accordance with the ballast plan.
- Ready to be used for modules of various power and sizes, thanks to the use of two adjustable telescopic arms.
- The system allows you to add weight to the base and simultaneously load the wind deflector with ballast (in roof areas particularly exposed to wind suction).
- In case of mounting PV modules in a horizontal arrangement, an additional element are ZET profiles with bean holes, to which the modules are mounted using clamps and an M8 Allen screw.

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 mounted.

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

Flat roof structures (FR)

1. Upper telescope - short side
   RBTSOLAR-KDPT_5_365
2. Lower telescope - short side
   RBTSOLAR-KDPT_4_350
3. Upper telescope - long side
   RBTSOLAR-KDT_3_825
4. Lower telescope - long side
   RBTSOLAR-KDR_2_825
5. Omega for support
   (Base for ballast blocks)
   RBTSOLAR-KD-PB
6. Base south
   RBTSOLAR-KDPP_1_1560
7. Purlin for support L=2175/2380/2728
   RBTSOLAR-KD-PL-2175/2380/2728

CHARACTERISTICS	FR-B-US-S/H/LAZ
Roof type	Flat roof (FR)
Method of mounting the structure on the roof	Ballast (B)
Type of construction	Universal (US)
Module orientation	South (S)
Module layout	Horizontal (H)
How to install a PV module	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 (weld + ballast)?	Yes - possibility of additional ballasting of the wind tower
How to install the clamps	Clamps mounted to purlins - bean system
Method of distribution	Available in stock

	MAX-LONG2100	MAX-LONG2300	MAX-LONG2500
Approximate weight of the structure per 1m2 of installation without additional ballast (kg/m2)2	10,22	10,61	11,20
Purlin length (mm)	2175	2380	2728
Wind brace length (mm)	2175	2355	2703
Maximum PV module length (mm)3	2100	2300	2500

[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

LIST OF PARTS - BASE OF CONSTRUCTION

Universal triangle
South

RBTSOLAR-FR-US-S

Omega dla podpory
(Podstawa dla bloczków
balastowych)

RBTSOLAR-KD-PB

Self-locking nut
M8 DIN985 A2

NSHM8A2

Round washer
A2 8.4 DIN125A

PPM8A2

Allen screw
M8X100 DIN912 A2

SIM8X100A2

Hexagonal screw
M8X20 DIN933 A2

SM8X20A2

Purlin for support
L=2175/2380/2728

RBTSOLAR-KD-PL-2175/2380/2728

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

Windchest
South support
L=2175/2355/2703mm

RBTSOLAR-KD-W-2175/2355/2703

Ballast wind shelter
South support
L=2175/2355/2703mm

RBTSOLAR-KD-WB-2175/2355/2703

13 Ballast structure

FR-B-US-S/V/LAZ/MAX-LONG1950

TYPE	MODULE DIRECTION	MODULE LAYOUT	INSTALLATION	MAX PV MODULE LENGTH
Universal (US)	South (S)	Vertical (V)	Long side (LAZ)	1950

SEE ONLINE →

DESCRIPTION

- Multi-part structure, made of Magnelis™ sheet metal, intended for flat roofs, where necessary additional ballast, without the possibility of using a welded structure.
- Non-invasive assembly, using the appropriate number of ballast blocks, in accordance with the ballast plan.
- Ready to be used for modules of various power and sizes, thanks to the use of two adjustable telescopic arms.
- The system allows you to add weight to the base and simultaneously load the wind deflector with ballast (in roof areas particularly exposed to wind suction).
- In case of mounting PV modules in a vertical arrangement, an additional element are ZET profiles with bean holes, to which the modules are mounted using clamps and an M8 Allen screw.

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 mounted.

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

Flat roof structures (FR)

1. Upper telescope - short side
   RBTSOLAR-KDPT_5_365
2. Lower telescope - short side
   RBTSOLAR-KDPT_4_350
3. Upper telescope - long side
   RBTSOLAR-KDT_3_825
4. Lower telescope - long side
   RBTSOLAR-KDR_2_825
5. Omega for support
   (Base for ballast blocks)
   RBTSOLAR-KD-PB
6. Base south
   RBTSOLAR-KDPP_1_1560
7. Purlin for support L=2380
   RBTSOLAR-KD-PL-2380

CHARACTERISTICS	FR-B-US-S/V/LAZ/MAX-LONG1950
Roof type	Flat roof (FR)
Method of mounting the structure on the roof	Ballast (B)
Type of construction	Universal (US)
Module orientation	South (S)
Module layout	Vetrical (V)
How to install a PV module	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 (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]	5,78
Purlin length (mm)	2380
Wind brace length (mm)	2355
Maximum PV module length (mm)[3]	1950
How to install the clamps	Clamps mounted to purlins - bean system
Method of distribution	Available in stock

[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

LIST OF PARTS - BASE OF CONSTRUCTION

Universal triangle
South

RBTSOLAR-FR-US-S

Omega dla podpory
(Podstawa dla bloczków
balastowych)

RBTSOLAR-KD-PB

Self-locking nut
M8 DIN985 A2

NSHM8A2

Round washer
A2 8.4 DIN125A

PPM8A2

Allen screw
M8X100 DIN912 A2

SIM8X100A2

Hexagonal screw
M8X20 DIN933 A2

SM8X20A2

Purlin for support
L=2380

RBTSOLAR-KD-PL-2380

LIST OF PARTS - OTHER INSTALLATION ELEMENTS

Sheet metal screw
OC 5.5X25 EPDM

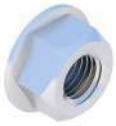
BLW55X25EPDMZ

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=2355

RBTSOLAR-KD-W-2355

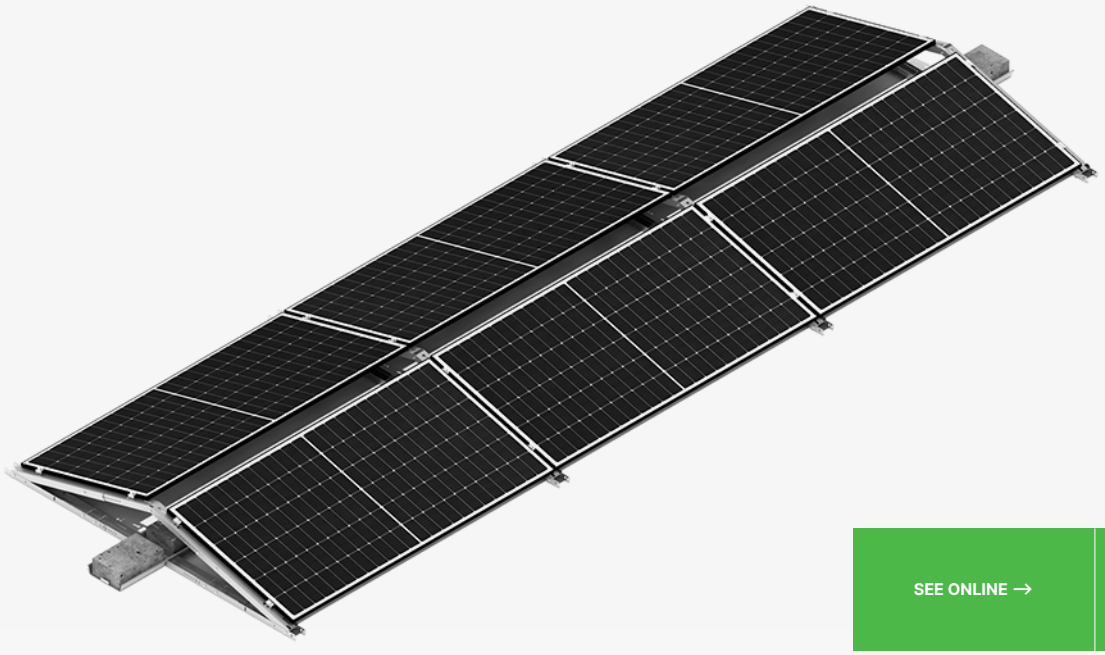
Ballast wind shelter
South support
L=2355

RBTSOLAR-KD-WB-2355

14 Ballast structure

FR-B-US-EW/H/SA/MAX-LONG2100

TYPE	MODULE DIRECTION	MODULE LAYOUT	INSTALLATION	MAX PV MODULE LENGTH
Universal (US)	East-west (EW)	Horizontal (H)	Short side (SA)	2100



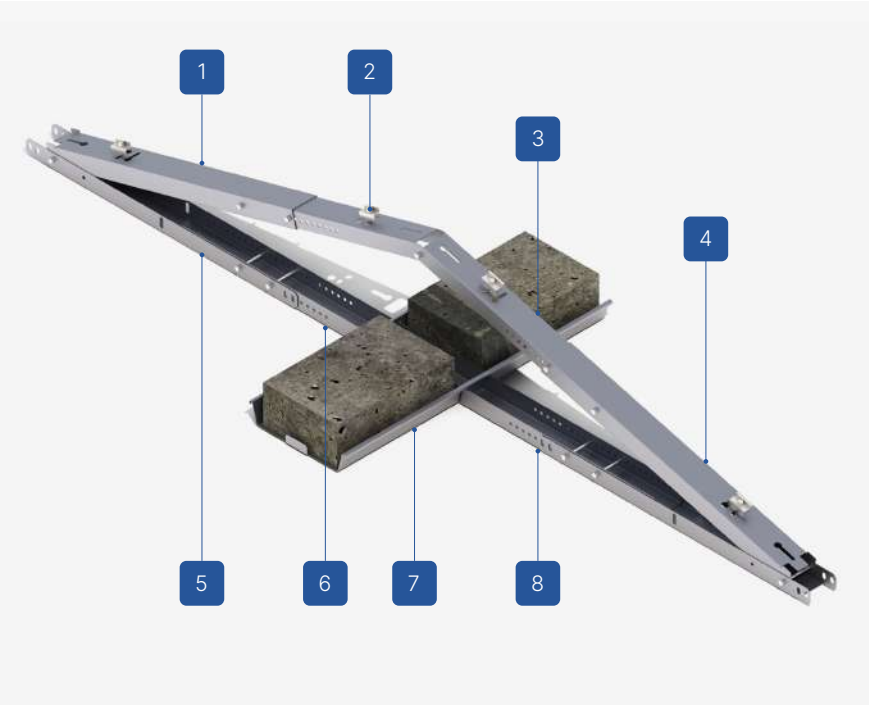
SEE ONLINE →

DESCRIPTION

- Multi-part structure, made of Magnelis™ sheet metal, intended for flat roofs, where necessary additional ballast, without the possibility of using a welded structure.
- Non-invasive assembly, using the appropriate number of ballast blocks, in accordance with the ballast plan.
- Ready to be used for modules of various power and sizes, thanks to the use of two adjustable telescopic arms.

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 mounted.

Flat roof structures (FR)



1. Lower telescope - long side
   RBTSOLAR-KDR_2_825
2. Upper telescope - long side
   RBTSOLAR-KDT_3_825
3. Upper telescope - long side
   RBTSOLAR-KDT_3_825
4. Lower telescope - long side
   RBTSOLAR-KDR_2_825
5. End telescope - base
   RBTSOLAR-KDWZP_6_880
6. Middle telescope - base
   RBTSOLAR-KDWZŁ_7_1544
7. Omega for support
   (Base for ballast blocks)
   RBTSOLAR-KD-PB
8. End telescope - base
   RBTSOLAR-KDWZP_6_880

CHARACTERISTICS	FR-B-US-EW/H/SA/MAX-LONG2100
Roof type	Flat roof (FR)
Method of mounting the structure on the roof	Ballast (B)
Type of construction	Universal (US)
Module orientation	East-west (EW)
Module layout	Horizontal (H)
How to install a PV module	Short side (SA)
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 (weld + ballast)?	No
Approximate weight of the structure per 1m² of installation without additional ballast (kg/m²)[2]	9,94
Purlin length (mm)	Without purlins
Wind brace length (mm)	Without wind guard
Maximum PV module length (mm)[3]	2100
How to install the clamps	Clamps mounted to the triangle - key system
Method of distribution	Available in stock

[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

LIST OF PARTS - BASE OF CONSTRUCTION

Universal triangle
East-west

RBTSOLAR-FR-US-EW

Omega dla podpory
(Podstawa dla bloczków
balastowych)

RBTSOLAR-KD-PB

Self-locking nut
M8 DIN985 A2

NSHM8A2

Round washer
A2 8.4 DIN125A

PPM8A2

Allen screw
M8X100 DIN912 A2

SIM8X100A2

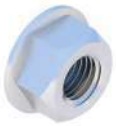
LIST OF PARTS - OTHER INSTALLATION ELEMENTS

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

15 Ballast structure

FR-B-US-EW/H/LAZ/MAX-LONG2100
FR-B-US-EW/H/LAZ/MAX-LONG2300
FR-B-US-EW/H/LAZ/MAX-LONG2500

TYPE	MODULE DIRECTION	MODULE LAYOUT	INSTALLATION	MAX PV MODULE LENGTH
Universal (US)	East-west (EW)	Horizontal (H)	Long side (LAZ)	2100 / 2300 / 2500

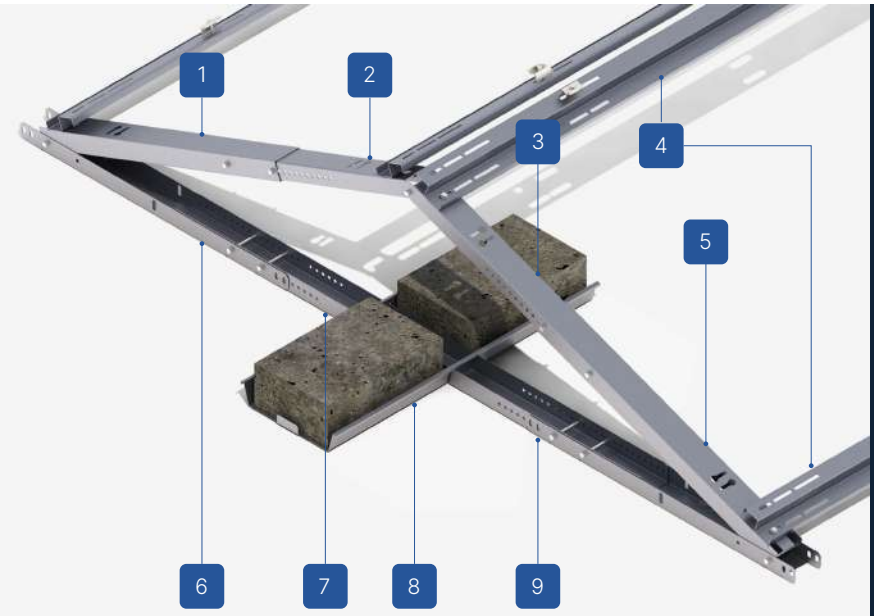
SEE ONLINE →

DESCRIPTION

- → Multi-part structure, made of Magnelis™ sheet metal, intended for flat roofs, where necessary additional ballast, without the possibility of using a welded structure.
- → Non-invasive assembly, using the appropriate number of ballast blocks, in accordance with the ballast plan.
- → Ready to be used for modules of various power and sizes, thanks to the use of two adjustable telescopic arms.
- → In the case of mounting PV modules in a horizontal arrangement, an additional element are ZET profiles with bean holes, to which the modules are mounted using clamps and an M8 Allen screw.

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 mounted.

Flat roof structures (FR)



1. Lower telescope - long side
   RBTSOLAR-KDR_2_825
2. Upper telescope - long side
   RBTSOLAR-KDT_3_825
3. Upper telescope - long side
   RBTSOLAR-KDT_3_825
4. Purlin for support L=2175/2380/2728
   RBTSOLAR-KD-PL-2175/2380/2728
5. Lower telescope - long side
   RBTSOLAR-KDR_2_825
6. End telescope - base
   RBTSOLAR-KDWZP_6_880
7. Middle telescope - base
   RBTSOLAR-KDWZŁ_7_1544
8. Omega for support
   (Base for ballast blocks)
   RBTSOLAR-KD-PB
9. End telescope - base
   RBTSOLAR-KDWZP_6_880

CHARACTERISTICS	FR-B-US-EW/H/LAZ
Roof type	Flat roof (FR)
Method of mounting the structure on the roof	Ballast (B)
Type of construction	Universal (US)
Module orientation	East-west (EW)
Module layout	Horizontal (H)
How to install a PV module	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 (weld + ballast)?	No
How to install the clamps	Clamps mounted to purlins - bean system
Method of distribution	Available in stock

	MAX-LONG2100	MAX-LONG2300	MAX-LONG2500
Approximate weight of the structure per 1m2 of installation without additional ballast (kg/m2)2	17,57	15,43	13,20
Purlin length (mm)	2175	2380	2728
Wind brace length (mm)	Without wind guard	Without wind guard	Without wind guard
Maximum PV module length (mm)3	2100	2300	2500

[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

LIST OF PARTS - BASE OF CONSTRUCTION

Universal triangle
East-west

RBTSOLAR-FR-US-EW

Omega dla podpory
(Podstawa dla bloczków
balastowych)

RBTSOLAR-KD-PB

Self-locking nut
M8 DIN985 A2

NSHM8A2

Round washer
A2 8.4 DIN125A

PPM8A2

Allen screw
M8X100 DIN912 A2

SIM8X100A2

Hexagonal screw
M8X20 DIN933 A2

SM8X20A2

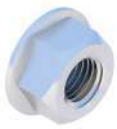
Purlin for support
L=2175/2380/2728

RBTSOLAR-KD-PL-2175/2380/2728

LIST OF PARTS - OTHER INSTALLATION ELEMENTS

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

21 Screw-on structure

FR-S-US-S/H/SA/MAX-LONG2100

TYPE	MODULE DIRECTION	MODULE LAYOUT	INSTALLATION	MAX PV MODULE LENGTH
Universal (US)	South (S)	Horizontal (H)	Short side (SA)	2100

SEE ONLINE →

DESCRIPTION

- Multi-part structure, made of Magnelis sheet, intended for flat or sloping roofs, without the need for additional ballasting and without the possibility of using a welded structure.
- Invasive installation system, by attaching to the roof substructure using the appropriate number of screws.
- Ready to be used for modules of various power and sizes, thanks to the use of two adjustable telescopic arms.

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 mounted.

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

Flat roof structures (FR)

1. Upper telescope - short side
   RBTSOLAR-KDPT_5_365
2. Lower telescope - short side
   RBTSOLAR-KDPT_4_350
3. Upper telescope - long side
   RBTSOLAR-KDT_3_825
4. Lower telescope - long side
   RBTSOLAR-KDR_2_825
5. Base south
   RBTSOLAR-KDPP_1_1560

CHARACTERISTICS	FR-S-US-S/H/SA/MAX-LONG2100
Roof type	Flat roof (FR)
Method of mounting the structure on the roof	Screw-on (S)
Type of construction	Universal (US)
Module orientation	South (S)
Module layout	Horizontal (H)
How to install a PV module	Short side (SA)
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 1m² of installation without additional ballast (kg/m²)[2]	5,15
Purlin length (mm)	Without purlins
Wind brace length (mm)	2175
Maximum PV module length (mm)[3]	2100
How to install the clamps	Clamps mounted to the triangle - key system
Method of distribution	Available in stock

[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

LIST OF PARTS - BASE OF CONSTRUCTION

Universal triangle
South

RBTSOLAR-FR-US-S

Self-locking nut
M8 DIN985 A2

NSHM8A2

Round washer
A2 8.4 DIN125A

PPM8A2

Allen screw
M8X100 DIN912 A2

SIM8X100A2

LIST OF PARTS - OTHER INSTALLATION ELEMENTS

Sheet metal screw
OC 5.5X25 EPDM

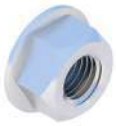
BLW55X25EPDMZ

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=2175/2355/2703mm

RBTSOLAR-KD-W-2175/2355/2703

Ballast wind shelter
South support
L=2175/2355/2703mm

RBTSOLAR-KD-WB-2175/2355/2703

M10 double thread screw
200/250/300

RBTSOLAR-KD-DWUG200/250/300

22 Screw-on structure

FR-S-US-S/H/LAZ/MAX-LONG2100
FR-S-US-S/H/LAZ/MAX-LONG2300
FR-S-US-S/H/LAZ/MAX-LONG2500

TYPE	MODULE DIRECTION	MODULE LAYOUT	INSTALLATION	MAX PV MODULE LENGTH
Universal (US)	South (S)	Horizontal (H)	Long side (LAZ)	2100 / 2300 / 2500

SEE ONLINE →

DESCRIPTION

- Multi-part structure, made of Magnelis sheet, intended for flat or sloping roofs, without the need for additional ballasting and without the possibility of using a welded structure.
- Invasive installation system, by attaching to the roof substructure using the appropriate number of screws.
- Ready to be used for modules of various power and sizes, thanks to the use of two adjustable telescopic arms.
- In case of mounting PV modules in a vertical arrangement and with a side length exceeding 2100 mm in a horizontal arrangement, ZET profiles are an additional element with bean holes, to which the modules are mounted using clamps and an M8 Allen screw.

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 mounted.

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

Flat roof structures (FR)

1. Upper telescope - short side
   RBTSOLAR-KDPT_5_365
2. Lower telescope - short side
   RBTSOLAR-KDPT_4_350
3. Upper telescope - long side
   RBTSOLAR-KDT_3_825
4. Lower telescope - long side
   RBTSOLAR-KDR_2_825
5. Base south
   RBTSOLAR-KDPP_1_1560
6. Purlin for support L=2175/2380/2728
   RBTSOLAR-KD-PL-2175/2380/2728

CHARACTERISTICS	FR-S-US-S/H/LAZ
Roof type	Flat roof (FR)
Method of mounting the structure on the roof	Screw-on (S)
Type of construction	Universal (US)
Module orientation	South (S)
Module layout	Horizontal (H)
How to install a PV module	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
How to install the clamps	Clamps mounted to purlins - bean system
Method of distribution	Available in stock

	MAX-LONG2100	MAX-LONG2300	MAX-LONG2500
Approximate weight of the structure per 1m2 of installation without additional ballast (kg/m2)2	8,96	9,35	6,72
Purlin length (mm)	2175	2380	2728
Wind brace length (mm)	2175	2355	2703
Maximum PV module length (mm)3	2100	2300	2500

[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

LIST OF PARTS - BASE OF CONSTRUCTION

Universal triangle
South

RBTSOLAR-FR-US-S

Self-locking nut
M8 DIN985 A2

Round washer
A2 8.4 DIN125A

Allen screw
M8X100 DIN912 A2

Hexagonal screw
M8X20 DIN933 A2

SM8X20A2

Purlin for support
L=2175/2380/2728

RBTSOLAR-KD-PL-2175/2380/2728

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

Windchest
South support
L=2175/2355/2703mm

RBTSOLAR-KD-W-2175/2355/2703

Ballast wind shelter
South support
L=2175/2355/2703mm

RBTSOLAR-KD-WB-2175/2355/2703

M10 double thread screw
200/250/300

RBTSOLAR-KD-DWUG200/250/300

23 Screw-on structure

FR-S-US-S/V/LAZ/MAX-LONG1950

TYPE	MODULE DIRECTION	MODULE LAYOUT	INSTALLATION	MAX PV MODULE LENGTH
Universal (US)	South (S)	Vertical (V)	Long side (LAZ)	1950

SEE ONLINE →

DESCRIPTION

- Multi-part structure, made of Magnelis sheet, intended for flat or sloping roofs, without the need for additional ballasting and without the possibility of using a welded structure.
- Invasive installation system, by attaching to the roof substructure using the appropriate number of screws.
- Ready to be used for modules of various power and sizes, thanks to the use of two adjustable telescopic arms.
- In case of mounting PV modules in a vertical arrangement and with a side length exceeding 2100 mm in a horizontal arrangement, ZET profiles are an additional element with bean holes, to which the modules are mounted using clamps and an M8 Allen screw.

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 mounted.

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

Flat roof structures (FR)

1. Upper telescope - short side
   RBTSOLAR-KDPT_5_365
2. Lower telescope - short side
   RBTSOLAR-KDPT_4_350
3. Upper telescope - long side
   RBTSOLAR-KDT_3_825
4. Lower telescope - long side
   RBTSOLAR-KDR_2_825
5. Base south
   RBTSOLAR-KDPP_1_1560
6. Purlin for support L=2380
   RBTSOLAR-KD-PL-2380

CHARACTERISTICS	FR-S-US-S/V/LAZ/MAX-LONG1950
Roof type	Flat roof (FR)
Method of mounting the structure on the roof	Screw-on (S)
Type of construction	Universal (US)
Module orientation	South (S)
Module layout	Vertical (V)
How to install a PV module	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 1m² of installation without additional ballast (kg/m²)[2]	5,1
Purlin length (mm)	2380
Wind brace length (mm)	2355
Maximum PV module length (mm)[3]	1950
How to install the clamps	Clamps mounted to purlins - bean system
Method of distribution	Available in stock

[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

LIST OF PARTS - BASE OF CONSTRUCTION

Universal triangle
South

RBTSOLAR-FR-US-S

Self-locking nut
M8 DIN985 A2

Round washer
A2 8.4 DIN125A

Allen screw
M8X100 DIN912 A2

Hexagonal screw
M8X20 DIN933 A2

SM8X20A2

Purlin for support
L=2175/2380/2728

RBTSOLAR-KD-PL-2175/2380/2728

LIST OF PARTS - OTHER INSTALLATION ELEMENTS

Sheet metal screw
OC 5.5X25 EPDM

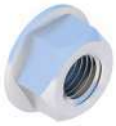
BLW55X25EPDMZ

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=2355

RBTSOLAR-KD-W-2355

Ballast wind shelter
South support
L=2355

RBTSOLAR-KD-WB-2355

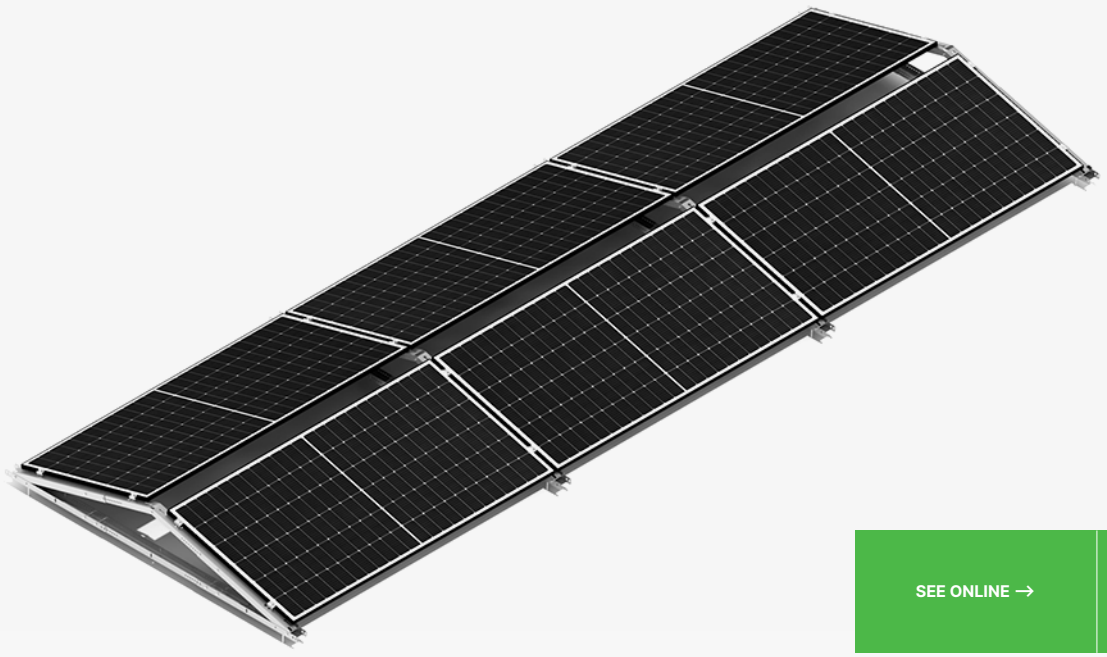
M10 double thread screw
200/250/300

RBTSOLAR-KD-DWUG200/250/300

24 Screw-on structure

FR-S-US-EW/H/SA/MAX-LONG2100

TYPE	MODULE DIRECTION	MODULE LAYOUT	INSTALLATION	MAX PV MODULE LENGTH
Universal (US)	East-west (EW)	Horizontal (H)	Short side (SA)	2100



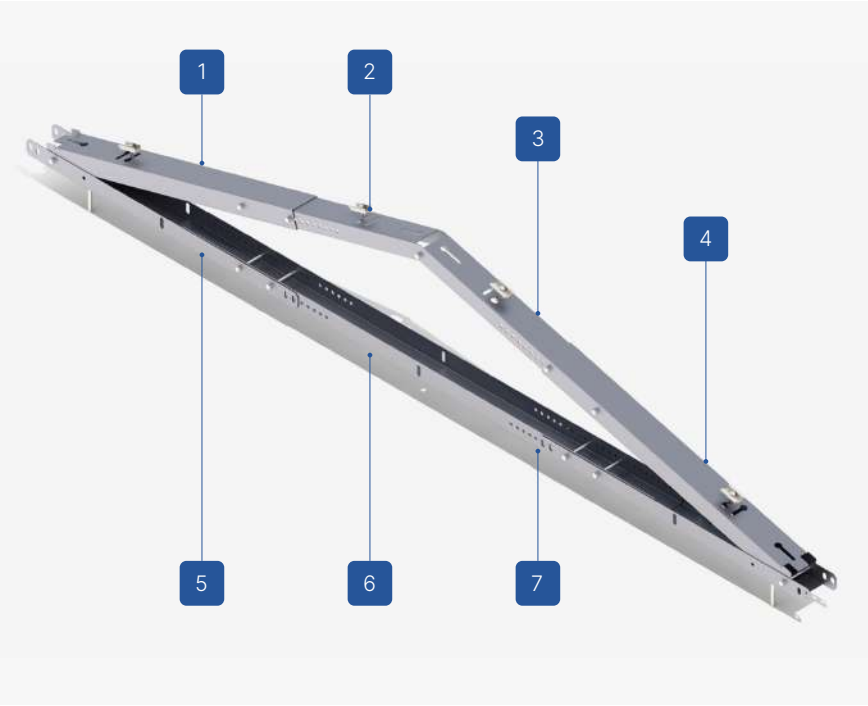
SEE ONLINE →

DESCRIPTION

- Multi-part structure, made of Magnelis sheet, intended for flat or sloping roofs, without the need for additional ballasting and without the possibility of using a welded structure.
- Invasive installation system, by attaching to the roof substructure using the appropriate number of screws.
- Ready to be used for modules of various power and sizes, thanks to the use of two adjustable telescopic arms.

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 mounted.

Flat roof structures (FR)



1. Lower telescope - long side
   RBTSOLAR-KDR_2_825
2. Upper telescope - long side
   RBTSOLAR-KDT_3_825
3. Upper telescope - long side
   RBTSOLAR-KDT_3_825
4. Lower telescope - long side
   RBTSOLAR-KDR_2_825
5. End telescope - base
   RBTSOLAR-KDWZP_6_880
6. Middle telescope - base
   RBTSOLAR-KDWZŁ_7_1544
7. End telescope - base
   RBTSOLAR-KDWZP_6_880

CHARACTERISTICS	FR-S-US-EW/H/SA/MAX-LONG2100
Roof type	Flat roof (FR)
Method of mounting the structure on the roof	Screw-on (S)
Type of construction	Universal (US)
Module orientation	East-west (EW)
Module layout	Horizontal (H)
How to install a PV module	Short side (SA)
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)?	No
Approximate weight of the structure per 1m² of installation without additional ballast (kg/m²)[2]	8,69
Purlin length (mm)	Without purlins
Wind brace length (mm)	Without wind guard
Maximum PV module length (mm)[3]	2100
How to install the clamps	Clamps mounted to the triangle - key system
Method of distribution	Available in stock

[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

LIST OF PARTS - BASE OF CONSTRUCTION

Universal triangle
East-west

RBTSOLAR-FR-US-EW

Self-locking nut
M8 DIN985 A2

NSHM8A2

Round washer
A2 8.4 DIN125A

PPM8A2

Allen screw
M8X100 DIN912 A2

SIM8X100A2

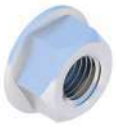
LIST OF PARTS - OTHER INSTALLATION ELEMENTS

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

M10 double thread screw
200/250/300

RBTSOLAR-KD-DWUG200/250/300

25 Screw-on structure

FR-S-US-EW/H/LAZ/MAX-LONG2100
FR-S-US-EW/H/LAZ/MAX-LONG2300
FR-S-US-EW/H/LAZ/MAX-LONG2500

TYPE	MODULE DIRECTION	MODULE LAYOUT	INSTALLATION	MAX PV MODULE LENGTH
Universal (US)	East-west (EW)	Horizontal (H)	Long side (LAZ)	2100 / 2300 / 2500

SEE ONLINE →

DESCRIPTION

- Multi-part structure, made of Magnelis sheet, intended for flat or sloping roofs, without the need for additional ballasting and without the possibility of using a welded structure.
- Invasive installation system, by attaching to the roof substructure using the appropriate number of screws.
- Ready to be used for modules of various power and sizes, thanks to the use of two adjustable telescopic arms.
- In case of mounting PV modules in a vertical arrangement and with a side length exceeding 2100 mm in a horizontal arrangement, ZET profiles are an additional element with bean holes, to which the modules are mounted using clamps and an M8 Allen screw.

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 mounted.

Flat roof structures (FR)

1. Lower telescope - long side
   RBTSOLAR-KDR_2_825
2. Upper telescope - long side
   RBTSOLAR-KDT_3_825
3. Upper telescope - long side
   RBTSOLAR-KDT_3_825
4. Purlin for support L=2175/2380/2728
   RBTSOLAR-KD-PL-2175/2380/2728
5. Lower telescope - long side
   RBTSOLAR-KDR_2_825
6. End telescope - base
   RBTSOLAR-KDWZP_6_880
7. Middle telescope - base
   RBTSOLAR-KDWZŁ_7_1544
8. End telescope - base
   RBTSOLAR-KDWZP_6_880

CHARACTERISTICS	FR-S-US-EW/H/LAZ
Roof type	Flat roof (FR)
Method of mounting the structure on the roof	Screw-on (S)
Type of construction	Universal (US)
Module orientation	East-west (EW)
Module layout	Horizontal (H)
How to install a PV module	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)?	No
How to install the clamps	Clamps mounted to purlins - bean system
Method of distribution	Available in stock

	MAX-LONG2100	MAX-LONG2300	MAX-LONG2500
Approximate weight of the structure per 1m2 of installation without additional ballast (kg/m2)2	13,61	14,38	12,35
Purlin length (mm)	2175	2380	2728
Wind brace length (mm)	Without wind guard	Without wind guard	Without wind guard
Maximum PV module length (mm)3	2100	2300	2500

[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

LIST OF PARTS - BASE OF CONSTRUCTION

Universal triangle
East-west

RBTSOLAR-FR-US-EW

Self-locking nut
M8 DIN985 A2

NSHM8A2

Round washer
A2 8.4 DIN125A

PPM8A2

Allen screw
M8X100 DIN912 A2

SIM8X100A2

Hexagonal screw
M8X20 DIN933 A2

SM8X20A2

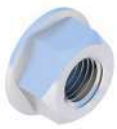
Purlin for support
L=2175/2380/2728

RBTSOLAR-KD-PL-2175/2380/2728

LIST OF PARTS - OTHER INSTALLATION ELEMENTS

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

M10 double thread screw
200/250/300

RBTSOLAR-KD-DWUG200/250/300

Back to catalog ←

Our representatives

REGION ↘	CONTACT ↘
Zachodniopomorskie, Pomorskie, Kujawsko-Pomorskie, Lubuskie Wielkopolskie	**Sebastian Jędraszek** +48 724 651 405 sebastian.jedraszek@rbtsolar.com
Podlaskie, Warmińsko-Mazurskie, Mazowieckie, Łódzkie	**Adrian Ochenkowski** +48 724 270 337 adrian.ochenkowski@rbtsolar.com
Dolnośląskie, Śląskie, Opolskie, Czechy	**Robert Szczepanik** +48 724 270 305 robert.szczepanik@rbtsolar.com
Małopolskie, Podkarpackie, Lubelskie, Świętokrzyskie	**Radosław Mazurek** +48 885 582 057 radoslaw.mazurek@rbtsolar.com
Lithuania, Latvia, Estonia	**Andrejus Krutko** +370 684 19934 andrejus.krutko@rbtsolar.com
Other countries	**Dana Kushel** +48 724 652 204 dana.kushel@rbtsolar.com

rbt solar

WE ARE PART OF GRUPA rexbud

CONTACT

+48 724 625 200

biuro@rbtsolar.com
rbtsolar.com

PRODUCTION FACILITY

ul. A. Struga 14
95-100 Zgierz
Poland
NIP 732 221 39 23

The information contained in this document is of an illustrative nature, primarily specifying the technical possibilities according to the presented assumptions, and does not constitute a commercial offer within the meaning of Article 66 para. 1 of the Polish Civil Code. We reserve the right to make technical changes related to product development, as well as changes in product prices and their availability. Please check the rbtsolar.com website, in the Sales Department, or with the Sales Representatives of RBT Solar Sp. z o.o. to verify whether the product parameters remain current at the time of placing an order. Detailed information about the technical parameters of individual products can be found in separate product sheets and on the rbtsolar.com website.

Back to catalog ←