



MADE IN
EUROPE

ES ENERGY
SYSTEMS

Photovoltaic Solutions

Mounting Systems and Carport Structures



At Energy Systems we develop aluminium mounting systems for photovoltaics. We project tailored solution to your needs, ensuring reliability and quality. Assembly is easy and fast.



WHY SHOULD YOU CHOOSE OUR COMPANY

Our products have CE Marking and they are totally made in Europe. We have the ISO 9001 quality label. Produced according to the Euro Codes 1, 2 and 3, EN206-1, EN 10025-2, EN 1993-1-1: 2005 and EN 1993-

1-8: 2005. We have our own designer production and engineering departments. We project tailored solutions to your needs, ensuring reliability and quality. Our solution are engineered for easy and fast assembly.

Our Vision

Be a globally recognized company by the capacity of innovation and high quality of our products.

Our Mission

Develop mounting systems for photovoltaic installations with high performance and quality. Creating innovative solutions which attend our customers needs, ensuring reliability and robustness.

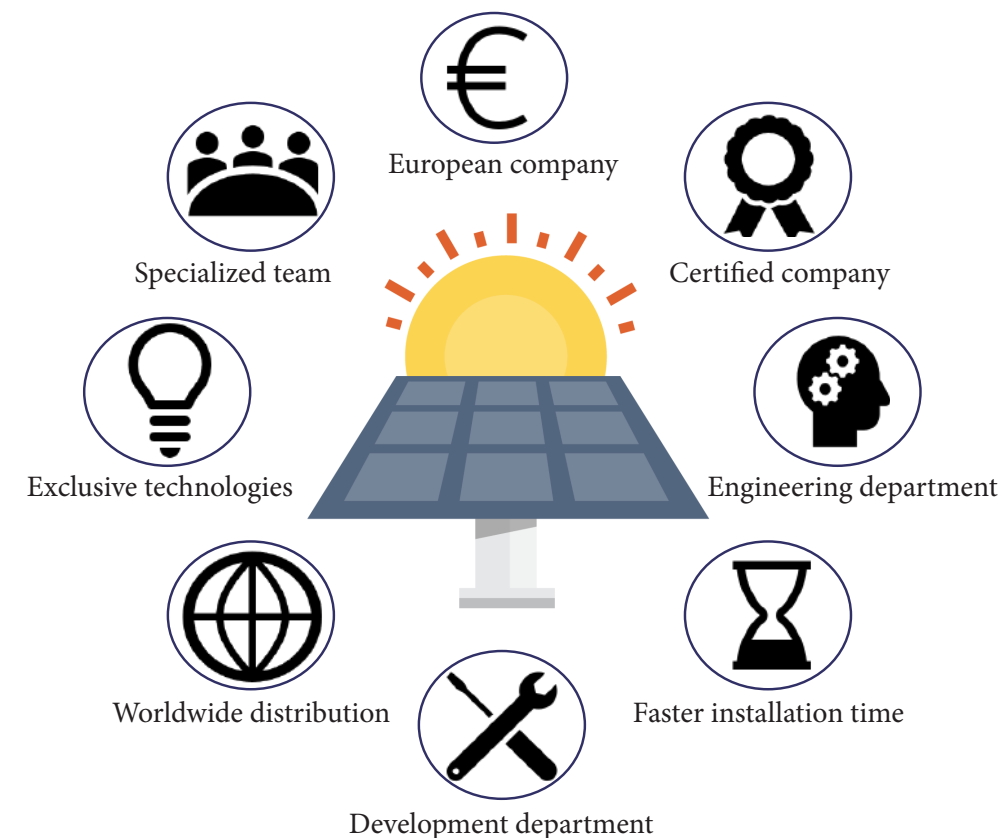
Our Value

Quality, innovation, sustainable and technological development, commitment and social responsibility.



Management
System
ISO 9001:2015

www.tuv.com
ID 9000000576



CARPORT

If you
can
dream it
you can
do it

**Watertight
version**

**Light or
heavy
vehicles**

**Electric
chargers**

**LED
Lighting**

**Single
carport**

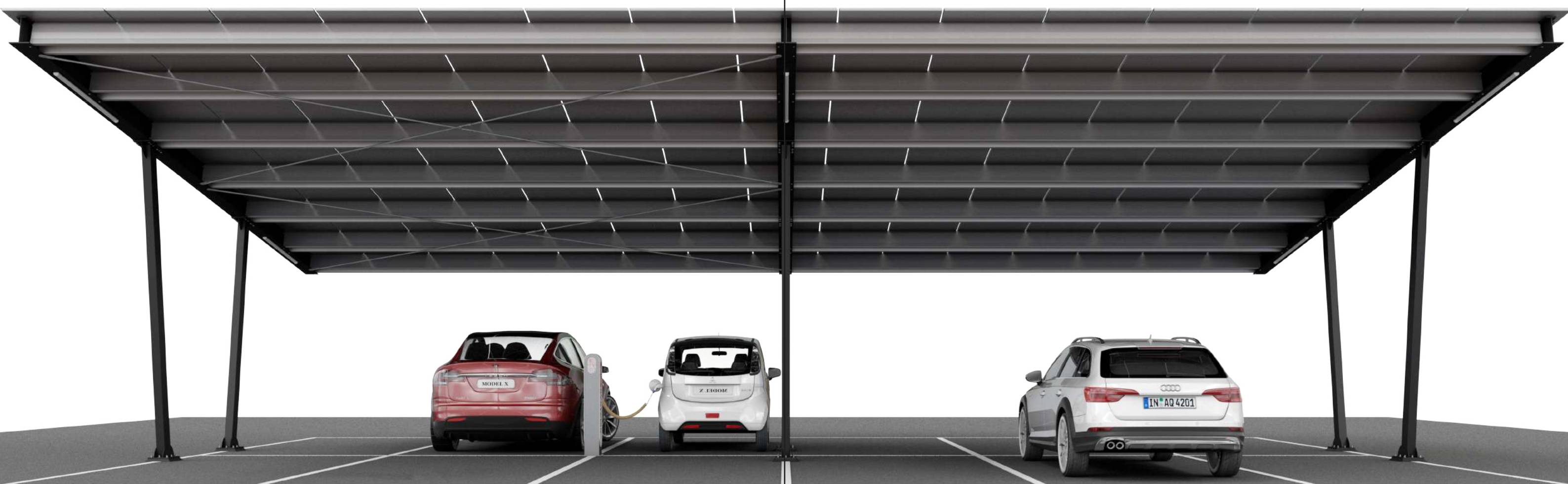
**Double
carport**

**5 years
warranty**

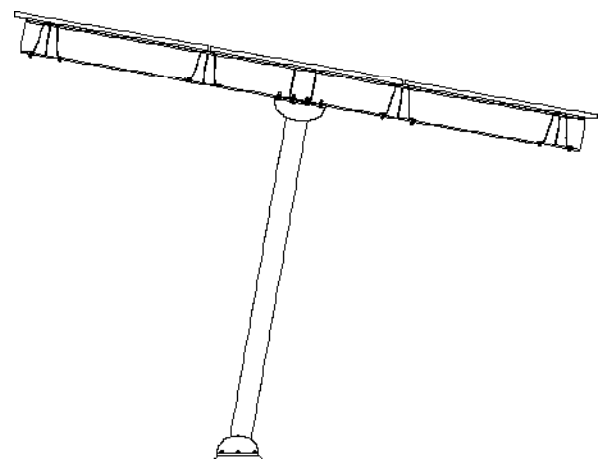
**Robust
and
safe**

At Energy Systems, we develop carport structures for any type of project and configuration, with CE Marking and following the Eurocode standard and rules the Carport brings together the use of sunshade product with the capaci-

ty to produce renewable energy; Excelent finishing and many color options; Standard or customized solution; Strengthens the image of sustainability; Extraordinary strength and reliability.



SINGLE CARPORT



Support
Distance:
5m or 7,5m

Roof:
4.90m

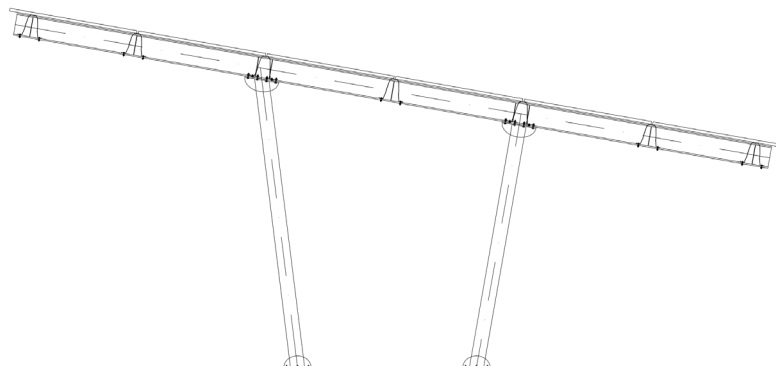
Minimum
Height:
2.6m up
to 5m

Modules:
3 in the
depth

Parking Spots



DOUBLE CARPORT



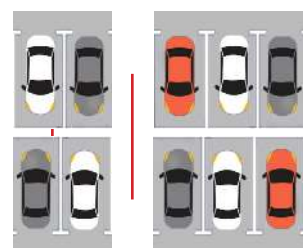
Roof:
9.85m

Modules:
6 in the
depth

Support
Distance:
5m or 7,5m

Minimum
Height:
2.6m up
to 5m

Parking Spots



Characteristics

Manufacturing warranty: 5 years;

Profile and flat products in steel S275 JR according to the standard En 10025-2;

Metal components according to the standards EN 1993-1-1: 2005 e EN 1993-1-8: 2005;

Anticorrosive treatment made by hot dip galvanisation and 20 years of warranty. Zinc Coating: average 93µm; Additional options of anticorrosive treatment and painting;

The structures were dimensioned according to the applicable standards and regulations, namely the Euro Codes 1, 2 and 3, RSAEEP, REBAP, REAE e a EN206-1;

Steel Purlin **300x2,5**

Steel pillars **180 x 100 x 6mm S275JRH**

Foundations structured with steel rod **M16**

Steel pipe beams **PRS200X15 250X8 + 100X15mm S275JR**

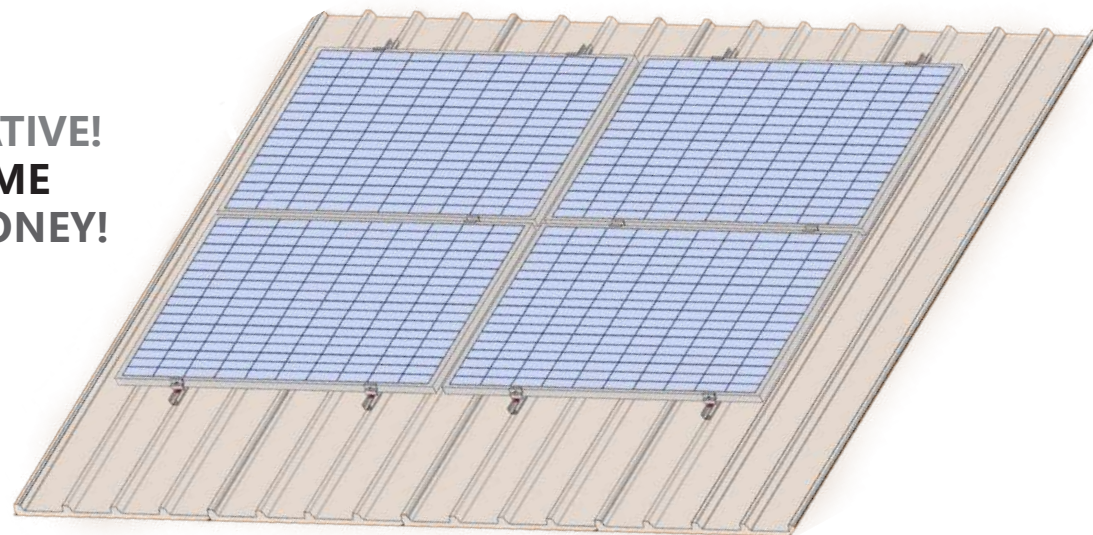


COPLANAR STRUCTURE



EASY PLAN 3M

**BE
INNOVATIVE!
SAVE TIME
AND MONEY!**



The Easy Plan 3M is the best option for photovoltaic installation! The assembly is easy and fast. You don't need to make any hole to fasten the mounting system, protecting the roof against leaks and infiltrations.

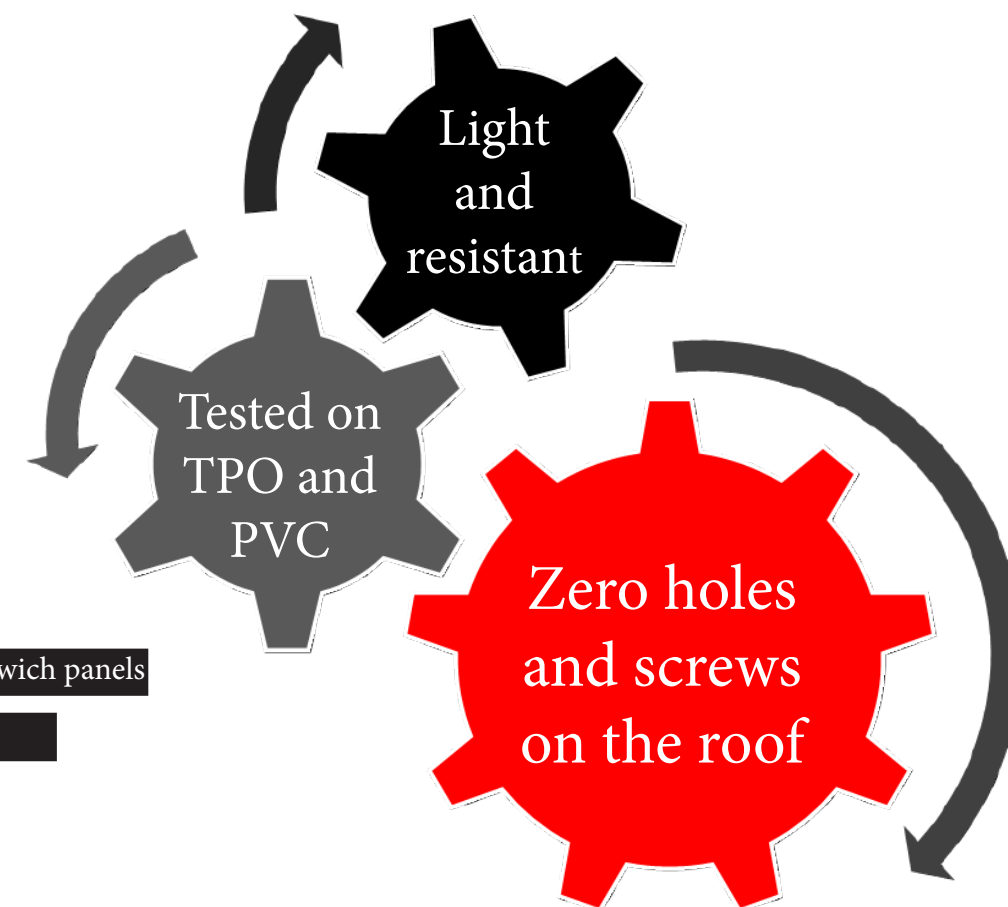
It is lighter and stronger than any rail fixed by screws. A tailor-made solution specially designed to install photovoltaic modules and cable trays on sandwich panel and metal roof.



**Length:
195mm**

**Weight
system:
0.55g/m²**

**Maximum
distance:
1,00m**



Adaptation to sandwich panels
and metal panels.

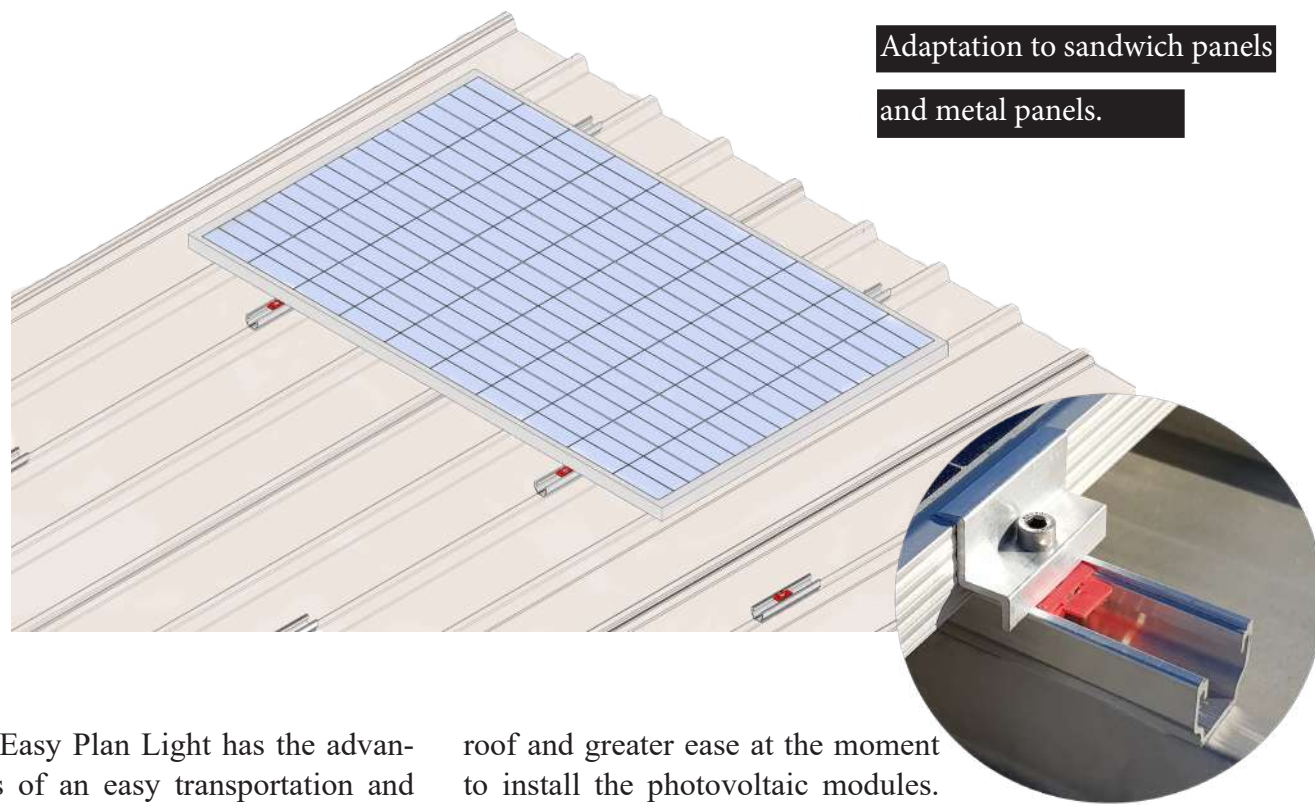
**15 years
warranty**

**Save
up to 30%
time**

**Up to
15%
cheaper**



EASY PLAN LIGHT



Adaptation to sandwich panels
and metal panels.

The Easy Plan Light has the advantages of an easy transportation and one of the best cost-benefit in coplanar solutions. Each piece has just 195mm, it means less weight on the

roof and greater ease at the moment to install the photovoltaic modules. The fixation is made by self-tapping screws with EPDM washer.

**Profile
Length:
195mm**

**Fast
assembly**

**Landscape
Orientation**

**Weight
system
0,55 Kg/m²**



EASY PLAN LIGHT BAR

Adaptation to sandwich panels
and metal panels.



The Easy Plan Light Bar has a fixation made by self-tapping screws. Snow load: 1 kN/m² for locations under 1.000 m above the sea level. Wind load: For a maximum height of 9m

and in type II exposure in compliance with Eurocode, maximum wind speed according to structure calculation. Roof top inclination for maximum up to 45°.

**Profile
Length
4.5m**

**Maximum
distance:
1,00m**

**Landscape
and
portrait**

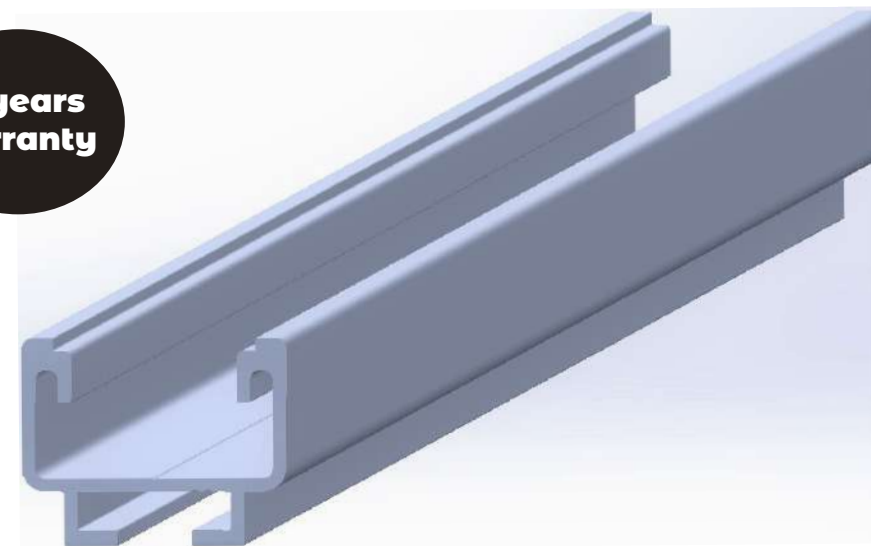
**Weight
system
1,38 Kg/m²**



Coplanar structure adaptation
to ceramics tiles.

EASY ROOF

**15 years
warranty**

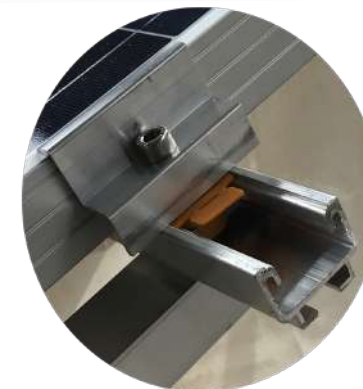


**Support
distance:
1.5m**

**Weight
system:
1.55km/m²**

**Inclination
angle:
0° to 35°**

The Easy Roof has a wind load for a maximum height of 9m and in type II exposure in compliance with Eurocode, maximum wind speed according to structure calculation, for maximum inclination up to 35°. Snow



load: 1 kN / m² for locations under 1.000 m above the sea level. Easy assembly structure with no need to drill or cut between every component that holds that same structure.



TRIANGULAR STRUCTURE



TRIANGLE



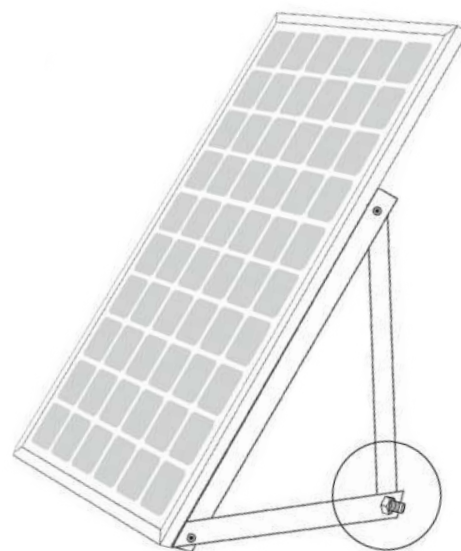
Produced in 4mm aluminium profile. It can be adapted to any situation, with various angle possibilities this type of structure is engineered to buildings up to 22m height.

**Strength
and
reliability**

**Inclination
angle: 1° to
35°**

**Warranty
15 years**

**Adaptable
to any
type roof**

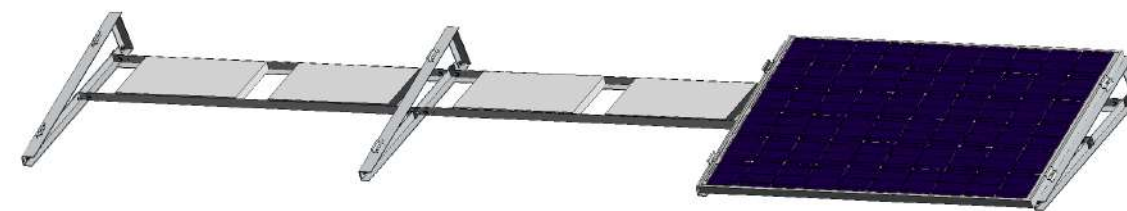


Configuration:

- * Single
- * Double
- * Triple
- * Tailor-made



BALLAST 3M



3M Science.
Applied to Life.™

A special mounting system fixed by bonding, ensuring total protection of the TPO membrane against leaks and infiltrations. Fixation made by bonding with the possibility to add concrete kerbs, according to the project requirements.

ding with the possibility to add concrete kerbs, according to the project requirements.

Landscape orientation

Inclination angle:
5° to 15°

Tested TPO/PVC membrane

Fixation: double sided tape
3m

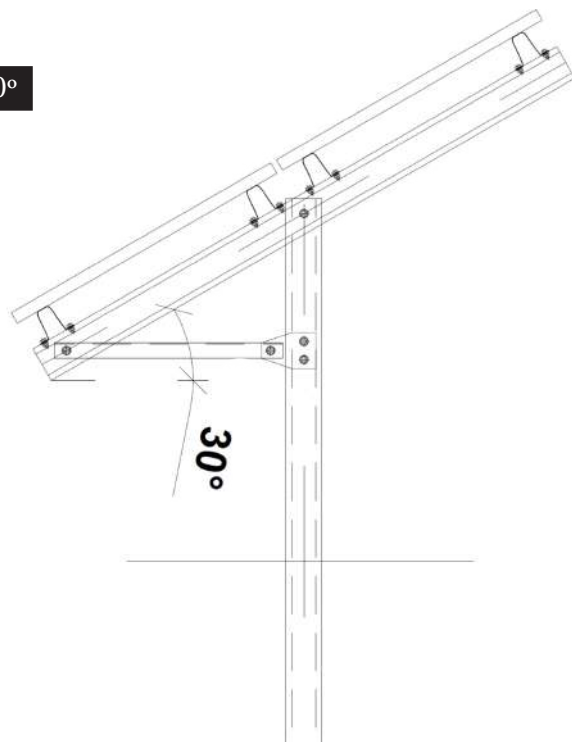


Thinking outside the box suggests coming up with new and innovative methods.

OTHER SOLUTIONS

GROUND MOUNTING

Inclination 30°



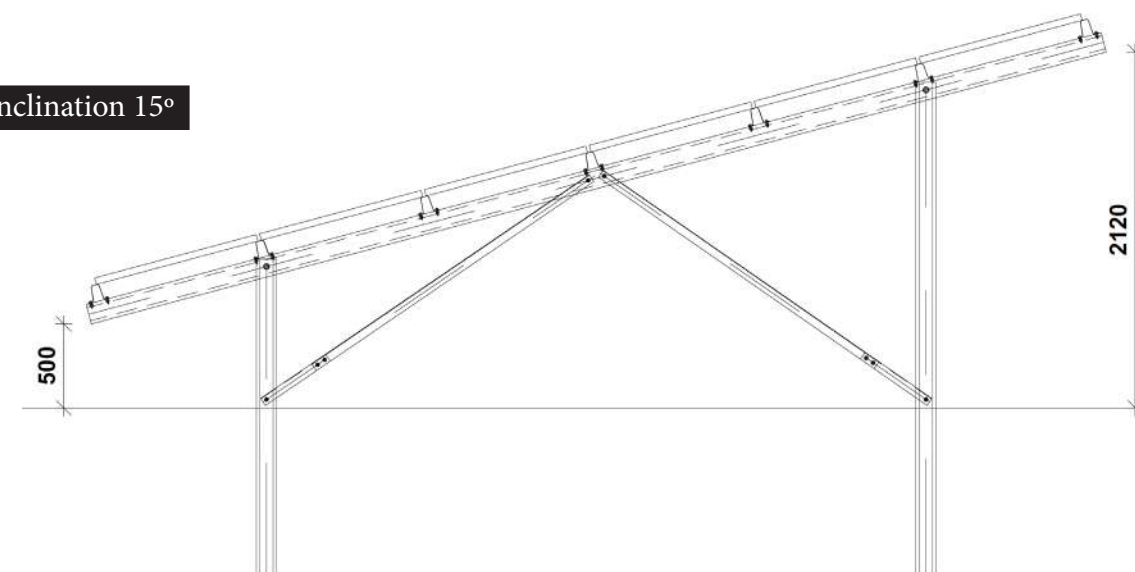
**Single
support**

Landscape

**2 Rows
of modules**

**Steel
S275JR**

Inclination 15°



**Double
support**

Landscape

**6 Rows
of modules**

**Steel
S275JR**





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