

Roof structures completed (FR)

002 Welded aluminum construction

FR-A-W-US-S/H/LA/MAX-LONG-X

TYPE OF CONSTRUCTION

Universal (US)

DIRECTION OF MODULES

South (S)

MODULE LAYOUT

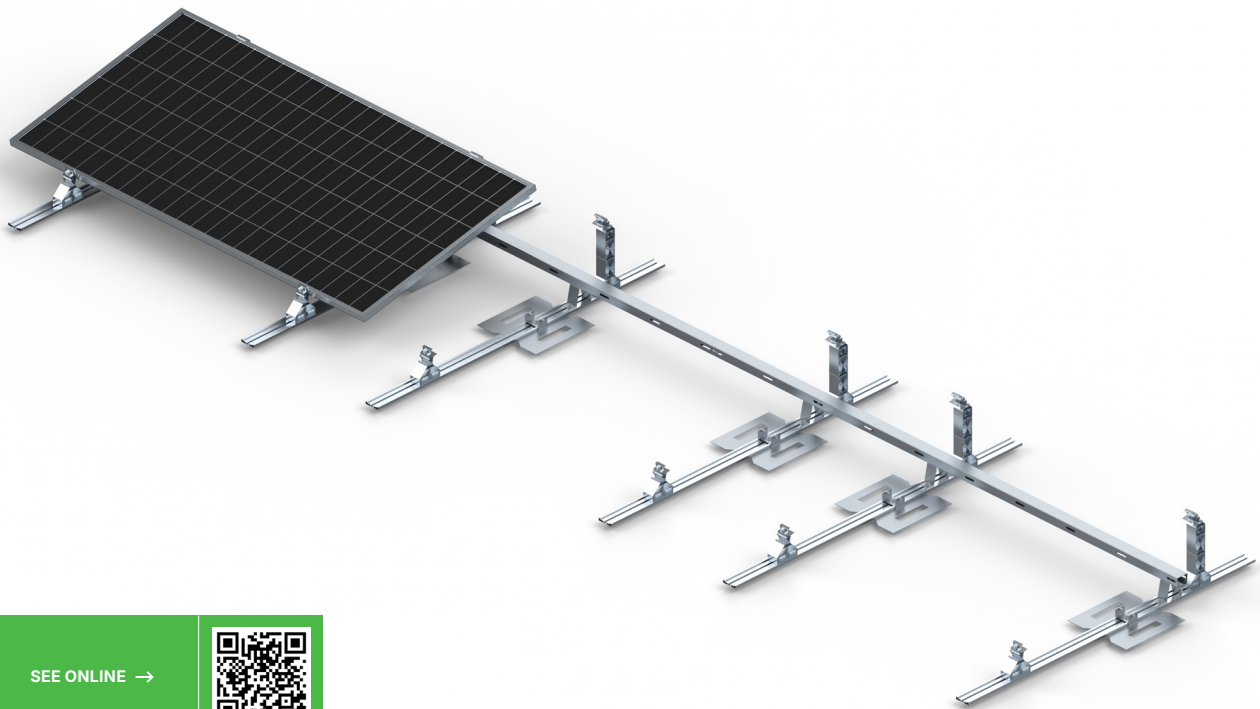
Horizontal (H)

ASSEMBLY METHOD

Long Side (LA)

MAX PV MODULE LENGTH

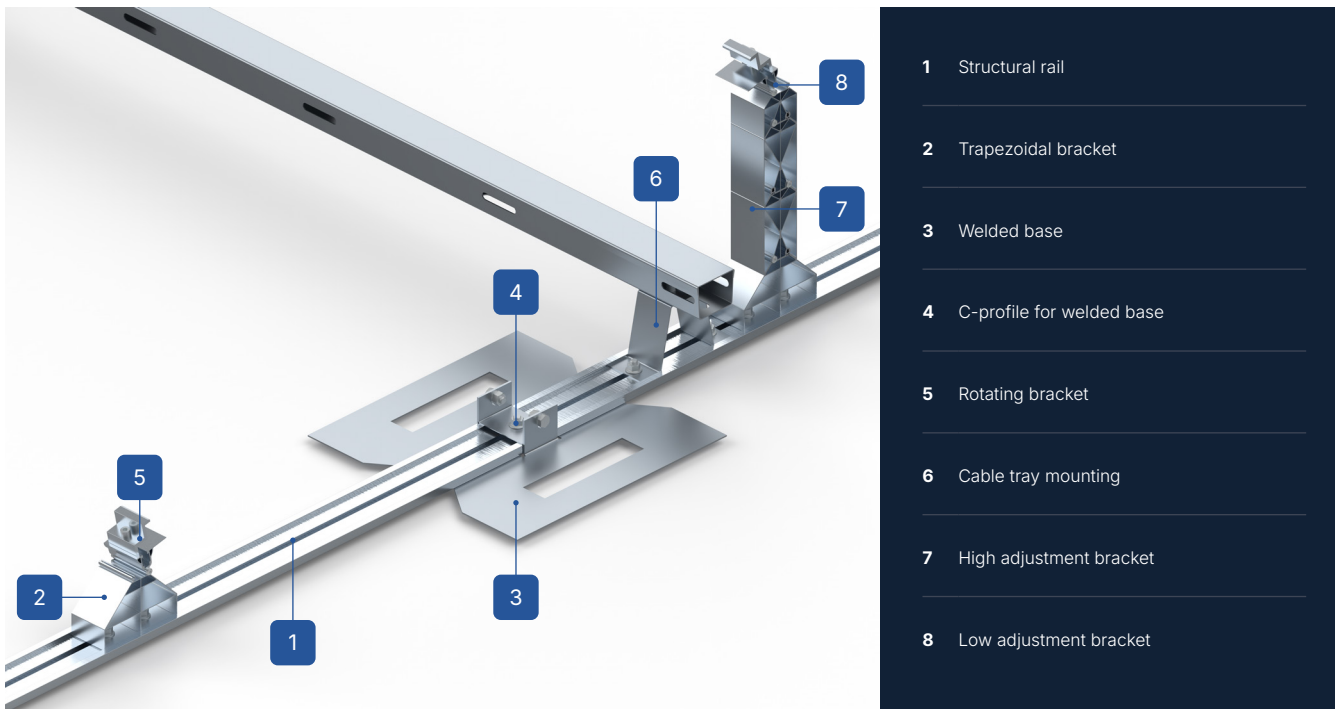
Individual (X)



DESCRIPTION OF THE STRUCTURE

- A multi-part welded aluminum structure designed for flat roofs, without the need for additional ballast.
- A universal photovoltaic structure allows for module tilt adjustments from 10 to 25 degrees, in 5-degree increments.
- Constant in-stock availability guarantees fast and efficient order fulfillment.
- A non-invasive system based on a base structure attached to the roof deck by welding appropriately sized patches of bituminous or PVC/TPO membrane.
- The base structure was designed in collaboration with membrane roofing specialists to ensure short installation times and maximum tear-out resistance.
- South-facing solutions require a wind brace to limit the impact of wind on the structure and increase its stiffness.
- Designed for roofs where there is insufficient load-bearing capacity for traditional Magnelis-based solutions.
- Hybrid system – in roof areas particularly exposed to wind suction, the number of welded bases can be increased. Installations with a capacity above 50kWp are each time recalculated by the technical department taking into account the roof load and the number and arrangement of bases to be welded.

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- 1 Structural rail

- 2 Trapezoïdal bracket

- 3 Welded base

- 4 C-profile for welded base

- 5 Rotating bracket

- 6 Cable tray mounting

- 7 High adjustment bracket

- 8 Low adjustment bracket

CONSTRUCTION CHARACTERISTICS

FR-A-W-US-S/H/LA/MAX-LONG-X

| | |
|---|---|
| Roof type | Aluminum Flat Roof (FR-A) |
| Roof mounting method | Welded Structure (W) |
| Construction type | Universal (US) |
| Module orientation | South (S) |
| Module layout | Level (H) |
| PV module mounting method ¹ | Long Side (LA) |
| Application/mounting surface | PVC Membrane/Bituminous Membrane |
| Structure mounting method | The base of the structure is welded to the roof surface |
| Does the structure require additional ballast? | No |
| Approximate structure weight per 1m ² of installation without panel weight (kg/m ²) ² | 2.71 |
| Purlin length (mm) | No Purlins |
| Wind girder length (mm) | 2175 |
| Maximum PV module length (mm) ³ | Custom (X) |
| Distribution method | Available on stock |

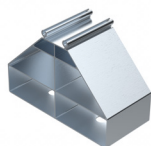
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ELEMENTS OF THE BASE OF THE STRUCTURE



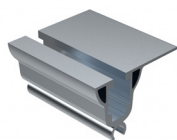
Welded base channel

RBTSOLAR-KD-AL-CPZ



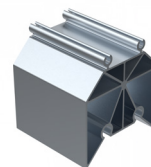
Trapezoidal bracket

RBTSOLAR-KD-AL-WT



Swivel bracket

RBTSOLAR-KD-AL-WO



Low adjustment bracket

RBTSOLAR-KD-AL-WRN



High adjustment bracket

RBTSOLAR-KD-AL-WRW



Cable tray mounting

RBTSOLAR-KD-MK



Structural rail

RBTSOLAR-KD-AL-SK



Welded base for support

RBTSOLAR-KD-PZ



Self-tapping screw-
ST4,8X9,5-C-S

WK4,8X9,5A2



T-head bolt
M10X20

SMM10X20A2



Hexagon nut
M10 A2

NM10A2



M10 flange nut

NKM10A2



Screw washer
M10 A2

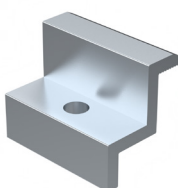
PSZM10A2



Hexagonal screw
M10x20 A2

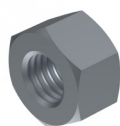
SM10x20A2

OTHER ASSEMBLY ELEMENTS



End clamp 30/32/35/40
Natura/Czarna

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



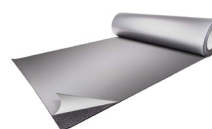
Hexagon nut
M8 A2

NM8A2



Allen screw
M8X35 A2

SIM8X35A2



Regupol

KD-GW-6/8,5/100-SAM



Wind brace L=X

RBTSOLAR-KD-W-X