OFTOB ENERGY PV Mounting Systems

Tile Roof Solar PV Mounting System

Overview

Tile Roof Hook Solar PV Mounting System is applied to tile roof residential and commercial solar projects. The system can achieve stable and strong connection between the roof support structure and solar modules with modular patented design. Pre-assembled kits save the installation time and cost onsite.

Advantages

➤ **Applicable for Different Tile Roofs**
Design project by project, selecting configuration of mounting system components flexibly.

➤ **Save Installation Time and Cost**
Pre-assembled components and clear installation manuals are supplied to save the onsite installation time and cost, leading to better ROI.

➤ **Compatible with Different Types of Solar Modules**
Compatible with most framed 60-cell, 72-cell, half-cut cell modules, and frameless modules.

Technical Parameters

Parameter	Value
System Name	Tile Hook
Design Standard	Euro Code/EN1991/1993/1994, BS 6399, ASCE 7-10
Installation Site	Pitched Roof
Design Code	International Building Code IBC 2009
Foundation	Tile, Flat Tile, Slate Tile, Asphalt Shingle Tile
Building Code	California Building Code CBC 2010
Tilt Angle	5–45°
Hook Material	AL6005-T5 (Anodized)
Wind Load	≤ 60 m/s
Fastener	SUS304 & Zinc-Nickel Alloy Electroplated Steel
Snow Load	≤ 1.6 kN/m²
Small Components	AL6005-T5 (Anodized)
Applicable Solar Module	Framed or Frameless
Color	Silver or Customized
Panel Layout	Portrait or Landscape
Warranty	10 Years

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Tile Hook 1

Universal Clamp Kit H28-46

End Clamp Kit

Inter Clamp Kit

Splice for MA Rail

MA Rail

MA Rail H60

Optional Hook Type

Tile Hook 1

Slate Tile Hook – 02

Slate Tile Hook – 04

Tile Hook Kit

Tile Hook H120

Adjustable Tile Hook 1

Tile Hook 3

Alu Tile Hook E

Flat Tile Hook H107

Adjustable Tile Hook H132

Tile Hook H132

Tile Hook H145

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OFTOB ENERGY PV Mounting Systems

Balcony Solar Mounting System

Overview

Balcony Solar Mounting System is a solar mounting product installed on balcony railings, which can easily realize the construction of photovoltaic power plants on the balcony. The system is all bolted and fixed, eliminating the need for welding and drilling during installation. The unique telescopic tube support leg design allows the angle of the panel to be adjusted at any time.

Advantages

➤ **Quick installation**

Installation and removal are very simple and fast, 1–2 people can complete the installation.

➤ **Adjustable angle**

The tilt angle of the panels can be flexibly adjusted according to the installation site to obtain the best power generation efficiency, with a maximum tilt angle of 30°.

➤ **No welding required**

The system is all bolted and fixed, eliminating the need for welding and drilling during installation.

➤ **Stable and reliable**

Optimized structural design and material selection ensure the strength and stability of the system, suitable for a variety of different climatic environments.

Technical Parameters

Parameter	Value
System Name	Balcony Solar Mounting System
Design Standard	~~Euro Code/EN1991/1993/1994, BS 6399, ASCE~~ 7-10
Installation Site	Balcony
Design Code	International Building Code IBC 2009
Installation Base	Metal Railings, Wall, Concrete Roof
Building Code	California Building Code CBC 2010
Mounting Angle	10°–30°
Material	Steel & AL6005-T5
Wind Load	≤ 30 m/s
Fastener	SUS304
Snow Load	≤ 1.0 kN/m²
Small Components	AL6005-T5
Applicable Solar Module	Framed
Color	Natural Silver or Customized
Panel Layout	Horizontal
Warranty	10-Year Warranty

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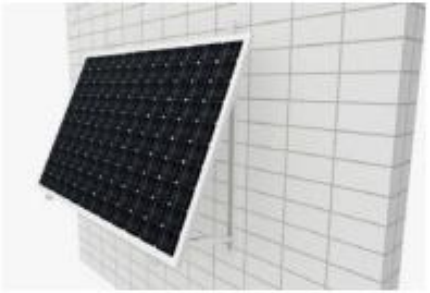
Structure

1. Installed on balcony with curved hook

2. Installed on wall with expansion bolts



3. Installed on concrete roof with expansion bolts

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Component Details

1. **Curved Hook**

Material: Zn-Al-Mg Coating Steel

2. **U-shaped Hoop**

Material: Zn-Al-Mg Coating Steel

3. **Longitudinal Beam H50**

Material: Zn-Al-Mg Coating Steel

4. **30×30 Square Tube**

Material: Zn-Al-Mg Coating Steel

5. **U-shaped Base Beam H50**
Material: Zn-Al-Mg Coating Steel

6. **Pro-U Shaped Adjustment Tube**
Material: Zn-Al-Mg Coating Steel

Installation Guide

1. Install the tripod on the ground

2. Adjust the preset angle

3. Lock the part of the Curved Hook

4. Find the 30×30 square tube also placed under the base beam of the tripod

5. Repeat the above steps to complete the installation of another set of tripod

6. Install the panel

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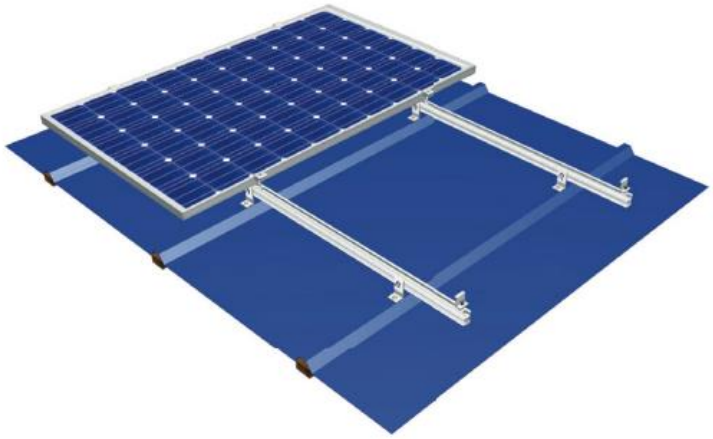
OFTOB ENERGY PV Mounting Systems

L Feet and Hanger Bolt Kit Metal Roof PV Mounting System



Overview— L Feet and Hanger Bolt Kit Metal Roof PV Mounting System

L Feet Kit and Hanger Bolt Kit is applied in most corrugated metal roof commercial and industrial solar projects. The system can achieve stable and strong connection between the roof support structure and solar modules with modular patented design. Pre-assembled kits save the installation time and cost on site.

Technical Parameters

Parameter	Value
System Name	L Feet Kit & Hanger Bolt Kit
Design Standard	Euro Code/EN1991/1993/1994, BS 6399, ASCE 7-10
Installation Site	Pitched Roof
Design Code	International Building Code IBC 2009
Foundation	Trapezoidal Roof
Building Code	California Building Code CBC 2010
Tilt Angle	0°
Material	AL6005-T5 (Anodized)
Wind Load	≤ 60 m/s
Fastener	SUS304 & Zinc-Nickel Alloy Electroplated Steel
Snow Load	≤ 1.6 kN/m²
Small Components	AL6005-T5 (Anodized)
Applicable Solar Module	Framed or Frameless
Color	Silver or Customized
Panel Layout	Portrait or Landscape
Warranty	10-Year Warranty

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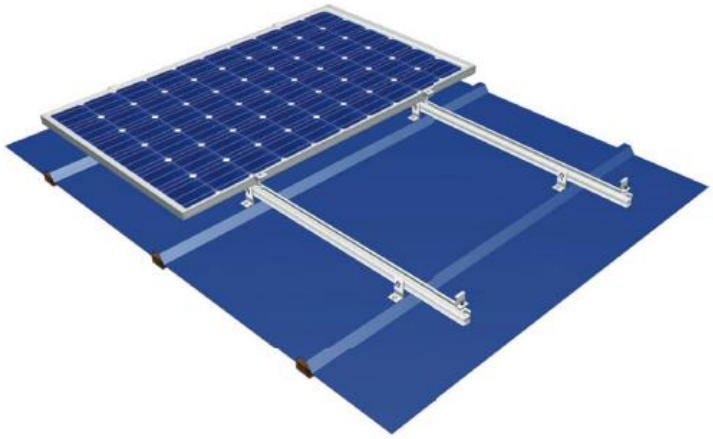
OFTOB ENERGY PV Mounting Systems

Adjustable Support Kit Solar PV Mounting System



Overview — **Adjustable Support Kit Solar PV Mounting System**

Adjustable Support Kit Solar PV Mounting System is applied in most corrugated metal roof and flat roof commercial and industrial solar projects. The system can achieve stable and strong connection between the roof support structure and solar modules with modular patented design. Adjustable angles can reduce the stock SKU and provide flexibility for onsite installation. Pre-assembled kits save the installation time and cost onsite.

Technical Parameters

Parameter	Value
System Name	Adjustable Support
Design Standard	Euro Code/EN1991/1993/1994, BS 6399, ASCE 7-10
Installation Site	Pitched Roof
Design Code	International Building Code IBC 2009
Foundation	Metal Roof
Building Code	California Building Code CBC 2010
Tilt Angle	10°–60°
Material	Rail: AL6005-T5 (Anodized)
Wind Load	≤ 60 m/s
Fastener	SUS304 & Zinc-Nickel Alloy Electroplated Steel
Snow Load	≤ 1.6 kN/m²
Small Components	AL6005-T5 (Anodized)
Applicable Solar Module	Framed or Frameless
Color	Silver or Customized
Panel Layout	Landscape or Portrait
Warranty	10-Year Warranty

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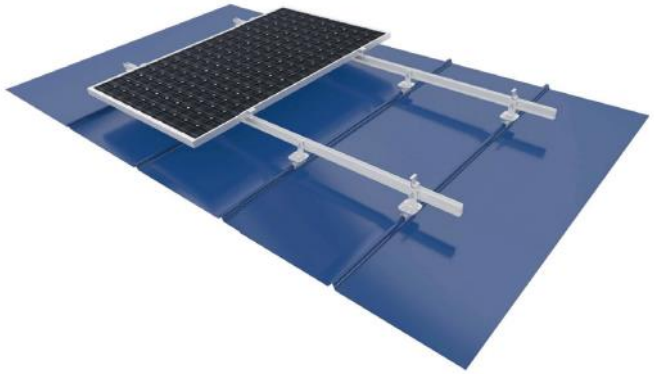
OFTOB ENERGY PV Mounting Systems

KlipLok Metal Roof Mounting System



Overview

KlipLok is mainly applied to metal roofs, and its material is **AL6005-T5**. With its professional design, it can realize the perfect connection between the roof support and roof to meet customer installation requirements. Professional solution and structure design can save your installation time and cost. Moreover, patented and unique design can bring you a good installation experience..

Advantages

➤ **Applicable for different metal roofs**

According to customer requirement, choose different roof mounting system flexibly.

➤ **Save installation time and cost**

Save the installation time and cost by offering installation manual and solution.

➤ **Compatible with different types of solar modules**

Free and flexible to choose different types of solar modules.

Technical Parameters

Parameter	Value
System Name	Kliplok
Design Standard	Euro Code/EN1991/1993/1994, BS 6399, ASCE 7-10
Installation Site	Pitched Roof
Design Code	International Building Code IBC 2009
Foundation	Trapezoidal Metal Roof Support
Building Code	California Building Code CBC 2010
Tilt Angle	0–15°
Material	AL6005-T5 (Anodized)
Wind Load	≤ 60 m/s
Fastener	SUS304 & Zinc-Nickel Alloy Electroplated Steel
Snow Load	≤ 1.6 kN/m²
Small Components	AL6005-T5 (Anodized)
Applicable Module	Framed or Frameless
Color	Silver or Customized
Panel Orientation	Portrait or Landscape
Warranty	10 Years

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Components

L Feet Kit

Multi-functional Kliplok 406/700

End Clamp Kit (MA)

Inter Clamp Kit (MA)

Splice for MA Rail

MA Rail

MA Rail H60

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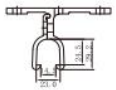
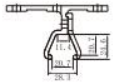
Applicable Kliplok Roof Support

Multi-functional Kliplok 23

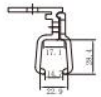


Multi-functional Kliplok 406

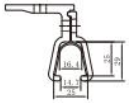
Kliplok 406 & 700 Compatible



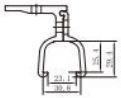
Medium Kliplok 23



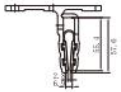
Kliplok 700



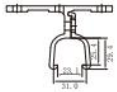
Kliplok 25B



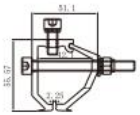
Kliplok Longline 305



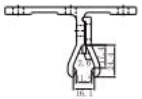
Kliplok Interface Kit



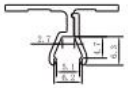
Universal Kliplok Roof Clamp



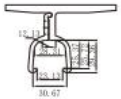
Multi-functional Kliplok V



Multi-functional Kliplok VI



Multi-functional Kliplok 406/700



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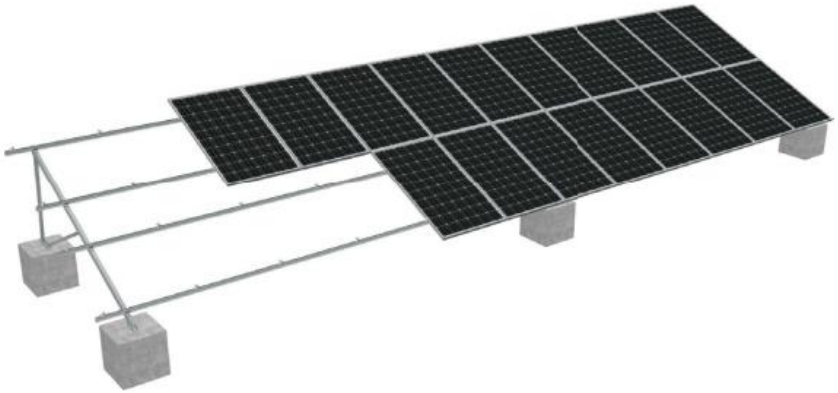
OFTOB ENERGY PV Mounting Systems

Double-row Tripod Base-beam-free RMIV



Overview

Double-row Tripod Base-beam-free RMIV is derived from RM II to meet different roof project demands. Solar modules can be arranged with single or double rows of landscape or portrait orientation. Quick installation and stable structure are assured by the modular patented design.

Advantages

➤ **System Compatibility**

Components mostly pre-assembled in factory to assure quick and reliable installation on site. Suitable for different flat rooftop, and compatible to different types of solar modules.

➤ **Unique Mudsill Design**

The mudsill can be fixed to flat roof or pitched roof with concrete foundation or steel foundation.

➤ **Solar Module Layout Flexibility**

Both landscape and portrait solar module layout are suitable. Both single row and double rows layout can be achieved separately or combined.

➤ **Adjustability**

Tilt angle can be adjustable.

Technical Parameters

Parameter	Value
System Name	Double-row Tripod Base-beam-free RMIV
Design Standard	Euro Code/EN1991/1993/1994, BS 6399, ASCE 7–10
Installation Site	Flat roof, ground
Design Code	International Building Code IBC 2009
Roof Type	Concrete foundation, steel foundation
Building Code	California Building Code CBC 2010
Tilt Angle	0–60°
Material	AL6005-T5 (Anodized)
Wind Load	≤ 60 m/s
Fastener	SUS304 & Zinc-Nickel Alloy Electroplated Steel
Snow Load	≤ 1.6 kN/m²
Small Components	AL6005-T5 (Anodized)
Applicable Solar Module	Framed or Frameless
Color	Silver or Customized
Panel Layout	Portrait or Landscape
Warranty	10-Year Warranty

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Structure

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Component Details

1. MA Rail
Specification: 3100, 4100, 5100 mm
Material: AL6005-T5 (Anodized)

2. Splice Kit for MA Rail
Specification: L200
Material: AL6005-T5 (Anodized)

3. End Clamp Kit (MA)
Components:
•End Clamp
•Cross Module
•Spring Washer M8
•Hex Socket Head Bolt

4. Inter Clamp Kit (MA)
Components:
•Inter Clamp
•Cross Module
•Spring Washer M8
•Hex Socket Head Bolt

5. Rail Clamp (MA)
Material: AL6005-T5 (Anodized)

6. RMIV Back Base
Material: Steel Q235B (Hot-Dip Galvanized)

7. RMIV Front Base
Material: Steel Q235B (Hot-Dip Galvanized)

8. Pre-assembled Structure
Material: AL6005-T5 (Anodized)

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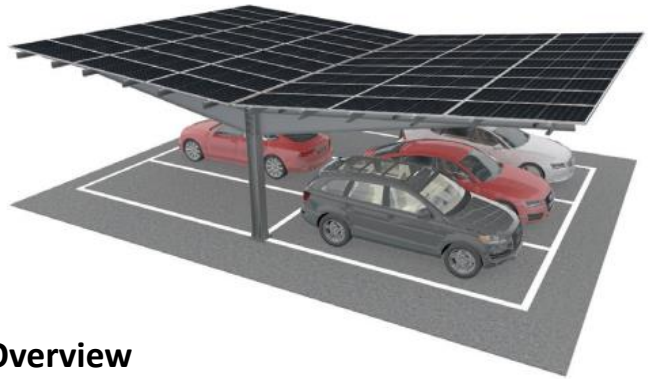
OFTOB ENERGY PV Mounting Systems

Mono Carport System



Overview

Pro Mono Carport System is mainly customized according to customer site requirements, which is convenient parking, beautiful appearance. PV carport not only has the function of ordinary carport, but also can generate electricity and income through solar power generation. Professional solutions bring you a simple and convenient installation experience. Mibet engineers have been committed to optimize the system design, products and service quality, and provide you with the best quality solutions of photovoltaic shed.

Advantages

➤ **Customized Solution**

Design case by case, making a good utilization of ground resources and pursuit for easy and quick installation.

➤ **Convenient parking and beautiful appearance**

The single column design makes the structure simpler, minimizes obstruction, and facilitates parking and access.

➤ **Save Installation Time and Labor Cost**

Pre-assembled components save onsite installation time.
Solution design case by case, most components pre-assembled in factory, no onsite cut and drill required, saving the onsite installation time and cost.

➤ **Compatible to Varied Solar Modules**

With MRac module clamps, the system is compatible with most kinds of framed 60-cell, 72-cell modules.

Technical Parameters

Parameter	Value
Installation Site	Open Area
Design Standard	Euro Code/EN1991/1993/1994, BS 6399, ASCE 7–10
Foundation	Concrete Foundation
Design Code	International Building Code IBC 2009
Tilt Angle	5–15°
Building Code	California Building Code CBC 2010
Wind Load	≤ 50 m/s
Material	Zn-Al-Mg Coating Steel & HDG Steel
Snow Load	≤ 1.6 kN/m²
Fastener	Zn-Ni Alloy & SUS304 & HDG Steel
Ground Clearance	≤ 1800 mm – 3000 mm
Small Components	AL6005-T5 (Anodized)
Applicable Solar Module	Framed or Frameless
Color	Silver or Customized
Panel Layout	Portrait or Landscape
Warranty	10-year

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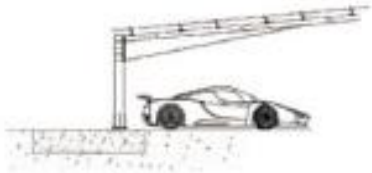
Structure



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Component Details

1. 76 Steel Tube
Material: HDG Steel

2. Mono Post with Welding Plate
Material: Zn-Al-Mg Coating Steel

3. Splice for Rail
Material: Zn-Al-Mg Coating Steel

4. Rail Connector
Material: Zn-Al-Mg Coating Steel

5. H-shape Steel
Material: HDG Steel

6. H-shape Steel with Welding Plate
Material: HDG Steel

7. Pull Rod Kit-A
Material: Zn-Al-Mg Coating Steel

8. Pull Rod Kit-B
Material: Zn-Al-Mg Coating Steel

9. Inter Clamp Kit
Material: AL6005-T5 (Anodized), SUS304

10. End Clamp Kit
Material: AL6005-T5 (Anodized), SUS304

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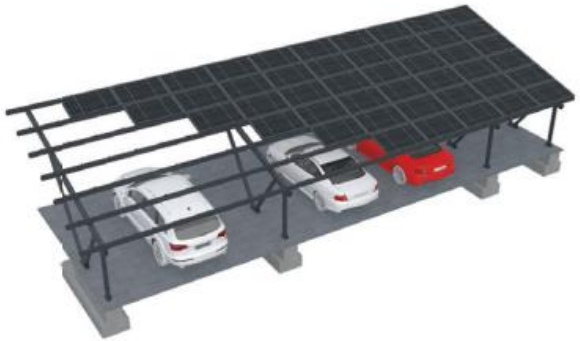
OFTOB ENERGY PV Mounting Systems

Mono Carport System II



Overview

Solar Carport System II is a pre-assembled ground solar mounting system which is ideal for large commercial and utility-scale solar PV projects. The system has been developed for various photovoltaic modules and will be customized to fit into the parking lot or designed according to specific requirements. The Carport System can protect the cars to avoid damage from sunshine, wind, rain water, and snow. Mibet's engineers continue to optimize the design of the system, the quality of product and service, and also provide the best solution for your Solar Carport System.

Advantages

➤ **Customized Solution**

Design case by case, making a good utilization of ground resources and pursuit for easy and quick installation.

➤ **High Waterproof**

The special waterproof conforms to the structure of system, which makes the performance stronger.

➤ **Save Installation Time and Labor Cost on Site**

With installation manuals and system solution, the construction on site will be simple.

Less construction time directly reduces project costs.

➤ **Compatible to Varied Solar Modules**

With MRac module clamps, the system is compatible with most kinds of framed and frameless modules.

Technical Parameters

Parameter	Value
Installation Site	Open Area
Design Standard	Euro Code/EN1991/1993/1994, BS 6399, ASCE 7–10
Foundation	Concrete Foundation
Design Code	International Building Code IBC 2009
Tilt Angle	5–15°
Building Code	California Building Code CBC 2010
Wind Load	≤ 50 m/s
Material	Zn-Al-Mg Coating Steel & HDG Steel
Snow Load	≤ 1.6 kN/m²
Fastener	Zn-Ni Alloy & SUS304 & HDG Steel
Ground Clearance	≤ 1800 mm – 3000 mm
Small Components	AL6005-T5 (Anodized)
Applicable Solar Module	Framed or Frameless
Color	Silver or Customized
Panel Layout	Portrait or Landscape
Warranty	10-year

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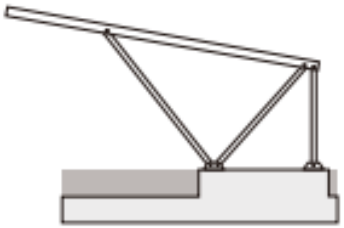
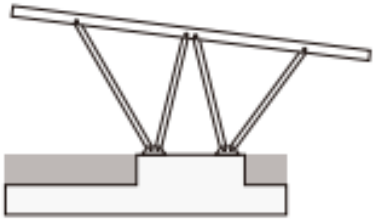
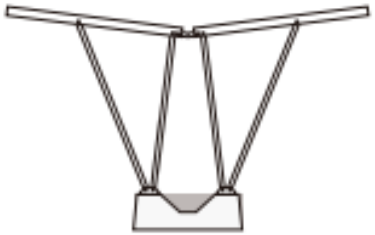
Structure







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Component Details

1. Conical Symmetric Cross Beam 135
Specification: L*58*135
Standard Length: 3000 mm / 5000 mm

2. Splice for Conical Symmetric Cross Beam 135
Specification: L260 mm
Components:
•Hexa Self-Tapping Screw with EPDM Washer ST6.3*19

3. Beam 160
Specification: L*100*100
Material: AL6005-T5 (Anodized)

4. C Clamp Kit
Components:
•C Clamp
•Symmetric Cross Module
•Spring Washer M8
•Hexagon Socket Bolt

5. Wide End Clamp Kit
Components:
•Wide End Clamp
•Symmetric Cross Module
•Spring Washer M8
•Hexagon Socket Bolt

6. U25 Inter Clamp Kit
Components:
•U25 Inter Clamp
•Symmetric Cross Module
•Spring Washer M8
•Hexagon Socket Bolt

7. Anchor Plate for Carport (L250)
Specification: 6*249*L250
Material: AL6005-T5 (Anodized)

8. Square Tube
Specification: L*100*100
Material: AL6005-T5 (Anodized)

9. Anchor Plate for Carport (L450)
Specification: 6*249*L450
Material: AL6005-T5 (Anodized)

10. Waterproof for Cross Beam
Specification: L*100*100

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