



The leading manufacturer of photovoltaic structures in Europe.



We are a part of the Rex-Bud Group, one of the largest General Contractors in the Polish and European markets.

We understand the significant importance of quality and timely execution. Leveraging nearly 30 years of experience, a team of top specialists in the market, and a modern, continuously expanding machine park, we are capable of meeting any project's requirements.



Stability and Safety

Rex-Bud Group has been operating continuously since 1995. Over nearly 30 years, with hundreds of completed projects under our belt, we have earned the reputation of being one of the leading General Contractors in Poland and Europe. As a part of the group, we guarantee the same quality, timeliness, and full commitment at every stage of your investment.



Experience

We understand the scale of challenges and the diversity of expectations that precede the start of each project. We also know how to meet them. Confirmation of this is the millions of square meters of investments delivered by the Group over the years, as well as numerous awards, including the Forbes Diamonds award five times and the Polish Construction Eagle statuette.



Highest Level of Service

We operate on the principle of partnership in business. Your time is important to us.

Working in a 'design and build' system, we tailor our services to meet your needs, ensuring the achievement of your goals. Our Design Office provides full support and advice at every stage of the investment to optimize production costs and shorten its duration.





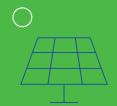
Continuous Development

We strive to always stay two steps ahead of the market and exceed our clients' expectations. This drives us to constantly push the boundaries of our capabilities, continuously developing our production resources, and ensuring the highest quality of services we offer.



7500+ m²

of production space



1000+ MW

annual production capacity of our photovoltaic structures



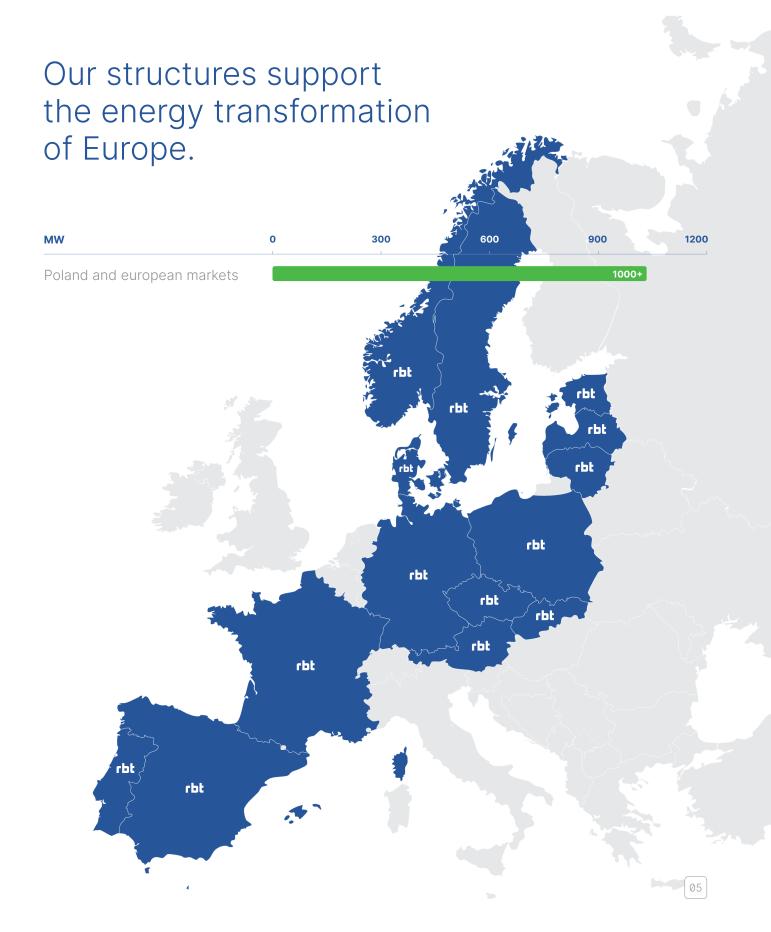
30+ years

of experience in the industry

Why Choose Us?

- We have our own **Design Department**, staffed by industry-leading specialists.
- + We work with the **latest technologies** and **precision machinery**.
- Our products meet all safety standards, and our production process is supported by a range of certifications.
- Excellent process optimization allows us to shorten project delivery time and reduce costs.
- With our continuously expanding production capabilities, we can handle even the most challenging orders
- → Learn more at rbtsolar.com





Our mission is to fulfill orders in a sustainable and environmentally friendly manner.

Only by caring for today can we give ourselves a chance for a better tomorrow.

We realize that a better tomorrow requires immediate action. Solar energy is a practically limitless, fully renewable, readily available source of power. That's why we are proud to support the development of eco-friendly energy by creating modern photovoltaic structure components. We believe that each of our products is a step toward a better and cleaner future, both for us and for our children.

Sustainable development and climate policy are of fundamental importance in the way we conduct our business. Preserving the natural environment for future generations to benefit from is one of our strategic goals and the foundation of our actions.



How do we do it?

Investment in the Environment

We believe that renewable energy sources mean a better future for our planet. That's why we are constantly seeking the latest solutions and technologies while developing our expertise in this field.

Social Responsibility

In our operations, we support local communities. We provide our employees with decent working conditions and opportunities for growth. We are focused on collaborating with local suppliers and partners.

Supporting the Energy Transformation

We actively work to promote renewable energy sources, including using them to power our own operations.



Innovative Solutions for Your Investments

We strive to continuously develop the solutions upon which we base our work. Our R&D department constantly explores how the latest technologies and unconventional materials can help create even better and more durable structural components. We aim for maximum flexibility and standardization of details, which translates into shorter project timelines and increased efficiency.

Our structures are characterized by:



Easy and Fast Assembly

- Minimal number of connections and screws, with a simplified system of mounting holes,
- Reduced likelihood of errors and shortened assembly time,
- Standardization of details allows for easy replacement of any structural element,
- + Low project, production, and assembly costs.



Flexibility in Component Connection

Building structures from individual components can somewhat resemble building with blocks. Each element fits together perfectly, providing high flexibility and the ability to construct virtually any structure on any surface with any specifications.



Modern Designs

Our Design Department creates high-quality components that form the basis of innovative and well-thought-out products. We use standardized, complementary elements for each photovoltaic installation, allowing us to approach each project individually.





As one of the leading manufacturers of photovoltaic structures, we provide a range of benefits:

+	Precise, Repeatable Production	We operate in production facilities with a total area of over 7500 square meters. Thanks to years of developed know-how, we are capable of producing precision-made components on a large scale with optimal parameters.
+	Durability You Can Trust	To achieve high durability, verified through rigorous testing, we use top-quality materials that we process ourselves. This gives us full control at every stage of production.
+	Uncompromising Quality	As one of the largest manufacturers in the industry, we collaborate with the best steel suppliers. This ensures the highest quality while maintaining favorable prices.
+	Research and Continuous Development	To continuously set new standards, we have developed our own R&D department. We explore modern methods of processing and production, selecting the right materials for them.
+	Relationship Focus	We are always open to feedback and suggestions from our partners and clients. Your input is invaluable to us.



Quality Confirmed by Certificates and Awards

The structural components we produce have all the necessary certifications and meet stringent standards. They are safe, durable, and approved for use in Poland and the European Union. The quality, stability, and reliability of the Rex-Bud Group are also recognized by experts, as evidenced by numerous awards received, including the Forbes Diamonds award five times.













Training Center

Our customers and partners can make use of our training center. The knowledge acquired there will enable them to build photovoltaic structures using our components in the best possible way. In this place, you will get a closer look at our products and learn more about various collaboration opportunities.



State-of-the-Art Machinery Park

We utilize the well-equipped machinery park of the Rex-Bud Group on a daily basis. Thanks to advanced technologies, supported by a dedicated team of employees, we are strengthening our position as an industry leader in both the Polish and European markets. We continuously improve our extensive technological infrastructure and enhance what is already good. Our goal is to set trends rather than follow them.

Product Certification and Testing

We are supported by Rawlplug, a global leader and expert in fasteners, connectors, and tools with over 100 years of tradition, in the testing and evaluation of the quality of our products.

PARTNER



Thanks to this partnership, we are confident that every component leaving our factory meets the most stringent technological standards and will not let you down in critical moments. Quality does not tolerate compromises.

In-House Design Office

We approach every project comprehensively. We are also flexible, recognizing constraints such as budget limitations. The experience and knowledge of the designers, engineers, and constructors in our Design Office have often allowed us to turn these constraints into successes.











Discover our structures:

Flat roof →



Carports →



Ground →



Facade →



Trackers →



Cable trays →



Get in touch with us \rightarrow

rbtsolar.com →



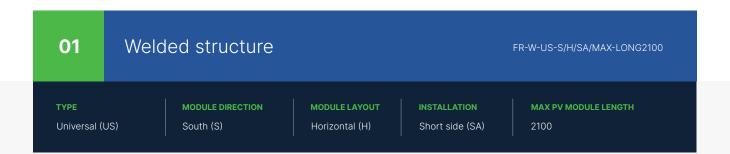






	STRUCTURE	CARD NO.	CONSTRUCION TYPE	MODULE DIRECTION	MODULE LAYOUT	INSTALLATION	MAX PV MODULE LENGTH	PAGE
		01	Universal (US)	South (S)	Horizontal (H)	Short side (SA)	2100	17
	structure (FR-W)	02	Universal (US)	South (S)	Horizontal (H)	Long side (LAZ)	2100	20
							2300	
							2500	
		03	Universal (US)	South (S)	Vertical (V)	Long side (LAZ)	1950	23
Projected (PS) South (S) Horizontal (H) Short side (SA) Individual 35		04	Universal (US)	East-west (EW)	Horizontal (H)	Short side (SA)	2100	26
		05	Universal (US)	East-west (EW)	Horizontal (H)	Long side (LAZ)	2100	29
Projected (PS) South (S) Horizontal (H) Long side (LAZ) Individual 32							2300	
Projected (PS) South (S) Horizontal (H) Long side (LAZ) Individual 38							2500	
Projected (PS) South (S) Vertical (V) Long side (LAZ) Individual 38		06	Projected (PS)	South (S)	Horizontal (H)	Short side (SA)	Individual	32
Projected (PS)		07	Projected (PS)	South (S)	Horizontal (H)	Long side (LAZ)	Individual	35
10		08	Projected (PS)	South (S)	Vertical (V)	Long side (LAZ)	Individual	38
11		09	Projected (PS)	East-west (EW)	Horizontal (H)	Short side (SA)	Individual	41
1		10	Projected (PS)	East-west (EW)	Horizontal (H)	Long side (LAZ)	Individual	44
Part		11	Universal (US)	South (S)	Horizontal (H)	Short side (SA)	2100	47
Universal (US) South (S) Horizontal (H) 2500 53	structure (FR-B)	12	Universal (US)	South (S)	Horizontal (H)	Long side (LAZ)	2100	50
13			Universal (US)	South (S)	Horizontal (H)		2300	
14			Universal (US)	South (S)	Horizontal (H)		2500	
Projected (PS) East-west (EW) Horizontal (H) Long side (LAZ) 2100 59		13	Universal (US)	South (S)	Vertical (V)	Long side (LAZ)	1950	53
Universal (US)		14	Universal (US)	East-west (EW)	Horizontal (H)	Short side (SA)	2100	56
Universal (US)		15	Universal (US)	East-west (EW)	Horizontal (H)	Long side (LAZ)	2100	59
16			Universal (US)	East-west (EW)	Horizontal (H)		2300	
17			Universal (US)	East-west (EW)	Horizontal (H)		2500	
18		16	Projected (PS)	South (S)	Horizontal (H)	Short side (SA)	Individual	62
19		17	Projected (PS)	South (S)	Horizontal (H)	Long side (LAZ)	Individual	65
20		18	Projected (PS)	South (S)	Vertical (V)	Long side (LAZ)	Individual	68
Screw-on structure (FR-S) 21		19	Projected (PS)	East-west (EW)	Horizontal (H)	Short side (SA)	Individual	71
22		20	Projected (PS)	East-west (EW)	Horizontal (H)	Long side (LAZ)	Individual	74
Driversal (US) South (S) Horizontal (H) Long side (LAZ) 2100 80	Screw-on	21	Universal (US)	South (S)	Horizontal (H)	Short side (SA)	2100	77
Universal (US) South (S) Horizontal (H) 2500	structure (FR-S)	22	Universal (US)	South (S)	Horizontal (H)	Long side (LAZ)	2100	80
23 Universal (US) South (S) Vertical (V) Long side (LAZ) 1950 83 24 Universal (US) East-west (EW) Horizontal (H) Short side (SA) 2100 86 25 Universal (US) East-west (EW) Horizontal (H) Long side (LAZ) 2100 89 Universal (US) East-west (EW) Horizontal (H) 2300 2300 Universal (US) East-west (EW) Horizontal (H) 2500 26 Projected (PS) South (S) Horizontal (H) Short side (SA) Individual 92 27 Projected (PS) South (S) Horizontal (H) Long side (LAZ) Individual 95 28 Projected (PS) South (S) Vertical (V) Long side (LAZ) Individual 98 29 Projected (PS) East-west (EW) Horizontal (H) Short side (SA) Individual 101			Universal (US)	South (S)	Horizontal (H)		2300	
24 Universal (US) East-west (EW) Horizontal (H) Short side (SA) 2100 86 25 Universal (US) East-west (EW) Horizontal (H) Long side (LAZ) 2100 89 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 92 27 Projected (PS) South (S) Horizontal (H) Long side (LAZ) Individual 95 28 Projected (PS) South (S) Vertical (V) Long side (LAZ) Individual 98 29 Projected (PS) East-west (EW) Horizontal (H) Short side (SA) Individual 101			Universal (US)	South (S)	Horizontal (H)		2500	
Universal (US) East-west (EW) Horizontal (H) Long side (LAZ) 2100 89 Universal (US) East-west (EW) Horizontal (H) 2300 Universal (US) East-west (EW) Horizontal (H) 2500 Projected (PS) South (S) Horizontal (H) Short side (SA) Individual 92 Projected (PS) South (S) Horizontal (H) Long side (LAZ) Individual 95 Projected (PS) South (S) Vertical (V) Long side (LAZ) Individual 98 Projected (PS) East-west (EW) Horizontal (H) Short side (SA) Individual 101		23	Universal (US)	South (S)	Vertical (V)	Long side (LAZ)	1950	83
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 92 27 Projected (PS) South (S) Horizontal (H) Long side (LAZ) Individual 95 28 Projected (PS) South (S) Vertical (V) Long side (LAZ) Individual 98 29 Projected (PS) East-west (EW) Horizontal (H) Short side (SA) Individual 101		24	Universal (US)	East-west (EW)	Horizontal (H)	Short side (SA)	2100	86
Universal (US) East-west (EW) Horizontal (H) 2500 26 Projected (PS) South (S) Horizontal (H) Short side (SA) Individual 92 27 Projected (PS) South (S) Horizontal (H) Long side (LAZ) Individual 95 28 Projected (PS) South (S) Vertical (V) Long side (LAZ) Individual 98 29 Projected (PS) East-west (EW) Horizontal (H) Short side (SA) Individual 101		25	Universal (US)	East-west (EW)	Horizontal (H)	Long side (LAZ)	2100	89
26 Projected (PS) South (S) Horizontal (H) Short side (SA) Individual 92 27 Projected (PS) South (S) Horizontal (H) Long side (LAZ) Individual 95 28 Projected (PS) South (S) Vertical (V) Long side (LAZ) Individual 98 29 Projected (PS) East-west (EW) Horizontal (H) Short side (SA) Individual 101			Universal (US)	East-west (EW)	Horizontal (H)		2300	
27Projected (PS)South (S)Horizontal (H)Long side (LAZ)Individual9528Projected (PS)South (S)Vertical (V)Long side (LAZ)Individual9829Projected (PS)East-west (EW)Horizontal (H)Short side (SA)Individual101			Universal (US)	East-west (EW)	Horizontal (H)		2500	
28 Projected (PS) South (S) Vertical (V) Long side (LAZ) Individual 98 29 Projected (PS) East-west (EW) Horizontal (H) Short side (SA) Individual 101		26	Projected (PS)	South (S)	Horizontal (H)	Short side (SA)	Individual	92
29 Projected (PS) East-west (EW) Horizontal (H) Short side (SA) Individual 101		27	Projected (PS)	South (S)	Horizontal (H)	Long side (LAZ)	Individual	95
29 Projected (PS) East-west (EW) Horizontal (H) Short side (SA) Individual 101		28	Projected (PS)	South (S)	Vertical (V)	Long side (LAZ)	Individual	98
30 Projected (PS) East-west (EW) Horizontal (H) Long side (LAZ) Individual 104		29	Projected (PS)	East-west (EW)	Horizontal (H)	Short side (SA)	Individual	101
		30	Projected (PS)	East-west (EW)	Horizontal (H)	Long side (LAZ)	Individual	104







- → 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.







Upper telescope - short side Lower telescope - short side Upper telescope - long side Lower telescope - long side Welded base for support Base south

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	Yes - possibility of additional ballasting of the wind tower		
(weld + ballast)?			
Approximate weight of the structure per 1m² of installation	5,54		
without additional ballast (kg/m²)²			
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



 \leftarrow

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-LONG2300 FR-W-US-S/H/LAZ/MAX-LONG2500 TYPE Universal (US) MODULE DIRECTION Horizontal (H) Long side (LAZ) 2100 / 2300 / 2500



- → 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.







CHARACTERISTICS FR-W-US-S/H/LAZ Flat roof (FR) Roof type 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? Is it possible to apply the hybrid solution Yes - possibility of additional ballasting of the wind tower (weld + ballast)? How to install the clamps Clamps mounted to purlins - bean system Method of distribution Available in stock MAX-LONG2300 MAX-LONG2100 MAX-LONG2500 Approximate weight of the structure per 1m2 of installation 9,76 8,54 7,26 without additional ballast (kg/m2)2 Purlin length (mm) 2175 2380 2728 Wind brace length (mm) 2175 Maximum PV module length (mm)3 2100 2300 2500

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





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

RI W55X25FPDM7



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



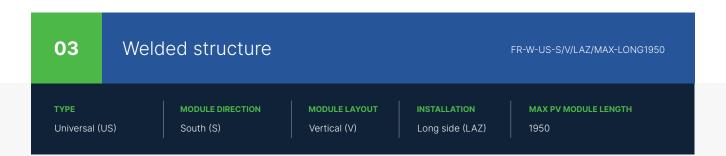
Windchest South support L=2175/2355/2703mm

RBTSOLAR-KD-W-2175/2355/2703



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





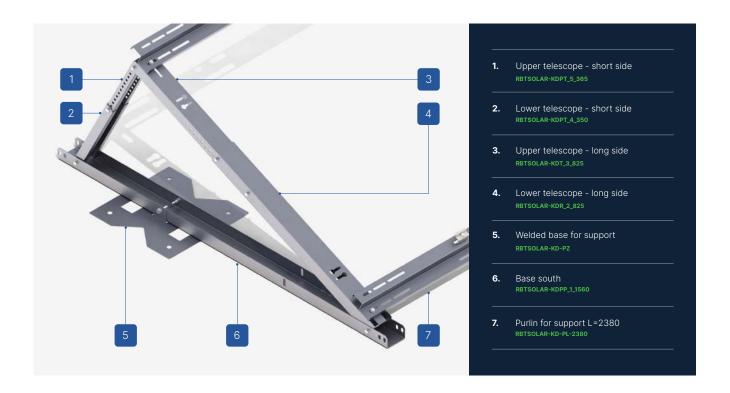


- → Multi-part structure, made of Magnelis™ sheet metal, intended for flat roofs, without the need additional ballast.
- → Created with the participation of a specialist in the installation ofmembrane coverings.
- → Its unique shape has been designed to significantly reduce assembly time and maximize 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.







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		
ls 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 ² of installation	5,54		
without additional ballast (kg/m²)²			
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)ALC2



Middle clamp 50 universal Nature/Black

KLSR50ALN KLSR50ALCZ



Allen screw M8X35 DIN912 A2

SIM8X35A2



Windchest South support L=2355

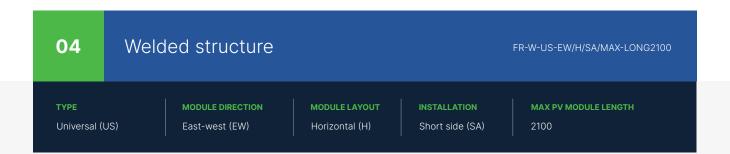
RBTSOLAR-KD-W-2355



Ballast wind shelter South support L=2355

RBTSOLAR-KD-WB-2355







- → 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.
- ightarrow 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.
- ightarrow 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.







Lower telescope - long side Upper telescope - long side Upper telescope - long side Lower telescope - long side End telescope - base Middle telescope - base Welded base for support End telescope - base

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	No		
(weld + ballast)?			
Approximate weight of the structure per 1m² of installation	9,49		
without additional ballast (kg/m²)²			
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





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



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



Flange nut serrated M8 DIN6923 A2

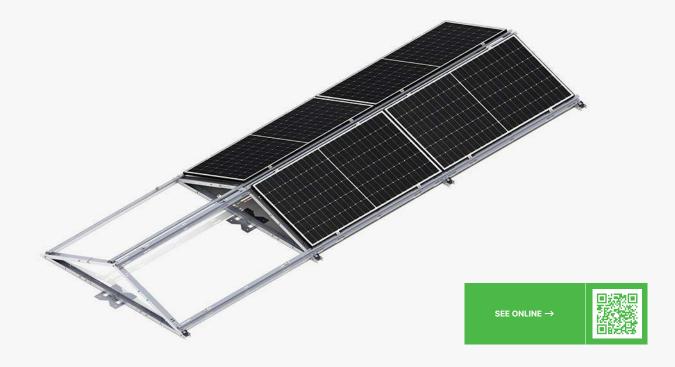
NKM8A2



Allen screw M8X35 DIN912 A2

SIM8X35A2

FR-W-US-EW/H/LAZ/MAX-LONG2100 05 Welded structure FR-W-US-EW/H/LAZ/MAX-LONG2300 FR-W-US-EW/H/LAZ/MAX-LONG2500 MODULE DIRECTION INSTALLATION MAX PV MODULE LENGTH Universal (US) East-west (EW) Horizontal (H) Long side (LAZ) 2100 / 2300 / 2500

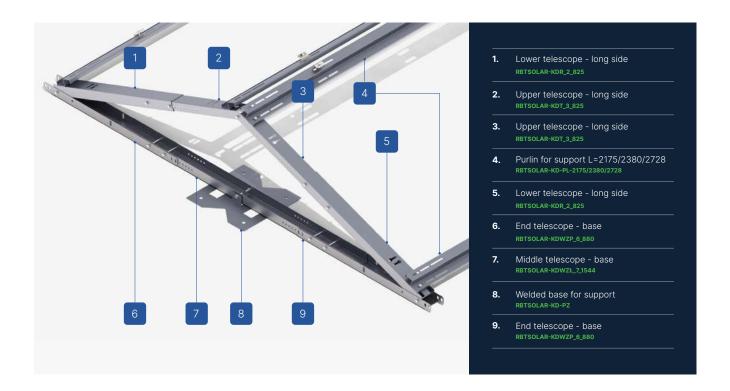


- → Multi-part structure, made of Magnelis[™] sheet metal, intended for flat roofs, without the needadditional ballast.
- → Created with the participation of a specialist in the installation of membrane coverings.
- ightarrow Its unique shape has been designed to significantly reduce assembly time and 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).
- \rightarrow 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.







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/bituming	ous membrane			
Method of assembly	The base of the structur	e is welded to the roof surfac	е		
Does the structure require additional ballast?	No				
Is it possible to apply the hybrid solution	No				
(weld + ballast)?					
How to install the clamps	Clamps mounted to purl	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	16,80	15,05	12,89		
without additional ballast (kg/m2)2					
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





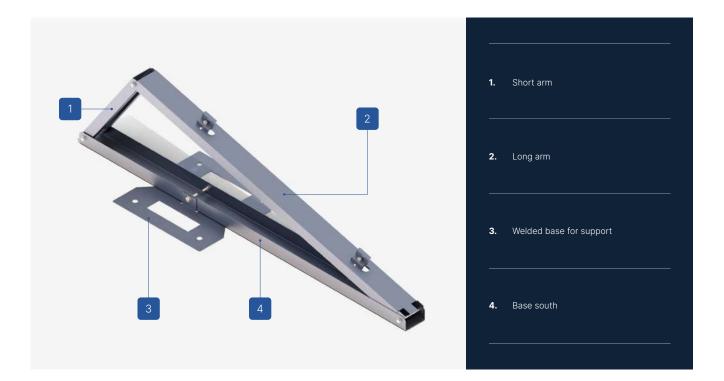
Welded structure FR-W-PS-S/H/SA/MAX-LONG-X TYPE MODULE DIRECTION MODULE LAYOUT INSTALLATION MAX PV MODULE LENGTH Projected (PS) South (S) Horizontal (H) Short side (SA) Individual (X)



- → 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).







CHARACTERISTICS FR-W-PS-S/H/SA/MAX-LONG-X Flat roof (FR) Roof type Method of mounting the structure on the roof Welded (W) Type of construction Projected (PS) South (S) Module orientation Module layout Horizontal (H) How to install a PV module¹ Short side (SA) Application/substrate on which it is mounted PVC membrane/bituminous membrane The base of the structure is welded to the roof surface Method of assembly Does the structure require additional ballast? 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) Χ Wind brace length (mm) Maximum PV module length (mm)³ 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.

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



Welded base

for support RBTSOLAR-KD-PZ



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

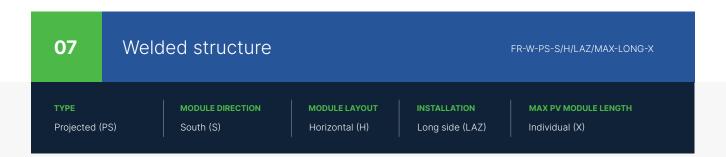


Windchest South support L=X

RBTSOLAR-KD-W-X









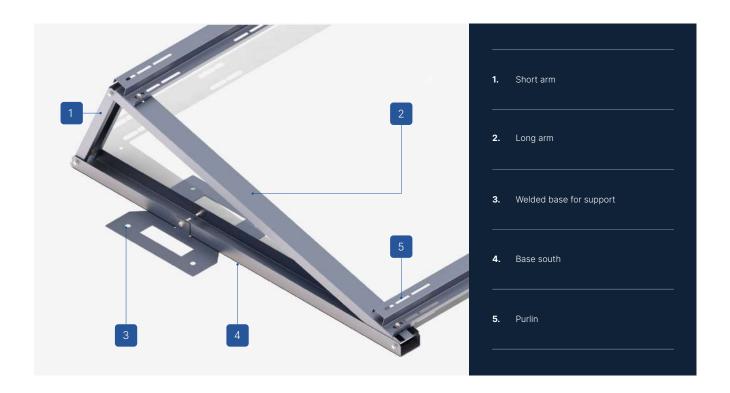
- → A multi-part construction made of Magnelis™ sheet metal, designed for flat roofs without the need for additional ballast.
- → Created with the involvement of a specialist in membrane roof installation.
- → Its unique shape is designed to significantly reduce installation time and maximize the force 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.







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	Yes - possibility of additional ballasting of the wind tower		
(weld + ballast)?			
Approximate weight of the structure per 1m² of installation	~16,5		
without additional ballast (kg/m²)²			
Purlin length (mm)	X		
Wind brace length (mm)	X		
Maximum PV module length (mm) ³	Χ		
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





LIST OF PARTS - BASE OF CONSTRUCTION



Welded base

for support







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

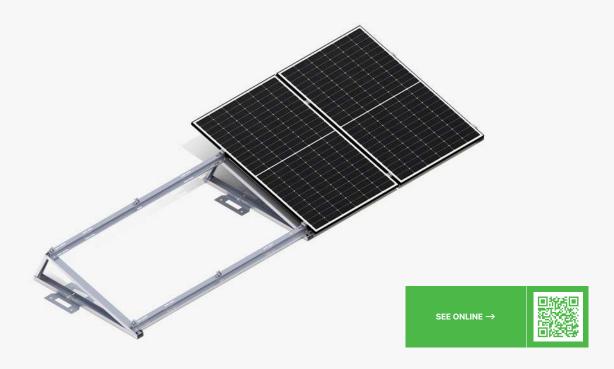


Windchest South support L=X

RBTSOLAR-KD-W-X



Welded structure FR-W-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



- → 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.



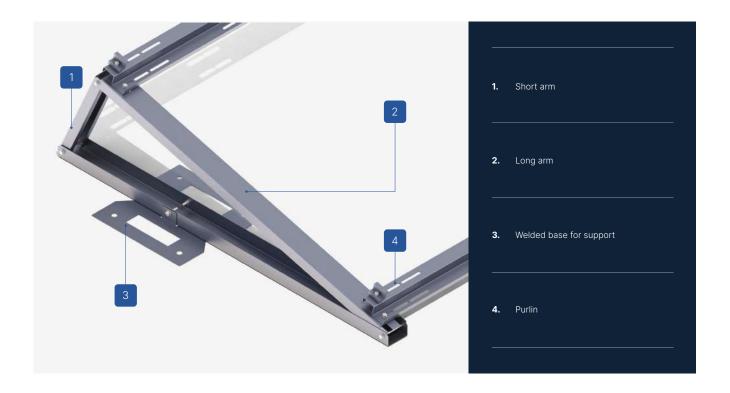
CHARACTERISTICS

Maximum PV module length (mm)³

How to install the clamps

Method of distribution





Flat roof (FR) Roof type Method of mounting the structure on the roof Welded (W) Type of construction Projected (PS) Module orientation South (S) Module layout Vertical (V) How to install a PV module¹ Long side (LAZ) Application/substrate on which it is mounted PVC membrane/bituminous membrane The base of the structure is welded to the roof surface Method of assembly Does the structure require additional ballast? Is it possible to apply the hybrid solution Yes - possibility of additional ballasting of the wind tower (weld + ballast)? ~16,5 Approximate weight of the structure per 1m² of installation without additional ballast (kg/m²)² Purlin length (mm) Χ Wind brace length (mm)

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

Clamps mounted to the triangle - key system

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.

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



Welded base

for support







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



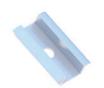
Sheet metal screw OC 5.5X25 EPDM

BLW55X25EPDMZ



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

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



Middle clamp 50 universal Nature/Black

KLSR50ALN KLSR50ALCZ



Allen screw M8X35 DIN912 A2

SIM8X35A2



Flange nut serrated M8 DIN6923 A2

NKM8A2

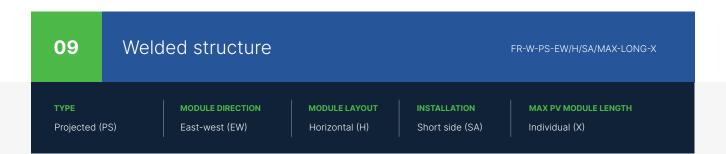


Windchest South support L=X

RBTSOLAR-KD-W-X









- → 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.







CHARACTERISTICS FR-W-PS-EW/H/SA/MAX-LONG-X Flat roof (FR) Roof type Method of mounting the structure on the roof Welded (W) Type of construction Projected (PS) East-west (EW) Module orientation Module layout Horizontal (H) How to install a PV module¹ 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 No (weld + ballast)? Approximate weight of the structure per 1m² of installation ~16,5 without additional ballast (kg/m²)² Purlin length (mm) Wind brace length (mm) Without wind guard Maximum PV module length (mm)³ Χ 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.

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











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 Hexagonal screw M10X20 IE

SM8X97Z

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



10 Welded structure FR-W-PS-EW/H/LAZ/MAX-LONG-X MAX PV MODULE LENGTH MODULE DIRECTION Projected (PS) East-west (EW) Horizontal (H) Long side (LAZ) Individual (X)



- → 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).
- ightarrow 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.







CHARACTERISTICS FR-W-PS-EW/H/LAZ/MAX-LONG-X Flat roof (FR) Roof type Method of mounting the structure on the roof Welded (W) Type of construction Projected (PS) East-west (EW) Module orientation Module layout Horizontal (H) How to install a PV module¹ Long side (LAZ) Application/substrate on which it is mounted PVC membrane/bituminous membrane The base of the structure is welded to the roof surface Method of assembly Does the structure require additional ballast? No Is it possible to apply the hybrid solution No (weld + ballast)? Approximate weight of the structure per 1m² of installation ~15,5 without additional ballast (kg/m²)² Purlin length (mm) Wind brace length (mm) Without wind guard Maximum PV module length (mm)³ Χ Clamps mounted to the triangle - key system How to install the clamps 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.

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











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



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

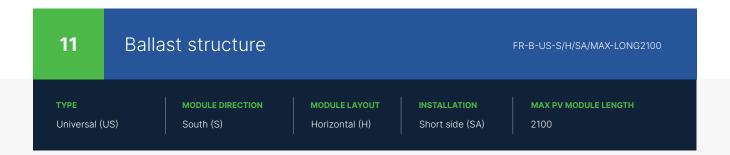
NKM8A2



Allen screw M8X35 DIN912 A2

SIM8X35A2







- → 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.
- $\rightarrow\,$ 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).







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

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	Yes - possibility of additional ballasting of the wind tower
(weld + ballast)?	
Approximate weight of the structure per 1m ² of installation	6,40
without additional ballast (kg/m²)²	
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





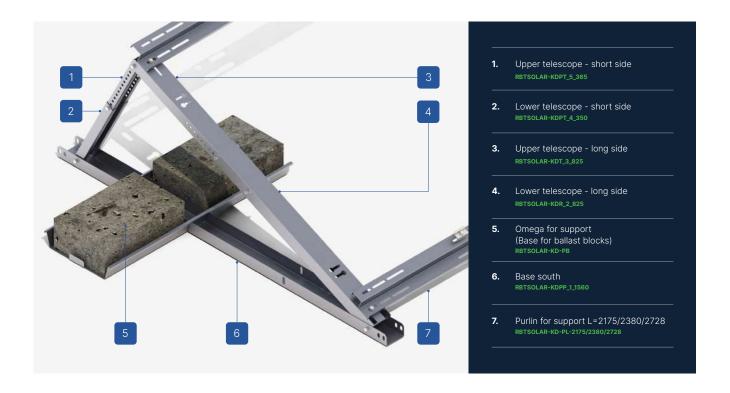
FR-B-US-S/H/LAZ/MAX-LONG2100 FR-B-US-S/H/LAZ/MAX-LONG2300 FR-B-US-S/H/LAZ/MAX-LONG2300 FR-B-US-S/H/LAZ/MAX-LONG2500 TYPE Universal (US) MODULE DIRECTION Horizontal (H) Horizontal (H) Long side (LAZ) 2100 / 2300 / 2500



- → 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.







CHARACTERISTICS FR-B-US-S/H/LAZ Flat roof (FR) Roof type Ballast (B) Method of mounting the structure on the roof Type of construction Universal (US) South (S) Module orientation Horizontal (H) Module layout 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 Yes - possibility of additional ballasting of the wind tower (weld + ballast)? 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 10,22 10,61 without additional ballast (kg/m2)2 Purlin length (mm) 2175 2380 2728

2355

2300

2703

2500

Wind brace length (mm)

Maximum PV module length (mm)3

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.

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





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

BI W55X25FPDM7



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

KLK50/30(32/35/40)ALN



Middle clamp 50 universal Nature/Black

KLSR50ALN



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



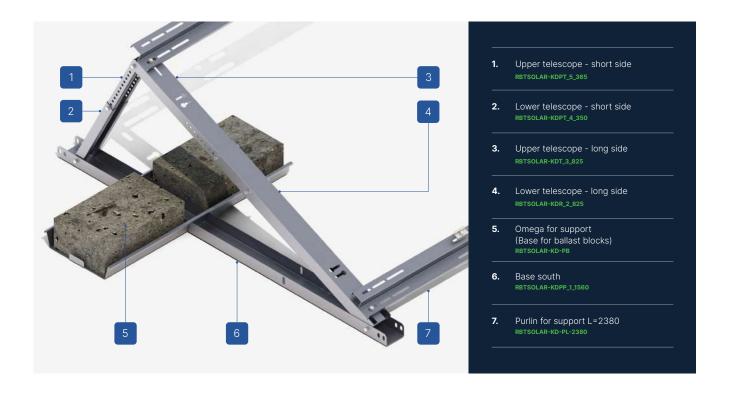
Ballast structure FR-B-US-S/V/LAZ/MAX-LONG1950 TYPE MODULE DIRECTION MODULE LAYOUT INSTALLATION MAX PV MODULE LENGTH Universal (US) South (S) Vertical (V) Long side (LAZ) 1950



- → 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.







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	Yes - possibility of additional ballasting of the wind tower
(weld + ballast)?	
Approximate weight of the structure per 1m ² of installation	5,78
without additional ballast (kg/m²)²	
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



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





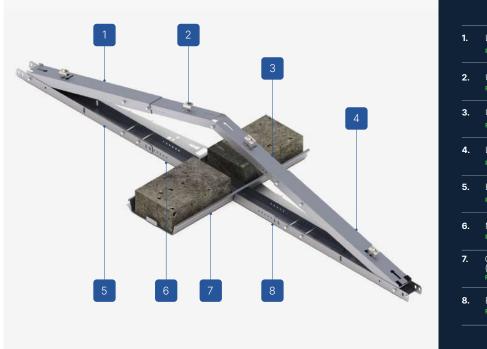
14 Ballast structure FR-B-US-EW/H/SA/MAX-LONG2100 MAX PV MODULE LENGTH Universal (US) East-west (EW) Horizontal (H) Short side (SA)



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







Lower telescope - long side Upper telescope - long side Upper telescope - long side Lower telescope - long side End telescope - base Middle telescope - base Omega for support (Base for ballast blocks) RBTSOLAR-KD-PB End telescope - base

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	No
(weld + ballast)?	
Approximate weight of the structure per 1m² of installation	9,94
without additional ballast (kg/m²)²	
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





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



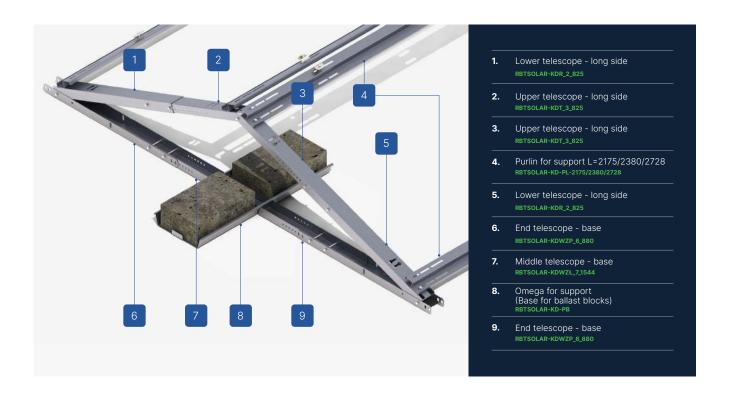
FR-B-US-EW/H/LAZ/MAX-LONG2100 15 Ballast structure FR-B-US-EW/H/LAZ/MAX-LONG2300 MAX PV MODULE LENGTH Universal (US) East-west (EW) Horizontal (H) Long side (LAZ) 2100 / 2300 / 2500



- → Multi-part structure, made of Magnelis[™] sheet metal, intended for flat roofs, where necessary additional ballast, without the possibility of using a welded structure.
- ightarrow 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.







CHARACTERISTICS FR-B-US-EW/H/LAZ Flat roof (FR) Roof type Method of mounting the structure on the roof Ballast (B) Type of construction Universal (US) East-west (EW) Module orientation Horizontal (H) Module layout 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 No (weld + ballast)? 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 15,43 17,57 without additional ballast (kg/m2)2 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

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.

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





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



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





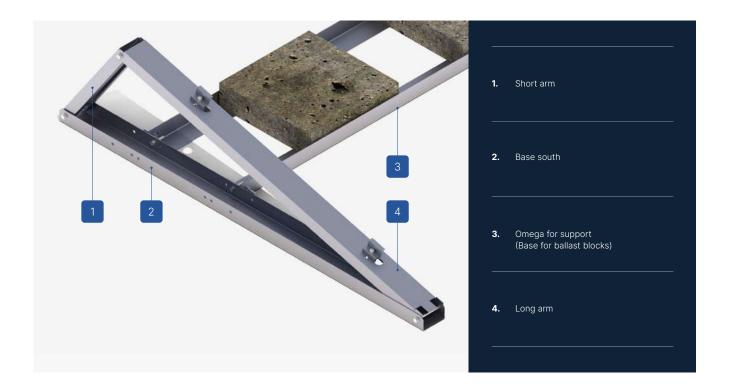
TYPE MODULE DIRECTION MODULE LAYOUT INSTALLATION MAX PV MODULE LENGTH Projected (PS) South (S) Horizontal (H) Short side (SA) Individual (X)



- → A multi-part construction made of Magnelis[™] 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).







CHARACTERISTICS	FR-B-PS-S/H/SA/MAX-LONG-X
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	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 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 1m² of installation	~14,5
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 the proper installation





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

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



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

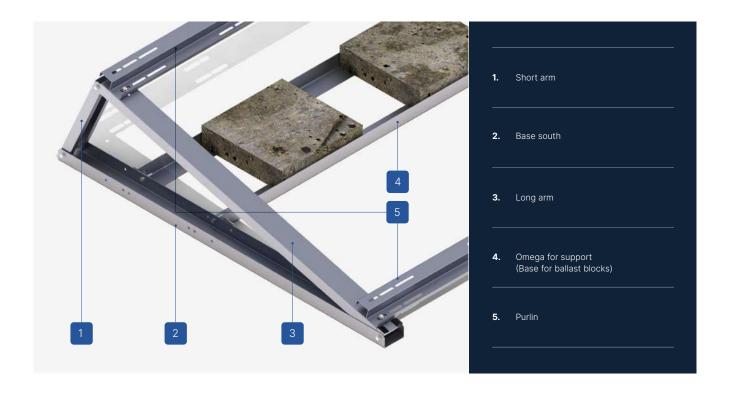


- → A multi-part construction made of Magnelis[™] sheet metal, designed for flat roofs requiring additional ballast, without the possibility of using a welded structure.
- → Non-invasive installation using an appropriate amount of ballast blocks, according to the ballast plan.
- → The system allows for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







CHARACTERISTICS FR-B-US-S/H/LAZ Flat roof (FR) Roof type Method of mounting the structure on the roof Ballast (B) Type of construction Projected (PS) Module orientation South (S) Horizontal (H) Module layout How to install a PV module¹ 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 1m² of installation without additional ballast (kg/m²)² Purlin length (mm) Χ Wind brace length (mm) Maximum PV module length (mm)³ 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.

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





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





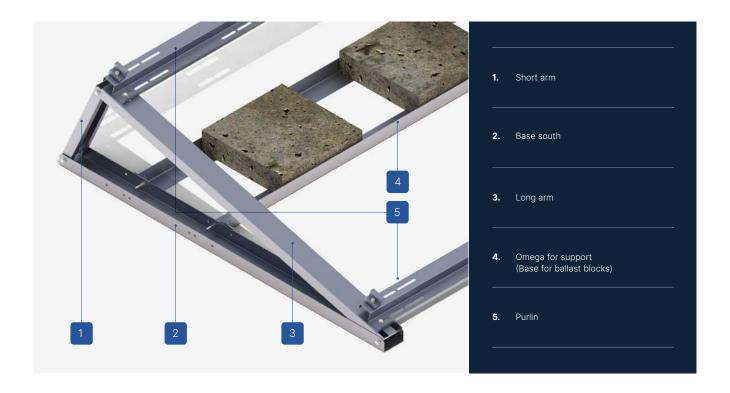
Ballast structure FR-B-PS-S/V/LAZ/MAX-LONG1950 TYPE MODULE DIRECTION MODULE LAYOUT INSTALLATION MAX PV MODULE LENGTH Projected (PS) South (S) Vertical (V) Long side (LAZ) 1950



- → A multi-part construction made of Magnelis[™] 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.







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 ¹	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 ² of installation	~17,5
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





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

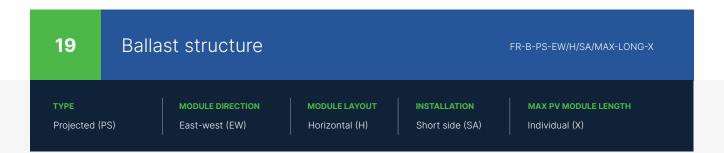


Windchest South support L=X

RBTSOLAR-KD-W-X





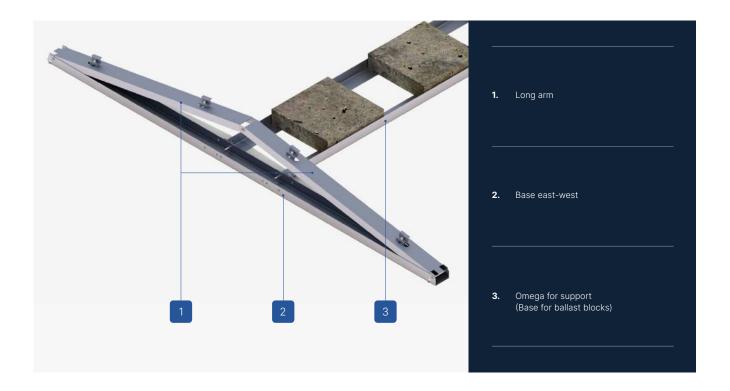




- → A multi-part construction made of Magnelis[™] sheet metal, designed for flat roofs requiring additional ballast, without the possibility of using a welded structure.
- → Non-invasive installation using an appropriate amount of ballast blocks, according to the ballast plan.







CHARACTERISTICS	FR-B-US-EW/H/SA/MAX-LONG-X	
Roof type	Flat roof (FR)	
Method of mounting the structure on the roof	Ballast (B)	
Type of construction	Projected (PS)	
Module orientation	East-west (EW)	
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 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	No	
(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)	Without wind guard	
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





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

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

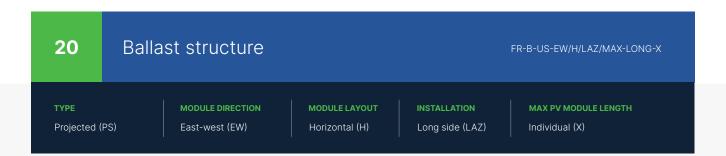


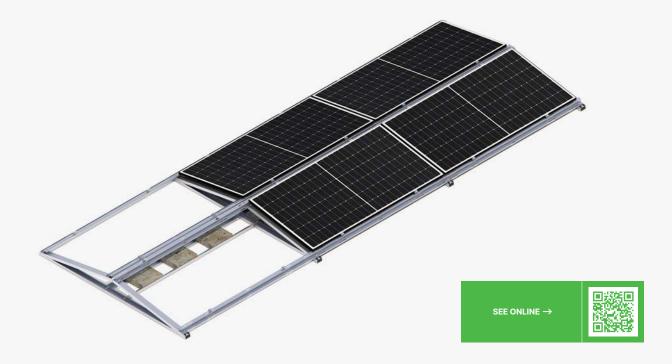
Allen screw M8X35 DIN912 A2

SIM8X35A2









- → A multi-part construction made of Magnelis[™] 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.
- ightarrow 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.







CHARACTERISTICS	FR-B-PS-EW/H/LAZ/MAX-LONG-X				
Roof type	Flat roof (FR)				
Method of mounting the structure on the roof	Ballast (B)				
Type of construction	Projected (PS)				
Module orientation	East-west (EW)				
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 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	No				
(weld + ballast)?					
Approximate weight of the structure per 1m² of installation	~16,5				
without additional ballast (kg/m²)²					
Purlin length (mm)	Χ				
Wind brace length (mm)	Without wind guard				
Maximum PV module length (mm) ³	Χ				
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





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



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

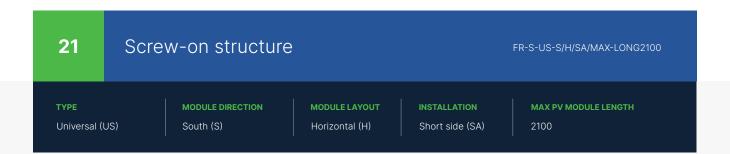


Allen screw M8X35 DIN912 A2

SIM8X35A2









- → 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.
- ightarrow 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.







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
ls 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 ² of installation	5,15
without additional ballast (kg/m²)²	
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

 \leftarrow

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-LONG2300 FR-S-US-S/H/LAZ/MAX-LONG2500 TYPE Universal (US) MODULE DIRECTION Horizontal (H) Horizontal (H) Long side (LAZ) 2100 / 2300 / 2500



- → 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.







CHARACTERISTICS FR-S-US-S/H/LAZ Flat roof (FR) Roof type Method of mounting the structure on the roof Screw-on (S) Type of construction Universal (US) South (S) Module orientation 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? Is it possible to apply the hybrid solution Yes - possibility of additional ballasting of the wind tower (weld + ballast)? How to install the clamps Clamps mounted to purlins - bean system Method of distribution Available in stock MAX-LONG2300 MAX-LONG2100 MAX-LONG2500 Approximate weight of the structure per 1m2 of installation 8,96 9,35 6,72 without additional ballast (kg/m2)2 Purlin length (mm) 2175 2380 2728 Wind brace length (mm) 2175 Maximum PV module length (mm)3 2100 2300

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





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

RI W55X25FPDM7



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

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



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



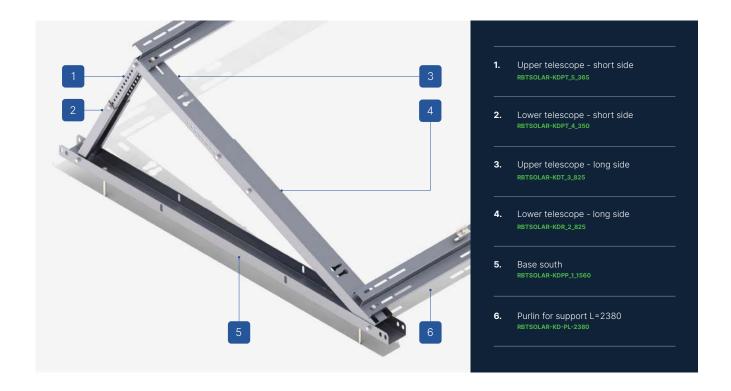
23 Screw-on structure FR-S-US-S/V/LAZ/MAX-LONG1950 TYPE MODULE DIRECTION MODULE LAYOUT INSTALLATION MAX PV MODULE LENGTH Universal (US) South (S) Vertical (V) Long side (LAZ) 1950



- → 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.







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	Yes - possibility of additional ballasting of the wind tower
(weld + ballast)?	
Approximate weight of the structure per 1m ² of installation	5,1
without additional ballast (kg/m²)²	
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

RI W55X25FPDM7



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





Screw-on structure 24 FR-S-US-EW/H/SA/MAX-LONG2100 MAX PV MODULE LENGTH Universal (US) East-west (EW) Horizontal (H) Short side (SA)



- → 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.
- $\rightarrow\,$ Ready to be used for modules of various power and sizes, thanks to the use of two adjustable telescopic arms.







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	No
(weld + ballast)?	
Approximate weight of the structure per 1m² of installation	8,69
without additional ballast (kg/m²)²	
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





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





FR-S-US-EW/H/LAZ/MAX-LONG2100 25 Screw-on structure FR-S-US-EW/H/LAZ/MAX-LONG2300 MAX PV MODULE LENGTH Universal (US) East-west (EW) Horizontal (H) Long side (LAZ) 2100 / 2300 / 2500



- → 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.



CHARACTERISTICS





Flat roof (FR) Roof type Screw-on (S) Method of mounting the structure on the roof Type of construction Universal (US) East-west (EW) Module orientation Horizontal (H) Module layout 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 No (weld + ballast)? How to install the clamps Clamps mounted to purlins - bean system Method of distribution Available in stock MAX-LONG2300 MAX-LONG2100 MAX-LONG2500

13,61

2175

2100

Without wind guard

14,38

2380

2300

Without wind guard

12,35

2728

Without wind guard

FR-S-US-EW/H/LAZ

Approximate weight of the structure per 1m2 of installation

without additional ballast (kg/m2)2

Maximum PV module length (mm)3

Purlin length (mm)

Wind brace length (mm)

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





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





26 Screw-on structure FR-S-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)



- → 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.







CHARACTERISTICS	FR-S-PS-S/H/SA/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	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	Yes - possibility of additional ballasting of the wind tower				
(weld + ballast)?					
Approximate weight of the structure per 1m ² of installation	~13				
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 the proper installation.





LIST OF PARTS - BASE OF CONSTRUCTION



Nakrętka sześciokątna M8 TZN

NM8Z



Podkładka M8 TZN

PPM8Z



Śruba M8X97 TZN

SM8X97Z

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

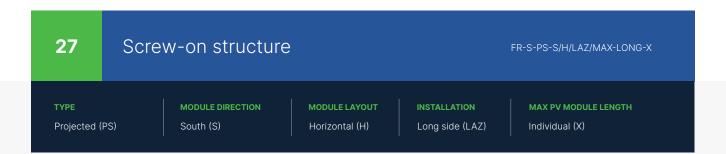
RBTSOLAR-KD-W-X



M10 double thread screw

200/250/300







- → 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.







CHARACTERISTICS FR-S-PS-S/H/LAZ/MAX-LONG-X Flat roof (FR) Roof type Method of mounting the structure on the roof Screw-on (S) Type of construction Projected (PS) South (S) Module orientation Module layout Horizontal (H) How to install a PV module¹ Long side (LAZ) Application/substrate on which it is mounted PVC membrane/bituminous membrane/sandwich panel/trapezoidal sheet The base of the structure is attached to the roof substructure Method of assembly Does the structure require additional ballast? 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 ~16 without additional ballast (kg/m²)² Purlin length (mm) Χ Wind brace length (mm) Maximum PV module length (mm)³ 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.

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



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





SCREW-ON STRUCTURE FR-S-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



- → 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.







CHARACTERISTICS FR-S-PS-S/V/LAZ/MAX-LONG1950 Flat roof (FR) Roof type Method of mounting the structure on the roof Screw-on (S) Type of construction Projected (PS) South (S) Module orientation Module layout Vertical (V) How to install a PV module¹ Long side (LAZ) Application/substrate on which it is mounted PVC membrane/bituminous membrane/sandwich panel/trapezoidal sheet The base of the structure is attached to the roof substructure Method of assembly Does the structure require additional ballast? 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 ~16 without additional ballast (kg/m²)² Purlin length (mm) Χ Wind brace length (mm) Maximum PV module length (mm)³ 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.

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



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

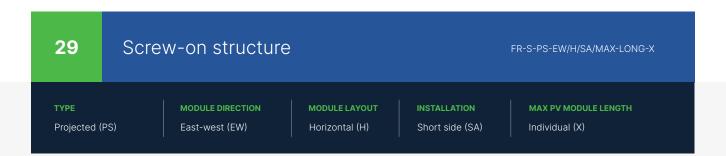
RBTSOLAR-KD-W-X



M10 double thread screw 200/250/300









- → 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.
- ightarrow An invasive installation system, by fastening to the roof substructure using an appropriate number of screws.







CHARACTERISTICS	FR-S-PS-EW/H/SA/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	East-west (EW)				
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/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	No				
(weld + ballast)?					
Approximate weight of the structure per 1m² of installation	~12				
without additional ballast (kg/m²)²					
Purlin length (mm)	X				
Wind brace length (mm)	Without wind guard				
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.





LIST OF PARTS - BASE OF CONSTRUCTION



Hexagonal nut M8 IE

NM8Z



Washer M8 300HV ISO7093-1 IE

PPM8Z



Screw M8X97 IE

SM8X97Z

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

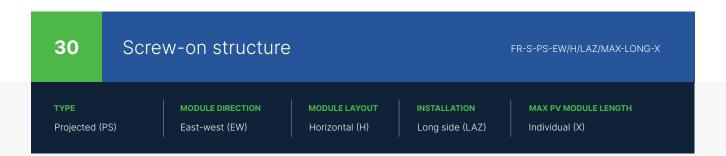
SIM8X35A2



M10 double thread screw 200/250/300









- → 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.







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	Projected (PS)				
Module orientation	East-west (EW)				
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				
ls it possible to apply the hybrid solution	No				
(weld + ballast)?					
Approximate weight of the structure per 1m² of installation	~15				
without additional ballast (kg/m²)²					
Purlin length (mm)	Χ				
Wind brace length (mm)	Without wind guard				
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





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



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

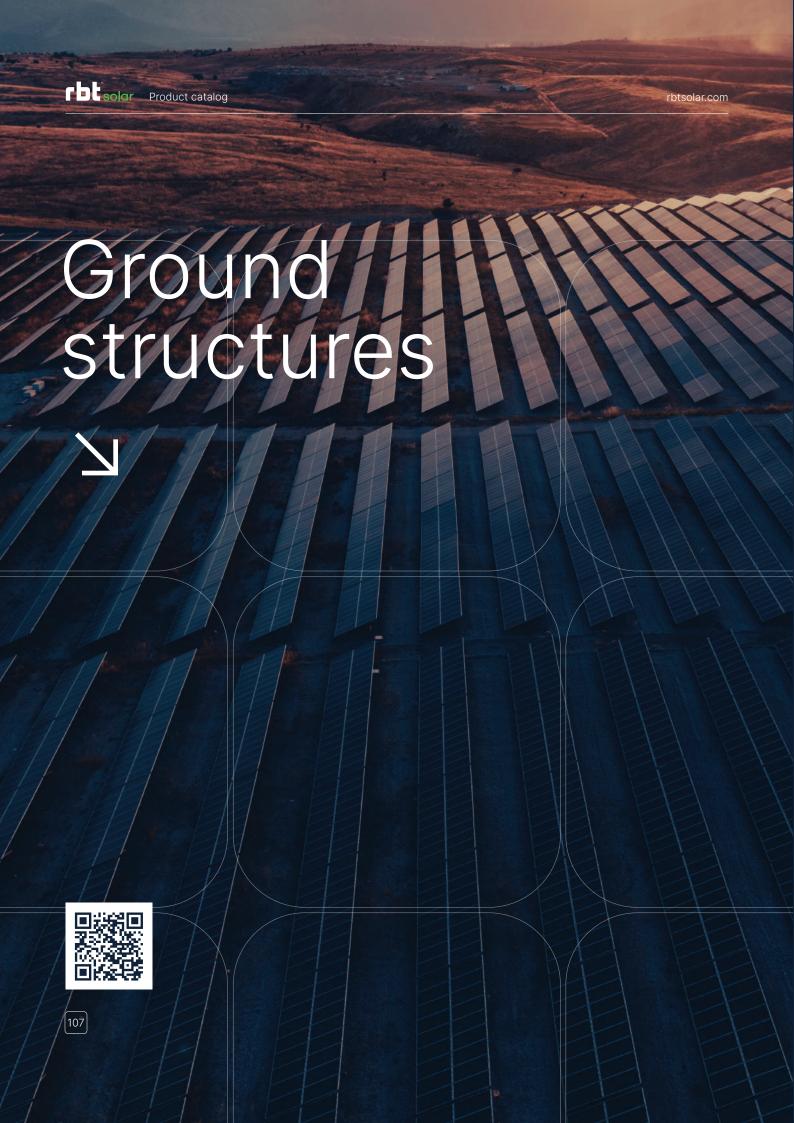


Allen screw M8X35 DIN912 A2

SIM8X35A2



M10 double thread screw 200/250/300





Ground structures (G)



STRUCTURE	CARD NO.	CONSTRUCION TYPE	MODULE DIRECTION	MODULE LAYOUT	SUPPORT NO.	MAX SIZE (PV MODULE)	PV MODULES NO.	PAGE
Piled structure (G-P)	01	Universal (US)	South (S)	Vertical (V)	2	2210×1200	2×1	109
		Universal (US)	South (S)	Vertical (V)	2	2210×1200	2×2	
	02	Universal (US)	South (S)	Vertical (V)	2	2465×1500	2×1	112
		Universal (US)	South (S)	Vertical (V)	2	2465×1500	2×2	
	03	Individual (I)	South (S)	Vertical (V)	1		2×4 (+2)	115
	04	Individual (I)	South (S)	Vertical (V)	2		2×4 (+2)	118
	05	Individual (I)	South (S)	Vertical (V)	2		3×3 (+3)	124
	06	Individual (I)	South (S)	Horizontal (H)	2		3×3 (+3)	127
	07	Individual (I)	South (S)	Horizontal (H)	2		4×3 (+4)	130
	08	Individual (I)	South (S)	Horizontal (H)	2		5×4 (+4)	133
	09	Individual (I)	South (S)	Horizontal (H)	2		6×6 (+6)	136
	10	Individual (I)	East-west (EW)	Vertical (V)	3		2×4-2×4 (+4)	139
	11	Individual (I)	East-west (EW)	Horizontal (H)	3		3×3-3×3 (+6)	142
	12	Individual (I)	East-west (EW)	Horizontal (H)	3		4×4-4×4 (+8)	145
Ballast structure (G-B)	13	Individual (I)	South (S)	Vertical (V)	1		2×4 (+2)	148
	14	Individual (I)	South (S)	Vertical (V)	2		2×4 (+2)	151
	15	Individual (I)	South (S)	Vertical (V)	2		3×3 (+3)	157
	16	Individual (I)	South (S)	Horizontal (H)	2		3×3 (+3)	160
	17	Individual (I)	South (S)	Horizontal (H)	2		4×3 (+4)	163
	18	Individual (I)	South (S)	Horizontal (H)	2		5×4 (+4)	166
	19	Individual (I)	South (S)	Horizontal (H)	2		6×6 (+6)	169
	20	Individual (I)	East-west (EW)	Vertical (V)	3		2×4-2×4 (+4)	172
	21	Individual (I)	East-west (EW)	Horizontal (H)	3		3×3-3×3 (+6)	175
	22	Individual (I)	East-west (EW)	Horizontal (H)	3		4×4-4×4 (+8)	178









- → A universal mounting system built with adjustable, telescopic beams allowing for the use of structures for modules of different power and size.
- → A multipart ground structure made of Magnelis™ steel designed for soil, piled without the need for additional ballasting.
- → Excellent for constructing installations up to 50 kW that require quick delivery of structures to the construction site.
- → The screw system used for mounting beams, latches, and posts does not require servicing as long as the installation is carried out according to the instructions.
- → Available in stock with piling up to 1500 mm.

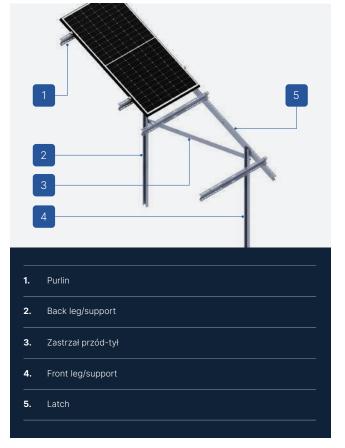
- → A construction system for which assembly requires assembling a minimum of two construction segments segment 2×2 and/or 2×1.
- → A modular system that allows the assembly and connection of an unlimited number of segments.
- → The system is designed for ground installations where the primary criterion for choosing the structure is the inability to use additional ballast.
- → The possibility of using a hybrid system in which there is an option to load the column/columns with ballast in places where it is not possible to drive stakes to a specified depth.

We recommend that each structure intended for production be previously calculated by our Technical Department regarding its installation in a specific wind and snow zone, as well as based on geotechnical conditions examined beforehand.













CHARACTERISTICS	G-P-US-S/V/2/MAX	2210×1200	
Type of substrate	Ground (G)		
Construction installation method	Piled structure (P)		
Type of construction	Universal (US)		
Module orientation	South (S)		
Module layout	Vertical (V)		
Type of modules	Standard/Bifacial		
Shape of the column	C-profile		
Does the construction require additional ballast?	No		
Is it possible to use a hybrid solution	Yes - possibility of add	itinal ballasting	
(piling + ballast)?			
Height of standard clamps (mm)	35		
Thickness of standard clamps (mm)	5		
Maximum PV module size (mm)	2210×1200		
Distribution method	Available in stock		
	2×1	2×2	
Minimum number of modules on the structure	2 (+2)	4 (+4)	

LIST OF PARTS - BASE OF CONSTRUCTION



End clamp 35 Nature/Black KLK50/35ALN KLK50/35ALCZ



Middle clamp 50 universal Nature/Black KLSR50ALN KLSR50ALCZ



Flange nut serrated M8 DIN6923 A2 NKM8A2



Hexagonal nut M10 IE





Washer M10 300HV ISO7093-1 IE

PSZM10Z



Allen screw M8X100 DIN912 A2

SIM8X100A2



Hexagonal screw M10X20 IE

SM10X20Z



 \leftarrow

O2 Piled structure G-P-US-S/V/2/MAX2465×1500/2×1 G-P-US-S/V/2/MAX2465×1500/2×2 TYPE Universal (US) MODULE DIRECTION South (S) MODULE LAYOUT Vertical (V) SUPPORTS NO. Two NO. / WIDTH (MAX) OF PV MODULES 2×1 i/lub 2×2 / 2465×1500



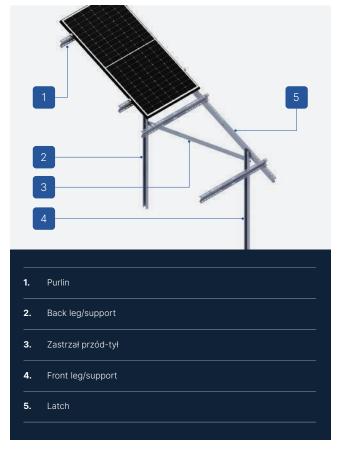
- → A universal mounting system built with adjustable, telescopic beams allowing for the use of structures for modules of different power and size.
- → A multipart ground structure made of Magnelis™ steel designed for soil, piled without the need for additional ballasting.
- → Excellent for constructing installations up to 50 kW that require quick delivery of structures to the construction site.
- → The screw system used for mounting beams, latches, and posts does not require servicing as long as the installation is carried out according to the instructions.
- → Available in stock with piling up to 1500 mm.

- → A construction system for which assembly requires assembling a minimum of two construction segments segment 2×2 and/or 2×1.
- → A modular system that allows the assembly and connection of an unlimited number of segments.
- → The system is designed for ground installations where the primary criterion for choosing the structure is the inability to use additional ballast.
- → The possibility of using a hybrid system in which there is an option to load the column/columns with ballast in places where it is not possible to drive stakes to a specified depth.

We recommend that each structure intended for production be previously calculated by our Technical Department regarding its installation in a specific wind and snow zone, as well as based on geotechnical conditions examined beforehand.











CHARACTERISTICS	G-P-US-S/V/2/MAX24	165×1500
Type of substrate	Ground (G)	
Construction installation method	Piled structure (P)	
Type of construction	Universal (US)	
Module orientation	South (S)	
Module layout	Vertical (V)	
Type of modules	Standard/Bifacial	
Shape of the column	C-profile	
Does the construction require additional ballast?	No	
Is it possible to use a hybrid solution	Yes - possibility of additi	nal ballasting
(piling + ballast)?		
Height of standard clamps (mm)	35	
Thickness of standard clamps (mm)	5	
Maximum PV module size (mm)	2465×1500	
Distribution method	Available in stock	
	2×1	2×2
Minimum number of modules on the structure	2 (+2)	4 (+4)

LIST OF PARTS - BASE OF CONSTRUCTION



End clamp 35 Nature/Black

KLK50/35ALN KLK50/35ALCZ



Middle clamp 50 universal Nature/Black

KLSR50ALN KLSR50ALCZ



Flange nut serrated M8 DIN6923 A2

NKM8A2



Hexagonal nut M10 IE

NM10Z



Washer M10 300HV ISO7093-1 IE

PSZM10Z



Allen screw M8X100 DIN912 A2

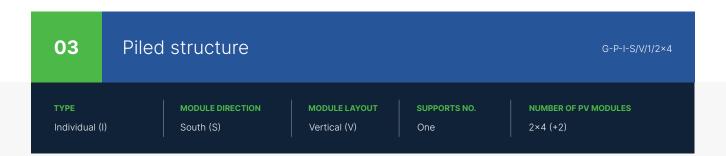


Hexagonal screw M10X20 IE

SM10X20Z

SIM8X100A2







- → A multipart ground structure made of Magnelis™ steel designed for soil. Piled, without the need for additional ballasting.
- → Excellent for constructing installations above 50 kW, that require building permits, and whose components need optimization due to the specific location of the structure.
- → The mounting system is constructed from individually selected structural elements, including beams, latches, and legs, allowing for the use of the structure only for predetermined modules and their sizes.
- → The screw system used for mounting beams, latches, and legs does not require servicing, as long as the installation is carried out according to the instructions.
- → Before production, it is necessary to provide a site development plan, along with module installation instructions and geotechnical conditions, including previous piling test results.
- → The system is designed for ground installations, where, due to challenging geotechnical conditions (e.g., areas with dolomite), it is necessary to use two-piece columns, including a lower column with increased strength (CW profile) for piling in rocky soils.
- → There is the possibility of applying a hybrid system, allowing for the weighting of the leg/legs in places where it is not possible to drill it/them to a specified depth.

We recommend that each structure intended for production be previously calculated by our Technical Department regarding its installation in a specific wind and snow zone, as well as based on geotechnical conditions examined beforehand.





CHARACTERISTICS	G-P-I-S/V/1/2×4
Type of substrate	Ground (G)
Construction installation method	Piled structure (P)
Type of construction	Individual (I)
Module orientation	South (S)
Module layout	Vertical (V)
Number of columns	1
Number of PV modules	2×4 (+2)
Type of modules	Standard/Bifacial
Shape of the column	C-profile / CW-profile
Does the construction require additional ballast?	No
Is it possible to use a hybrid solution	Yes - possibility of additinal ballasting
(piling + ballast)?	
Minimum number of modules on the structure	8
Height of standard clamps (mm)	35
Thickness of standard clamps (mm)	5
Maximum PV module size (mm)	-
Distribution method	Individual order





LIST OF PARTS - BASE OF CONSTRUCTION



End clamp 35 Nature/Black KLK50/35ALN KLK50/35ALCZ



Middle clamp 50 universal Nature/Black





Flange nut serrated M8 DIN6923 A2 NSHM8A2



Hexagonal nut M10 IE





Washer M10 300HV ISO7093-1 IE

PSZM10Z



Allen screw M8X100 DIN912 A2



Hexagonal screw M10X20 IE

SM10X20Z





Bipartite support leg CW-profile



Strut



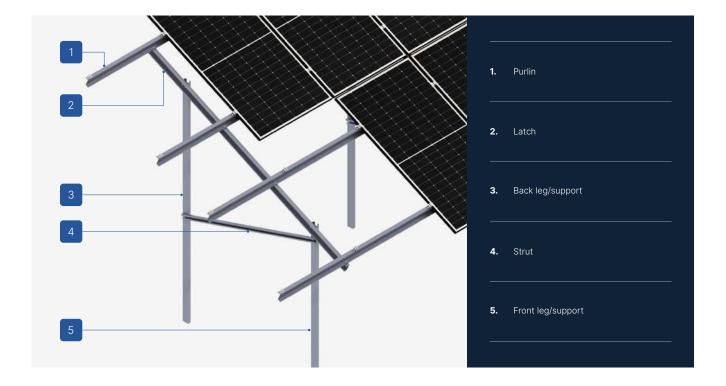




- → A multipart ground structure made of Magnelis™ steel designed for soil. Piled, without the need for additional ballasting.
- → Excellent for constructing installations above 50 kW, that require building permits, and whose components need optimization due to the specific location of the structure.
- → The mounting system is constructed from individually selected structural elements, including beams, latches, and legs, allowing for the use of the structure only for predetermined modules and their sizes.
- → The screw system used for mounting beams, latches, and legs does not require servicing, as long as the installation is carried out according to the instructions.
- → Before production, it is necessary to provide a site development plan, along with module installation instructions and geotechnical conditions, including previous piling test results.
- → The system is designed for ground installations, where, due to challenging geotechnical conditions (e.g., areas with dolomite), it is necessary to use two-piece columns, including a lower column with increased strength (CW profile) for piling in rocky soils.
- → There is the possibility of applying a hybrid system, allowing for the weighting of the leg/legs in places where it is not possible to drill it/them to a specified depth.

We recommend that each structure intended for production be previously calculated by our Technical Department regarding its installation in a specific wind and snow zone, as well as based on geotechnical conditions examined beforehand.





CHARACTERISTICS	G-P-I-S/V/2/2×4
Type of substrate	Ground (G)
Construction installation method	Piled structure (P)
Type of construction	Individual (I)
Module orientation	South (S)
Module layout	Vertical (V)
Number of columns	2
Number of PV modules	2×4 (+2)
Type of modules	Standard/Bifacial
Shape of the column	C-profile / CW-profile
Does the construction require additional ballast?	No
Is it possible to use a hybrid solution	Yes - possibility of additinal ballasting
(piling + ballast)?	
Minimum number of modules on the structure	8
Height of standard clamps (mm)	35
Thickness of standard clamps (mm)	5
Maximum PV module size (mm)	-
Distribution method	Individual order





LIST OF PARTS - BASE OF CONSTRUCTION



End clamp 35 Nature/Black KLK50/35ALN KLK50/35ALCZ



Middle clamp 50 universal Nature/Black





Flange nut serrated M8 DIN6923 A2 NSHM8A2



Hexagonal nut M10 IE





Washer M10 300HV ISO7093-1 IE

PSZM10Z



Allen screw M8X100 DIN912 A2



Hexagonal screw M10X20 IE

SM10X20Z





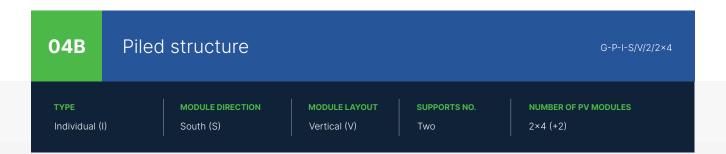
Bipartite support leg CW-profile



Strut





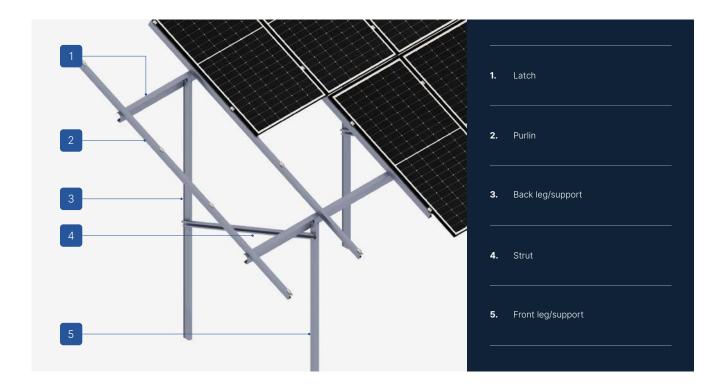




- → A multipart ground structure made of Magnelis™ steel designed for soil. Piled, without the need for additional ballasting.
- → Excellent for constructing installations above 50 kW, that require building permits, and whose components need optimization due to the specific location of the structure.
- → The mounting system is constructed from individually selected structural elements, including beams, latches, and legs, allowing for the use of the structure only for predetermined modules and their sizes.
- → The screw system used for mounting beams, latches, and legs does not require servicing, as long as the installation is carried out according to the instructions.
- → Before production, it is necessary to provide a site development plan, along with module installation instructions and geotechnical conditions, including previous piling test results.
- → The system is designed for ground installations, where, due to challenging geotechnical conditions (e.g., areas with dolomite), it is necessary to use two-piece columns, including a lower column with increased strength (CW profile) for piling in rocky soils.
- → There is the possibility of applying a hybrid system, allowing for the weighting of the leg/legs in places where it is not possible to drill it/them to a specified depth.

We recommend that each structure intended for production be previously calculated by our Technical Department regarding its installation in a specific wind and snow zone, as well as based on geotechnical conditions examined beforehand.





CHARACTERISTICS	G-P-I-S/V/2/2×4
Type of substrate	Ground (G)
Construction installation method	Piled structure (P)
Type of construction	Individual (I)
Module orientation	South (S)
Module layout	Vertical (V)
Number of columns	2
Number of PV modules	2×4 (+2)
Type of modules	Standard/Bifacial
Shape of the column	C-profile / CW-profile
Does the construction require additional ballast?	No
Is it possible to use a hybrid solution	Yes - possibility of additinal ballasting
(piling + ballast)?	
Minimum number of modules on the structure	8
Height of standard clamps (mm)	35
Thickness of standard clamps (mm)	5
Maximum PV module size (mm)	-
Distribution method	Individual order





LIST OF PARTS - BASE OF CONSTRUCTION



End clamp 35 Nature/Black KLK50/35ALN KLK50/35ALCZ



Middle clamp 50 universal Nature/Black





Flange nut serrated M8 DIN6923 A2 NSHM8A2



Hexagonal nut M10 IE





Washer M10 300HV ISO7093-1 IE

PSZM10Z



Allen screw M8X100 DIN912 A2



Hexagonal screw M10X20 IE

SM10X20Z





Bipartite support leg CW-profile



Strut



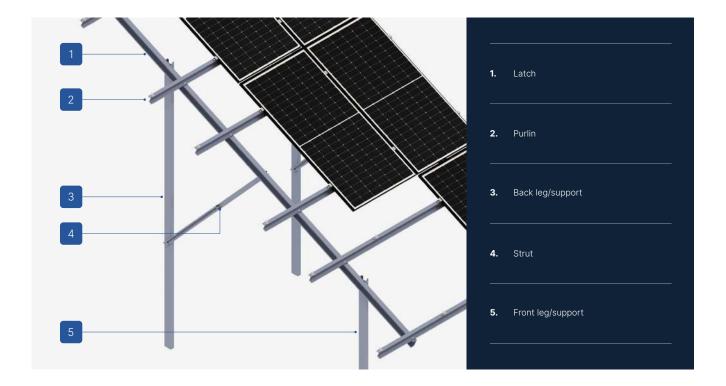




- → A multipart ground structure made of Magnelis™ steel designed for soil. Piled, without the need for additional ballasting.
- → Excellent for constructing installations above 50 kW, that require building permits, and whose components need optimization due to the specific location of the structure.
- → The mounting system is constructed from individually selected structural elements, including beams, latches, and legs, allowing for the use of the structure only for predetermined modules and their sizes.
- → The screw system used for mounting beams, latches, and legs does not require servicing, as long as the installation is carried out according to the instructions.
- → Before production, it is necessary to provide a site development plan, along with module installation instructions and geotechnical conditions, including previous piling test results.
- → The system is designed for ground installations, where, due to challenging geotechnical conditions (e.g., areas with dolomite), it is necessary to use two-piece columns, including a lower column with increased strength (CW profile) for piling in rocky soils.
- → There is the possibility of applying a hybrid system, allowing for the weighting of the leg/legs in places where it is not possible to drill it/them to a specified depth.

We recommend that each structure intended for production be previously calculated by our Technical Department regarding its installation in a specific wind and snow zone, as well as based on geotechnical conditions examined beforehand.





CHARACTERISTICS	G-P-I-S/V/2/3×3
Type of substrate	Ground (G)
Construction installation method	Piled structure (P)
Type of construction	Individual (I)
Module orientation	South (S)
Module layout	Vertical (V)
Number of columns	2
Number of PV modules	3×3 (+3)
Type of modules	Standard/Bifacial
Shape of the column	C-profile / CW-profile
Does the construction require additional ballast?	No
Is it possible to use a hybrid solution	Yes - possibility of additinal ballasting
(piling + ballast)?	
Minimum number of modules on the structure	9
Height of standard clamps (mm)	35
Thickness of standard clamps (mm)	5
Maximum PV module size (mm)	-
Distribution method	Individual order





LIST OF PARTS - BASE OF CONSTRUCTION



End clamp 35 Nature/Black KLK50/35ALN KLK50/35ALCZ



Middle clamp 50 universal Nature/Black





Flange nut serrated M8 DIN6923 A2 NSHM8A2



Hexagonal nut M10 IE





Washer M10 300HV ISO7093-1 IE

PSZM10Z



Allen screw M8X100 DIN912 A2



Hexagonal screw M10X20 IE

SM10X20Z





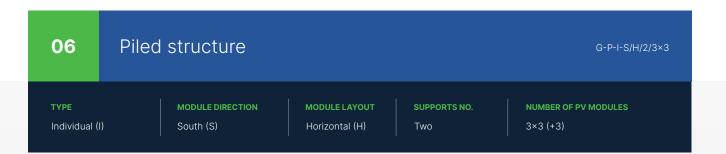
Bipartite support leg CW-profile



Strut







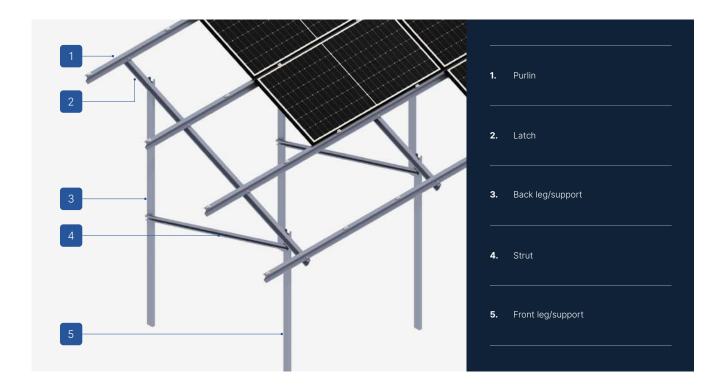


- → A multipart ground structure made of Magnelis™ steel designed for soil. Piled, without the need for additional ballasting.
- → Excellent for constructing installations above 50 kW, that require building permits, and whose components need optimization due to the specific location of the structure.
- → The mounting system is constructed from individually selected structural elements, including beams, latches, and legs, allowing for the use of the structure only for predetermined modules and their sizes.
- → The screw system used for mounting beams, latches, and legs does not require servicing, as long as the installation is carried out according to the instructions.
- → Before production, it is necessary to provide a site development plan, along with module installation instructions and geotechnical conditions, including previous piling test results.
- → The system is designed for ground installations, where, due to challenging geotechnical conditions (e.g., areas with dolomite), it is necessary to use two-piece columns, including a lower column with increased strength (CW profile) for piling in rocky soils.
- → There is the possibility of applying a hybrid system, allowing for the weighting of the leg/legs in places where it is not possible to drill it/them to a specified depth.

We recommend that each structure intended for production be previously calculated by our Technical Department regarding its installation in a specific wind and snow zone, as well as based on geotechnical conditions examined beforehand.

The structure is designed for wind and snow zones specified as WIS2, with piling not deeper than 1500. To initiate production, no prepayment is required, unlike constructions produced for individual orders.





CHARACTERISTICS	G-P-I-S/H/2/3×3
Type of substrate	Ground (G)
Construction installation method	Piled structure (P)
Type of construction	Individual (I)
Module orientation	South (S)
Module layout	Horizontal (H)
Number of columns	2
Number of PV modules	3×3 (+3)
Type of modules	Standard/Bifacial
Shape of the column	C-profile / CW-profile
Does the construction require additional ballast?	No
Is it possible to use a hybrid solution	Yes - possibility of additinal ballasting
(piling + ballast)?	
Minimum number of modules on the structure	9
Height of standard clamps (mm)	35
Thickness of standard clamps (mm)	5
Maximum PV module size (mm)	-
Distribution method	Individual order





LIST OF PARTS - BASE OF CONSTRUCTION



End clamp 35 Nature/Black KLK50/35ALN KLK50/35ALCZ



Middle clamp 50 universal Nature/Black





Flange nut serrated M8 DIN6923 A2 NSHM8A2



Hexagonal nut M10 IE





Washer M10 300HV ISO7093-1 IE

PSZM10Z



Allen screw M8X100 DIN912 A2



Hexagonal screw M10X20 IE

SM10X20Z



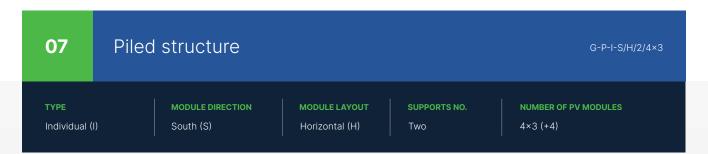


Bipartite support leg CW-profile



Strut



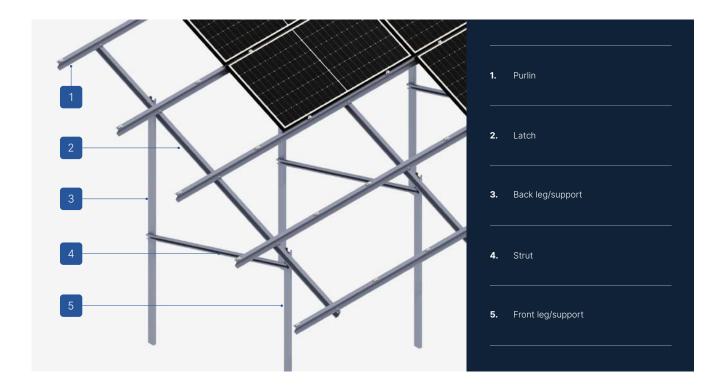




- → A multipart ground structure made of Magnelis™ steel designed for soil. Piled, without the need for additional ballasting.
- → Excellent for constructing installations above 50 kW, that require building permits, and whose components need optimization due to the specific location of the structure.
- → The mounting system is constructed from individually selected structural elements, including beams, latches, and legs, allowing for the use of the structure only for predetermined modules and their sizes.
- → The screw system used for mounting beams, latches, and legs does not require servicing, as long as the installation is carried out according to the instructions.
- → Before production, it is necessary to provide a site development plan, along with module installation instructions and geotechnical conditions, including previous piling test results.
- → The system is designed for ground installations, where, due to challenging geotechnical conditions (e.g., areas with dolomite), it is necessary to use two-piece columns, including a lower column with increased strength (CW profile) for piling in rocky soils.
- → There is the possibility of applying a hybrid system, allowing for the weighting of the leg/legs in places where it is not possible to drill it/them to a specified depth.

We recommend that each structure intended for production be previously calculated by our Technical Department regarding its installation in a specific wind and snow zone, as well as based on geotechnical conditions examined beforehand.





CHARACTERISTICS	G-P-I-S/H/2/4×3
Type of substrate	Ground (G)
Construction installation method	Piled structure (P)
Type of construction	Individual (I)
Module orientation	South (S)
Module layout	Horizontal (H)
Number of columns	2
Number of PV modules	4×3 (+4)
Type of modules	Standard/Bifacial
Shape of the column	C-profile / CW-profile
Does the construction require additional ballast?	No
Is it possible to use a hybrid solution	Yes - possibility of additinal ballasting
(piling + ballast)?	
Minimum number of modules on the structure	12
Height of standard clamps (mm)	35
Thickness of standard clamps (mm)	5
Maximum PV module size (mm)	-
Distribution method	Individual order





LIST OF PARTS - BASE OF CONSTRUCTION



End clamp 35 Nature/Black KLK50/35ALN KLK50/35ALCZ



Middle clamp 50 universal Nature/Black





Flange nut serrated M8 DIN6923 A2 NSHM8A2



Hexagonal nut M10 IE





Washer M10 300HV ISO7093-1 IE

PSZM10Z



Allen screw M8X100 DIN912 A2



Hexagonal screw M10X20 IE

SM10X20Z





Bipartite support leg CW-profile



Strut



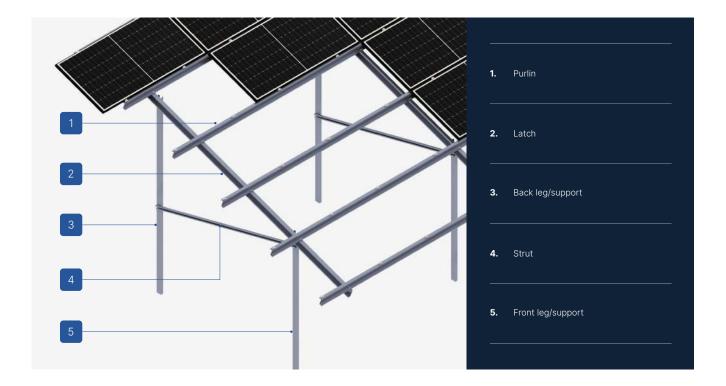




- → A multipart ground structure made of Magnelis™ steel designed for soil. Piled, without the need for additional ballasting.
- → Excellent for constructing installations above 50 kW, that require building permits, and whose components need optimization due to the specific location of the structure.
- → The mounting system is constructed from individually selected structural elements, including beams, latches, and legs, allowing for the use of the structure only for predetermined modules and their sizes.
- → The screw system used for mounting beams, latches, and legs does not require servicing, as long as the installation is carried out according to the instructions.
- → Before production, it is necessary to provide a site development plan, along with module installation instructions and geotechnical conditions, including previous piling test results.
- → The system is designed for ground installations, where, due to challenging geotechnical conditions (e.g., areas with dolomite), it is necessary to use two-piece columns, including a lower column with increased strength (CW profile) for piling in rocky soils.
- → There is the possibility of applying a hybrid system, allowing for the weighting of the leg/legs in places where it is not possible to drill it/them to a specified depth.

We recommend that each structure intended for production be previously calculated by our Technical Department regarding its installation in a specific wind and snow zone, as well as based on geotechnical conditions examined beforehand.





CHARACTERISTICS	G-P-I-S/H/2/5×4
Type of substrate	Ground (G)
Construction installation method	Piled structure (P)
Type of construction	Individual (I)
Module orientation	South (S)
Module layout	Horizontal (H)
Number of columns	2
Number of PV modules	5×4 (+4)
Type of modules	Standard/Bifacial
Shape of the column	C-profile / CW-profile
Does the construction require additional ballast?	No
Is it possible to use a hybrid solution	Yes - possibility of additinal ballasting
(piling + ballast)?	
Minimum number of modules on the structure	20
Height of standard clamps (mm)	35
Thickness of standard clamps (mm)	5
Maximum PV module size (mm)	-
Distribution method	Individual order





LIST OF PARTS - BASE OF CONSTRUCTION



End clamp 35 Nature/Black KLK50/35ALN KLK50/35ALCZ



Middle clamp 50 universal Nature/Black





Flange nut serrated M8 DIN6923 A2 NSHM8A2



Hexagonal nut M10 IE





Washer M10 300HV ISO7093-1 IE

PSZM10Z



Allen screw M8X100 DIN912 A2



Hexagonal screw M10X20 IE

SM10X20Z

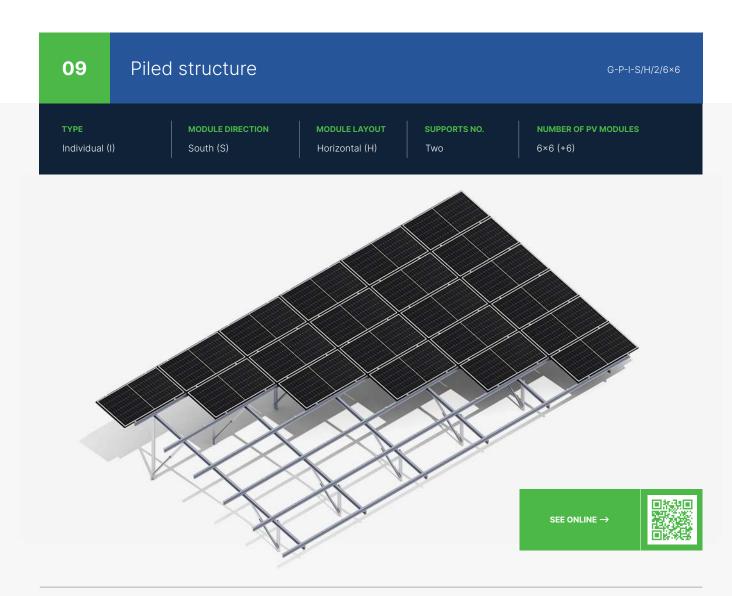




Bipartite support leg CW-profile



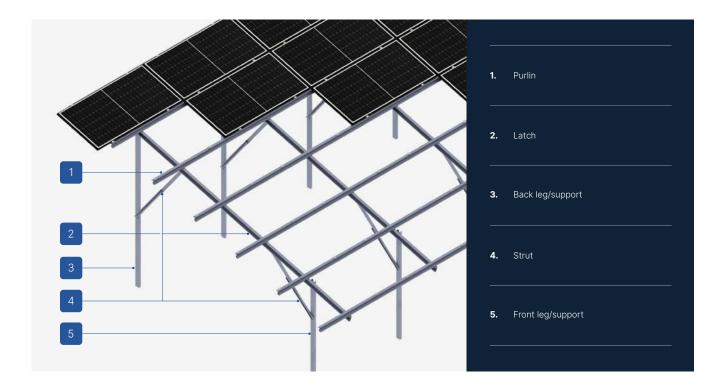
Strut



- → A multipart ground structure made of Magnelis™ steel designed for soil. Piled, without the need for additional ballasting.
- → Excellent for constructing installations above 50 kW, that require building permits, and whose components need optimization due to the specific location of the structure.
- → The mounting system is constructed from individually selected structural elements, including beams, latches, and legs, allowing for the use of the structure only for predetermined modules and their sizes.
- → The screw system used for mounting beams, latches, and legs does not require servicing, as long as the installation is carried out according to the instructions.
- → Before production, it is necessary to provide a site development plan, along with module installation instructions and geotechnical conditions, including previous piling test results.
- → The system is designed for ground installations, where, due to challenging geotechnical conditions (e.g., areas with dolomite), it is necessary to use two-piece columns, including a lower column with increased strength (CW profile) for piling in rocky soils.
- → There is the possibility of applying a hybrid system, allowing for the weighting of the leg/legs in places where it is not possible to drill it/them to a specified depth.

We recommend that each structure intended for production be previously calculated by our Technical Department regarding its installation in a specific wind and snow zone, as well as based on geotechnical conditions examined beforehand.





CHARACTERISTICS	G-P-I-S/H/2/6×6
Type of substrate	Ground (G)
Construction installation method	Piled structure (P)
Type of construction	Individual (I)
Module orientation	South (S)
Module layout	Horizontal (H)
Number of columns	2
Number of PV modules	6×6 (+6)
Type of modules	Standard/Bifacial
Shape of the column	C-profile / CW-profile
Does the construction require additional ballast?	No
Is it possible to use a hybrid solution	Yes - possibility of additinal ballasting
(piling + ballast)?	
Minimum number of modules on the structure	36
Height of standard clamps (mm)	35
Thickness of standard clamps (mm)	5
Maximum PV module size (mm)	-
Distribution method	Individual order





LIST OF PARTS - BASE OF CONSTRUCTION



End clamp 35 Nature/Black KLK50/35ALN KLK50/35ALCZ



Middle clamp 50 universal Nature/Black





Flange nut serrated M8 DIN6923 A2 NSHM8A2



Hexagonal nut M10 IE





Washer M10 300HV ISO7093-1 IE

PSZM10Z



Allen screw M8X100 DIN912 A2



Hexagonal screw M10X20 IE

SM10X20Z



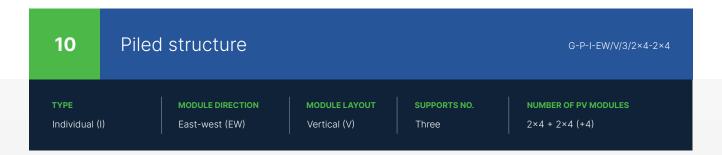


Bipartite support leg CW-profile



Strut



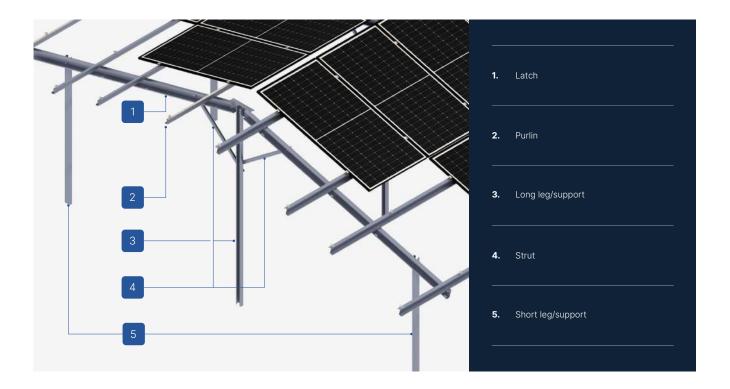




- → A multipart ground structure made of Magnelis™ steel designed for soil. Piled, without the need for additional ballasting.
- → Excellent for constructing installations above 50 kW, that require building permits, and whose components need optimization due to the specific location of the structure.
- → The mounting system is constructed from individually selected structural elements, including beams, latches, and legs, allowing for the use of the structure only for predetermined modules and their sizes.
- → The screw system used for mounting beams, latches, and legs does not require servicing, as long as the installation is carried out according to the instructions.
- → Before production, it is necessary to provide a site development plan, along with module installation instructions and geotechnical conditions, including previous piling test results.
- → The system is designed for ground installations, where, due to challenging geotechnical conditions (e.g., areas with dolomite), it is necessary to use two-piece columns, including a lower column with increased strength (CW profile) for piling in rocky soils.
- → There is the possibility of applying a hybrid system, allowing for the weighting of the leg/legs in places where it is not possible to drill it/them to a specified depth.

We recommend that each structure intended for production be previously calculated by our Technical Department regarding its installation in a specific wind and snow zone, as well as based on geotechnical conditions examined beforehand.





CHARACTERISTICS	G-P-I-EW/V/3/2×4-2×4
Type of substrate	Ground (G)
Construction installation method	Piled structure (P)
Type of construction	Individual (I)
Module orientation	East-west (EW)
Module layout	Vertical (V)
Number of columns	3
Number of PV modules	2×4 + 2×4 (+4)
Type of modules	Standard/Bifacial
Shape of the column	C-profile / CW-profile
Does the construction require additional ballast?	No
Is it possible to use a hybrid solution	Yes - possibility of additinal ballasting
(piling + ballast)?	
Minimum number of modules on the structure	16
Height of standard clamps (mm)	35
Thickness of standard clamps (mm)	5
Maximum PV module size (mm)	-
Distribution method	Individual order





LIST OF PARTS - BASE OF CONSTRUCTION



End clamp 35 Nature/Black KLK50/35ALN KLK50/35ALCZ



Middle clamp 50 universal Nature/Black

KLSR50ALN KLSR50ALCZ



Flange nut serrated M8 DIN6923 A2 NSHM8A2



Hexagonal nut M10 IE

NM10Z



Washer M10 300HV ISO7093-1 IE

PSZM10Z



Allen screw M8X100 DIN912 A2

SIM8X100A2



Hexagonal screw M10X20 IE

SM10X20Z





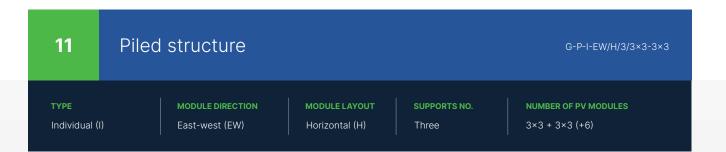
Bipartite support leg CW-profile

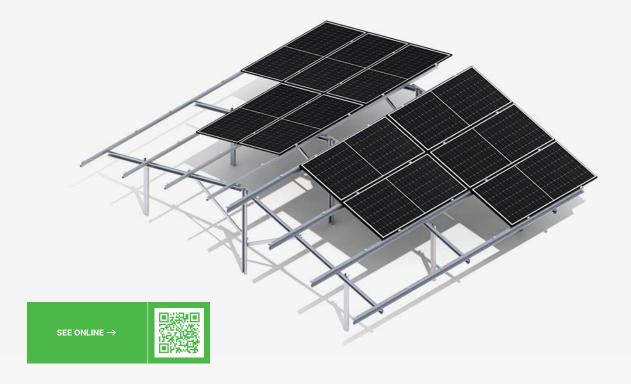


Strut





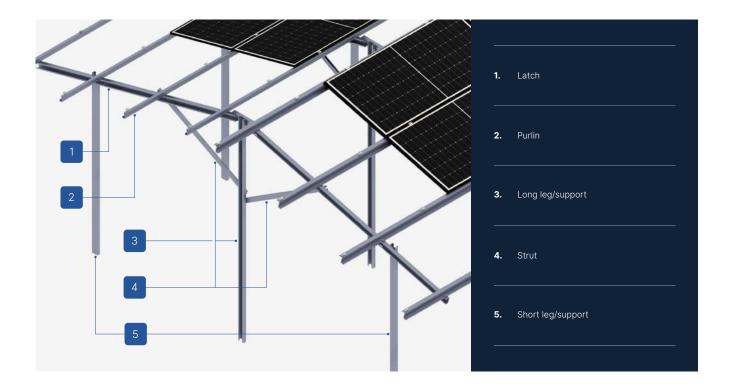




- → A multipart ground structure made of Magnelis™ steel designed for soil. Piled, without the need for additional ballasting.
- → Excellent for constructing installations above 50 kW, that require building permits, and whose components need optimization due to the specific location of the structure.
- → The mounting system is constructed from individually selected structural elements, including beams, latches, and legs, allowing for the use of the structure only for predetermined modules and their sizes.
- → The screw system used for mounting beams, latches, and legs does not require servicing, as long as the installation is carried out according to the instructions.
- → Before production, it is necessary to provide a site development plan, along with module installation instructions and geotechnical conditions, including previous piling test results.
- → The system is designed for ground installations, where, due to challenging geotechnical conditions (e.g., areas with dolomite), it is necessary to use two-piece columns, including a lower column with increased strength (CW profile) for piling in rocky soils.
- → There is the possibility of applying a hybrid system, allowing for the weighting of the leg/legs in places where it is not possible to drill it/them to a specified depth.

We recommend that each structure intended for production be previously calculated by our Technical Department regarding its installation in a specific wind and snow zone, as well as based on geotechnical conditions examined beforehand.





CHARACTERISTICS	G-P-I-EW/H/3/3×3-3×3
Type of substrate	Ground (G)
Construction installation method	Piled structure (P)
Type of construction	Individual (I)
Module orientation	East-west (EW)
Module layout	Horizontal (H)
Number of columns	3
Number of PV modules	3×3 + 3×3 (+6)
Type of modules	Standard/Bifacial
Shape of the column	C-profile / CW-profile
Does the construction require additional ballast?	No
Is it possible to use a hybrid solution	Yes - possibility of additinal ballasting
(piling + ballast)?	
Minimum number of modules on the structure	18
Height of standard clamps (mm)	35
Thickness of standard clamps (mm)	5
Maximum PV module size (mm)	-
Distribution method	Individual order





LIST OF PARTS - BASE OF CONSTRUCTION



End clamp 35 Nature/Black KLK50/35ALN KLK50/35ALCZ



Middle clamp 50 universal Nature/Black

KLSR50ALN KLSR50ALCZ



Flange nut serrated M8 DIN6923 A2 NSHM8A2



Hexagonal nut M10 IE

NM10Z



Washer M10 300HV ISO7093-1 IE

PSZM10Z



Allen screw M8X100 DIN912 A2

SIM8X100A2



Hexagonal screw M10X20 IE

SM10X20Z



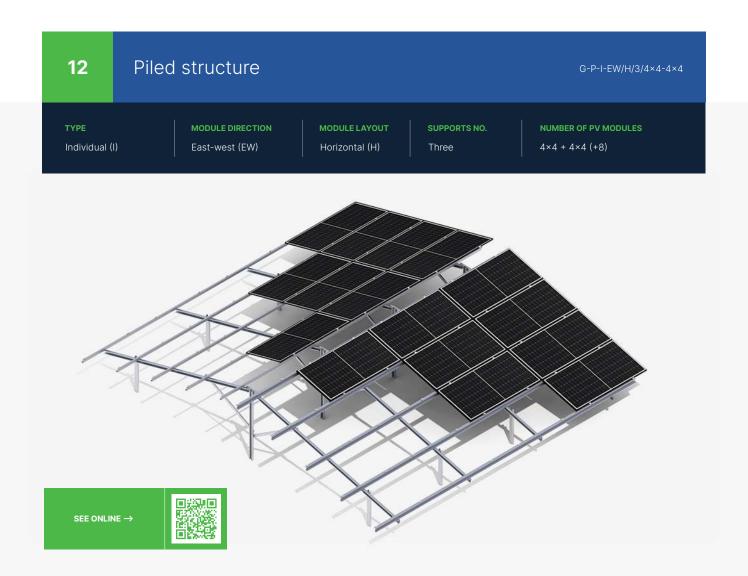


Bipartite support leg CW-profile



Strut

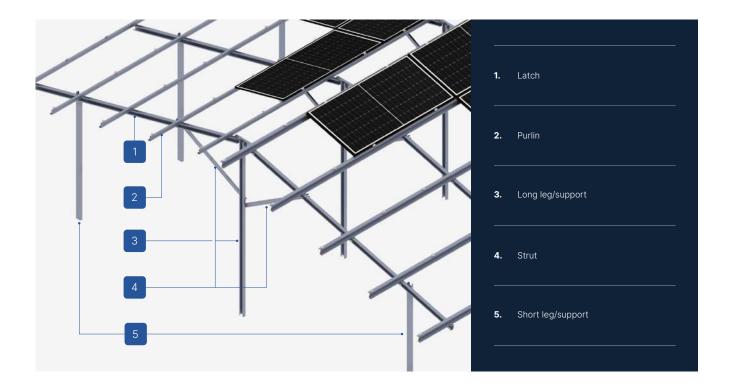




- → A multipart ground structure made of Magnelis™ steel designed for soil. Piled, without the need for additional ballasting.
- → Excellent for constructing installations above 50 kW, that require building permits, and whose components need optimization due to the specific location of the structure.
- → The mounting system is constructed from individually selected structural elements, including beams, latches, and legs, allowing for the use of the structure only for predetermined modules and their sizes.
- → The screw system used for mounting beams, latches, and legs does not require servicing, as long as the installation is carried out according to the instructions.
- → Before production, it is necessary to provide a site development plan, along with module installation instructions and geotechnical conditions, including previous piling test results.
- → The system is designed for ground installations, where, due to challenging geotechnical conditions (e.g., areas with dolomite), it is necessary to use two-piece columns, including a lower column with increased strength (CW profile) for piling in rocky soils.
- → There is the possibility of applying a hybrid system, allowing for the weighting of the leg/legs in places where it is not possible to drill it/them to a specified depth.

We recommend that each structure intended for production be previously calculated by our Technical Department regarding its installation in a specific wind and snow zone, as well as based on geotechnical conditions examined beforehand.





CHARACTERISTICS	G-P-I-EW/H/3/4×4-4×4
Type of substrate	Ground (G)
Construction installation method	Piled structure (P)
Type of construction	Individual (I)
Module orientation	East-west (EW)
Module layout	Horizontal (H)
Number of columns	3
Number of PV modules	4×4 + 4×4 (+8)
Type of modules	Standard/Bifacial
Shape of the column	C-profile / CW-profile
Does the construction require additional ballast?	No
Is it possible to use a hybrid solution	Yes - possibility of additinal ballasting
(piling + ballast)?	
Minimum number of modules on the structure	32
Height of standard clamps (mm)	35
Thickness of standard clamps (mm)	5
Maximum PV module size (mm)	-
Distribution method	Individual order





LIST OF PARTS - BASE OF CONSTRUCTION



End clamp 35 Nature/Black KLK50/35ALN KLK50/35ALCZ



Middle clamp 50 universal Nature/Black

KLSR50ALN KLSR50ALCZ



Flange nut serrated M8 DIN6923 A2 NSHM8A2



Hexagonal nut M10 IE





Washer M10 300HV ISO7093-1 IE

PSZM10Z



Allen screw M8X100 DIN912 A2



Hexagonal screw M10X20 IE

SM10X20Z



LIST OF PARTS - OTHER INSTALLATION ELEMENTS

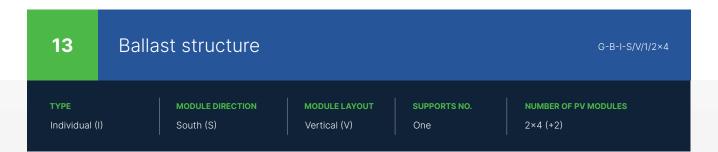


Bipartite support leg CW-profile



Strut







- → A multipart ground structure made of Magnelis™ steel designed for soils and areas where additional ballasting is required.
- → Excellent for constructing installations above 50 kW that require building permits, and whose components need optimization due to the specific location of the structure.
- → The mounting system is constructed from individually selected structural elements, including beams, latches, and legs, allowing for the use of the structure only for predetermined modules and their sizes.
- → The screw system used for mounting beams, latches, and legs does not require servicing as long as the installation is carried out according to the instructions.
- → Before production, it is necessary to provide a site development plan along with module installation instructions.
- → The system is designed for ground installations where the primary criterion for choosing the structure is the need for additional ballasting.
- → There is the possibility of applying a hybrid system, allowing for the weighting of the leg/legs in places where it is not possible to drill it/them to a specified depth.





CHARACTERISTICS	G-B-I-S/V/1/2×4
Type of substrate	Ground (G)
Construction installation method	Ballast structure (B)
Type of construction	Individual (I)
Module orientation	South (S)
Module layout	Vertical (V)
Number of columns	1
Number of PV modules	2×4 (+2)
Type of modules	Standard/Bifacial
Shape of the column	C-profile / CW-profile
Does the construction require additional ballast?	Yes
Is it possible to use a hybrid solution	Yes - possibility of additinal ballasting
(piling + ballast)?	
Minimum number of modules on the structure	8
Height of standard clamps (mm)	35
Thickness of standard clamps (mm)	5
Maximum PV module size (mm)	-
Distribution method	Individual order





LIST OF PARTS - BASE OF CONSTRUCTION



End clamp 35 Nature/Black KLK50/35ALN KLK50/35ALCZ



Middle clamp 50 universal Nature/Black

KLSR50ALN KLSR50ALCZ



Flange nut serrated M8 DIN6923 A2 NSHM8A2



Hexagonal nut M10 IE





Washer M10 300HV ISO7093-1 IE

PSZM10Z



Allen screw M8X100 DIN912 A2



Hexagonal screw M10X20 IE



SM10X20Z



Strut



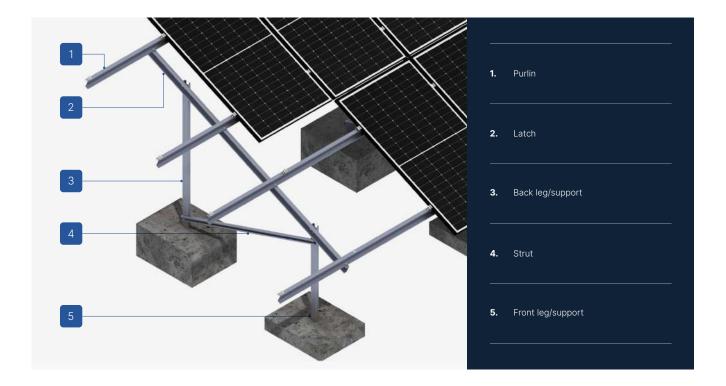


TYPE | MODULE DIRECTION | MODULE LAYOUT | SUPPORTS NO. | NUMBER OF PV MODULES | Individual (I) | South (S) | Vertical (V) | Two | 2×4 (+2)



- → A multipart ground structure made of Magnelis™ steel designed for soils and areas where additional ballasting is required.
- → Excellent for constructing installations above 50 kW that require building permits, and whose components need optimization due to the specific location of the structure.
- → The mounting system is constructed from individually selected structural elements, including beams, latches, and legs, allowing for the use of the structure only for predetermined modules and their sizes.
- → The screw system used for mounting beams, latches, and legs does not require servicing as long as the installation is carried out according to the instructions.
- → Before production, it is necessary to provide a site development plan along with module installation instructions.
- → The system is designed for ground installations where the primary criterion for choosing the structure is the need for additional ballasting.
- → There is the possibility of applying a hybrid system, allowing for the weighting of the leg/legs in places where it is not possible to drill it/them to a specified depth.





CHARACTERISTICS	G-B-I-S/V/2/2×4
Type of substrate	Ground (G)
Construction installation method	Ballast structure (B)
Type of construction	Individual (I)
Module orientation	South (S)
Module layout	Vertical (V)
Number of columns	2
Number of PV modules	2×4 (+2)
Type of modules	Standard/Bifacial
Shape of the column	C-profile / CW-profile
Does the construction require additional ballast?	Yes
Is it possible to use a hybrid solution	Yes - possibility of additinal ballasting
(piling + ballast)?	
Minimum number of modules on the structure	8
Height of standard clamps (mm)	35
Thickness of standard clamps (mm)	5
Maximum PV module size (mm)	-
Distribution method	Individual order





LIST OF PARTS - BASE OF CONSTRUCTION



End clamp 35 Nature/Black KLK50/35ALN KLK50/35ALCZ



Middle clamp 50 universal Nature/Black

KLSR50ALN KLSR50ALCZ



Flange nut serrated M8 DIN6923 A2 NSHM8A2



Hexagonal nut M10 IE





Washer M10 300HV ISO7093-1 IE

PSZM10Z



Allen screw M8X100 DIN912 A2



Hexagonal screw M10X20 IE



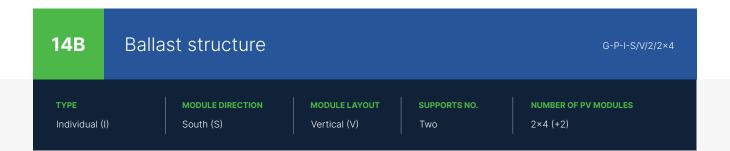
SM10X20Z



Strut



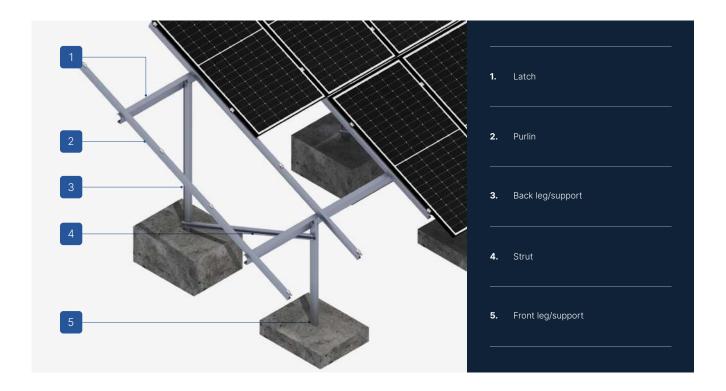






- → A multipart ground structure made of Magnelis™ steel designed for soils and areas where additional ballasting is required.
- → Excellent for constructing installations above 50 kW that require building permits, and whose components need optimization due to the specific location of the structure.
- → The mounting system is constructed from individually selected structural elements, including beams, latches, and legs, allowing for the use of the structure only for predetermined modules and their sizes.
- → The screw system used for mounting beams, latches, and legs does not require servicing as long as the installation is carried out according to the instructions.
- → Before production, it is necessary to provide a site development plan along with module installation instructions.
- → The system is designed for ground installations where the primary criterion for choosing the structure is the need for additional ballasting.
- → There is the possibility of applying a hybrid system, allowing for the weighting of the leg/legs in places where it is not possible to drill it/them to a specified depth.





CHARACTERISTICS	G-B-I-S/V/2/2×4
Type of substrate	Ground (G)
Construction installation method	Ballast structure (B)
Type of construction	Individual (I)
Module orientation	South (S)
Module layout	Vertical (V)
Number of columns	2
Number of PV modules	2×4 (+2)
Type of modules	Standard/Bifacial
Shape of the column	C-profile / CW-profile
Does the construction require additional ballast?	Yes
Is it possible to use a hybrid solution	Yes - possibility of additinal ballasting
(piling + ballast)?	
Minimum number of modules on the structure	8
Height of standard clamps (mm)	35
Thickness of standard clamps (mm)	5
Maximum PV module size (mm)	-
Distribution method	Individual order





LIST OF PARTS - BASE OF CONSTRUCTION



End clamp 35 Nature/Black KLK50/35ALN KLK50/35ALCZ



Middle clamp 50 universal Nature/Black

KLSR50ALN KLSR50ALCZ



Flange nut serrated M8 DIN6923 A2 NSHM8A2



Hexagonal nut M10 IE





Washer M10 300HV ISO7093-1 IE

PSZM10Z



Allen screw M8X100 DIN912 A2



Hexagonal screw M10X20 IE



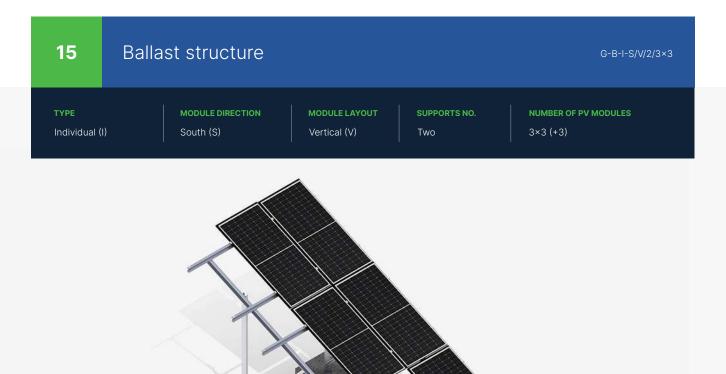
SM10X20Z



Strut





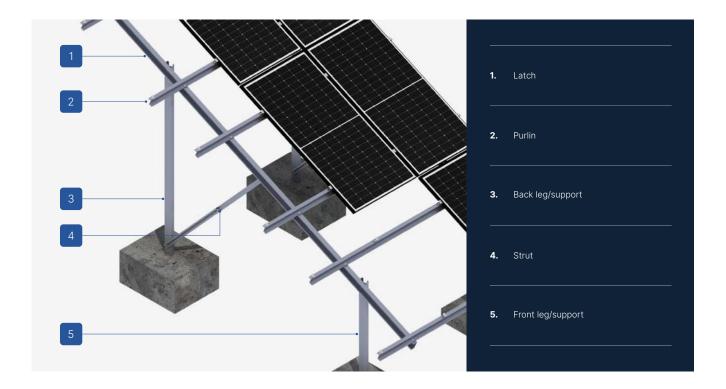


SEE ONLINE \rightarrow



- → A multipart ground structure made of Magnelis™ steel designed for soils and areas where additional ballasting is required.
- → Excellent for constructing installations above 50 kW that require building permits, and whose components need optimization due to the specific location of the structure.
- → The mounting system is constructed from individually selected structural elements, including beams, latches, and legs, allowing for the use of the structure only for predetermined modules and their sizes.
- → The screw system used for mounting beams, latches, and legs does not require servicing as long as the installation is carried out according to the instructions.
- → Before production, it is necessary to provide a site development plan along with module installation instructions.
- → The system is designed for ground installations where the primary criterion for choosing the structure is the need for additional ballasting.
- → There is the possibility of applying a hybrid system, allowing for the weighting of the leg/legs in places where it is not possible to drill it/them to a specified depth.





CHARACTERISTICS	G-B-I-S/V/2/3×3
Type of substrate	Ground (G)
Construction installation method	Ballast structure (B)
Type of construction	Individual (I)
Module orientation	South (S)
Module layout	Vertical (V)
Number of columns	2
Number of PV modules	3×3 (+3)
Type of modules	Standard/Bifacial
Shape of the column	C-profile / CW-profile
Does the construction require additional ballast?	Yes
Is it possible to use a hybrid solution	Yes - possibility of additinal ballasting
(piling + ballast)?	
Minimum number of modules on the structure	9
Height of standard clamps (mm)	35
Thickness of standard clamps (mm)	5
Maximum PV module size (mm)	-
Distribution method	Individual order





LIST OF PARTS - BASE OF CONSTRUCTION



End clamp 35 Nature/Black KLK50/35ALN KLK50/35ALCZ



Middle clamp 50 universal Nature/Black

KLSR50ALN KLSR50ALCZ



Flange nut serrated M8 DIN6923 A2 NSHM8A2



Hexagonal nut M10 IE





Washer M10 300HV ISO7093-1 IE

PSZM10Z



Allen screw M8X100 DIN912 A2



Hexagonal screw M10X20 IE



SM10X20Z



Strut





TYPE | MODULE DIRECTION | MODULE LAYOUT | SUPPORTS NO. | NUMBER OF PV MODULES | Individual (I) | South (S) | Horizontal (H) | Two | 3×3 (+3)



- → A multipart ground structure made of Magnelis™ steel designed for soils and areas where additional ballasting is required.
- → Excellent for constructing installations above 50 kW that require building permits, and whose components need optimization due to the specific location of the structure.
- → The mounting system is constructed from individually selected structural elements, including beams, latches, and legs, allowing for the use of the structure only for predetermined modules and their sizes.
- → The screw system used for mounting beams, latches, and legs does not require servicing as long as the installation is carried out according to the instructions.
- → Before production, it is necessary to provide a site development plan along with module installation instructions.
- → The system is designed for ground installations where the primary criterion for choosing the structure is the need for additional ballasting.
- → There is the possibility of applying a hybrid system, allowing for the weighting of the leg/legs in places where it is not possible to drill it/them to a specified depth.





CHARACTERISTICS	G-B-I-S/H/2/3×3
Type of substrate	Ground (G)
Construction installation method	Ballast structure (B)
Type of construction	Individual (I)
Module orientation	South (S)
Module layout	Horizontal (H)
Number of columns	2
Number of PV modules	3×3 (+3)
Type of modules	Standard/Bifacial
Shape of the column	C-profile / CW-profile
Does the construction require additional ballast?	Yes
Is it possible to use a hybrid solution	Yes - possibility of additinal ballasting
(piling + ballast)?	
Minimum number of modules on the structure	9
Height of standard clamps (mm)	35
Thickness of standard clamps (mm)	5
Maximum PV module size (mm)	-
Distribution method	Individual order





LIST OF PARTS - BASE OF CONSTRUCTION



End clamp 35 Nature/Black KLK50/35ALN KLK50/35ALCZ



Middle clamp 50 universal Nature/Black

KLSR50ALN KLSR50ALCZ



Flange nut serrated M8 DIN6923 A2 NSHM8A2



Hexagonal nut M10 IE





Washer M10 300HV ISO7093-1 IE

PSZM10Z



Allen screw M8X100 DIN912 A2



Hexagonal screw M10X20 IE



SM10X20Z



Strut





17 Ballast structure G-B-I-S/H/2/4×3 TYPE | MODULE DIRECTION | MODULE LAYOUT | SUPPORTS NO. | NUMBER OF PV MODULES | Individual (I) | South (S) | Horizontal (H) | Two | 4×3 (+4)



- → A multipart ground structure made of Magnelis™ steel designed for soils and areas where additional ballasting is required.
- → Excellent for constructing installations above 50 kW that require building permits, and whose components need optimization due to the specific location of the structure.
- → The mounting system is constructed from individually selected structural elements, including beams, latches, and legs, allowing for the use of the structure only for predetermined modules and their sizes.
- → The screw system used for mounting beams, latches, and legs does not require servicing as long as the installation is carried out according to the instructions.
- → Before production, it is necessary to provide a site development plan along with module installation instructions.
- → The system is designed for ground installations where the primary criterion for choosing the structure is the need for additional ballasting.
- → There is the possibility of applying a hybrid system, allowing for the weighting of the leg/legs in places where it is not possible to drill it/them to a specified depth.





CHARACTERISTICS	G-B-I-S/H/2/4×3
Type of substrate	Ground (G)
Construction installation method	Ballast structure (B)
Type of construction	Individual (I)
Module orientation	South (S)
Module layout	Horizontal (H)
Number of columns	2
Number of PV modules	4×3 (+4)
Type of modules	Standard/Bifacial
Shape of the column	C-profile / CW-profile
Does the construction require additional ballast?	Yes
Is it possible to use a hybrid solution	Yes - possibility of additinal ballasting
(piling + ballast)?	
Minimum number of modules on the structure	12
Height of standard clamps (mm)	35
Thickness of standard clamps (mm)	5
Maximum PV module size (mm)	-
Distribution method	Individual order





LIST OF PARTS - BASE OF CONSTRUCTION



End clamp 35 Nature/Black KLK50/35ALN KLK50/35ALCZ



Middle clamp 50 universal Nature/Black

KLSR50ALN KLSR50ALCZ



Flange nut serrated M8 DIN6923 A2 NSHM8A2



Hexagonal nut M10 IE





Washer M10 300HV ISO7093-1 IE

PSZM10Z



Allen screw M8X100 DIN912 A2



Hexagonal screw M10X20 IE



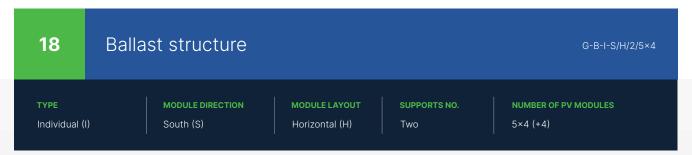
SM10X20Z



Strut









- → A multipart ground structure made of Magnelis™ steel designed for soils and areas where additional ballasting is required.
- → Excellent for constructing installations above 50 kW that require building permits, and whose components need optimization due to the specific location of the structure.
- → The mounting system is constructed from individually selected structural elements, including beams, latches, and legs, allowing for the use of the structure only for predetermined modules and their sizes.
- → The screw system used for mounting beams, latches, and legs does not require servicing as long as the installation is carried out according to the instructions.
- → Before production, it is necessary to provide a site development plan along with module installation instructions.
- → The system is designed for ground installations where the primary criterion for choosing the structure is the need for additional ballasting.
- → There is the possibility of applying a hybrid system, allowing for the weighting of the leg/legs in places where it is not possible to drill it/them to a specified depth.





CHARACTERISTICS	G-B-I-S/H/2/5×4
Type of substrate	Ground (G)
Construction installation method	Ballast structure (B)
Type of construction	Individual (I)
Module orientation	South (S)
Module layout	Horizontal (H)
Number of columns	2
Number of PV modules	5×4 (+4)
Type of modules	Standard/Bifacial
Shape of the column	C-profile / CW-profile
Does the construction require additional ballast?	Yes
Is it possible to use a hybrid solution	Yes - possibility of additinal ballasting
(piling + ballast)?	
Minimum number of modules on the structure	20
Height of standard clamps (mm)	35
Thickness of standard clamps (mm)	5
Maximum PV module size (mm)	-
Distribution method	Individual order





LIST OF PARTS - BASE OF CONSTRUCTION



End clamp 35 Nature/Black KLK50/35ALN KLK50/35ALCZ



Middle clamp 50 universal Nature/Black

KLSR50ALN KLSR50ALCZ



Flange nut serrated M8 DIN6923 A2 NSHM8A2



Hexagonal nut M10 IE





Washer M10 300HV ISO7093-1 IE

PSZM10Z



Allen screw M8X100 DIN912 A2



Hexagonal screw M10X20 IE



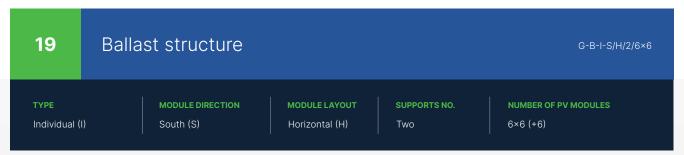
SM10X20Z



Strut



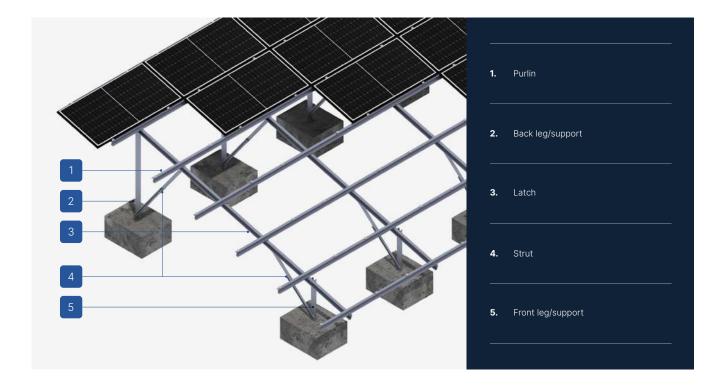






- → A multipart ground structure made of Magnelis™ steel designed for soils and areas where additional ballasting is required.
- → Excellent for constructing installations above 50 kW that require building permits, and whose components need optimization due to the specific location of the structure.
- → The mounting system is constructed from individually selected structural elements, including beams, latches, and legs, allowing for the use of the structure only for predetermined modules and their sizes.
- → The screw system used for mounting beams, latches, and legs does not require servicing as long as the installation is carried out according to the instructions.
- → Before production, it is necessary to provide a site development plan along with module installation instructions.
- → The system is designed for ground installations where the primary criterion for choosing the structure is the need for additional ballasting.
- → There is the possibility of applying a hybrid system, allowing for the weighting of the leg/legs in places where it is not possible to drill it/them to a specified depth.





CHARACTERISTICS	G-B-I-S/H/2/6×6
Type of substrate	Ground (G)
Construction installation method	Ballast structure (B)
Type of construction	Individual (I)
Module orientation	South (S)
Module layout	Horizontal (H)
Number of columns	2
Number of PV modules	6×6 (+6)
Type of modules	Standard/Bifacial
Shape of the column	C-profile / CW-profile
Does the construction require additional ballast?	Yes
Is it possible to use a hybrid solution	Yes - possibility of additinal ballasting
(piling + ballast)?	
Minimum number of modules on the structure	36
Height of standard clamps (mm)	35
Thickness of standard clamps (mm)	5
Maximum PV module size (mm)	-
Distribution method	Individual order





LIST OF PARTS - BASE OF CONSTRUCTION



End clamp 35 Nature/Black KLK50/35ALN KLK50/35ALCZ



Middle clamp 50 universal Nature/Black

KLSR50ALN KLSR50ALCZ



Flange nut serrated M8 DIN6923 A2 NSHM8A2



Hexagonal nut M10 IE





Washer M10 300HV ISO7093-1 IE

PSZM10Z



Allen screw M8X100 DIN912 A2



Hexagonal screw M10X20 IE



SM10X20Z

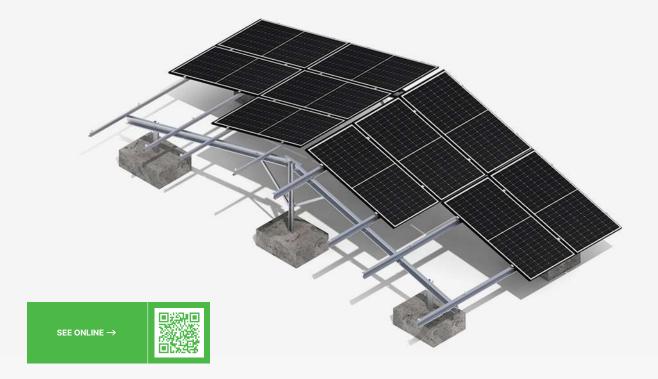


Strut





Ballast structure G-B-I-EW/V/3/2×4-2×4 TYPE | MODULE DIRECTION | MODULE LAYOUT | SUPPORTS NO. | NUMBER OF PV MODULES | Individual (I) | East-west (EW) | Vertical (V) | Three | 2×4 + 2×4 (+4)



- → A multipart ground structure made of Magnelis™ steel designed for soils and areas where additional ballasting is required.
- → Excellent for constructing installations above 50 kW that require building permits, and whose components need optimization due to the specific location of the structure.
- → The mounting system is constructed from individually selected structural elements, including beams, latches, and legs, allowing for the use of the structure only for predetermined modules and their sizes.
- → The screw system used for mounting beams, latches, and legs does not require servicing as long as the installation is carried out according to the instructions.
- $\,\to\,$ Before production, it is necessary to provide a site development plan along with module installation instructions.
- → The system is designed for ground installations where the primary criterion for choosing the structure is the need for additional ballasting.
- → There is the possibility of applying a hybrid system, allowing for the weighting of the leg/legs in places where it is not possible to drill it/them to a specified depth.





CHARACTERISTICS	G-B-I-EW/V/3/2×4-2×4
Type of substrate	Ground (G)
Construction installation method	Ballast structure (B)
Type of construction	Individual (I)
Module orientation	East-west (EW)
Module layout	Vertical (V)
Number of columns	3
Number of PV modules	2×4 + 2×4 (+4)
Type of modules	Standard/Bifacial
Shape of the column	C-profile / CW-profile
Does the construction require additional ballast?	Yes
Is it possible to use a hybrid solution	Yes - possibility of additinal ballasting
(piling + ballast)?	
Minimum number of modules on the structure	16
Height of standard clamps (mm)	35
Thickness of standard clamps (mm)	5
Maximum PV module size (mm)	-
Distribution method	Individual order





LIST OF PARTS - BASE OF CONSTRUCTION



End clamp 35 Nature/Black KLK50/35ALN KLK50/35ALCZ



Middle clamp 50 universal Nature/Black

KLSR50ALN KLSR50ALCZ



Flange nut serrated M8 DIN6923 A2 NSHM8A2



Hexagonal nut M10 IE





Washer M10 300HV ISO7093-1 IE

PSZM10Z



Allen screw M8X100 DIN912 A2



Hexagonal screw M10X20 IE

SM10X20Z



LIST OF PARTS - OTHER INSTALLATION ELEMENTS

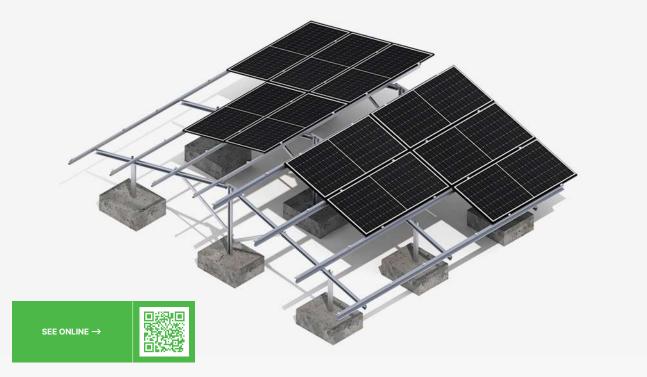


Strut



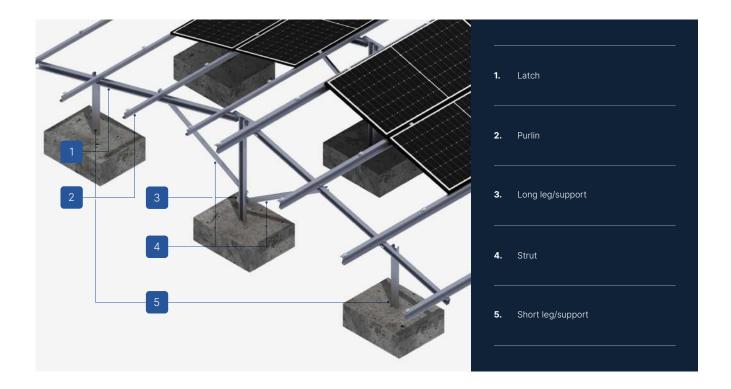


21 Ballast structure C-B-I-EW/H/3/3×3-3×3 TYPE | MODULE DIRECTION | MODULE LAYOUT | SUPPORTS NO. | NUMBER OF PV MODULES | Individual (I) | East-west (EW) | Horizontal (H) | Three | 3×3 + 3×3 (+6)



- → A multipart ground structure made of Magnelis™ steel designed for soils and areas where additional ballasting is required.
- → Excellent for constructing installations above 50 kW that require building permits, and whose components need optimization due to the specific location of the structure.
- → The mounting system is constructed from individually selected structural elements, including beams, latches, and legs, allowing for the use of the structure only for predetermined modules and their sizes.
- → The screw system used for mounting beams, latches, and legs does not require servicing as long as the installation is carried out according to the instructions.
- → Before production, it is necessary to provide a site development plan along with module installation instructions.
- → The system is designed for ground installations where the primary criterion for choosing the structure is the need for additional ballasting.
- → There is the possibility of applying a hybrid system, allowing for the weighting of the leg/legs in places where it is not possible to drill it/them to a specified depth.





CHARACTERISTICS	G-B-I-EW/H/3/3×3-3×3
Type of substrate	Ground (G)
Construction installation method	Ballast structure (B)
Type of construction	Individual (I)
Module orientation	East-west (EW)
Module layout	Horizontal (H)
Number of columns	3
Number of PV modules	3×3 + 3×3 (+6)
Type of modules	Standard/Bifacial
Shape of the column	C-profile / CW-profile
Does the construction require additional ballast?	Yes
Is it possible to use a hybrid solution	Yes - possibility of additinal ballasting
(piling + ballast)?	
Minimum number of modules on the structure	18
Height of standard clamps (mm)	35
Thickness of standard clamps (mm)	5
Maximum PV module size (mm)	-
Distribution method	Individual order





LIST OF PARTS - BASE OF CONSTRUCTION



End clamp 35 Nature/Black KLK50/35ALN KLK50/35ALCZ



Middle clamp 50 universal Nature/Black

KLSR50ALN KLSR50ALCZ



Flange nut serrated M8 DIN6923 A2 NSHM8A2



Hexagonal nut M10 IE





Washer M10 300HV ISO7093-1 IE

PSZM10Z



Allen screw M8X100 DIN912 A2



Hexagonal screw M10X20 IE

SM10X20Z



LIST OF PARTS - OTHER INSTALLATION ELEMENTS

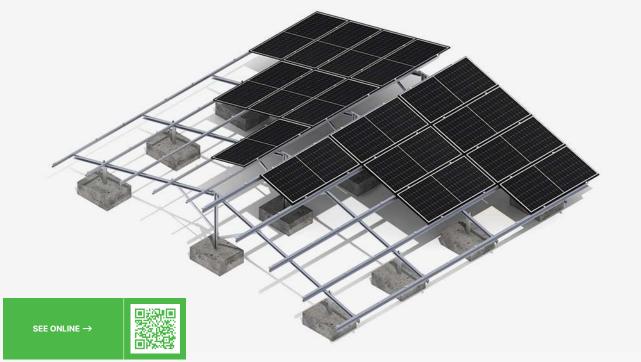


Strut





22 Ballast structure G-B-I-EW/H/3/4×4-4×4 TYPE | MODULE DIRECTION | MODULE LAYOUT | SUPPORTS NO. | NUMBER OF PV MODULES | Individual (I) | East-west (EW) | Horizontal (H) | Three | 4×4 + 4×4 (+8)



- → A multipart ground structure made of Magnelis™ steel designed for soils and areas where additional ballasting is required.
- → Excellent for constructing installations above 50 kW that require building permits, and whose components need optimization due to the specific location of the structure.
- → The mounting system is constructed from individually selected structural elements, including beams, latches, and legs, allowing for the use of the structure only for predetermined modules and their sizes.
- → The screw system used for mounting beams, latches, and legs does not require servicing as long as the installation is carried out according to the instructions.
- → Before production, it is necessary to provide a site development plan along with module installation instructions.
- → The system is designed for ground installations where the primary criterion for choosing the structure is the need for additional ballasting.
- → There is the possibility of applying a hybrid system, allowing for the weighting of the leg/legs in places where it is not possible to drill it/them to a specified depth.





G-B-I-EW/H/3/4×4-4×4

Type of substrate	Ground (G)
Construction installation method	Ballast structure (B)
Type of construction	Individual (I)
Module orientation	East-west (EW)
Module layout	Horizontal (H)
Number of columns	3
Number of PV modules	4×4 + 4×4 (+8)
Type of modules	Standard/Bifacial
Shape of the column	C-profile / CW-profile
Does the construction require additional ballast?	Yes
Is it possible to use a hybrid solution	Yes - possibility of additinal ballasting
(piling + ballast)?	
Minimum number of modules on the structure	32
Height of standard clamps (mm)	35
Thickness of standard clamps (mm)	5
Maximum PV module size (mm)	-
Distribution method	Individual order





LIST OF PARTS - BASE OF CONSTRUCTION



End clamp 35 Nature/Black KLK50/35ALN KLK50/35ALCZ



Middle clamp 50 universal Nature/Black

KLSR50ALN KLSR50ALCZ



Flange nut serrated M8 DIN6923 A2 NSHM8A2



Hexagonal nut M10 IE





Washer M10 300HV ISO7093-1 IE

PSZM10Z



Allen screw M8X100 DIN912 A2



Hexagonal screw M10X20 IE

SM10X20Z



LIST OF PARTS - OTHER INSTALLATION ELEMENTS



Strut





CARD NO.	CONSTRUCION TYPE	MODULE DIRECTION	MODULE LAYOUT	NUMBER OF SUPPORTS	PV MODULE SIZE (MAX)	NUMBER OF PV MODULES	PAGE
01	Universal (US)	South (S)	Vertical (V)	4	W=1200	3×3	183
02	Universal (US)	South (S)	Vertical (V)	4	W=1200	3×5 / 3×6	186
03	Individual (I)	South (S)	Vertical (V)	4	customized		189
04	Individual (I)	South (S)	Vertical (V)	4	customized		192



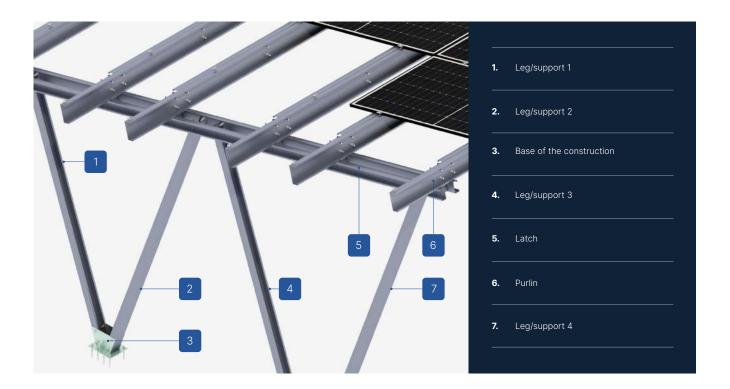
O1 Single space carport CP1-US-S/V/4/3×3/MAX-WIDTH1200 TYPE MODULE DIRECTION MODULE LAYOUT SUPPORTS NO. No. / WIDTH (MAX) OF PV MODULES Universal (US) South (S) Vertical (V) Four 3×3 / 1200



DESCRIPTION

- → Universal mounting system built with adjustable and densely perforated beams, allowing for the use of structures for modules of different power and size.
- ightarrow A four-support system in the shape of the letter V.
- → A multipart construction made of Magnelis™ steel, designed for various types of car ramps and parking lots - with the need for additional ballasting.
- → The applied screw system for mounting beams, latches, and posts does not require servicing, provided that the installation is carried out in accordance with the instructions.
- → Excellent for building small home installations up to 10 kW.
- → In the case of multi-space carports, a modular system has been applied, allowing for the assembly and connection of an unlimited number of segments.
- → The possibility of using a hybrid system in which there is an option to attach the post/posts to prefabricated ballast blocks placed directly on the ground in areas where it is not possible to anchor the blocks in the ground to a specified depth.





CHARACTERISTICS	CP1-US-S/V/4/3×3/MAX-WIDTH1200
Type of substrate	Ground
Type of construction and installation method	Carport (CP), mounted to a prefabricated foundation
	using chemical anchors
Type of construction	Universal (US)
Module orientation	South (S)
Module layout	Vertical (V)
Number of PV modules:	3×3
Type of modules	Standard/Bifacial
Shape of the column	V-shaped
Does the construction require additional ballast?	No
Is it possible to use a hybrid solution	No
(piling + ballast)?	
Minimum number of modules on the construction	9 in case the width of the modules does not exceed 1200 mm
Height of standard clamps (mm)	35
Thickness of standard clamps (mm)	5
Maximum length of the PV module (mm)	-
Standard inclination	15°
Distribution method	Individual order





LIST OF PARTS - BASE OF CONSTRUCTION



End clamp 35 Nature/Black KLK50/35ALN KLK50/35ALCZ



Middle clamp 50 universal Nature/Black KLSR50ALN KLSR50ALCZ





Flange nut serrated M8 DIN6923 A2 NKM8A2



Hexagonal nut M12 IE





Hexagonal nut M16 IE

NM16Z



Washer M12 300HV ISO7093-1 IE

PSZM12Z



Washer M16 300HV ISO7093-1 IE

PSZM16Z



Allen screw M8X100 DIN912 A2



Hexagonal screw M12X30 IE

SM12X30Z



Hexagonal screw M16X30 IE

SM16X30Z



Support frame



Purlin

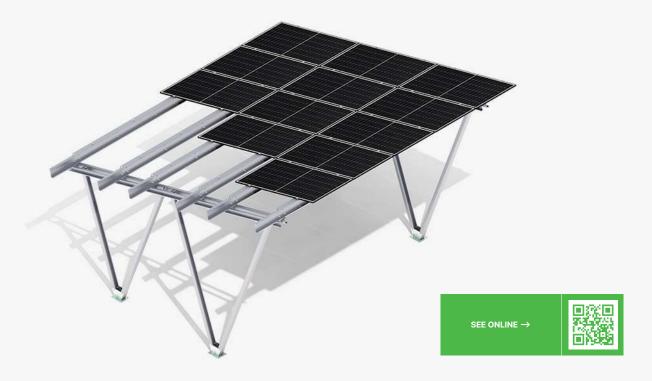
LIST OF PARTS - OTHER INSTALLATION ELEMENTS



Foundation footing



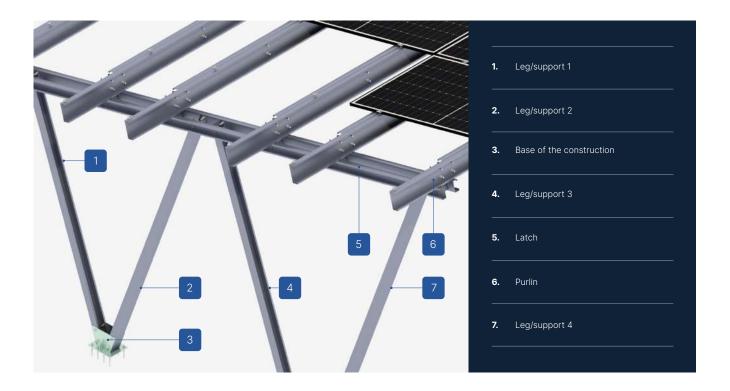
Double space carport CP2-US-S/V/4/3×6 TYPE MODULE DIRECTION MODULE LAYOUT SUPPORTS NO. No. / WIDTH (MAX) OF PV MODULES Universal (US) South (S) Vertical (V) Four 3×6 / 1200



DESCRIPTION

- → Universal mounting system built with adjustable and densely perforated beams, allowing for the use of structures for modules of different power and size.
- ightarrow A four-support system in the shape of the letter V.
- → A multipart construction made of Magnelis™ steel, designed for various types of car ramps and parking lots - with the need for additional ballasting.
- → The applied screw system for mounting beams, latches, and posts does not require servicing, provided that the installation is carried out in accordance with the instructions.
- $\,\rightarrow\,\,$ Excellent for building small home installations up to 10 kW.
- → In the case of multi-space carports, a modular system has been applied, allowing for the assembly and connection of an unlimited number of segments.
- → The possibility of using a hybrid system in which there is an option to attach the post/posts to prefabricated ballast blocks placed directly on the ground in areas where it is not possible to anchor the blocks in the ground to a specified depth.





CHARACTERISTICS	CP2-US-S/V/4/3×6
Type of substrate	Ground
Type of construction and installation method	Carport (CP), mounted to a prefabricated foundation
	using chemical anchors
Type of construction	Universal (US)
Module orientation	South (S)
Module layout	Vertical (V)
Number of PV modules:	3×6
Type of modules	Standard/Bifacial
Shape of the column	V-shaped
Does the construction require additional ballast?	No
Is it possible to use a hybrid solution	No
(piling + ballast)?	
Minimum number of modules on the construction	18 in case the width of the modules does not exceed 1200 mm
Height of standard clamps (mm)	35
Thickness of standard clamps (mm)	5
Maximum length of the PV module (mm)	-
Standard inclination	15°
Distribution method	Individual order





LIST OF PARTS - BASE OF CONSTRUCTION



End clamp 35 Nature/Black KLK50/35ALN KLK50/35ALCZ



Middle clamp 50 universal Nature/Black

KLSR50ALN KLSR50ALCZ



Flange nut serrated M8 DIN6923 A2 NKM8A2



Hexagonal nut M12 IE

NM12Z



Hexagonal nut M16 IE

NM16Z



Washer M12 300HV ISO7093-1 IE

PSZM12Z



Washer M16 300HV ISO7093-1 IE

PSZM16Z



Allen screw M8X100 DIN912 A2



Hexagonal screw M12X30 IE

SM12X30Z



Hexagonal screw M16X30 IE

SM16X30Z



Support frame



Purlin

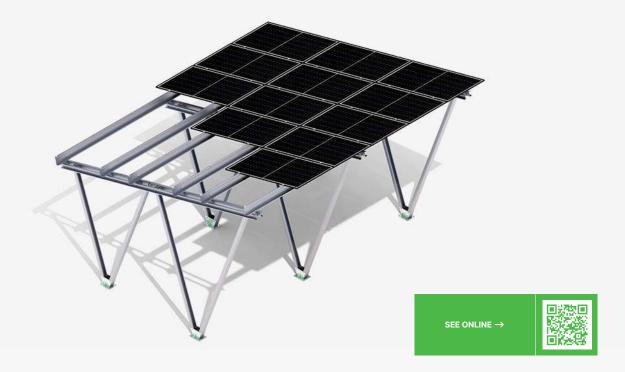
LIST OF PARTS - OTHER INSTALLATION ELEMENTS



Foundation footing



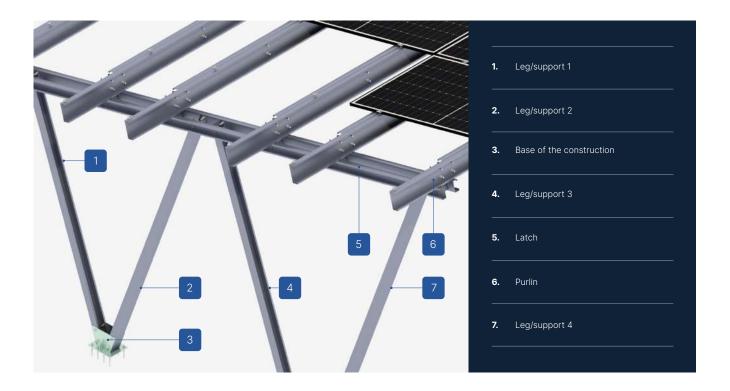
Single space multimodule carport CP1-I-S/V/4/MULTI TYPE | MODULE DIRECTION | MODULE LAYOUT | SUPPORTS NO. | NO. / WIDTH (MAX) OF PV MODULES | Individual (I) | South (S) | Vertical (V) | Four | Customized



DESCRIPTION

- → Universal mounting system built with adjustable and densely perforated beams, allowing for the use of structures for modules of different power and size.
- ightarrow A four-support system in the shape of the letter V.
- → A multipart construction made of Magnelis™ steel, designed for various types of car ramps and parking lots - with the need for additional ballasting.
- → The applied screw system for mounting beams, latches, and posts does not require servicing, provided that the installation is carried out in accordance with the instructions.
- $\,\rightarrow\,\,$ Excellent for building small home installations up to 10 kW.
- → In the case of multi-space carports, a modular system has been applied, allowing for the assembly and connection of an unlimited number of segments.
- → The possibility of using a hybrid system in which there is an option to attach the post/posts to prefabricated ballast blocks placed directly on the ground in areas where it is not possible to anchor the blocks in the ground to a specified depth.





CHARACTERISTICS	CP1-I-S/V/4/MULTI
Type of substrate	Ground
Type of construction and installation method	Carport (CP), mounted to a prefabricated foundation
	using chemical anchors
Type of construction	Individual (I)
Module orientation	South (S)
Module layout	Vertical (V)
Number of PV modules:	Customized
Type of modules	Standard/Bifacial
Shape of the column	V-shaped
Does the construction require additional ballast?	No
Is it possible to use a hybrid solution	No
(piling + ballast)?	
Minimum number of modules on the construction	Customized
Height of standard clamps (mm)	35
Thickness of standard clamps (mm)	5
Maximum length of the PV module (mm)	-
Standard inclination	15°
Distribution method	Individual order





LIST OF PARTS - BASE OF CONSTRUCTION



End clamp 35 Nature/Black KLK50/35ALN KLK50/35ALCZ



Middle clamp 50 universal Nature/Black

KLSR50ALN KLSR50ALCZ



Flange nut serrated M8 DIN6923 A2 NKM8A2



Hexagonal nut M12 IE

NM12Z



Hexagonal nut M16 IE

NM16Z



Washer M12 300HV ISO7093-1 IE

PSZM12Z



Washer M16 300HV ISO7093-1 IE

PSZM16Z



Allen screw M8X100 DIN912 A2



Hexagonal screw M12X30 IE

SM12X30Z



Hexagonal screw M16X30 IE

SM16X30Z



Support frame



Purlin

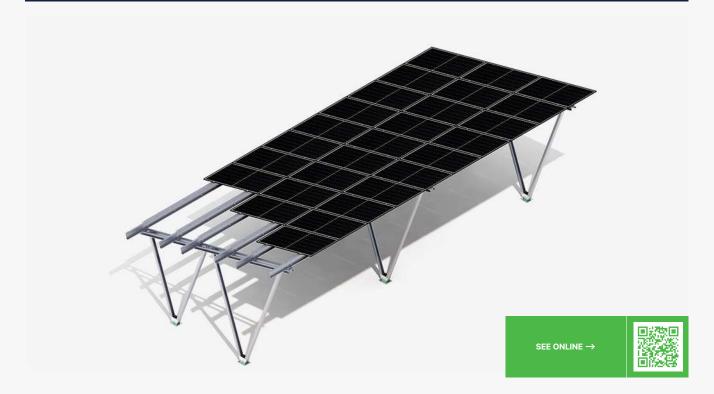
LIST OF PARTS - OTHER INSTALLATION ELEMENTS



Foundation footing



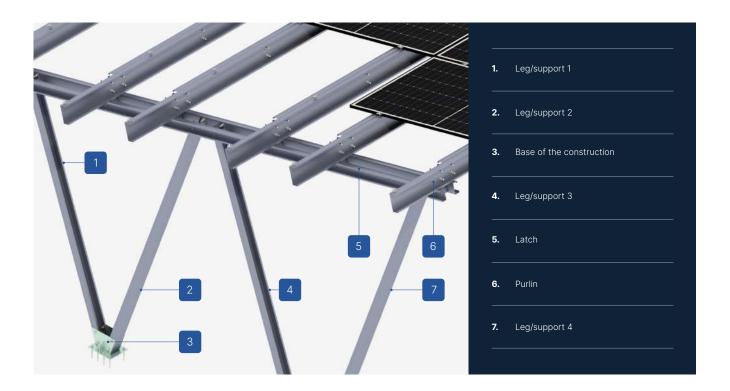
Double space multimodule carport CP2-I-S/V/4/MULTI TYPE | MODULE DIRECTION | MODULE LAYOUT | SUPPORTS NO. | NO. / WIDTH (MAX) OF PV MODULES | Individual (I) | South (S) | Vertical (V) | Four | Customized



DESCRIPTION

- → Universal mounting system built with adjustable and densely perforated beams, allowing for the use of structures for modules of different power and size.
- ightarrow A four-support system in the shape of the letter V.
- → A multipart construction made of Magnelis[™] steel, designed for various types of car ramps and parking lots - with the need for additional ballasting.
- → The applied screw system for mounting beams, latches, and posts does not require servicing, provided that the installation is carried out in accordance with the instructions.
- $\,\rightarrow\,\,$ Excellent for building small home installations up to 10 kW.
- → In the case of multi-space carports, a modular system has been applied, allowing for the assembly and connection of an unlimited number of segments.
- → The possibility of using a hybrid system in which there is an option to attach the post/posts to prefabricated ballast blocks placed directly on the ground in areas where it is not possible to anchor the blocks in the ground to a specified depth.





CHARACTERISTICS	CP2-I-S/V/4/MULTI
Type of substrate	Ground
Type of construction and installation method	Carport (CP), mounted to a prefabricated foundation
	using chemical anchors
Type of construction	Individual (I)
Module orientation	South (S)
Module layout	Vertical (V)
Number of PV modules:	Customized
Type of modules	Standard/Bifacial
Shape of the column	V-shaped
Does the construction require additional ballast?	No
Is it possible to use a hybrid solution	No
(piling + ballast)?	
Minimum number of modules on the construction	Customized
Height of standard clamps (mm)	35
Thickness of standard clamps (mm)	5
Maximum length of the PV module (mm)	-
Standard inclination	15°
Distribution method	Individual order





LIST OF PARTS - BASE OF CONSTRUCTION



End clamp 35 Nature/Black KLK50/35ALN KLK50/35ALCZ



Middle clamp 50 universal Nature/Black

KLSR50ALN KLSR50ALCZ



Flange nut serrated M8 DIN6923 A2 NKM8A2



Hexagonal nut M12 IE

NM12Z



Hexagonal nut M16 IE

NM16Z



Washer M12 300HV ISO7093-1 IE

PSZM12Z



Washer M16 300HV ISO7093-1 IE

PSZM16Z



Allen screw M8X100 DIN912 A2



Hexagonal screw M12X30 IE

SM12X30Z



Hexagonal screw M16X30 IE

SM16X30Z



Support frame



Purlin

LIST OF PARTS - OTHER INSTALLATION ELEMENTS



Foundation footing





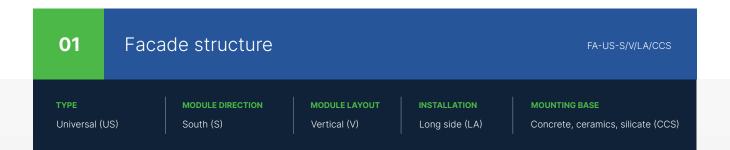


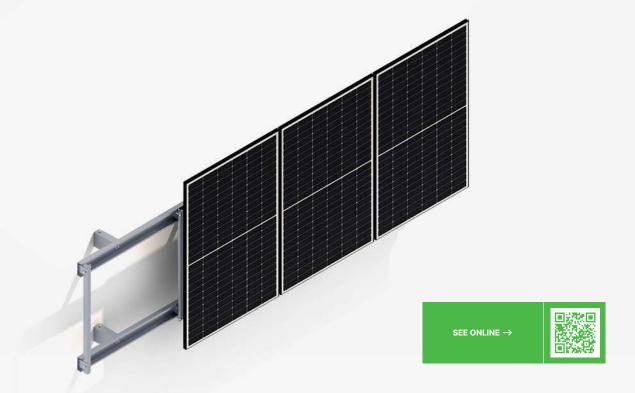


CARD NO.	CONSTRUCION TYPE	MODULE DIRECTION	MODULE LAYOUT	INSTALLATION	MOUNTING BASE	PAGE
01	Universal (US)	South (S)	Vertical (V)	Long side (LA)	Concrete, ceramics, silicate (CCS)	197
02	Universal (US)	South (S)	Horizontal (H)	Long side (LA)	Concrete, ceramics, silicate (CCS)	
03	Individual (I)	South (S)	Vertical (V)	Long side (LA)	Sandwich panel, metal sheet (SP)	200
04	Individual (I)	South (S)	Horizontal (H)	Long side (LA)	Sandwich panel, metal sheet (SP)	









DESCRIPTION

- → A multi-part facade structure made of aerated concrete, ceramics or silicate and further insulated with wool or polystyrene.
- → An invasive system composed of adjustable consoles, which are mounted to the facade using screws of appropriate length, and then to which profiles (on which PV modules, previously equipped in neccessary mounts, are suspended) are attached.
- → A universal mounting system composed of adjustable, telescopic elements, enabling the use of structures with modules of various power and sizes.
- → The structure has been designed to shorten the base assembly and, at the same time, make the number of mounting points to the facade as small as possible.





CHARACTERISTICS	FA-US-S/V/LA/CCS
Destination	Facades (FA)
Type of construction	Universal (US)
Module orientation	South (S)
Module layout	Vertical (V)
How to install a PV module	Long side (LA)
Mounting base	Concrete, ceramics, silicate (CCS)
Module type	Standard/Bifacial
Minimum number of PV modules	1
Standard clamps height (mm)	35
Standard clamps width (mm)	5
Maximum PV module length (mm)	-
Distribution	Available in stock





LIST OF PARTS - BASE OF CONSTRUCTION



End clamp 35 Nature/Black KLK50/35ALN KLK50/35ALCZ



Middle clamp 50 universal Nature/Black

KLSR50ALN KLSR50ALCZ



Self-locking nut M8 DIN985 A2

NSHM8A2



Hexagonal nut M10 IE

NM10Z



Washer M10 300HV ISO7093-1 IE

PSZM10Z



Allen screw M8X100 DIN912 A2

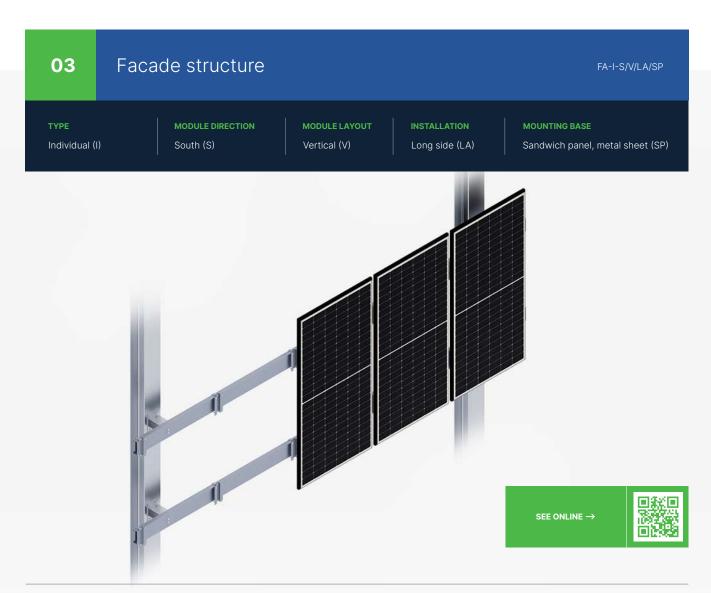
SIM8X100A2



Hexagonal screw M10X20 IE

SM10X20Z

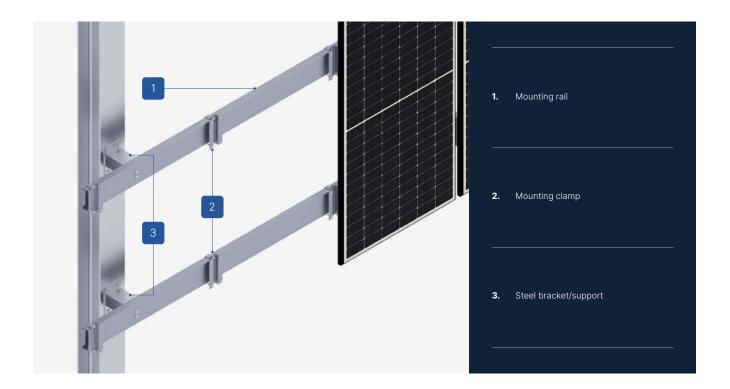




OPIS KONSTRUKCJI

- → A multi-part facade structure made of Magnelis[™] sheet, designed for facades constructed using sandwich panel or trapezoidal sheet technology.
- → An invasive system composed of adjustable consoles, which are mounted to the facade using screws of appropriate length, and then to which profiles (on which PV modules, previously equipped in neccessary mounts, are suspended) are attached.
- ightarrow A universal mounting system composed of adjustable, telescopic elements, enabling the use of structures with modules of various power and sizes.
- ightarrow A system designed for facades where the basis for the construction choice is the impossibility of applying installation mounting on the roof or ground.
- → The structure has been designed to shorten the base assembly and, at the same time, make the number of mounting points to the facade as small as possible.





CHARACTERISTICS	FA-I-S/V/LA/SP
Destination	Facades (FA)
Type of construction	Individual (US)
Module orientation	South (S)
Module layout	Vertical (V)
How to install a PV module	Long side (LA)
Mounting base	Sandwich panel, metal sheet (SP)
Module type	Standard/Bifacial
Minimum number of PV modules	1
Standard clamps height (mm)	35
Standard clamps width (mm)	5
Maximum PV module length (mm)	-
Distribution	Individual order





LIST OF PARTS - BASE OF CONSTRUCTION











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

Hexagonal screw M8X20 DIN933 A2

SM8X20A2



Hexagonal screw M10X20 IE

SM10X20Z

Trackers









ТҮРЕ	CARD NO.	CONSTRUCION TYPE	MODULE DIRECTION	MODULE LAYOUT	NUMBER OF PILES	PAGE
Piled (P)	01	Single axis (1AT)	East-west (EW)	Vertical (V)	1 (1P)	205





Designed to follow the sun







DESCRIPTION

MECHANICS:

- → Strength verification of structure parameters carried out by a specialist laboratory.
- → Various tracker lengths available to suit specific number of strings, and the selection of number and length of the trackers is individually carried out for each project.
- → Design assumptions implemented according to the DFA methodology (Designed for Assembly).
- → Split adaptive bearings adjust its position to variable thermal or geometric deformations of the supporting beam.
- → The use of an intermediate purlin to increase the central support surface of the load-bearing purlin connected to the PV panel.
- → Drive leg is in the same axis as the support columns (the length of the support columns is selected individually, depending on the geographical and geological conditions of the project).
- → Standardization of structural elements.
- → Optimization of screw connections.

CONTROLS:

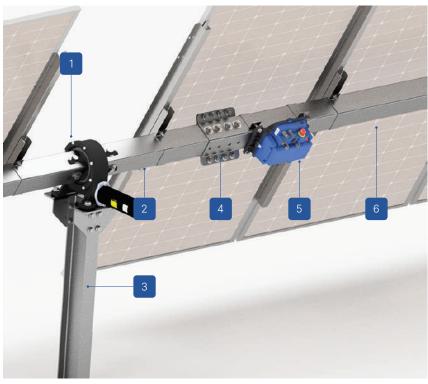
- → Device is using an advanced astronomical algorithm to control the position of the panels in relation to the current position of the sun.
- → Intuitive installation and startup configuration system.
- → Configurable alarm and notification management.
- → Backward algorithm that prevents and minimizes row shading.
- → Zigbee® wireless communication system, or wired RS-485.
- → Remote monitoring and preventive maintenance to reduce installation downtime (easy integration with SCADA system in the Modbus TCP/IP standard).
- → Possibility of individual configuration of the tracker operation depending on the order of rows and terrain slope.
- → Safety system against excessive wind speed (safe positioning of PV panels).
- → Possibility of using various service modes related to the position of the panels, e.g. snow removal, cleaning.
- → Possibility to use a snow level detector.
- → Possibility of current and historical verification of installation parameters via cloud data storage.

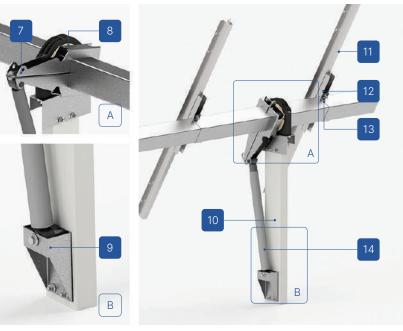
CHARACTERISTICS	T-P-1AT-EW/V/1P
Construction base	Ground
Method of mounting	Piled (P)
Type of construction	Tracker (T), single axis (1A)
Module orientation	East-west (EW)
Module layout	Vertical (V)
PV module length (MAX)	2300
Type of tracking	Automatic, horizontal ¹
Tracking algorithm	Direct astronomical patterns; Tracking precision = 2,0°2
Rotation range	±60°
Ground cover factor	Any configuration determined by the customer (from 32% to 50%)
PV module compatibility	Standard/Bifacial
Drive system	1 independent horizontal rotation drive per 1 tracker
Modules per tracker	max 60 (individual configuration possible)
Power supply	dedicated photovoltaic modules + 230V AC 50/60 Hz³ battery
Communication	Zigbee® wireless (or wired RS-485) communication system
Monitoring	Modbus TCP/IP, possibity of integration with SCADA system
Adaptation to the slope of terrain	up to 6% in N-S direction
Wind resistance	1) Up to 80 km/h in any given position
	2) Up to 140 km/h in horizontal or any position configured as neutral
Method of distribution	Individual order

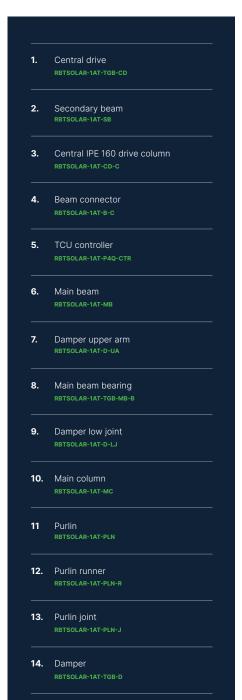
Recommended alignment of the tracker axis along the north-south direction.

 $^{^{\}rm 2}\,\mbox{Possible}$ individual adjustment of traction to the topography of the terrain

³ Possibility of UPS usage.









TECHNICAL NOTES

Assembly method:

Screw connections. Designed for fast and easy installation.
No on-site welding or drilling required.

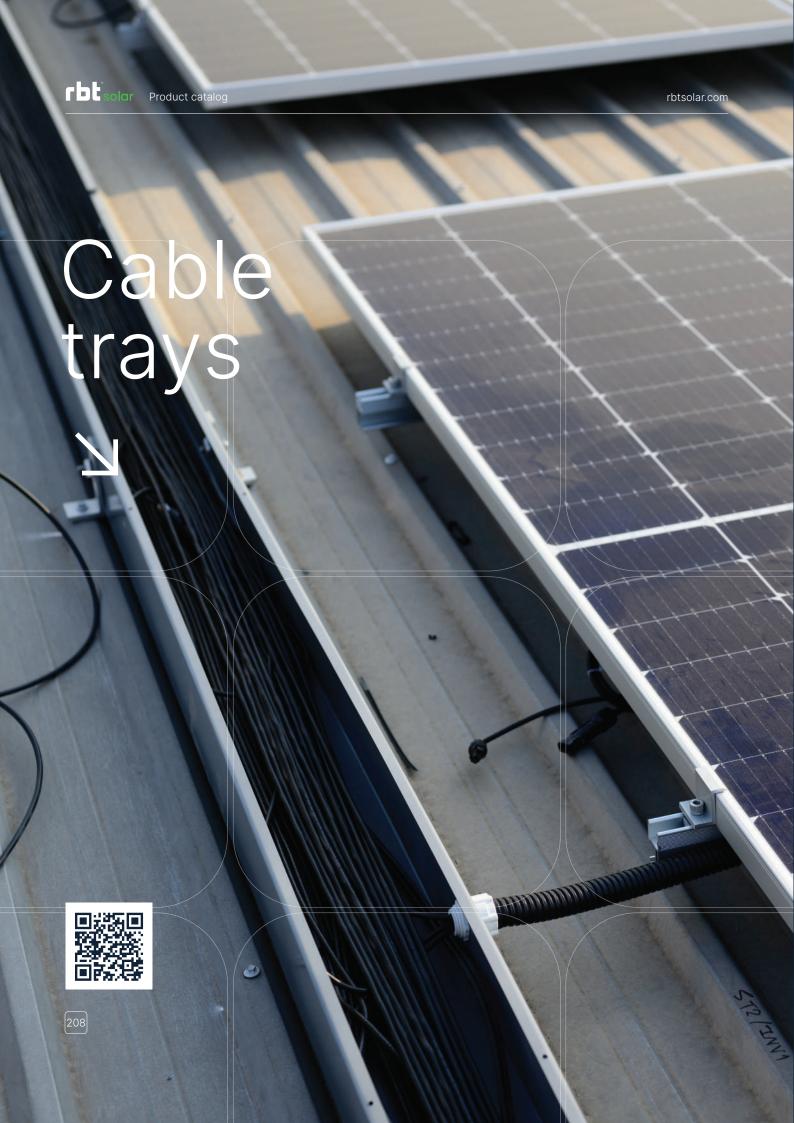
Materials:
Construction graded steel.



SERVICE

Maintenance-free bearings. Inspection and maintenance of the rotary drive every 2 years.

Technical inspections according to individual arrangements.







CARD NO.	PRODUCT NAME	PAGE
01	Cable trays	210
02	Straight connector	212
03	Vertical 45° connector	214
04	90° connector	216
05	Three-way connector	218



01

Cable trays

KD-KK-60×50×3000 KD-KK-100×50×3000 KD-KK-200×50×3000



DESCRIPTION

Cable trays with widths of 60, 100, and 200 mm complement our photovoltaic structures, forming a complete system designed for the construction of photovoltaic installations mounted on roofs, grounds, and parking lots - characterized not only by accessibility, but also durability, achieved through the use of high-quality steel resistant to corrosion in C3 environments, ensuring the required corrosion resistance for a minimum of 10 years.

- → A universal mounting system, built with cable trays of varying widths and connecting elements, allowing for versatile installation.
- → A multipart cable tray system, made of Magnelis™ steel, designed for various types of installations, mounted using our structures and beyond.
- → Excellent for building small home installations up to 10 kW.
- → The system is intended for installations, where the primary criterion is the need to install trays outside the building and in cases where a warranty period exceeding 10 years is required for C3 environments (in accordance with the warranty terms available on the website www.rbtsolar.com).





LIST OF PARTS - BASE OF CONSTRUCTION



Hexagonal nut M10 IE

NM10Z



Washer M10 300HV ISO7093-1 IE

PSZM10Z



Hexagonal screw M10X20 IE

SM10X20Z

LIST OF PARTS - OTHER INSTALLATION ELEMENTS



Sheet metal screw OC 5.5X25 EPDM

BLW55X25EPDMZ



Welded base for support

RBTSOLAR-KD-PZ



Clamp for welded base

KD-KK-PZ-93×85×200



Cable tray W=65/105/205

KD-KK-65/105/205×13×3000



02

Straight connectors

KD-KK-L-65×40×200 KD-KK-L-105×40×200 KD-KK-L-205×40×200





DESCRIPTION

Straight connectors with widths of 65, 105 and 205 mm complement our photovoltaic structures, forming a complete system designed for the construction of photovoltaic installations mounted on roofs, grounds, and parking lots - characterized not only by accessibility, but also durability, achieved through the use of high-quality steel resistant to corrosion in C3 environments, ensuring the required corrosion resistance for a minimum of 10 years.

- → A universal mounting system, built with cable trays of varying widths and connecting elements, allowing for versatile installation.
- → A multipart cable tray system, made of Magnelis™ steel, designed for various types of installations, mounted using our structures and beyond.
- → Excellent for building small home installations up to 10 kW.
- → The system is intended for installations, where the primary criterion is the need to install trays outside the building and in cases where a warranty period exceeding 10 years is required for C3 environments (in accordance with the warranty terms available on the website www.rbtsolar.com).





LIST OF PARTS - BASE OF CONSTRUCTION







Hexagonal nut M10 IE

NM10Z

Washer M10 300HV ISO7093-1 IE

PSZM10Z

Hexagonal screw M10X20 IE

SM10X20Z



03

Vertical 45° connectors

KD-KK-LP45-60×50 KD-KK-LP45-100×50 KD-KK-LP45-200×50





DESCRIPTION

Vertical 45° connectors with widths of 60, 100 and 200 mm complement our photovoltaic structures, forming a complete system designed for the construction of photovoltaic installations mounted on roofs, grounds, and parking lots - characterized not only by accessibility, but also durability, achieved through the use of high-quality steel resistant to corrosion in C3 environments, ensuring the required corrosion resistance for a minimum of 10 years.

- → A universal mounting system, built with cable trays of varying widths and connecting elements, allowing for versatile installation.
- → A multipart cable tray system, made of Magnelis™ steel, designed for various types of installations, mounted using our structures and beyond.
- → Excellent for building small home installations up to 10 kW.
- → The system is intended for installations, where the primary criterion is the need to install trays outside the building and in cases where a warranty period exceeding 10 years is required for C3 environments (in accordance with the warranty terms available on the website www.rbtsolar.com).





LIST OF PARTS - BASE OF CONSTRUCTION







Hexagonal nut M10 IE

NM10Z

Washer M10 300HV ISO7093-1 IE

PSZM10Z

Hexagonal screw M10X20 IE

SM10X20Z



04

Connectors 90°

KD-KK-LK90-60×50 KD-KK-LK90-100×50 KD-KK-LK90-200×50



DESCRIPTION

90° connectors with width of 60, 100 and 200 mm complement our photovoltaic structures, forming a complete system designed for the construction of photovoltaic installations mounted on roofs, grounds, and parking lots - characterized not only by accessibility, but also durability, achieved through the use of high-quality steel resistant to corrosion in C3 environments, ensuring the required corrosion resistance for a minimum of 10 years.

- → A universal mounting system, built with cable trays of varying widths and connecting elements, allowing for versatile installation.
- → A multipart cable tray system, made of Magnelis™ steel, designed for various types of installations, mounted using our structures and beyond.
- → Excellent for building small home installations up to 10 kW.
- → The system is intended for installations, where the primary criterion is the need to install trays outside the building and in cases where a warranty period exceeding 10 years is required for C3 environments (in accordance with the warranty terms available on the website www.rbtsolar.com).





LIST OF PARTS - BASE OF CONSTRUCTION







Hexagonal nut M10 IE

NM10Z

Washer M10 300HV ISO7093-1 IE

PSZM10Z

Hexagonal screw M10X20 IE

SM10X20Z

LIST OF PARTS - OTHER INSTALLATION ELEMENTS





Sheet metal screw OC 5.5X25 EPDM

crew Cover DM W=60/100/200

BLW55X25EPDMZ

RBTSOLAR-KD-KK-LKD90-60×50 RBTSOLAR-KD-KK-LKD90-100×50 RBTSOLAR-KD-KK-LKD90-200×50

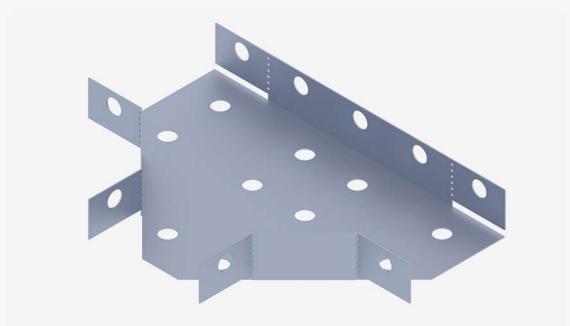


05

Three-way connectors

KD-KK-LT90-60×50 KD-KK-LT90-100×50 KD-KK-LT90-200×50





SEE ONLINE \rightarrow



DESCRIPTION

Three-way connectos with width of 60, 100 and 200 mm complement our photovoltaic structures, forming a complete system designed for the construction of photovoltaic installations mounted on roofs, grounds, and parking lots - characterized not only by accessibility, but also durability, achieved through the use of high-quality steel resistant to corrosion in C3 environments, ensuring the required corrosion resistance for a minimum of 10 years.

- → A universal mounting system, built with cable trays of varying widths and connecting elements, allowing for versatile installation.
- → A multipart cable tray system, made of Magnelis™ steel, designed for various types of installations, mounted using our structures and beyond.
- → Excellent for building small home installations up to 10 kW.
- → The system is intended for installations, where the primary criterion is the need to install trays outside the building and in cases where a warranty period exceeding 10 years is required for C3 environments (in accordance with the warranty terms available on the website www.rbtsolar.com).



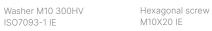


LIST OF PARTS - BASE OF CONSTRUCTION





PSZM10Z NM10Z





LIST OF PARTS - OTHER INSTALLATION ELEMENTS



Sheet metal screw OC 5.5X25 EPDM

BLW55X25EPDMZ



Cover W=60/100/200

RBTSOLAR-KD-KK-LTD90-60×50 RBTSOLAR-KD-KK-LTD90-100×50 RBTSOLAR-KD-KK-LTD90-200×50

Our representatives



REGION >	CONTACT >
REGION 3	CONTACT 3

Zachodniopomorskie,	Śląskie,
Opolskie	

Sebastian Jędraszek

+48 724 651 405 sebastian.jedraszek@rbtsolar.com

Mazowieckie, Łódzkie, Podlaskie

Piotr Belowski

+48 724 270 337 piotr.belowski@rbtsolar.com

Pomorskie, Warmińsko-Mazurskie, Kujawsko-Pomorskie

Tomasz Steindel

+48 724 445 300 tomasz.steindel@rbtsolar.com

Małopolskie, Podkarpackie, Lubelskie, Świętokrzyskie

Radosław Mazurek

+48 885 582 057 radoslaw.mazurek@rbtsolar.com

Wielkopolskie, Dolnośląskie, Lubuskie

Julian Nowak

+48 725 454 239 julian.nowak@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



CONTACT

PRODUCTION FACILITY

+48 724 625 200

ul. A. Struga 14 95-100 Zgierz

biuro@rbtsolar.com rbtsolar.com

Poland

WE ARE PART OF GRUPA/rexbud

NIP 732 221 39 23

