

### PROFILES, ACCESSORIES AND KITS FOR ALUMINUM STRUCTURES OF PHOTOVOLTAIC PANELS

- One of the most innovative and practical flat roof mounting system is the east-west orientation. Becoming an industry trend rapidly, these structures can squeeze in more rows and panels, and therefore generate a greater capacity than other south-north facing systems.
- They can be installed in two different angle inclinations such as 10 degrees or 12 degrees.
- The triangular supporting structure is made out of an aluminum "L" shaped profile with 50x50 mm dimensions (non-adjustable angle) which is very lightweight, ballast-optimized and makes the entire system very convenient and economic.

Our manufacturing capacity is not only limited producing this standard solar structure for flat roof but also gives the customer freedom to customize its own product including their specific drawings and requests regarding the triangle structures, profiles and accessories, technical properties and to reach needed static requirements.







## PRODUCTION CYCLE













5





0





## ALUMINIUM SUPPORTING STRUCTURES FOR PHOTOVOLTAIC SYSTEMS

#### The production cycle of this product consists in:

- Extrusion of profiles- Aluminum profiles production in extrusion presses
- Cutting and working center process- Cutting of aluminium profiles according to the dimensions and designs and processing in working centers.
- 4 Aluminium accessories manufacturing- production of the accessories through processes such as milling, drilling, turning, threading and adjusting.
- 4 Anodizing of aluminum profiles and accessories- surface treatment with anodizing
- Sembling- Assembly of modules and kits to be installed as per customised design
- Quality Control
- Packaging and storage
- Transport















## PESP/LUMIN

# ALUMINUM MOUNTING STRUCTURES FOR EAST-WEST PHOTOVOLTAIC SYSTEMS

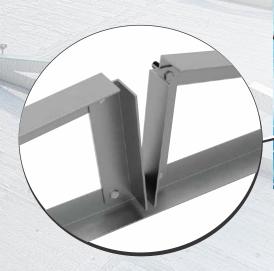
The reason why solar arrays that are situated east-west are becoming an industry trend rapidly, is because these structures can squeeze in more rows and panels, and therefore a greater generation capacity than other south-north facing systems.

They can be installed in two different angles such as 10 degrees or 12 degrees.

The designs and sizes can be tailored to meet customized project needs.

As a material, aluminum alloy will ensure that this roof solar mount project will be longlasting, durable, easy to install, maintenancefree, and cost-effective

The on-roof system is by far the most prevalent type of solar panel installation. It is completed with connecting profile and accessories used for holding PV panels and also in the form of preassembled kits for holding panels.





The manufacturing and production cycle of aluminium profiles and accessories for the supporting structures of the photovoltaic panels that are placed on flat roofs is:

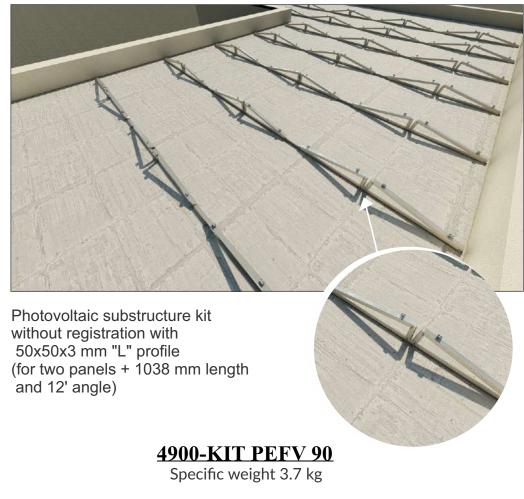
- Extrusion of aluminum profiles
- Cutting according to the required dimension and processing in the work center
- Production of accessories with automatic mechanical processes such as: drilling, milling, threading
- Surface treatment with anodization
- Packaging
- Logistics

The unified capacity of production units, combining with closed-cycle production processes, offers the possibility of realizing large projects in due time and with maximum flexibility.

## **KITS**

Photovoltaic substructure kit

without registration with



1082

0ç 1048

17

50x50x3 mm "L" profile (for two panels +1038 mm length and 10' angle)

17

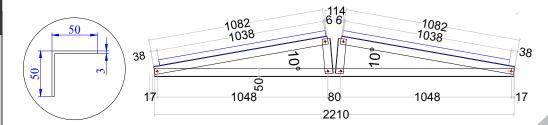
1082 1038

1048

74

2204

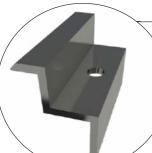
**4900-KIT PEFV 92** Specific weight 3.59 kg





#### 4900-PE-2613/360

Aluminium solar "L" component with cutting 360 mm with 2 holes Ø 11mm used to connect 2 kits at the base



#### 4900-PEGA-MBA-2673/60

Aluminium end clamp for solar panel fixing 60 mm length, available for various panel thickness



#### 4900-PEGA-MBA-2673-60/V

Aluminium end clamp 60 mm length, available for various panel thickness, with stainless steel M8 bolt and nut



#### 4900-PEGA-MBA-2673-60-V+PSR68

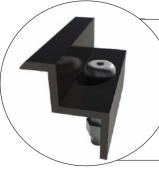
Aluminium end clamp 60 mm length available for various panel thickness with slot nut





#### 4900-PEGA-MZI-2673/60

Black aluminium end clamp for solar panel fixing 60 mm length, available for various panel thickness



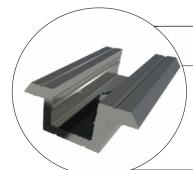
#### 4900-PEGA-MZI-2673-60/V

Black aluminium end clamp 60 mm length, available for various panel thickness, with stainless steel M8 bolt and nut



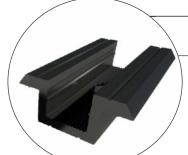
#### 4900-PEGA-MZI-2673-60-V+PSR68

Black aluminium end clamp 60 mm length available for various panel thickness with slot nut



#### 4900-PEGA-MBA-2679/60

Aluminium mid clamp for solar panel fixing 60 mm length, available for various panel thickness



#### 4900-PEGA-MZI-2679/60

Black aluminium mid clamp for solar panel fixing 60 mm length, available for various panel thickness



#### 4900-PEGA-MBA-2679-60/V

Aluminium mid clamp 60 mm length, available for various panel thickness, with stainless steel M8 bolt and nut



#### 4900-PEGA-MZI-2679-60/V

Black aluminium mid clamp 60 mm length, available for various panel thickness, with stainless steel M8 bolt and nut





#### 4900-PEGA-MBA-2679-60-V+PSR68

Aluminium mid clamp 60 mm length available for various panel thickness with slot nut

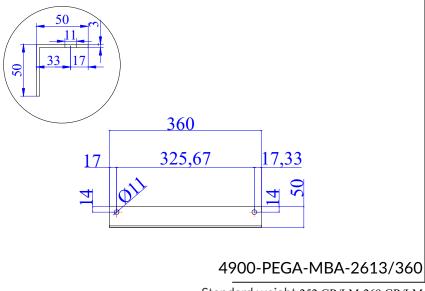


#### 4900-PEGA-MZI-2679-60-V+PSR68

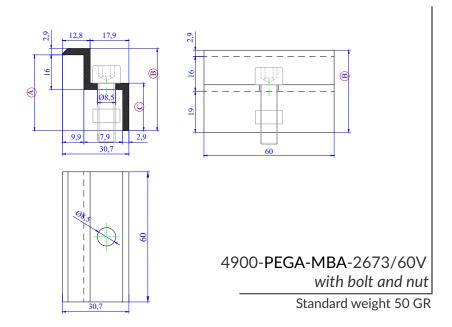
Black aluminium mid clamp 60 mm length available for various panel thickness with slot nut

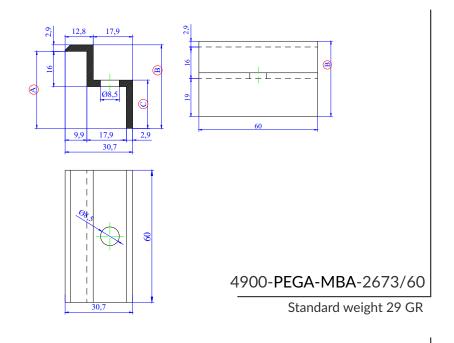
#### **Technical additional information**

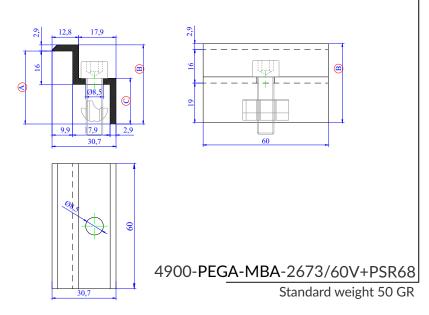
- ♦ System of aluminium and profiles: For trapezoidal sheet metal roof or sandwich panel
- Raw material: Primary aluminium alloy 6060/6063-Provided in: Mill finished, natural anodized and black anodized surface
- Fixing type: Mounting with screws on the trapezoidal sheet or sandwich panel

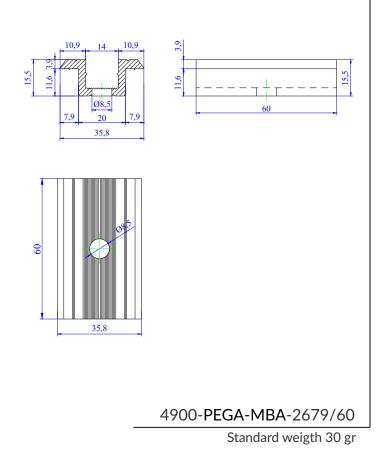


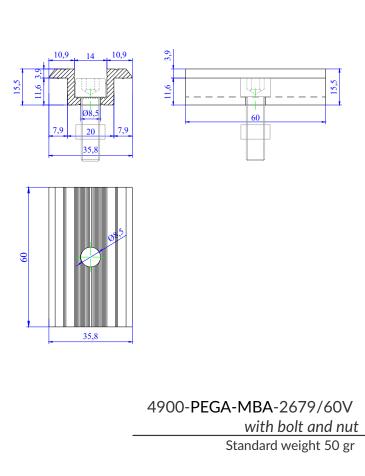
Standard weight 252 GR/LM-269 GR/LM

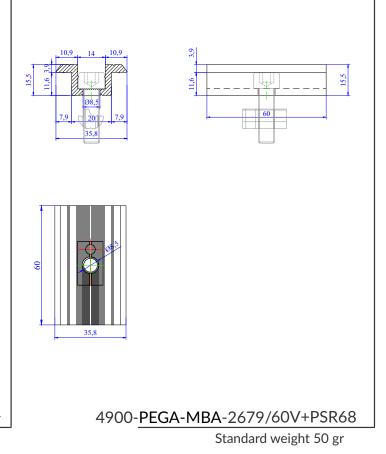














#### Our activity, services and products are certified for:

- ✓ Design, production and trade of aluminium shapes and accessories for civil and industrial applications. ventilated facades systems, handrails, shutters, fences, sunbreakers and components of interior and exterior furnishings systems
- Design, production and trade of aluminium structures for solar panels.
- Design, production and trade of precast aluminium structures for the construction of civil and industrial accommodation modules and relative assembly.

#### QUALANOD LICENCE FOR ARCHITECTURE ANODISING

PESPA ALUMIN is authorized to use the quality sign, according to the regulations for the use of the quality label for ARCHITECTURAL ANODIZING

#### QUALANOD LICENCE FOR INDUSTRIAL ANODISING

PESPA ALUMIN is authorized to use the quality sign, according to the regulations for the use of the quality label for INDUSTRIAL ANODIZING.

#### ISO 14001:2015 - ENVIRONMENTAL MANAGEMENT SYSTEM

Pespa Alumin has implemented and maintains an environmental system which fullfills the requirements of the standard in all the operative units.

#### ISO 45001:2018 - HEALTH AND SAFETY MANAGEMENT SYSTEM

Pespa Alumin has implemented and maintains in compliance with the standard for its activity.

#### ISO 9001:2015 - QUALITY MANAGEMENT SYSTEM

Pespa Alumin is a certified organisation which fullfills the requirements of the standard.

#### CE EN 1090-1:2009+A1:2011

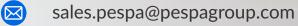
In compliance with Regulation (EU) No. 305/2011 of the European Parliament this certificate applies to the construction product: Structural components and kits for aluminium structures

## STANDARD EN 1090-1 / EN 1090-3 CERTFICATE: WELDED ALUMINIUM COMPONENTS FOR STRUCTURAL WORKS Standard – technical requirements - EN 1090-1 / EN 1090-3 Execution class(es) - EXC1; EXC2; EXC3; EXC4 Method(s) CE

marking – 2; 3a; 3b Welding process(es) - 131; 141 EN ISO 4063 Parent material(s) - Groups: 23.1 ISO/TR 15608







Website: www.pespagroup.com

0 Address: Lagjia 14, Shkozet Durres, Albania

Pespa Alumin Pespa Alumin