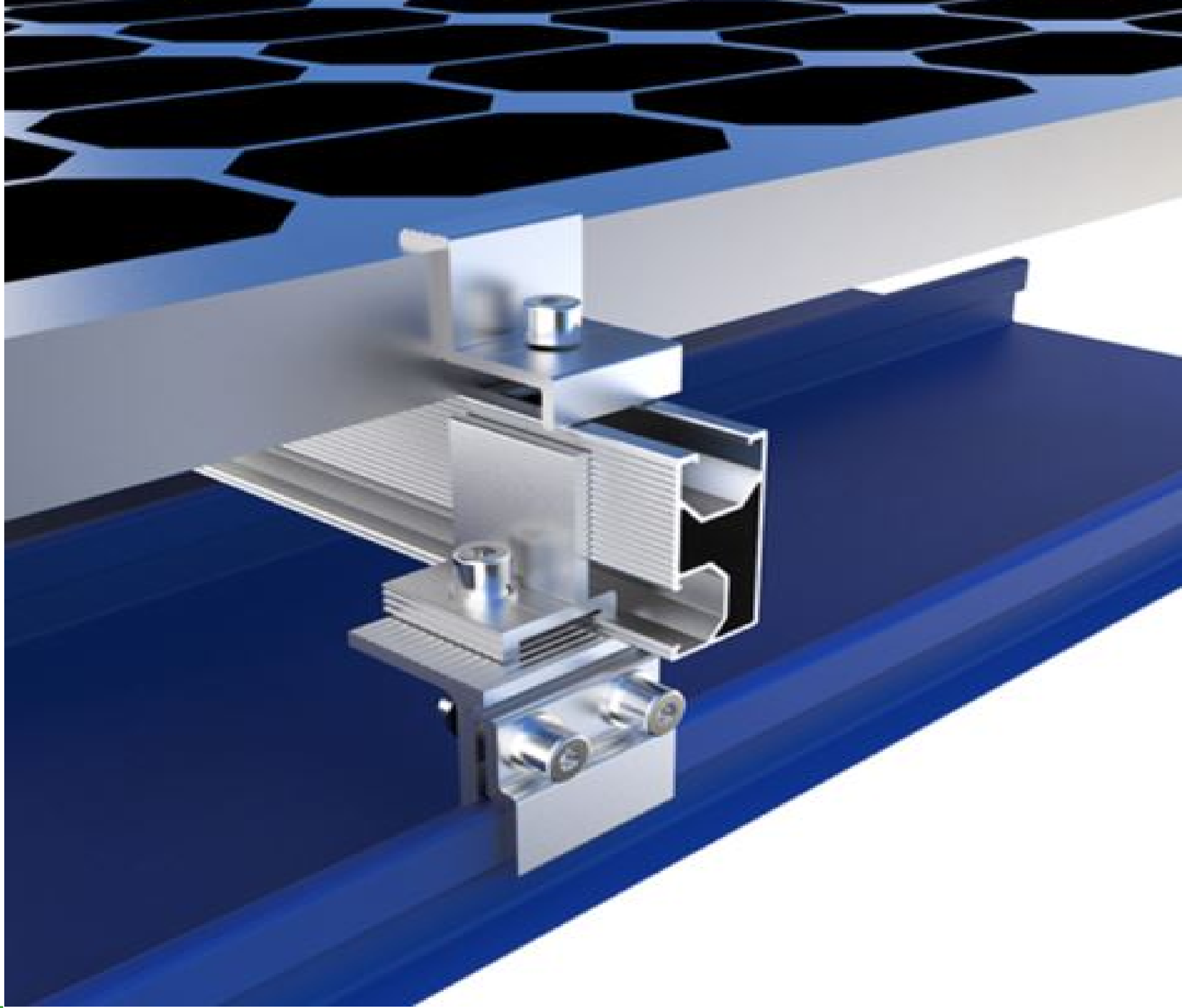
ALUMSOLAR PV ENGINEERING CO.,LTD



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M: +86 186 021 756 88
E: info@alumsolar.com
W: https://alumsolar.wixsite.com/alumsolar

ALUMSOLAR

Solar mounting system

international shipments

FROM 2012 ALUMSOLAR

company events

2012

Incorporation of Alumsolar

Being awarded as mounting system supplier and solution provider for 20MW Grounded Solar Farm in Qinghai, 20MW Solar System for roofs in Australia and 4MW Grounded solar farm in Japan.

2013

Obtained ISO9001 and annual volume reaches 80MW

explored Counter Weighed aluminum mounting system for America

2014

obtained CE certification, and Japan branch office is incorporated in Kobe

developed solar mounting system market in UK and annual volume hits 100MW

2015

obtained CSA certification for North America

2016

Solar PV System integration division is incorporated and signed supply agreements with many domestic EPCs. Annual volume hits 160MW

Singapore branch office is incorporated and explored South Asia market with annual volume 20MW

2017

annual volume hits 240MW and developed Middle East and South America Makrets

"TOP WORKMANSHIP
RELIABLE PERFORMANCE
PROFESSIONAL ENGINEERING."

table of contents

Mounting System Solution Provider

Alumsolar

Alumsolar Pv Engineering Co.,Ltd, was established in 2012, with a registered capital of RMB 2 million, focusing on the development and fabrication of solar mounting system with value added technical services

Quality is our culture in Alumsolar.

Alumsolar Pv Engineering Co.,Ltd was established in 2015, with a registered capital of RMB 2 Million, focusing on the development and fabrication of solar PV mounting systems with value added technical services.

Provides all kinds of solar mounting bracket in Alumsolar. One of market leader for solar mounting structure Since 2000. With 2 factories 5000 workers and more that 10000 solutions, Professional produce and design, ensure that the best solutions suit to each clients` projects.

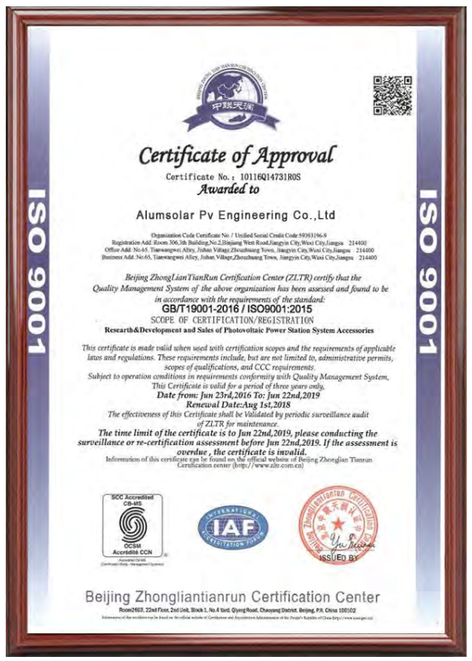
High-quality, innovative, strong and extremely flexible in terms of application – these are the features of the ALUMSOLAR’ s PV mounting systems. Whether you need steel or high-strength aluminum, an individual mounting profile or a small fastening screw – everything we offer has to meet requirements that are not merely high, but the very highest.

Designed for a service life of at least 25 years of perfect functionality, even in extreme conditions. For flat roofs, pitched roofs, solar parks and carports. For large scale solar farms, we can also take care of designing, calculating and supervising complete solar and photovoltaic plants. From the soil investigations and calculation of all structural analyses to site design, logistics and a version which is ready to release and transfer to the customer.
The company has built a strong manufacturing capacity and complete industrial chain system, after years of accumulation and precipitation, with research and innovation as a source of power, and constantly promotes product upgrading; we gather a wide range of customer resources at domestic and abroad.

In China, we work closely China State Power, Huaneng Energy, Zhonghang Power, CSIC, Trina Solar, Canadian Solar, etc. Overseas, our mounting systems are installed for IKEA, Pepsi, etc., we have customers worldwide, including Japan, Singapore, Philippine, Indonesia, India, Middle East, North and South America, etc.
At present the company’ s annual production of 500MW solar racking capacity, and provide design and development, as well as some customized technical services for domestic and oversea customers.

cetificates

CE Certificate



ISO 9001 Certificate

CSA Certificate

ISO9001

As the international standard that specifies requirements for a quality management system (QMS). Organizations use the standard to demonstrate the ability to consistently provide solar mounting structure products and services that meet customer and regulatory requirements.

CE marking with European standard

CE marking is a certification mark that indicates conformity with health, safety, and environmental protection standards for solar mounts sold within the European Economic Area. The CE marking is also found on solar mounts sold outside the EEA that are manufactured solar mounts in, or designed to be sold in, the EEA.

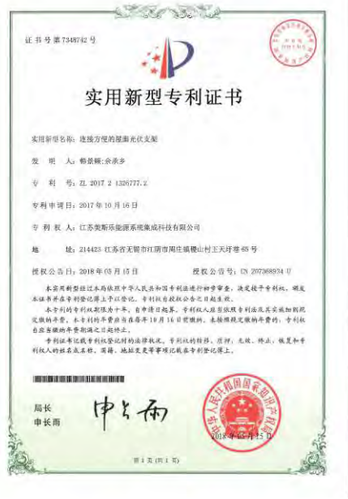
GSA

CSA International (Canadian Standards Association), a member of the CSA Group, is a provider of solar mounts testing and certification services for electrical, a variety of other products. Recognized in the U.S., Canada and around the worldS., Canada and around the world

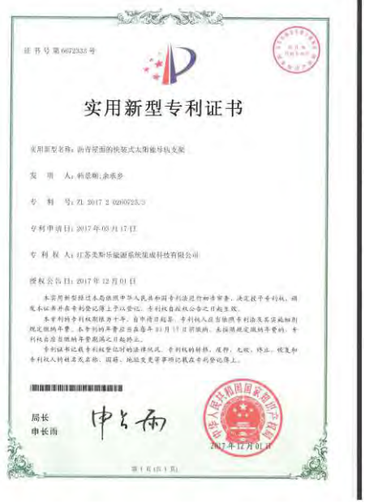
Patent for Fast Installation Mounting System

Patent for Wind Load Reducing Mounting System

Patent for Leakage Free Mounting System



Patent for Easy Connection Mounting System

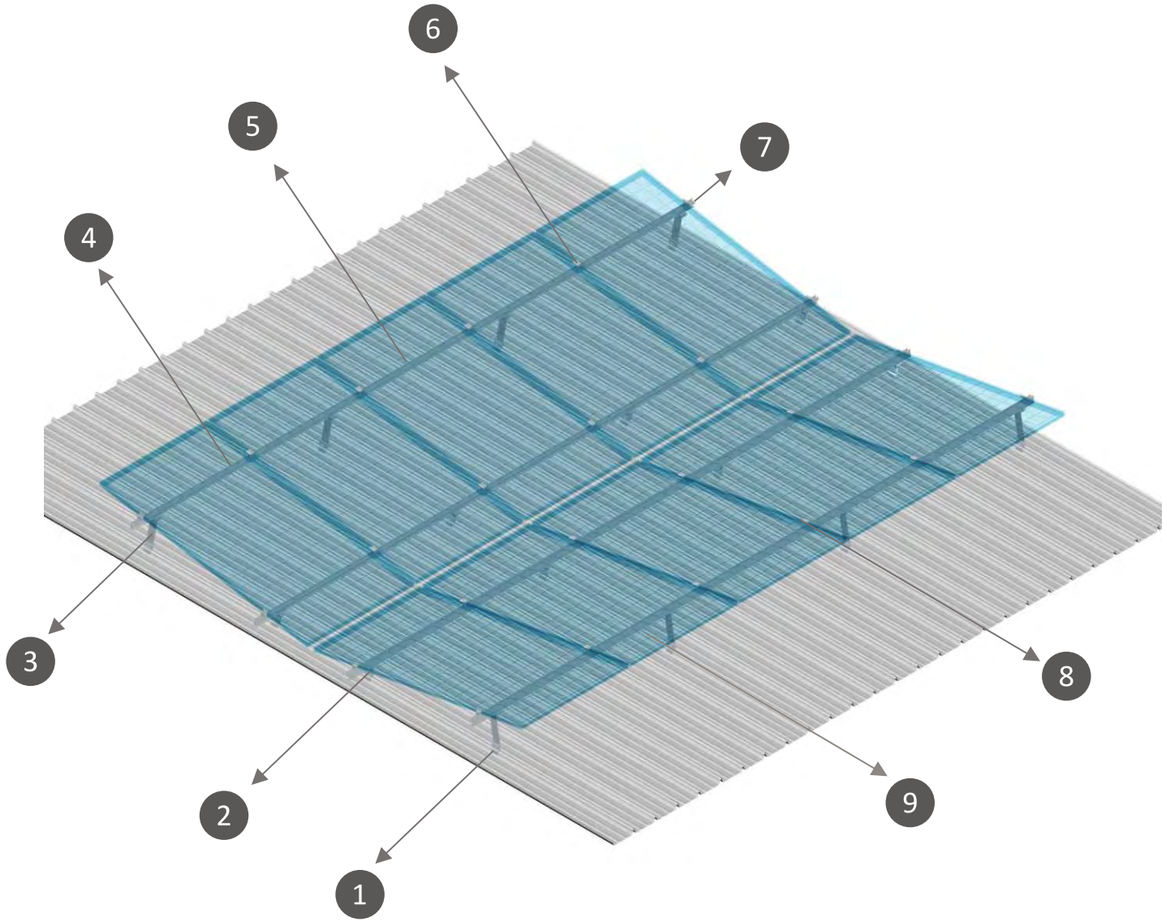


Patent for Quick Installation Mounting System

Alumsolar is Certified and Honored!

Metal Roof Solution M2

Module has angles to the Roof Proifile 5° / 10° / 15°



1  Fixation Part

2  L Feet

3 Rail

4  Rail Joiner

5  Mid Clamp

6 End Clamps

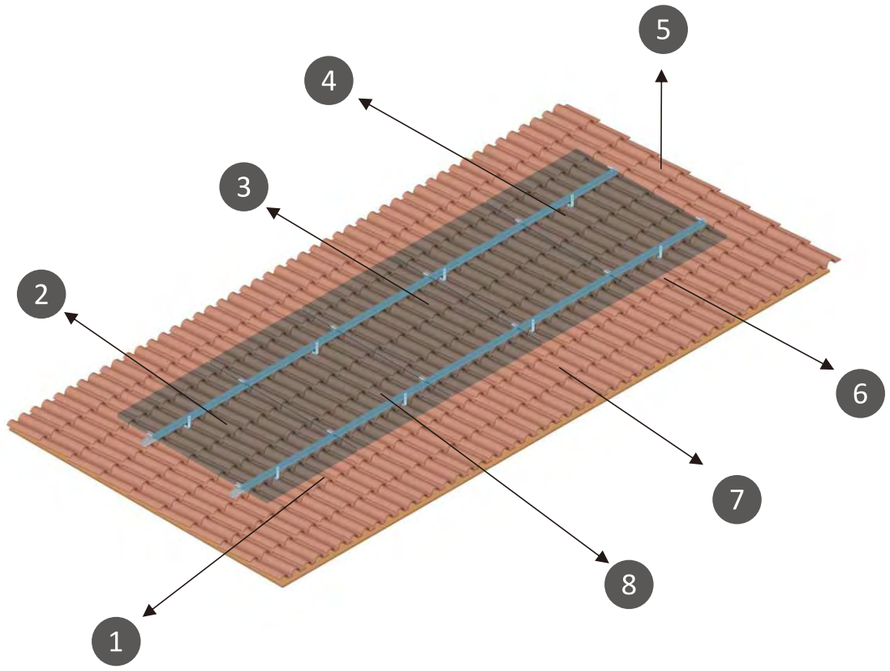
7  Weed Washer

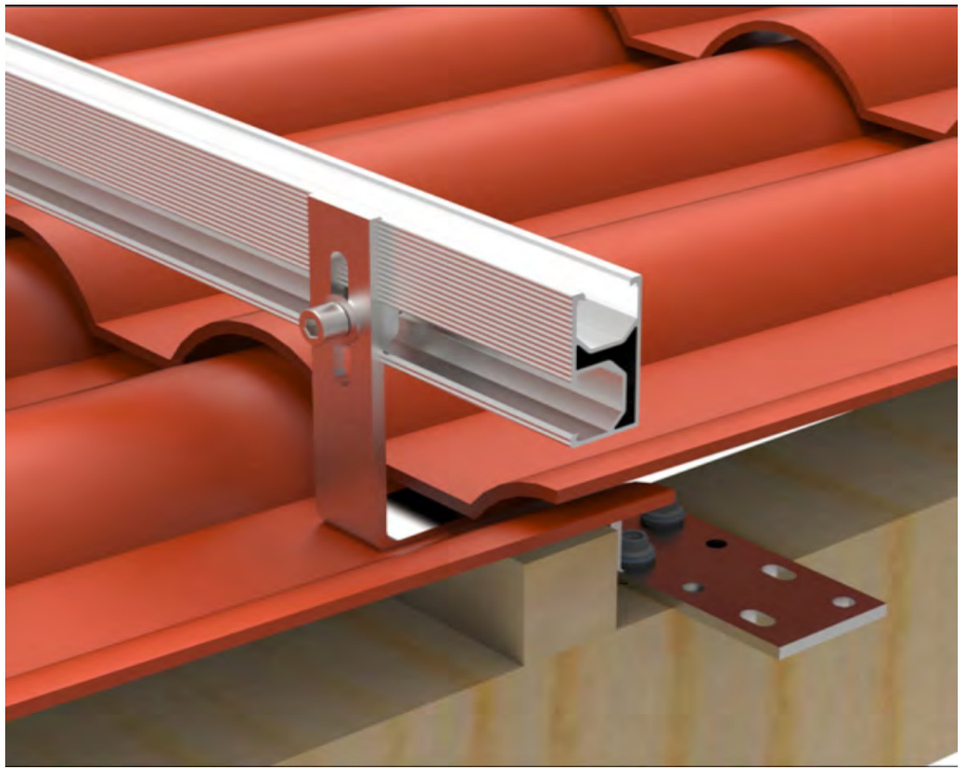
8  Grounding Lug

9  Solar Module

Tile Roof Solution

Module follow Roof Profile 0°





1  Hook

2 Rail

3  Rail Joiner

4  Mid Clamp

5  End Clamps

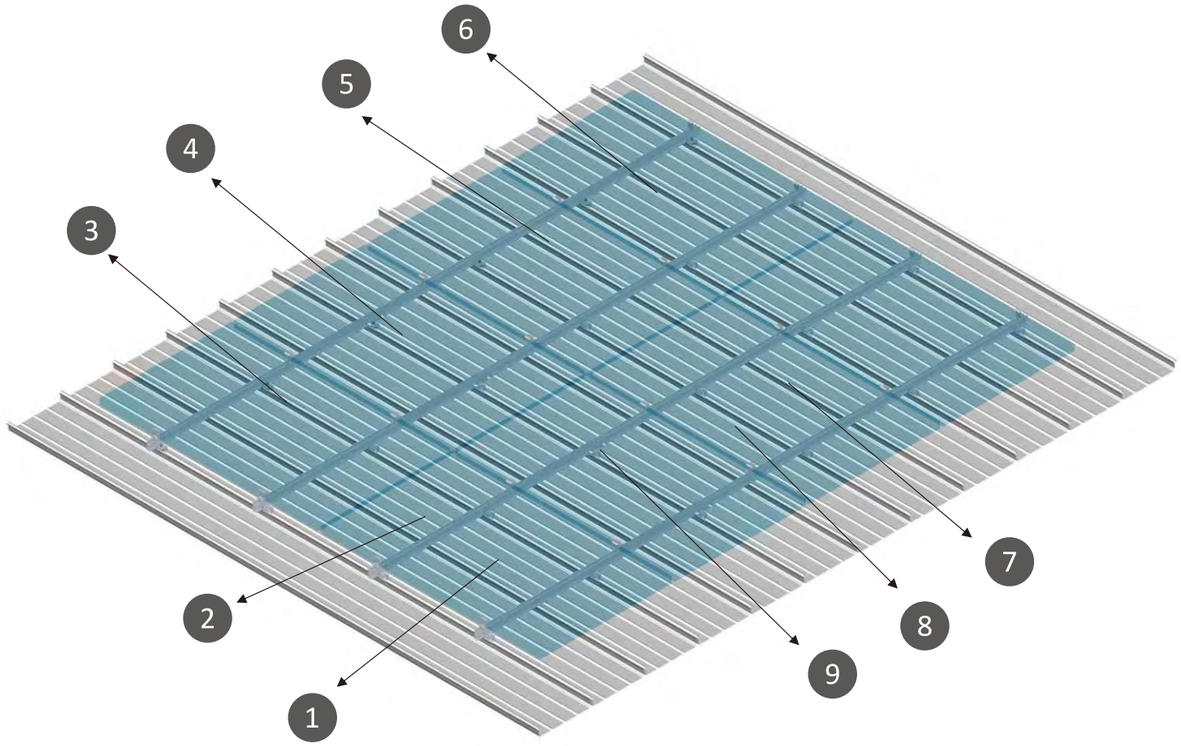
6  Weed Washer

7  Grounding Lug

8  Solar Module

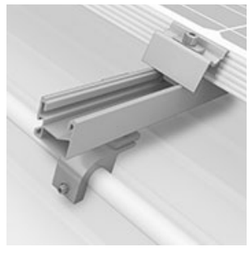
Metal Roof Solution M1

Module follow Roof Profile 0°



1	Fixation Part	2	L Feet
3	Rail	4	Rail Joiner
5	Mid Clamp	6	End Clamps
7	Weed Washer	8	Grounding Lug
9	Solar Module		

Seam Clamp

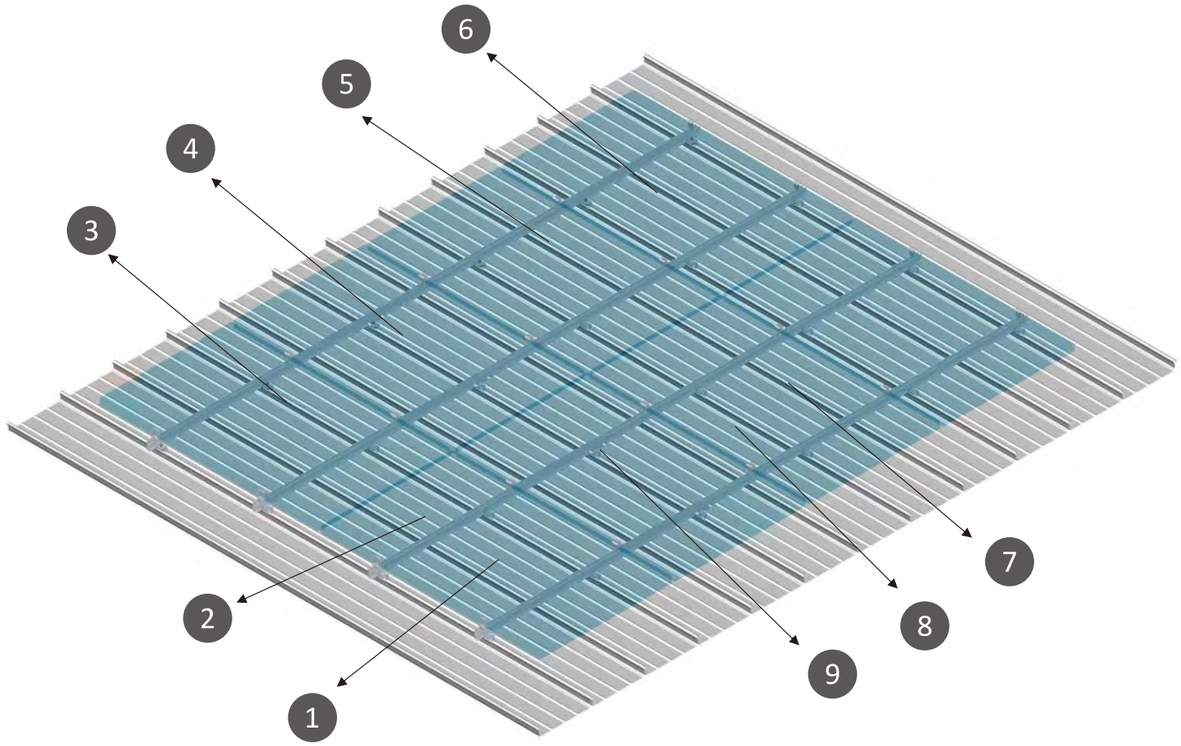


Rail with Cable Tray

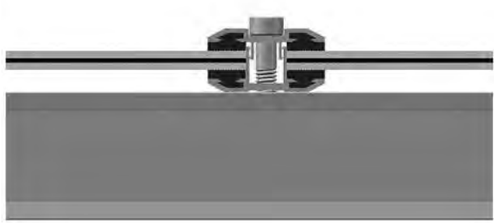
Standing Seam Type

Metal Roof Solution M2

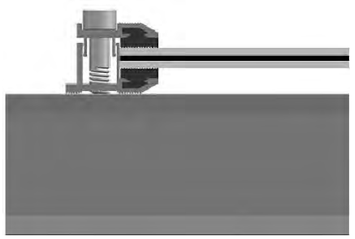
Module follow Roof Profile 0° Thin solar panels installation



1	Fixation Part	2	L Feet
3	Rail	4	Rail Joiner
5	Mid Clamp	6	End Clamps
7	Weed Washer	8	Grounding Lug
9	Solar Module		



Mid/inter clamp fixed thin solar panels

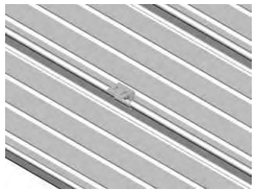


End clamp fixed thin solar panels

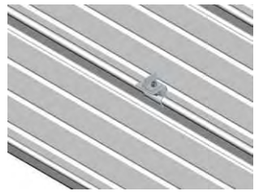
Metal Roof Solution

Simple Installation Process

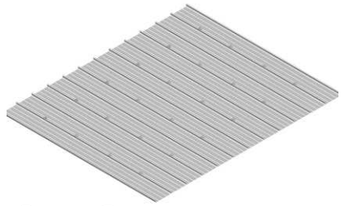
<M1>



Step 1:
Identify the location for the 1st clamps as specified in the drawing and fix the clamp on the metal roof



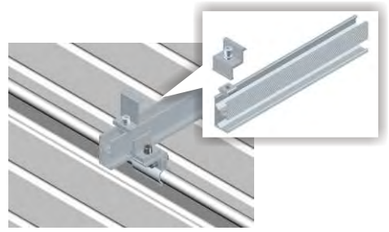
Step 2:
Mount the rail clip on the seam clamp (not tighten)



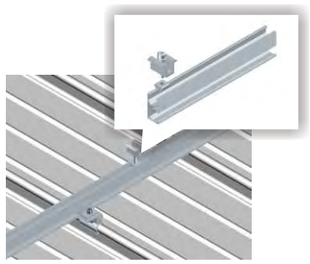
Step 3:
Repeat the process and spread the fixation parts all over the roof with locations as specified in the drawing

Step 4:
Secure the rails on the seam clamp and tighten the rail clip

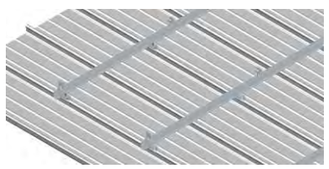
Step 5:
connect the rails and repeat the process, lay all the rails on the roof



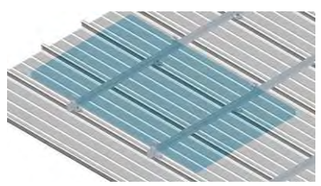
Step 6:
Fix the 1st end clamp as location specified in the drawing and do not tighten it



Step 7:
Fix the 1st Mid clamp with weed washer as location specified in the drawing and do not tighten it

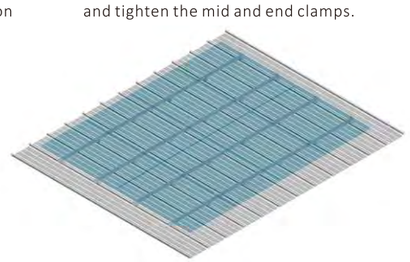


Step 8:
Fix all the other mid and end lamps for the 1st module installation

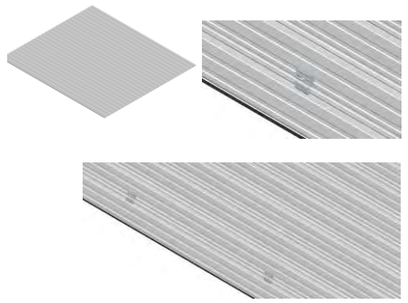


Step 9:
Mount the 1st Module on the rail and tighten the mid and end clamps.

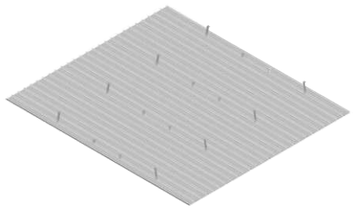
Step 10:
repeat the process and complete all installations.



<M2>



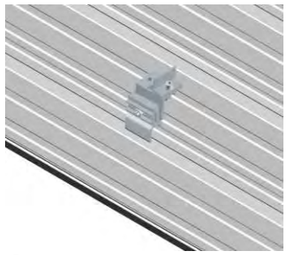
Step 1:
Identify the location for the front leg as specified in the drawing and fix the clamp on the metal roof
Identify the location for the rear leg as specified in the drawing and fix the clamp on the metal roof



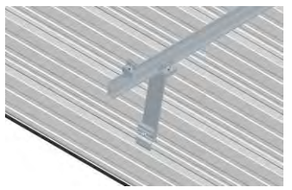
Step 4:
Repeat the process and spread the fixation parts all over the roof with locations as specified in the drawing

Step 7:
Repeat the process and spread it over for all the legs on the roof

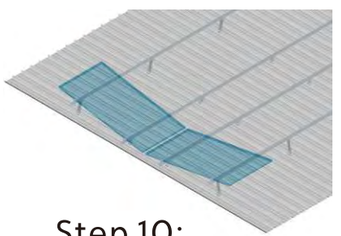
Step 2:
Fix the front leg on the seam clamp



Step 5:
Fix the rail clip on the front leg but not tighten it



Step 8:
Fix the 1st end clamp as location specified in the drawing and do not tighten it

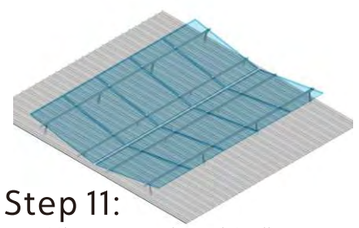


Step 10:
Mount the 1st Module on the rail and tighten the mid and end clamps.

Step 3:
Fix the rear leg on the seam clamp

Step 6:
Fix the rail clip on the rear leg but not tighten it

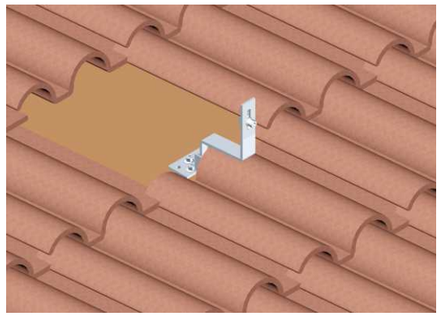
Step 9:
Fix the 1st Mid clamp with weed washer as location specified in the drawing and do not tighten it



Step 11:
repeat the process and complete all installations.

Tile Roof Solution

Simple Installation Process

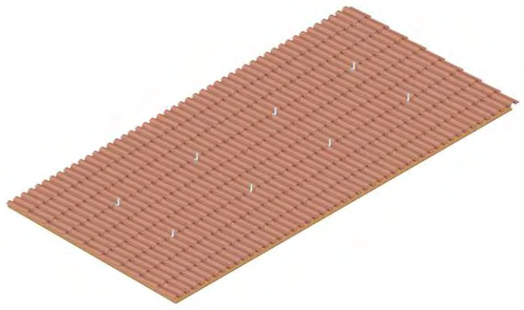


Step 1:

Identify the 1st hook location as specified in the drawing, remove a few pieces of tiles and mount 1st hook

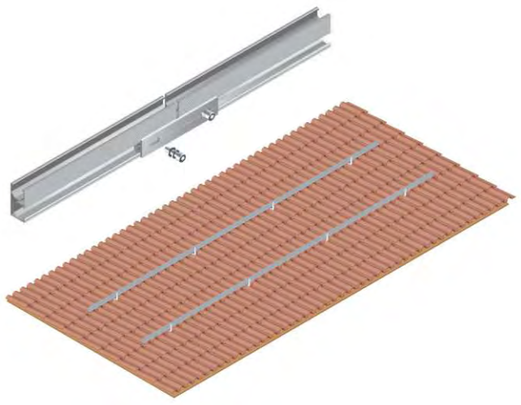
Step 2:

Re-instate the Tiles



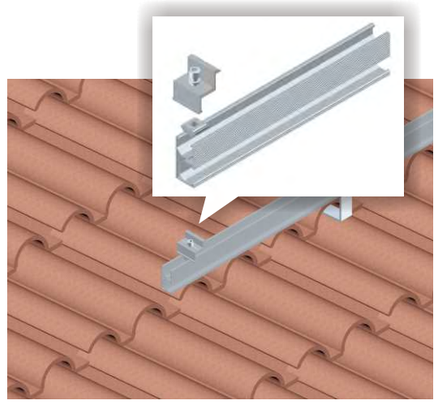
Step 3:

Mount all the hooks with spacing as specified in the drawing with good alignment



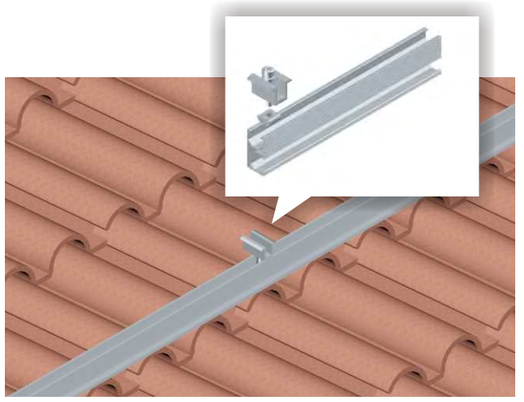
Step 4:

Secure the rail on the hooks



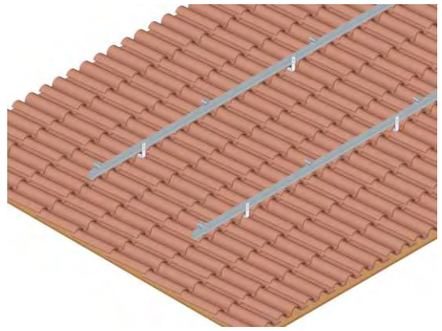
Step 5:

Fix the 1st end clamp but not tighten at location as specified in the drawing



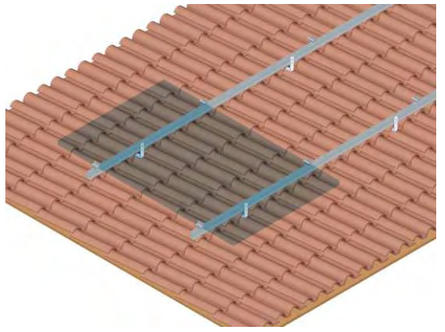
Step 6:

Fix the 1st mid clamp but not tighten at the location as specified in the drawing



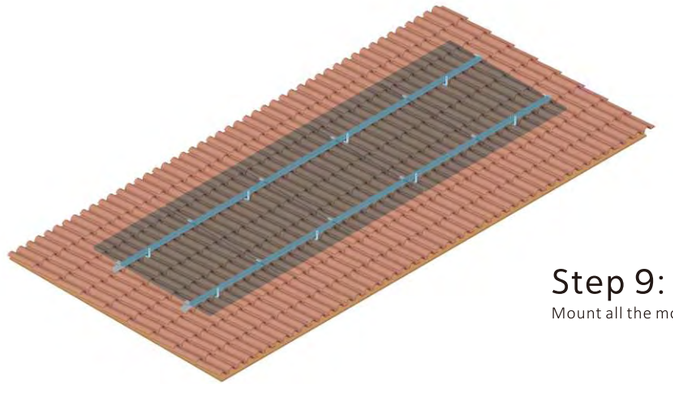
Step 7:

Fix but not tighten all the end and mid clamps



Step 8:

Mount the 1st module and tighten the screws with specified torques

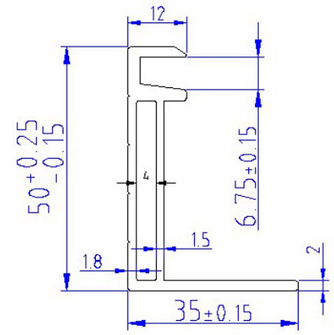


Step 9:

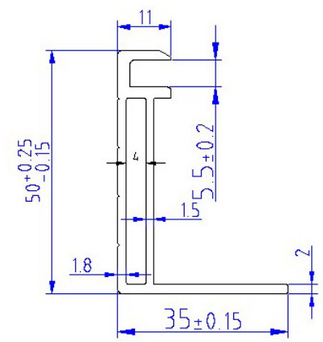
Mount all the modules

Aluminum Frame for Solar Module

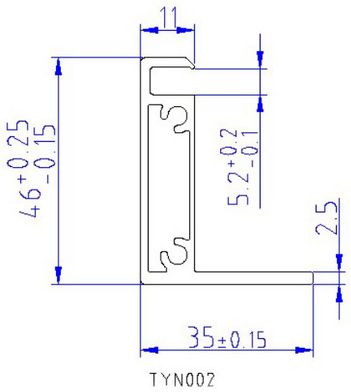
Customed section and dimension



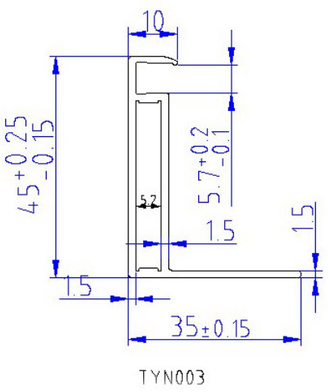
XL015A



XL015



TYN002

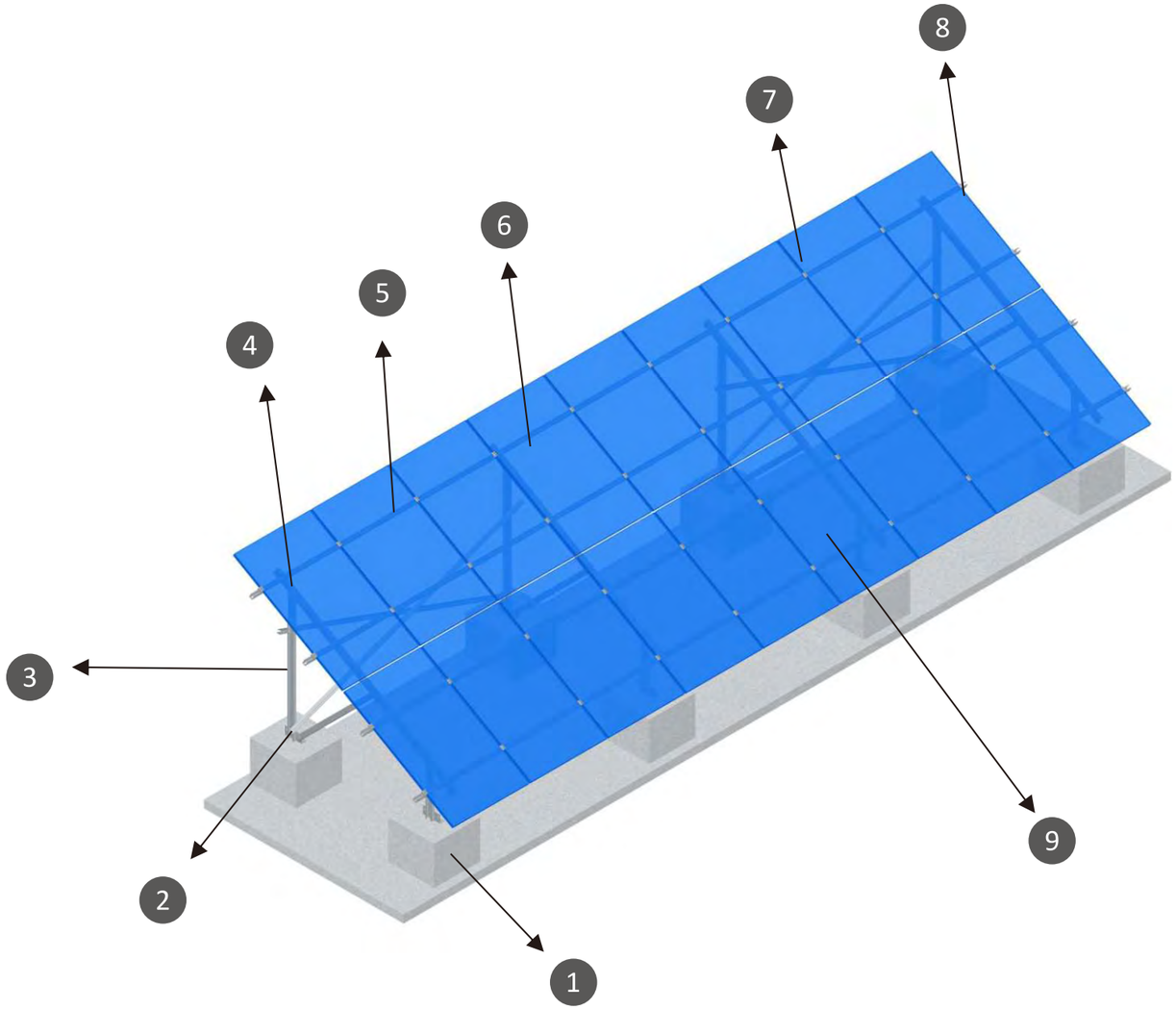


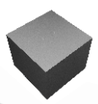
TYN003

* material: aluminum 6063-T5 /6005-T5
* Dimension: 1950, 1650, 992, custom
* CNC: 45 degree
* accessories: L feet

RC Roof Solution

Traditional 10° / 20° /30°+



1  Pre-cast Concrete Stump

2  Fixation Plate

3  Vertical Pole

4  Main Beam

5 Rail

6  Rail Joiners

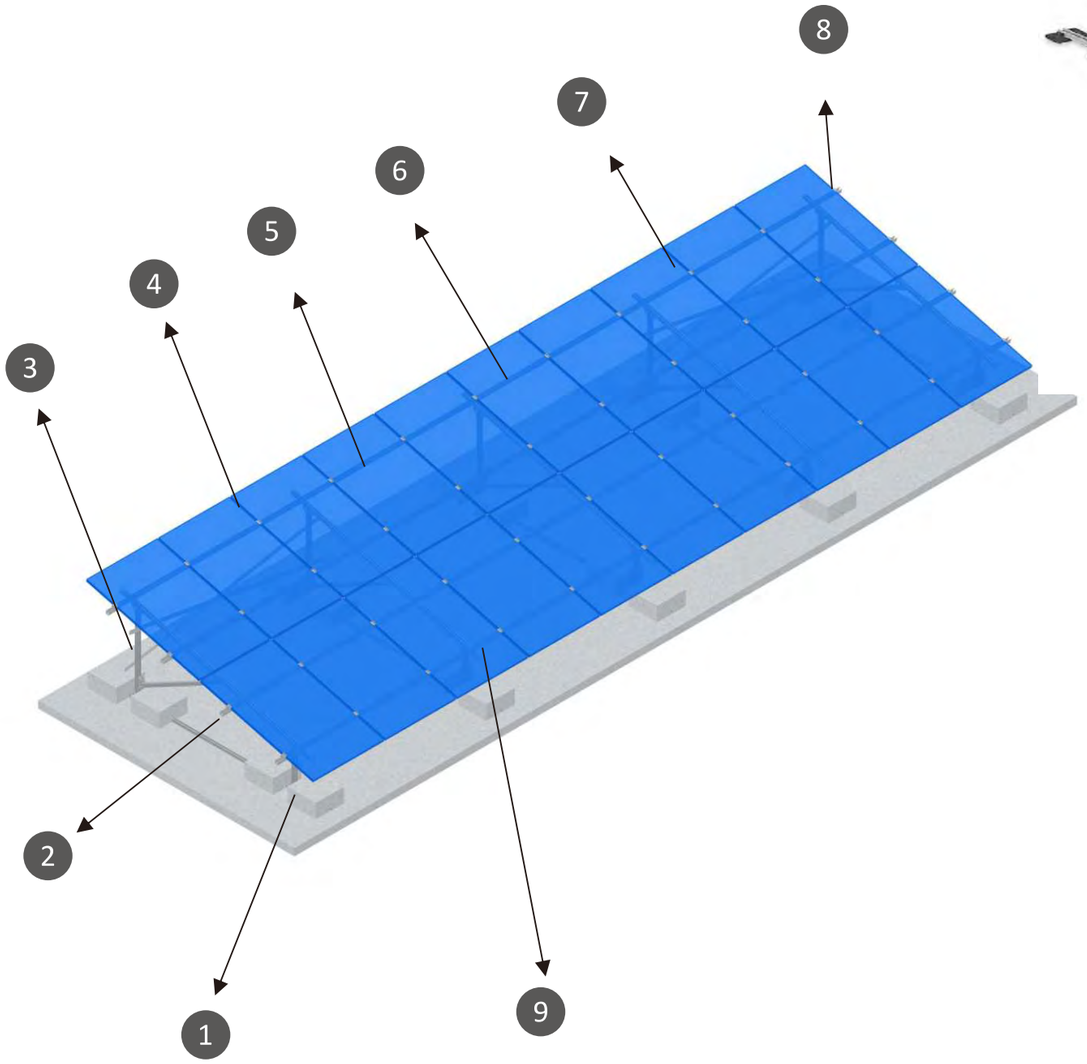
7  Mid Clamp

8 End Clamp

9  Solar Module

RC Roof Solution

Counter Weighed 10° / 20° /30°+



1 Sit-on Concrete Stumps

2 Base Rail

3 Vertical Pole

4 Main Beam

5 Rail

6 Rail Joiners

7 Mid Clamp

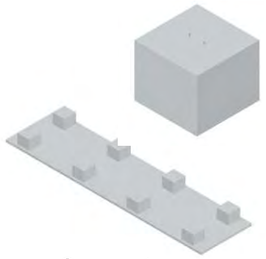
8 End Clamp

9 Solar Module

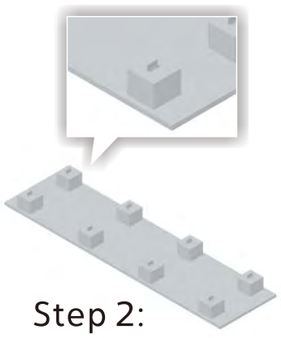
RC Roof Solution

Simple Installation Process

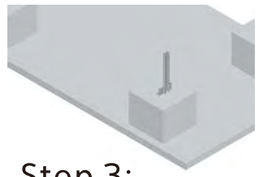
<RC01>



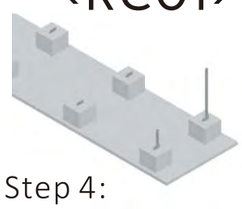
Step 1:
Identify the location for 1st concrete stump and cast the stumps as indicated in the planning drawing



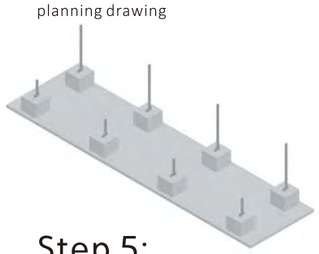
Step 2:
Place fixation plate on the cast concrete stumps



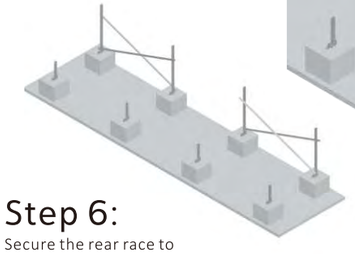
Step 3:
Mount the front pole on the concrete stump



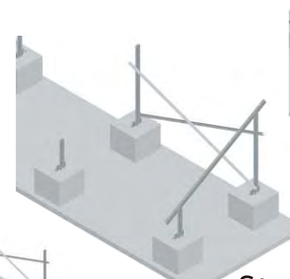
Step 4:
Mount the rear pole on the concrete stump



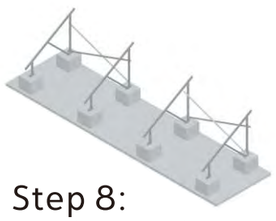
Step 5:
Repeat the process to all concrete stumps as positioned in the drawing



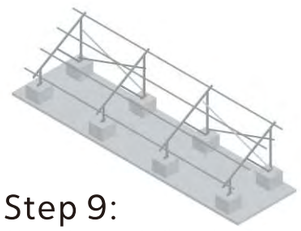
Step 6:
Secure the rear race to increase the strength



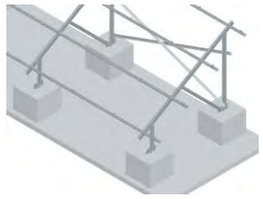
Step 7:
Mount the main beam and side brace



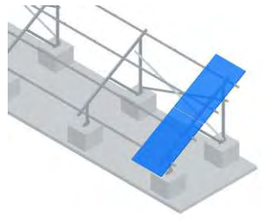
Step 8:
Repeat the process and mount all main beams and side braces



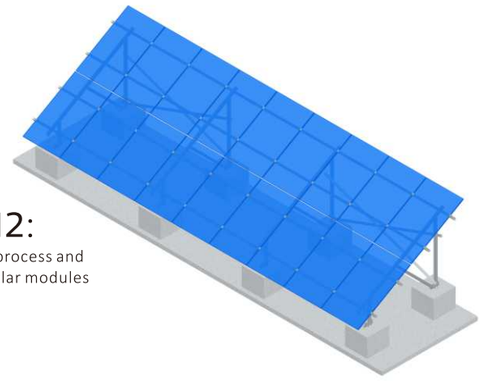
Step 9:
Mount the normal rails on the main beam



Step 10:
Mount the end and mid clamps but not tightening them



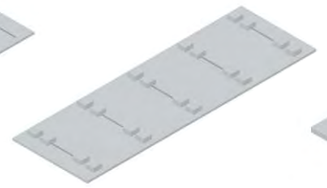
Step 11:
Mount the solar modules on the rails



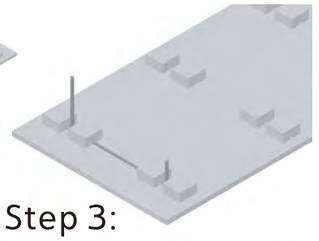
Step 12:
Repeat the process and mount all solar modules

<RC02>

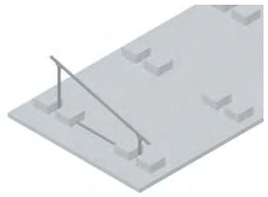
Step 1:
Identify locations for base rails and lay all the base rails according to the space design of the drawing



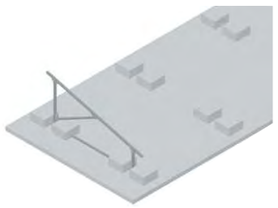
Step 2:
Place all concrete stumps on the base rails



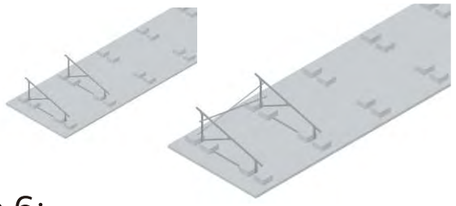
Step 3:
Mount all front and rear poles at positions specified in the drawing



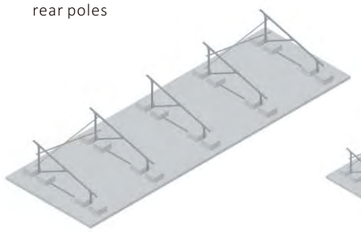
Step 4:
Fix the main beam with front and rear poles



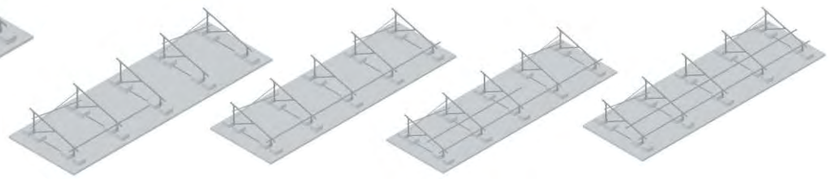
Step 5:
Secure the side brace



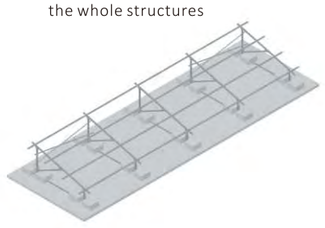
Step 6:
Repeat the process and fix the rear braces between rear poles to increase the structural strength



Step 7:
Repeat the process and complete the whole structures

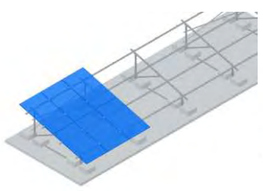


Step 8:
Install the rails above the main beams and join the rails in diagonal direction



Step 9:
Repeat the process and mount all the rails

Step 10:
Install the rails above the main beams and join the rails in diagonal direction

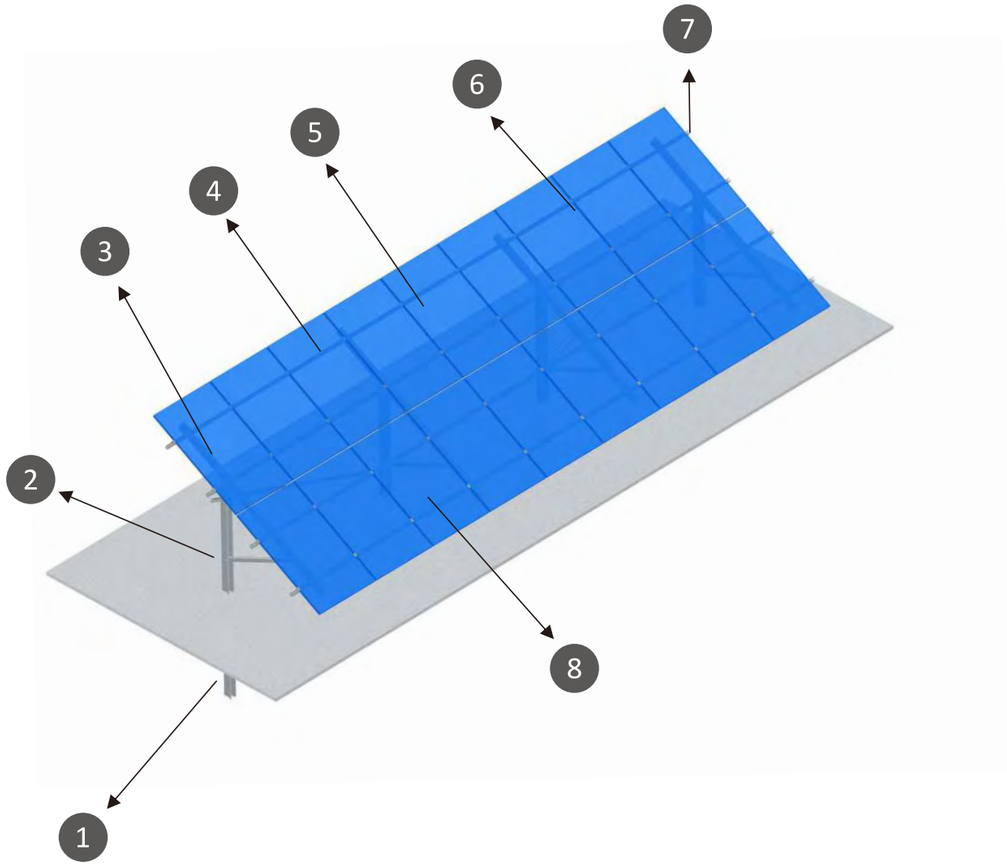


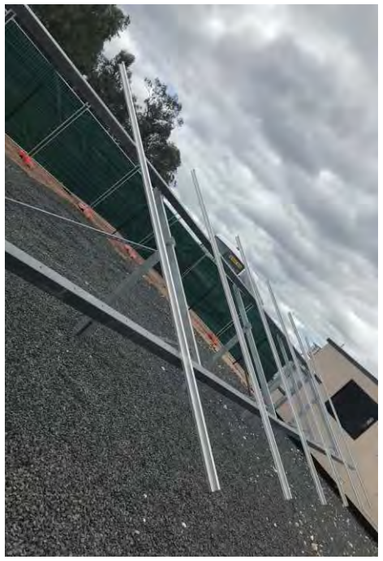
Step 11:
Mount the solar modules on the rails

Step 12:
Repeat the process and mount all solar modules

Ground Mounted Solar Racking

Type A: 10° / 20° /30°+





1 Main Pole underground

2 Main Pole aboveground

3 Main Beam

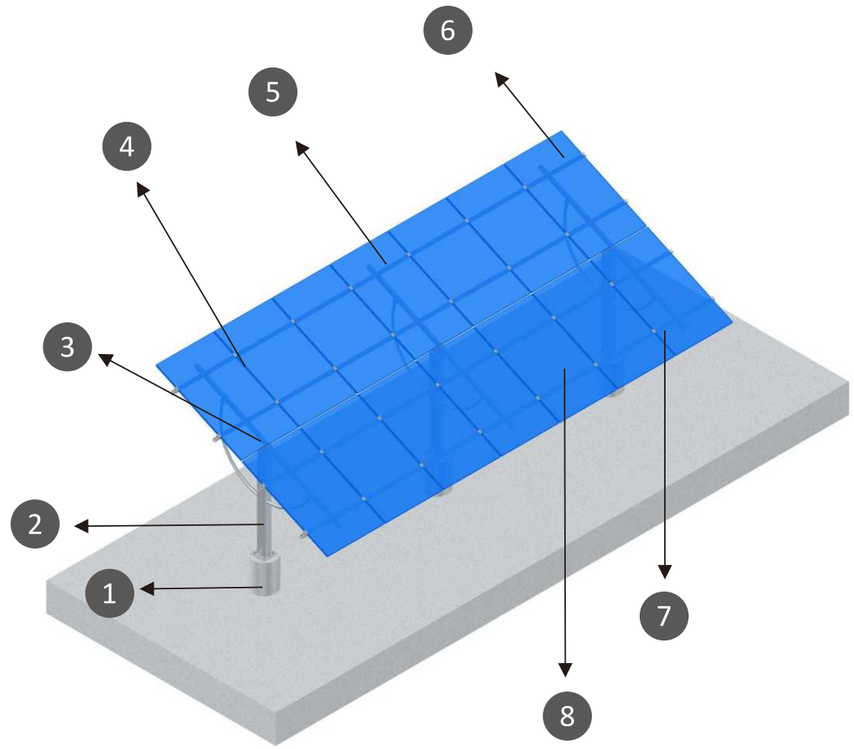
4 Rail

5 Rail Joiners

6 Mid Clamp

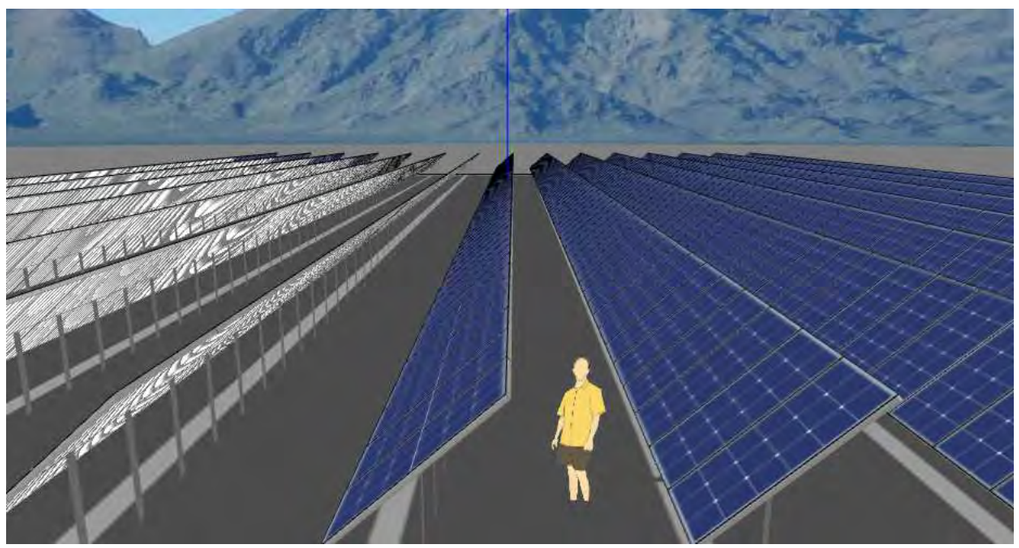
7 End Clamp

8 Solar Module



Ground Mounted Solar Racking

Type B: 10° / 20° /30°+



1 Main Pole underground

2 Main Pole aboveground

3 Main Beam

4 Rail

5 Rail Joiners

6 Mid Clamp

7 End Clamp

8 Solar Module

Ground Mounted Solar Racking

Simple Installation Process

‹G01›

Step 1:
Identify the location for 1st main pole and install the pole according to the drawing

Step 2:
Install all the poles at locations as specified in the planning drawing

Step 3:
Mount the main beam with side support on the main pole

Step 4:
Repeat the process and complete the 2nd pole structure

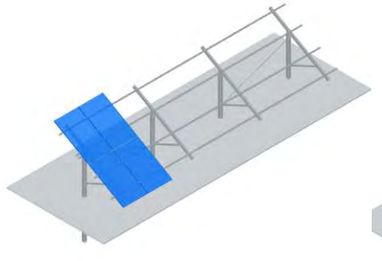
Step 5:
Secure the rear brace and increase the structural strength

Step 6:
Repeat the process and mount all pole structures with layout designed in the drawing

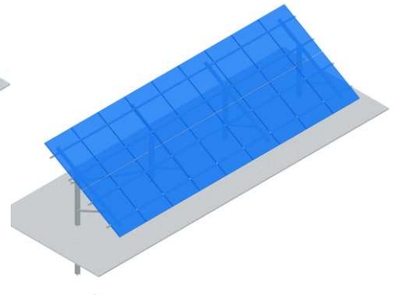
Step 7:
Secure the normal rail on the main beams

Step 8:
Repeat the process and mount all the rails

Step 9:
Mount the end and mid clamps but not tightening them



Step 10:
Mount the solar modules on the rails



Step 11:
Repeat the process and mount all solar modules

‹G02›

Step 1:
Identify the location for 1st main pole and install the po according to the drawing
re

Step 2:
Install all the poles at location as specified in the planning drawing

Step 3:
Mount the main beam with side support on the main pole

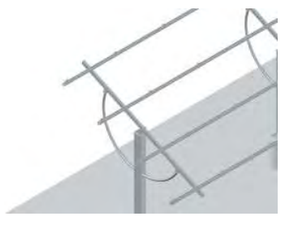
Step 4:
epeat the process and complete
he main structure

Step 5:
Mount the adjustable structure with main beam on the main pole

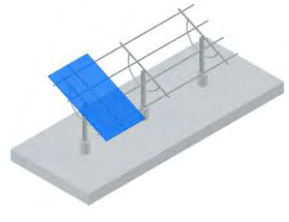
Step 6:
Repeat the process and complete the full adjustable structure installation

Step 7:
Secure the normal rail on the main beams

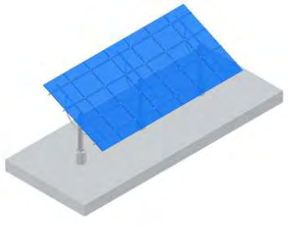
Step 8:
Repeat the process and mount all the rails



Step 9:
Mount the end and mid clamps but not tightening them

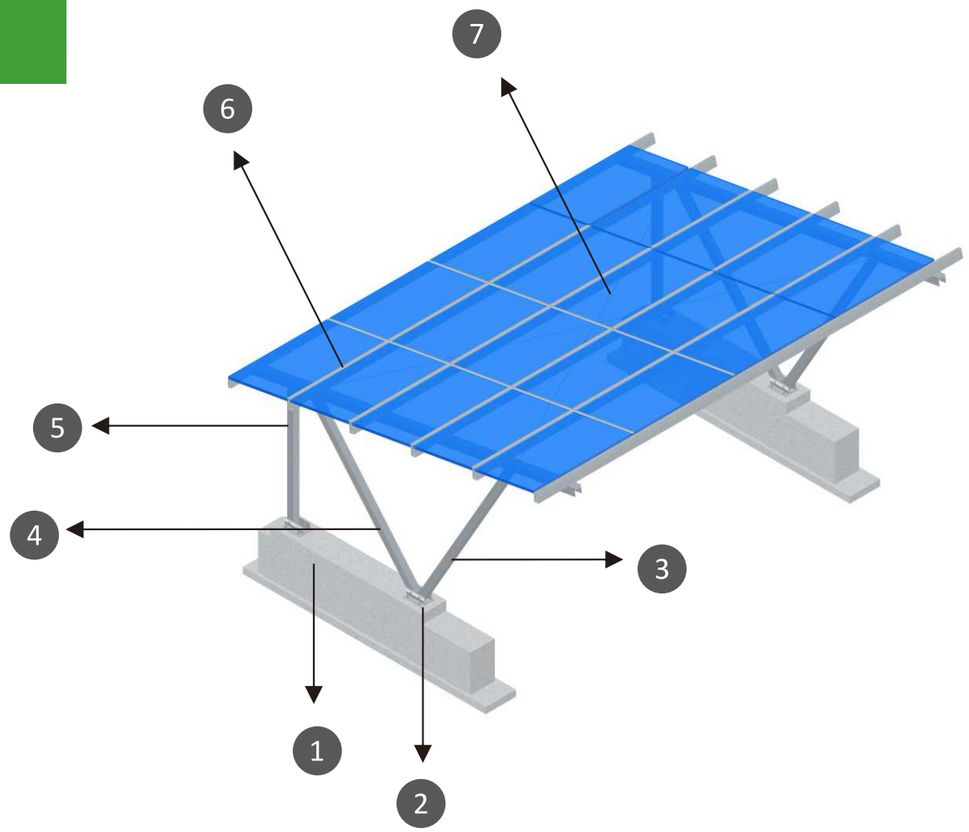


Step 10:
Mount the solar modules on the rails



Step 11:
Repeat the process and mount all solar modules

Solar Carport Solution



1 Concrete Base

2 Base Plate

3 Front Pole

4 Secondary Front Pole

5 Rear Pole

6 Main Beam

7 Solar Module

Step 1:

Identify the location for the first concrete base and cast the concrete base as designed in the shop drawings

Step 2:

Repeat the process and set out the concrete base at distance and location specified in the drawing

Step 3:

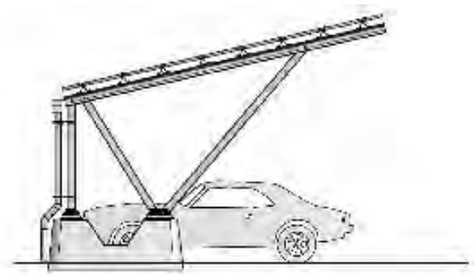
Mount the main support structure with tightening rod on top

Step 4:

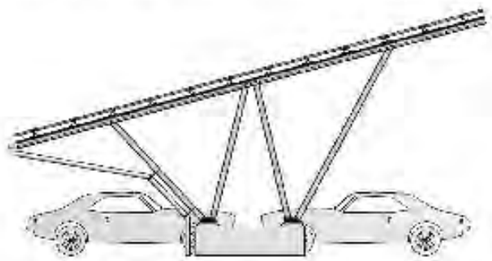
Install the main beam with rails on the main structure

Step 5:

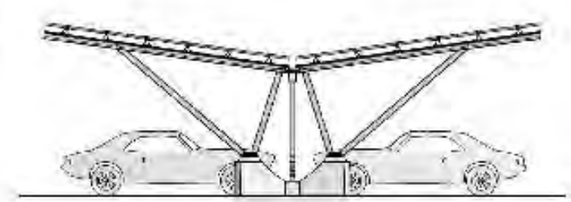
Mount the solar modules and complete the installation



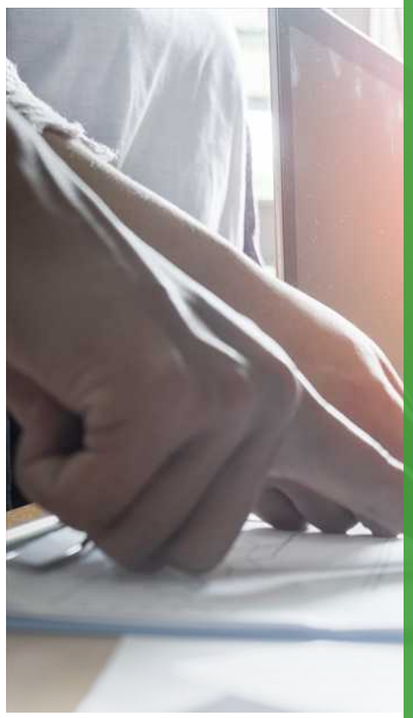
B1: 1 Row Vehicle Arrangement



B2: 2 Row Vehicle Arrangement

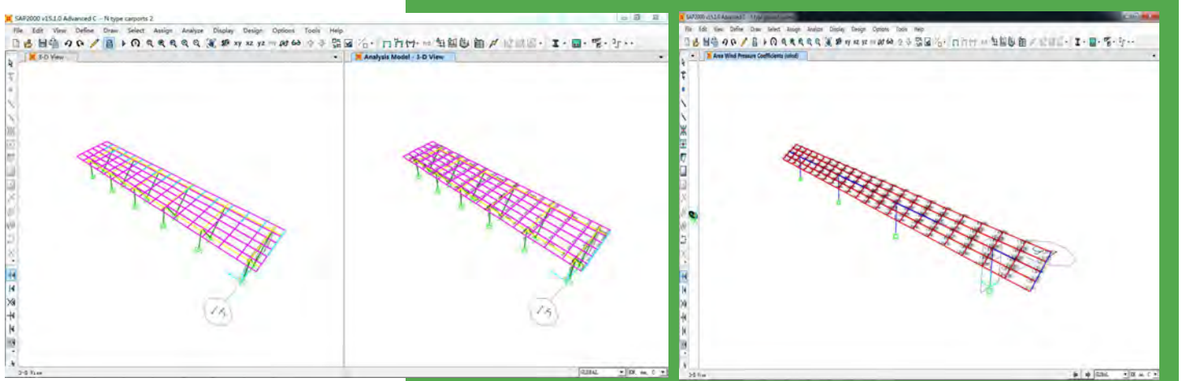


B3: 2 Row Vehicle Arrangement
(North/South Facing)



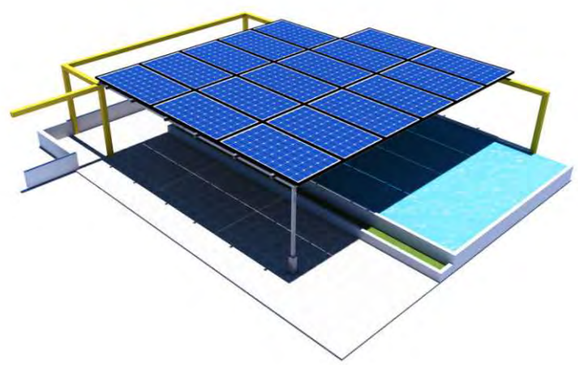
Professionalism

We have in-house engineers who are able to do structural designs to meet different standards of different countries by using the software SAP2000.



The working procedures are as follows:

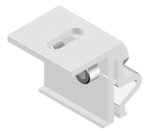
- Alumsolar will issue a standard questionnaire to the customer
- Customer shall complete the questionnaire and furnish PVSolver required documents, include but not limited to module datasheet, maximum wind speed, applied standards, roof profile details, soil report, etc
- Alumsolar will work out basic design with simple prelim calculations for customer review
- Detailed calculation book will be provided upon confirmation of the project



Products

‹ Seam Clamp for Metal Roofs ›


RC-001


RC-002


RC-010


RC-022


RC-024


RC-025


RC-026


RC-036


RC-039


RC-042


RC-048


RC-049

‹ Hooks for Tile Roofs ›


SP-S-021


SP-S-022


SP-S-024


SP-S-078

‹ Rails ›

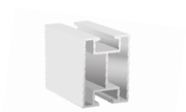

AL-003

AL003-1

AL-007

AL-010


AL-031


AL-033


AL-051


AL-052

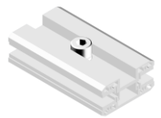
AL-055

‹ Mid and End Clamps ›

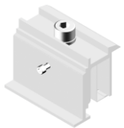

MC-001


MC-002


MC-005


MC-006

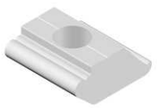

MC-008

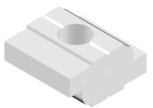

MC-040


MC-042

‹ Parts and Accessories ›


SP-A-002


SP-A-003


SP-A-004


SP-A-007

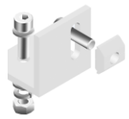

SP-A-012


SP-A-039


SP-A-075

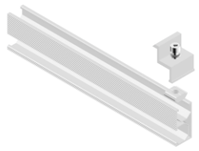

SP-A-077

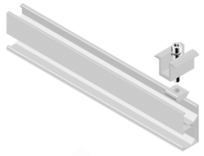

SP-A-079


SP-A-083

SP-A-099

SP-A-109


End Clamp Mount


Mid Clamp Mount

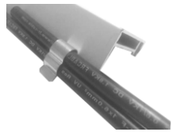

Grounding Clip

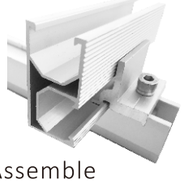

Cable Clip

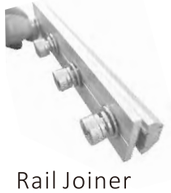

Rail Joiner


Assemble


Cable Clip


Cable Clip


Assemble


Rail Joiner


Rail Joiner


Rail Joiner Installation

Products


Rail

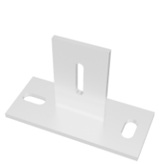

Rail Joiner


Anchor Bar


Rail


Pile


Rail


Base Plate


Vertical Pole


Base Plate


Rail


Rail


Adjustable Pole


Vertical Pole


Ballast Tray Type for RC Roof


Connection


Base Plate


Rail

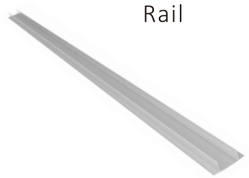

Rail


Base Plate

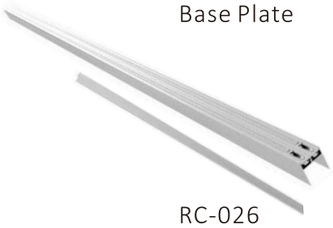

Rail


Rail


Base Plate


RC-026

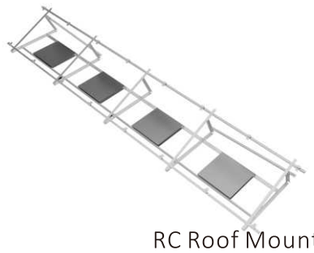

RC-026


RC-026


Pole


Adjustable Pole


Rail


RC Roof Mounting


Pole Connection


Connection

project portfolio

Project Location: Shanghai, China
Capacity: 60MWp
Completion Year: 2018
Type: Concrete Roof Mounted

Project Location: Shanghai, China
Capacity: 4.3MWp
Completion Year: 2016
Type: Concrete Roof Mounted

Project Location: Tuas, Singapore
Capacity: 1MWp
Completion Year: 2017
Type: RC Roof Mounted

Project Location: Singapore
Capacity: 221Wp
Completion Year: 2017
Type: Metal roof Mounted

Project Location: Singapore
Capacity: 1.6MWp
Completion Year: 2017
Type: Metal roof Mounted

Project Location: Shiga-ken, Japan
Capacity: 2MWp
Completion Year: 2015
Type: Metal Roof Mounted

Project Location: Iloilo, Philippines
Capacity: 1.9MWp
Completion Year: 2016
Type: Metal roof Mounted

Project Location: Cebu, Philippines
Capacity: 2.5MWp
Completion Year: 2017
Type: RC Roof Mounted

Project Location: Iloilo, Philippines
Capacity: 1.9MWp
Completion Year: 2016
Type: Metal roof Mounted

Project Location: Cebu, Philippines
Capacity: 2.5MWp
Completion Year: 2017
Type: Metal roof Mounted

Project Location: Africa
Capacity: 1.6MWp
Completion Year: 2015
Type: Metal Roof Mounted

Project Location: USA
Capacity: 2.5MWp
Completion Year: 2015
Type: Ground Mounted

project portfolio

Project Location: Shanghai, China
Capacity: 60MWp
Completion Year: 2018
Type: Ground Mounted

Project Location: Klang, Malaysia
Capacity: 426kWp
Completion Year: 2016
Type: Metal roof Mounted

Project Location: Tuas, Singapore
Capacity: 1MWp
Completion Year: 2017
Type: Metal roof Mounted

Project Location: Singapore
Capacity: 221Wp
Completion Year: 2017
Type: Metal roof Mounted

Project Location: Singapore
Capacity: 1.6MWp
Completion Year: 2017
Type: Metal roof Mounted

Project Location: Shiga-ken, Japan
Capacity: 2MWp
Completion Year: 2015
Type: Ground Mounted

Project Location: Africa
Capacity: 1.6MWp
Completion Year: 2015
Type: Ground Mounted

Project Location: USA
Capacity: 2.5MWp
Completion Year: 2015
Type: RC roof Mounted

Nature, the gentlest mother

_____Emily dickinson

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