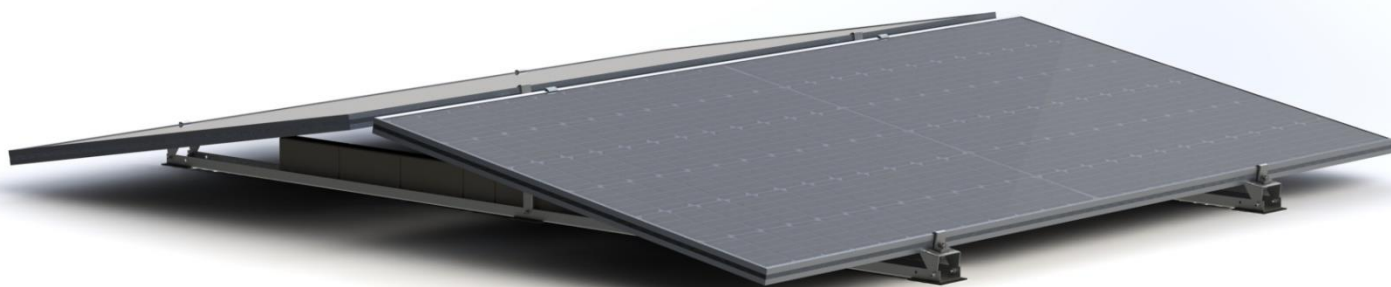


Metal construction PVMSR (Photovoltaic
Mounting Structure for Rooftops)
Roof metal structure for installation of photovoltaic modules

PVMSR-CB-DCF



ALL-PURPOSE SOLUTION

Suitable for all types
of concrete roofs

BUDGET SOLUTION

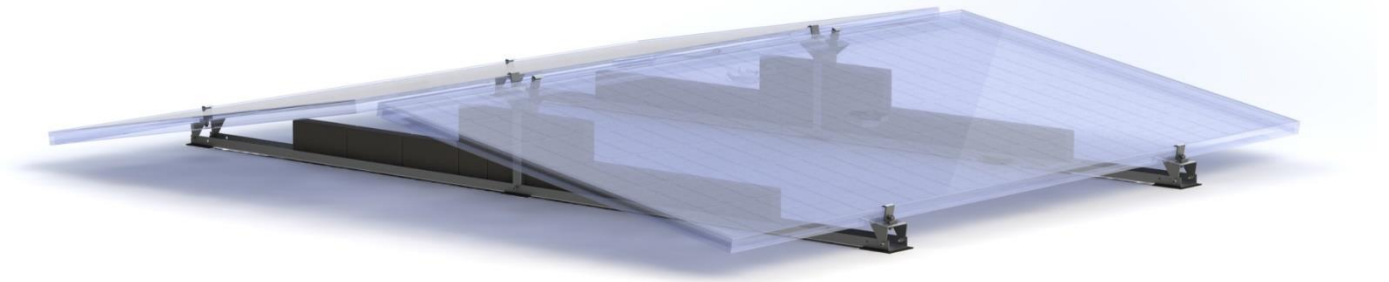
Use of galvanized
steel instead of
aluminum

10-YEAR WARRANTY

Warranty against
through corrosion
of metal structures

Metal construction PVMSR (Photovoltaic Mounting Structure for rooftops)

Roof metal structure for installation of photovoltaic modules



GENERAL SPECIFICATIONS AND ADVANTAGES

- + Supply package includes all the necessary items for PV modules installation- supporting structure, rubber underlay, fasteners, metal hardware and ballast
- + The structure is designed for use on concrete roofing
- + The structure is mounted on rubber underlay which keeps the membrane coating undamaged
- + The maximum distributed load on the roof is less than 200 Pa, which is one tenth of the possible snow load, and therefore does not affect the reliability of the roof;
- + By means of the detailed calculation of wind loads for each specific roof, it is possible to reduce the total weight of ballast by up to 50% by using lightweight ballast blocks, and therefore reduce the total load pressure on the roof
- + Design provides for the laying of a solar cable so that the contact connections remain accessible for visual and thermal imaging inspection
- + Pre-assembled design ensures high installation speed
- + The construction adapts to the roof type
- + Resistance to atmospheric loads (wind, snow)
- + Anti-corrosion coating on casing components applying hot-dip galvanization in accordance with ISO1461:2009

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Supporting metal structure for roofs with concrete and roofing material, fixed with ballast, two-slope arrangement of FEM frame type with the use of clamps

TECHNICAL DATA

Recommended FEM parameters

Length	up to 2384 mm
Width	up to 1303 mm
Height	35-40 mm
Mass	up to 40 kg

Design parameters

Construction type	roof
Roof mounting system	ballast
Arrangement of PV modules	double slope
Fastening PV modules to the structure	clamps
Allowable wind load	550 Pa

Terms of use

Temperature	- 40...+45 °C
Relative humidity	5-100%
Maximum long-term distributed pressure on the roof*	2 kPa

* Taking into account the snow load of 1800 Pa.

Design solutions for the use of this structure must include, among other things, a section for calculating the bearing capacity of the building (roof) on which the FES is installed, taking into account wind and snow loads for a specific region in accordance with the applicable norms (DBN B.1.2-2:2006).

Meets the requirements of the standards:

DBN A.3.2-2-2009	Occupational safety and industrial safety in construction. Substantive provisions.
DBN V.2.6-198:2014	Steel structures. Design standards.
DSTU B V.2.6-200:2014	Steel constructions. Installation requirements
NPAOP 0.00-1.15-07	Rules of labor protection during work at height.
DSTU B V.2.6-75:2008	Designs of Buildings and Structures. Steel Construction Structures. General Technical Requirements.
DSTU-N B V.2.6-186:2013	Guidance for the Protection of Construction Designs of Buildings and Structures from Corrosion.
DSTU-N B A.3.1-21:2013	Guidance for the Implementation Mounting Joints of Steel Building Structures on High-Tensile Bolts.

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