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**PROFESSIONAL
MANUFACTURER OF
SOLAR PV MOUNTING SYSTEM**

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ABOUT US

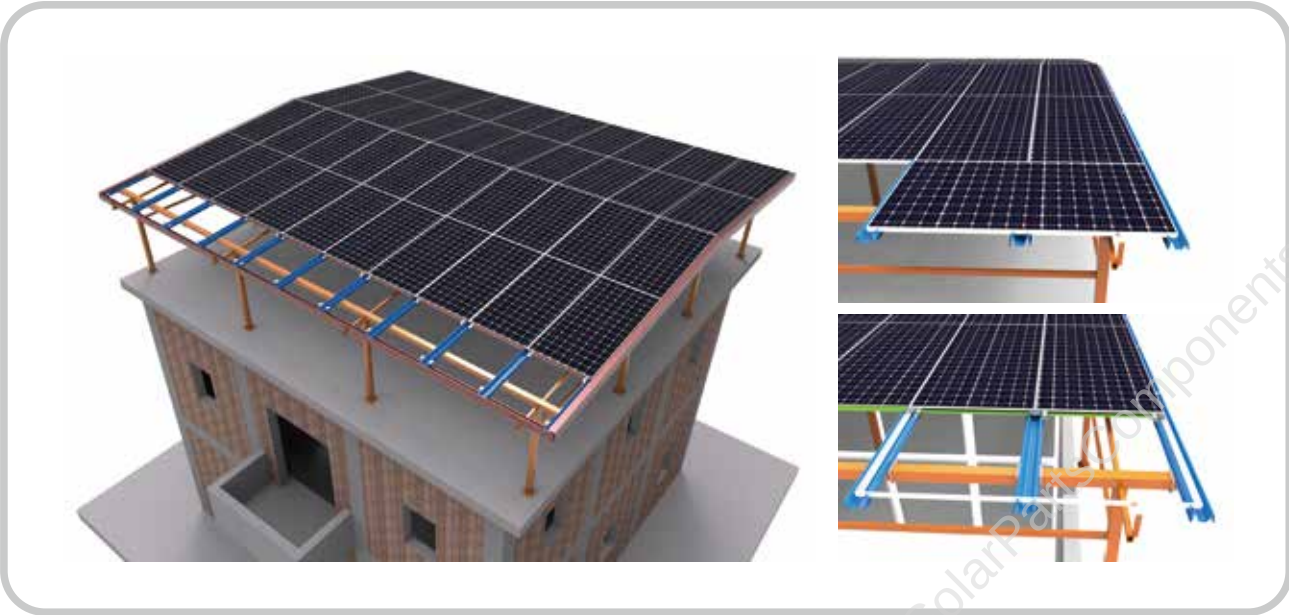
Guan Huang Group was established in 2010; it is a company integrating design, development, manufacturing, sales and service of photovoltaic accessories and brackets. After years of development, it has become a manufacturer of photovoltaic bracket systems and accessories. In 2015, it achieved comprehensive and rapid development in the photovoltaic industry; in 2016, it created the photovoltaic Guanhuang brand; in 2017, the company was committed to rural photovoltaic power stations, business development, design, construction, installation, and service integrated energy development; in 2018, the company created a The photovoltaic accessories supply chain production base; in 2019, a foreign trade team was established, and a bridge to connect with the world market informatization was established; in 2020, a photovoltaic support system production base in the north was built; Strengthen and orderly implement the system and strategic fission. In 2022, the shareholding reform was carried out and XIAMEN TOP BEST TECH CO.,LTD was established, and the company's performance has been vigorously developed and expanded. In 2023, Guanhuang will add two more manufacturing bases in the north and the south: a manufacturing base for small photovoltaic products in Handan in the north, and a production base for photovoltaic tube manufacturing in Zhangzhou in the south.

The company currently has more than 500 employees. The company fully implements ISO9001, ISO4001, ISO45001 and other quality management system three-body certifications, and carefully builds a photovoltaic midstream supply and front-end service development industry chain company. Over the years, the company has continuously improved technology and introduced several photovoltaic automated assembly lines. Manufacturing and other equipment to enhance the company's technical manufacturing capabilities. Facing the development opportunities and challenges of photovoltaic new energy, the company is committed to expanding the development of industrial and commercial photovoltaic power stations, and leads the base manufacturing with front-end marketing as a channel link, adhering to customer needs as the center; manufacturing with excellence, innovation and development as the pursuit of quality , realizing collaboration across the value supply chain and terminal systems!

The company has joined forces with a number of domestic top 500 listed private enterprise groups to vigorously develop industrial and commercial photovoltaic power stations, and jointly promote photovoltaic green environmental protection; in response to the country's call for energy conservation, carbon emission reduction, carbon peaking and carbon neutrality, distributed photovoltaic power generation photovoltaic The development goal of the system manufacturing complex is our own responsibility; the company actively responds to various challenges and breakthroughs, creates more value in technological innovation in the field of photovoltaic clean energy, and vigorously promotes the green and environmental protection of photovoltaic power generation to go ahead!



BIPV residential sunshed roof system



Components



M water channel
Material: ZAM275



Landscape channel
Material: ZAM275



M side cover
Material: ZAM275



Aluminum buckle
Material: AL6005-T5,ZAM275



Square tube
Material: ZAM275



M channel connector
Material: ZAM275



Side clamp
Material: AL6005-T5



Bridge assembly
Material: ZAM275



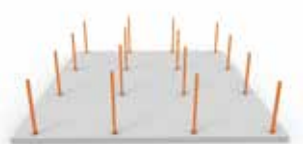
Front waterchannel
Material: ZAM275

Installation steps

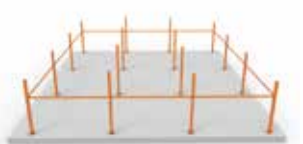
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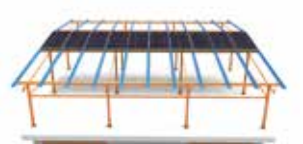
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Data Sheet

Installation site	Residential/Commercial flat roofing	Wind Speed	60m/s
Material	ZAM, AL6005-T5 (Anodized)	Snow Load	3.6KN/M2
Tilt Angle	0-30°	Building height	20m
Modules	Frame module	Standard	AS/NZS1170&DIN1055
Array	Customized	Warranty	10years
Orientation	landscape,Portrait	Service life	25 years

Introduction

The BIPV residential sunshed roof system belongs to the BIPV type, which is specially designed for various civil cement roofs. Building a solar conservatory on the roof that can generate electricity can not only make full use of the roof space to generate electricity, but also effectively protect the floor from cracking and leaking due to wind and sun.

The photovoltaic sun shed does not need to destroy the old roof, but builds a brand new roof on the entire floor, which is beautiful and generous.

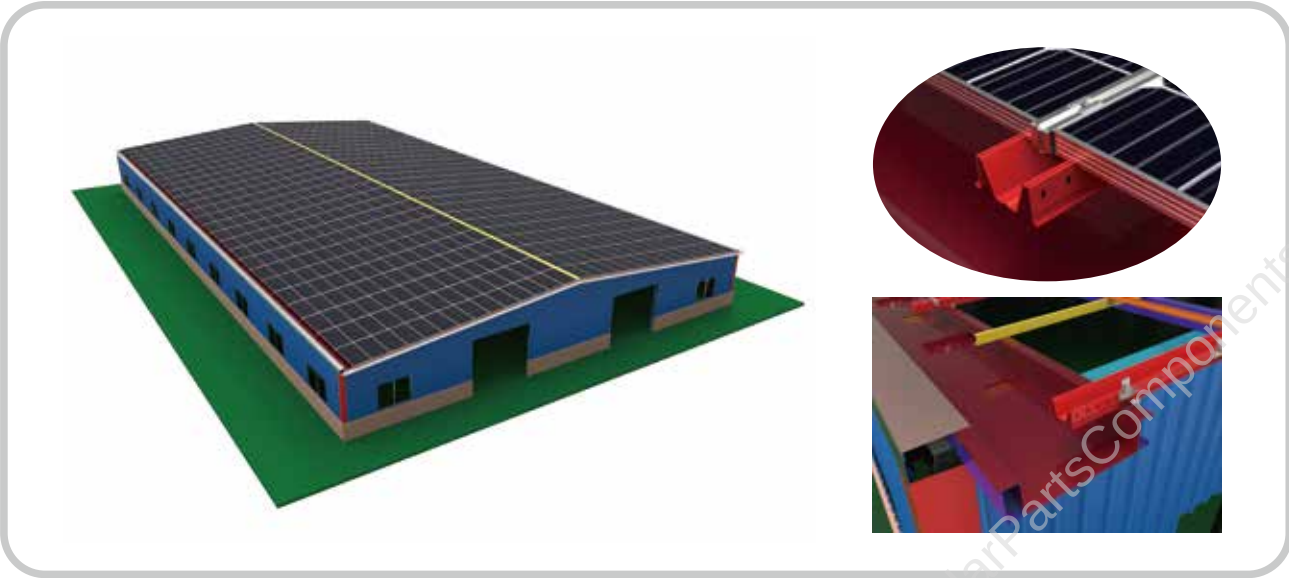
The photovoltaic sun shed provided by our company is made of high-quality zinc-aluminum-magnesium and aluminum alloy, which is anti-corrosion and anti-rust, and has a service life of more than 25 years.

Advantage

1. Like a "green greenhouse" on the roof to make full use of the roof space;
2. Stable structure; strong corrosion resistance
3. Easy installation; short construction period
4. Cost-effective, 10-year warranty;
5. Highly waterproof



BIPV commercial industrial solar system



Components



M water channel
Material: ZAM275



Cover
Material: ZAM275



U-water channel
Material: ZAM275



M channel calmp
Material: AL6005-T5, ZAM275



Front water channel
Material: ZAM275



Side Cover
Material: ZAM275



M channel connector
Material: ZAM275



Mid clamp assembly
Material: AL6005-T5,ZAM275



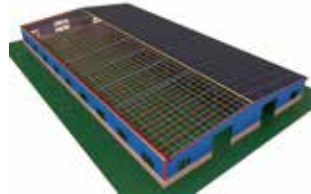
End clamp assembly
Material: AL6005-T5, ZAM275

Installation steps

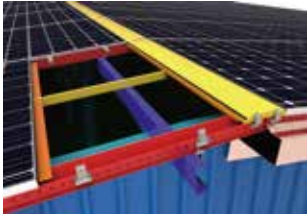
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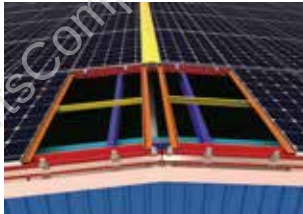
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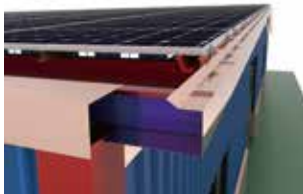
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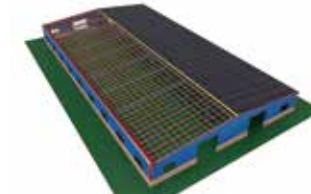
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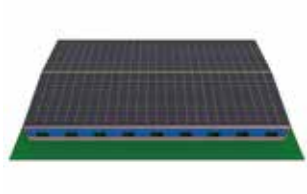
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Data Sheet

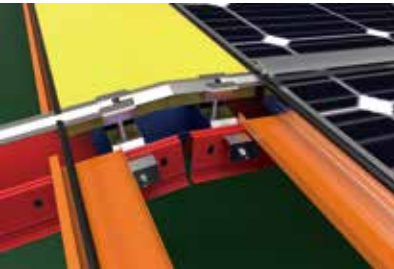
Installation site	BIPV industrial plant	Wind Speed	60m/s
Material	ZAM, AL6005-T5 (Anodized)	Snow Load	3.6KN/M2
Tilt Angle	0-30°	Building height	20m
Modules	Frame module	Standard	AS/NZS1170&DIN1055
Array	Customized	Warranty	10 years
Orientation	landscape,Portrait	Service life	20 years

Introduction

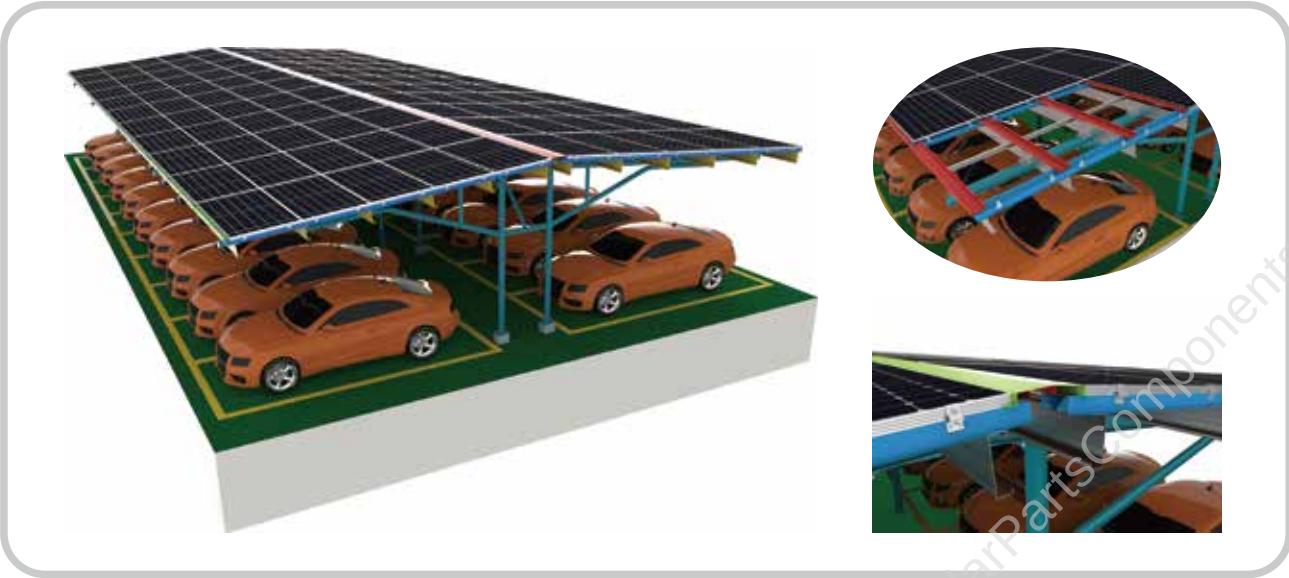
BIPV solar system is an application that integrates solar power generation into buildings, realizing the perfect combination of photo voltaic power generation and buildings. Photovoltaic materials are used to replace traditional building materials and are installed on the side of walls and roofs to make the building itself a power source. It can not only meet various design requirements such as water leakage and shrinkage of conventional defensive buildings, but also has wind speed and snow resistance. It has the advantages of strong load capacity, good ventilation, good lighting, heat insulation, fire prevention, waterproof, convenient operation and maintenance.

Advantage

1. Excellent ventilation and heat dissipation performance, large output power
2. Easy to install and strengthen the overall structure
3. Save the cost of roof laying and renovation, and greatly reduce the construction cost
4. djustable high inclination angle to maximize light absorption and drainage performance



BIPV steel waterproof carport



Components



M water channel
Material: ZAM275



Cover
Material: ZAM275



U-water channel
Material: ZAM275



M channel clamp
Material: AL6005-T5, ZAM275



Front water channel
Material: ZAM275



Side Cover
Material: ZAM275



M channel connector
Material: ZAM275



Mid clamp assembly
Material: AL6005-T5,ZAM275



End clamp assembly
Material: AL6005-T5, ZAM275

Installation steps

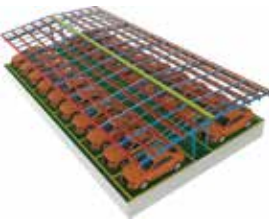
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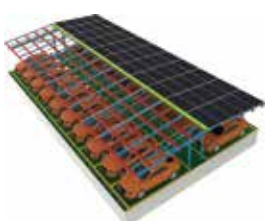
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Data Sheet

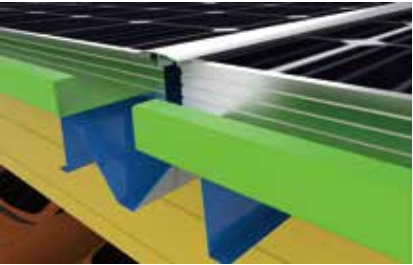
Installation site	BIPV carbon steel carport	Wind Speed	60m/s
Material	ZAM, AL6005-T5 (Anodized)	Snow Load	3.6KN/M2
Tilt Angle	5-15°	Height	Above 2m
Modules	Frame module	Standard	AS/NZS1170&DIN1055
Array	Customized	Warranty	10 years
Orientation	landscape,Portrait	Service life	20 years

Introduction

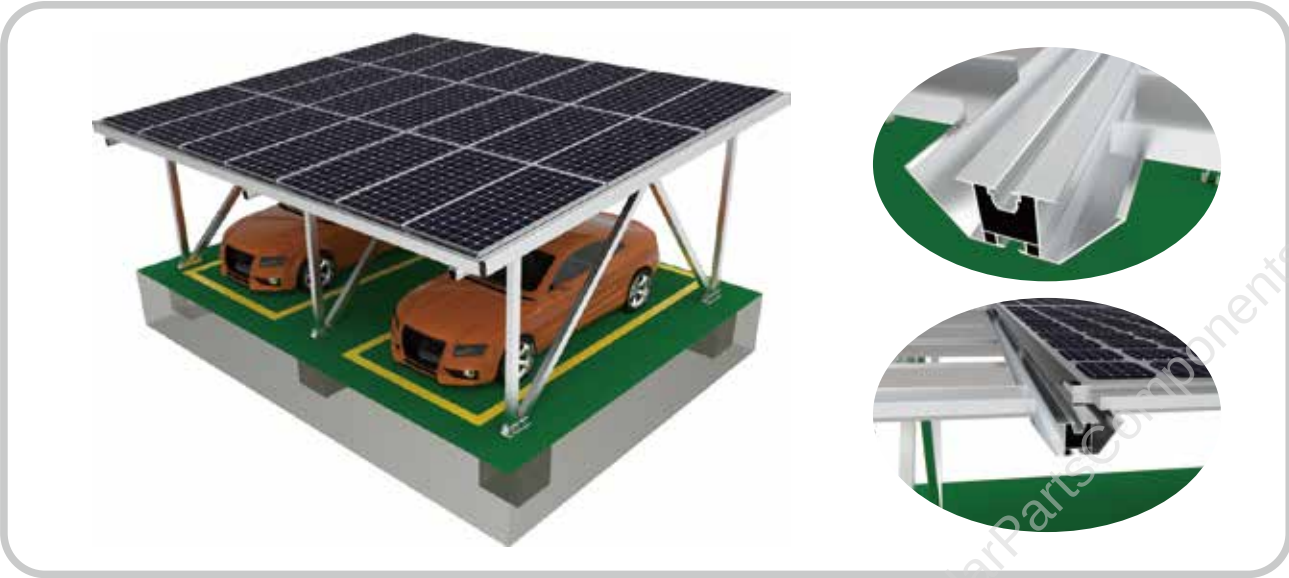
BIPV waterproof solar carport system is a new waterproof parking solution with good waterproof function.
The design is cost-effective while providing shade from the sun and rain, and can power not only charging stations, but also nearby businesses, homes or public spaces

Advantage

- 1. Structure waterproof with high waterproof performance
- 2. Design according to the site and make reasonable use of the area
- 3. Can be customized to meet customer requirements
- 4. Stable and sturdy, can withstand high wind speed and snow load



BIPV aluminum waterproof carport



Components



Water channel
Material: AL6005-T5



Rail
Material: AL6005-T5



Rail connector
Material:AL6005-T5, SUS304



Beam
Material: AL6005-T5



square tube
Material: AL6005-T5



Beam connecto
Material: AL6005-T5, SUS304



H connector
Material:AL6005-T5, SUS304



Foot
Material: AL6005-T5, SUS304



Rail clamp
Material: AL6005-T5



Cover
Material: AL6005-T5



Mid clamp
Material: AL6005-T5, SUS304



End clamp
Material: AL6005-T5, SUS304

Data Sheet

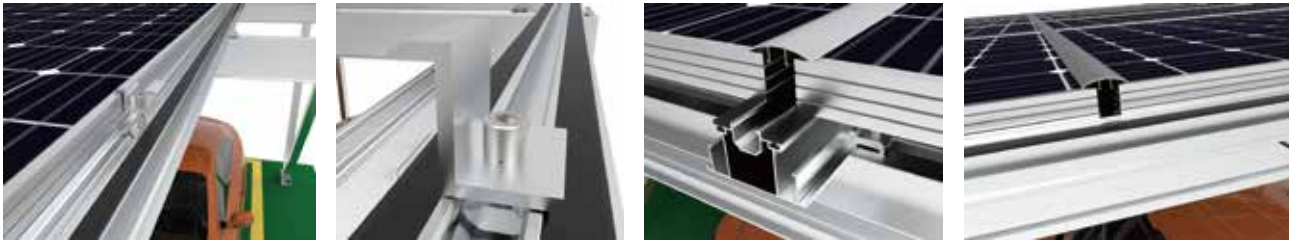
Installation site	open area	Wind Speed	60m/s
Material	SUS304,AL6005-T5 (Anodized)	Snow Load	3.6KN/M2
Tilt angle	0-30°	Height	Above 2m
Modules	Frame/ Frameless solar Module	Standard	AS/NZS1170&DIN1055
Array	Customized	Warranty	10 years
Orientation	Landscape,Portrait	Service life	25 years

Introduction

This solar waterproof carport system is designed with high-strength aluminum alloy to ensure its safety while providing easy installation and beautiful appearance. The special structural design maximizes the space. Two cars are used as a unit or freely combined according to requirements. Waterproof design, 10-year warranty.

Advantage

- 1. Highly pre-assembled to ensure easy installation and reduce labor costs
- 2. The height and angle can be adjusted within a certain range
- 3. Light material, easy to transport and install
- 4. The layout of the system can be adjust according to the actual situation on site



Installation steps



Application

No hemming



Full hemming



Residential waterproof roof system



Data Sheet

Installation site	Residential waterproof roof system	Wind Speed	60m/s
Material	Zn-Al-Mg S350GD-ZAM275	Snow Load	3.6 KN / M2
Tilt angle	0-30°	Building height	20m
Modules	Frame solar Module	Standard	AS/NZS1170 & DIN 1055
Array	Customized	Warranty	10 years
Orientation	Landscape,Portrait	Service life	25 years

Introduction

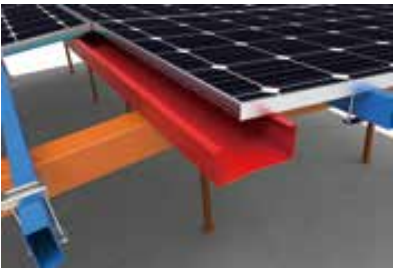
The residential waterproof roof system for households not only achieves the purpose of photovoltaic power generation, avoids the risk of water leakage on the user's roof, but also provides users with a place to drink tea, enjoy the coolness, chat and sit quietly. It is not only beautiful, sunshade, and rain shelter, but also increases the usable space of the house, and effectively enhances the drainage speed and drainage capacity of the roof.

Our sun shed adopts a fully welded installation method, and is made of high-quality zinc-aluminum-magnesium and aluminum alloy materials, which are anti-corrosion and anti-rust, and have a service life of more than 25 years. Compared with the BIPV residential with an M waterchannel one It is more economical.



Advantage

1. Suitable for concrete flat roofs;
2. It is suitable for installing modules of any specification and thin film modules;
3. The design is tested according to the standard, and the performance is stable;
4. Simple installation, high efficiency, short construction period;
5. Zinc-aluminum-magnesium material, long service life.



Components



Square tube

Material: ZAM275



Horizontal waterchannel

Material: ZAM275



Vertical waterchannel

Material: ZAM275



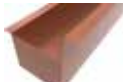
Vertical middle channel

Material: AL6005-T5,ZAM275



roof top gutter

Material: ZAM275



N-S waterchannel

Material: ZAM275



Buckle

Material: AL6005-T5,ZAM275



Hemming

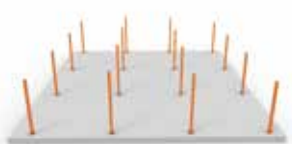
Material: AL6005-T5

Installation steps

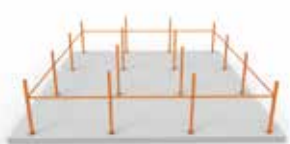
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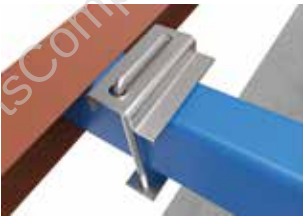
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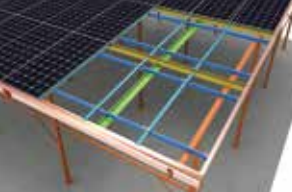
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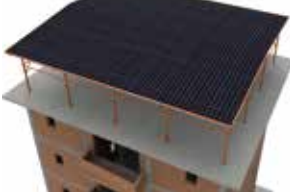
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Tile Roof PV Mounting System

Tile Hook Series



Components

1



Rail
model: 100020011
material: AL6005-T5

2



No. 1 Hook
model: 100080053
material: SUS304

3



Mid clamp
model: 100100015
material: AL6005-T5, SUS304

4



End clamp
model: 100110005
material: AL6005-T5

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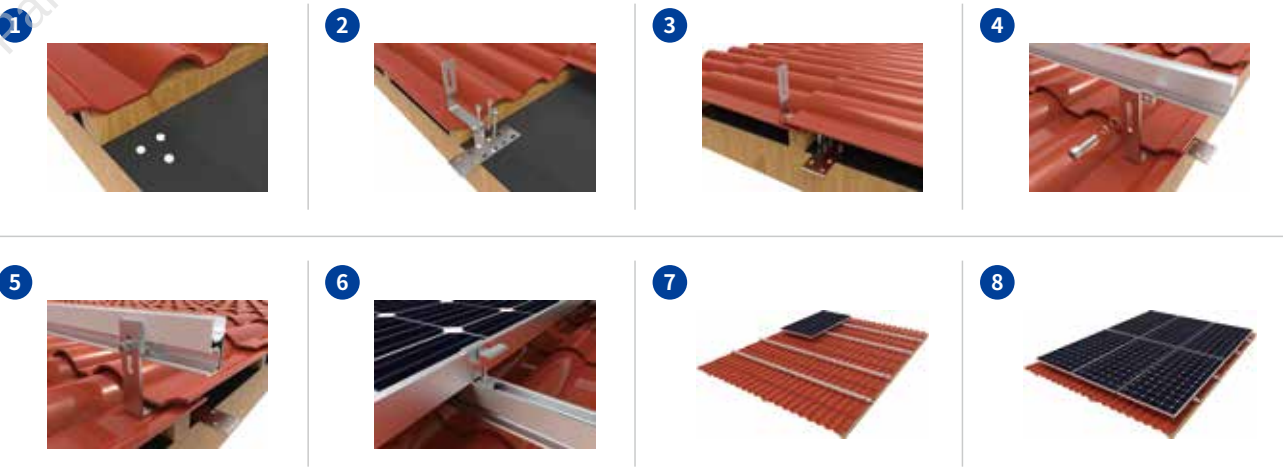
Connector
model: 100020002
material: AL6005-T5

6



Bolt, screw and nut
model: 100020003
material: SUS304, AL6005-T5

Installation steps



Data Sheet

Installation site	Tile roof	Wind load	60 m/s
Material	SUS304,AL6063-T5/6005-T5	Snow load	70 cm
Tilt angle	0-60 degrees	Building height	up to 20 m
Modules	Frame solar Module	Standard	AS/NZS1170&DIN1055
panel array	Customized	Warranty	10 years
component layout	Landscape,Portrait	Service life	20 years

Introduction

The tile roof pv mounting system adopts advanced modular design, and the components are fixed by guide rail beams and clamping blocks. The installation is convenient and quick, and the highly pre-assembled and customized solutions save a lot of installation time and money.

A professional manufacturer of glazed tile roof support systems, providing various support solutions for glazed tile roofs. The professional design allows the hook components to perfectly connect with the glass tiles.

Design schemes adapted to local conditions and excellent structural strength calculations save installation time and reduce installation costs. The patented accessory design brings you more fast installation



Advantage

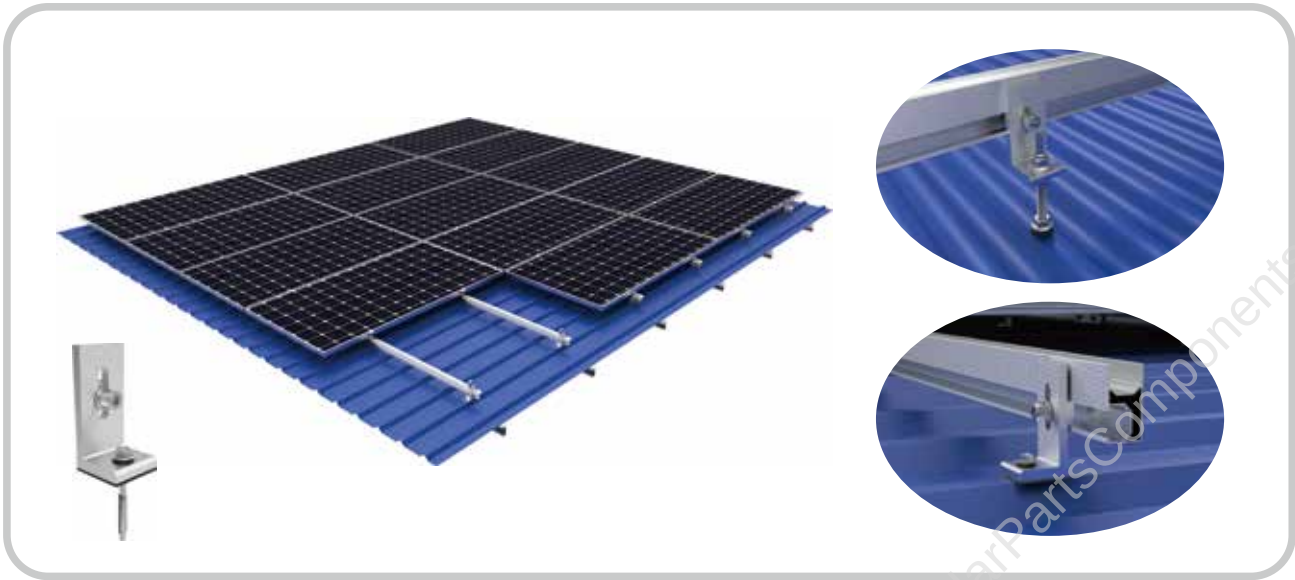
- safe and stable

The system is designed by skilled designers and can meet the export standards of various countries. The parts are made of high-quality aluminum alloy and stainless steel with long service life. The main supporting parts are tested to ensure strength, stability and safety.
- Easy to install

There are only 4-5 parts in a system, and most of the accessories are pre-assembled, saving you time and money.
- Extensive

Suitable for installing solar modules of any size on residential or commercial projects.

Metal Roof-L feet system

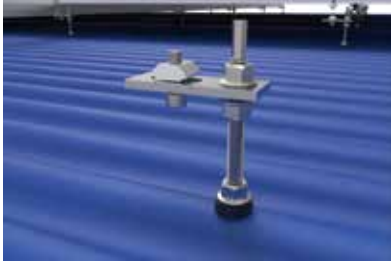


Data Sheet

Installation site	Metal roof	Wind Speed	60m/s
Material	AL6005-T5 (Anodized)	Snow Load	3.6KN/M2
Tilt Angle	0-60°	Building height	20m
Modules	Frame or Frameless	Standard	AS/NZS1170&DIN1055
Array	Customized	Warranty	10years
Orientation	landscape,Portrait	Service life	25 years

Introduction

L feet are suitable for commercial, industrial and residential metal roofs, L feet are used with aluminum rails and fix photovoltaic modules through medium and side pressure on the rails. Can meet different installation requirements, multiple designs for different conditions and excellent structural strength calculation, suitable for framed and frameless solar panels, convenient installation method, simple structure, strong and durable.



Advantage

- 1. Suitable for different corrugated and trapezoidal metal roofs.
- 2. Save installation cost and time, easy installation and low cost.
- 3. It is the most widely used system for metal roofs on the market.
- 4. The layout can be adjusted according to the actual situation of the building.

Components



L feet
Material: AL6005-T5



Mounting rails
Material: AL6005-T5



Rail splice bars
Material: AL6005-T5, SUS304



End clamp
Material: AL6005-T5, SUS304



Mid clamp
Material: AL6005-T5, SUS304



Grounding washer
Material: SUS304



Grounding Lugs
Material: AL6005-T5, SUS304



Self-tapping screw
Material: SUS304

Installation steps

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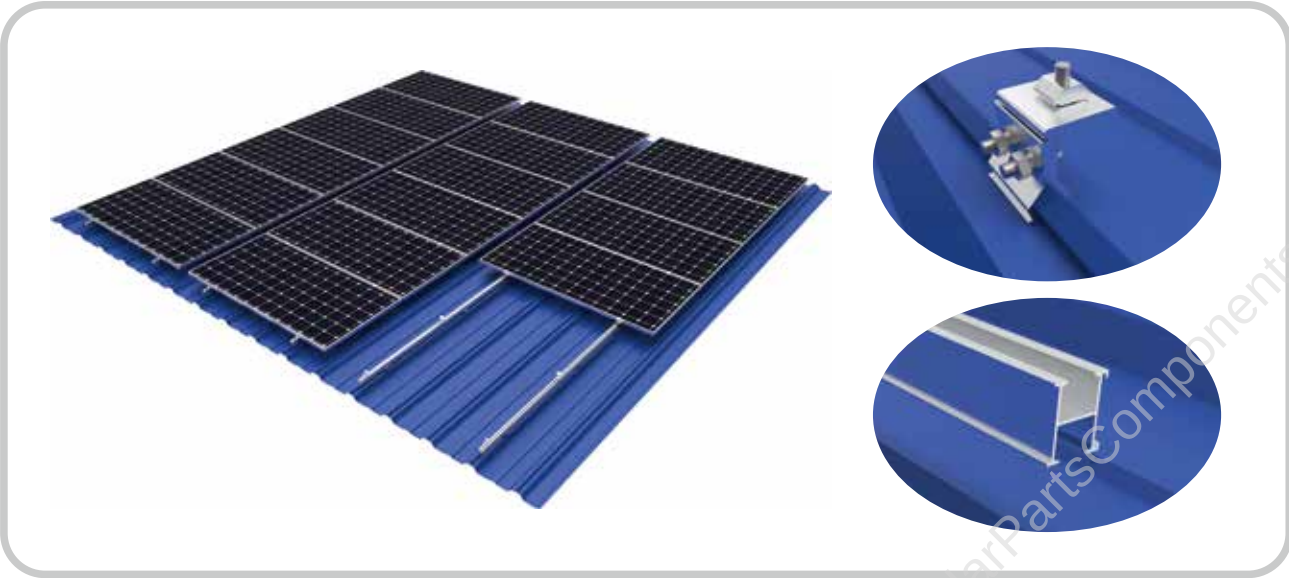
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Application



Metal roof clamps system



Data Sheet

Installation site	Metal roof	Wind Speed	60m/s
Material	AL6005-T5 (Anodized)	Snow Load	3.6KN/M2
Tilt Angle	0-60°	Building height	20m
Modules	Frame or Frameless	Standard	AS/NZS1170 & DIN 1055
Array	Customized	Warranty	10 years
Orientation	landscape,Portrait	Service life	25 years

Introduction

Metal roof clamps are suitable for different tin roofs. Its professional design can realize the perfect connection between the clamps and the roof and meet the installation requirements of customers. Professional solutions and unique structural designs can save your installation time and cost. Suitable for framed or frameless solar modules and easy installation.

Advantage

- 1. Suitable for different corrugated metal roofs, professionally designed to achieve a perfect connection between the fixture and the roof.
- 2. Save installation cost and time, easy installation and low cost.
- 3. The self-developed fixture can match various standard solar modules, and the service life of the roof structure can reach 25 years.
- 4. Adjust the layout according to the actual situation, and the service life can reach 25 years.



Components



Clamps

Material:AL6005-T5



Rail

Material: AL6005-T5



Rail connector

Material: AL6005-T5, SUS304



End clamp

Material: AL6005-T5, SUS304



Mid clamp

Material: AL6005-T5, SUS304



Grounding washer

Material: SUS304



Grounding Lugs

Material: AL6005-T5, SUS304

Installation steps

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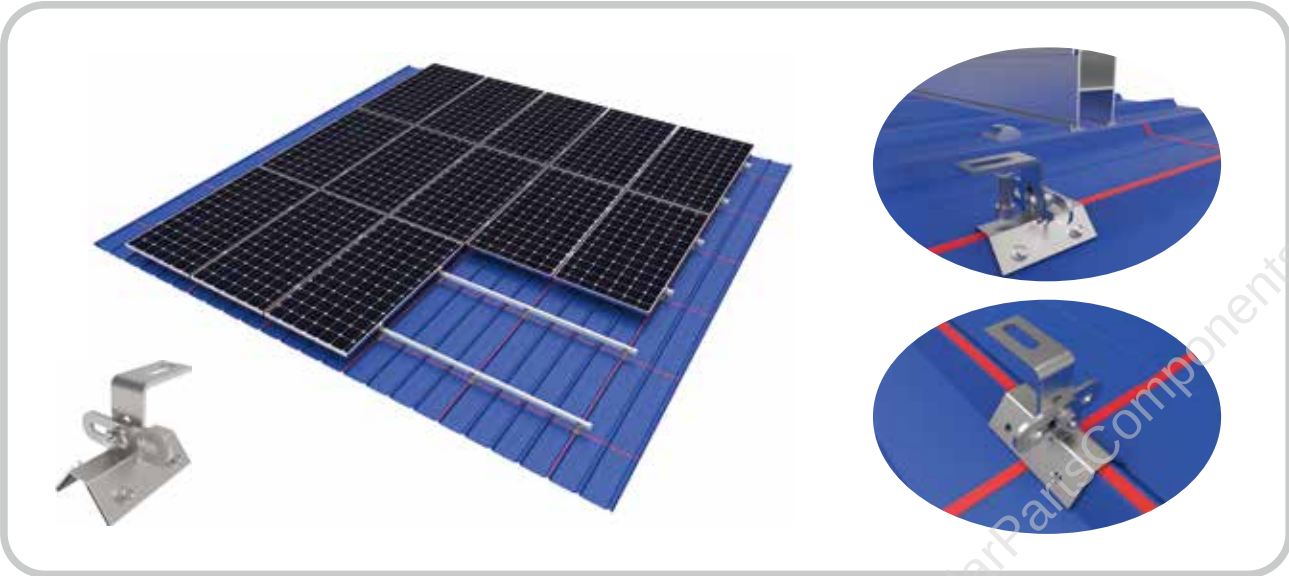
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Optional clamps



Trapezoidal roof universal Clamps



Data Sheet

Installation site	Trapezoidal metal roof	Wind Speed	60m/s
Material	SUS304,AL6005-T5 (Anodized)	Snow Load	3.6 KN / M2
Tilt Angle	0-60°	Building height	20m
Modules	Frame or Frameless	Standard	AS/NZS1170 & DIN 1055
Array	Customized	Warranty	10 years
Orientation	andscape,Portrait	Service life	25 years

Introduction

The trapezoidal roof clamp is suitable for the trapezoidal roof of large-area factory buildings or warehouses, which can realize the perfect connection between the clamp and the roof and meet the installation requirements of customers. Professional solutions and unique structural designs can save your installation time and cost. Suitable for framed or frameless solar modules, can bring you a good installation experience.



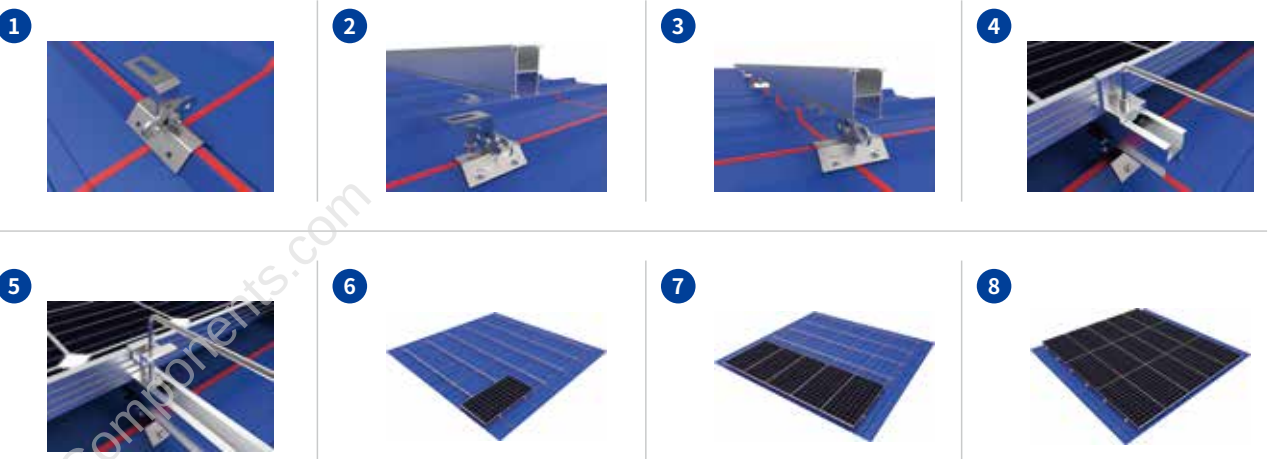
Advantage

- 1. Suitable for almost all trapezoidal metal roofs.
- 2. Save installation cost and time, easy to install.
- 3. Adjustable universal trapezoidal clamp.
- 4. The layout can be adjusted according to the actual situation of the building.

Components



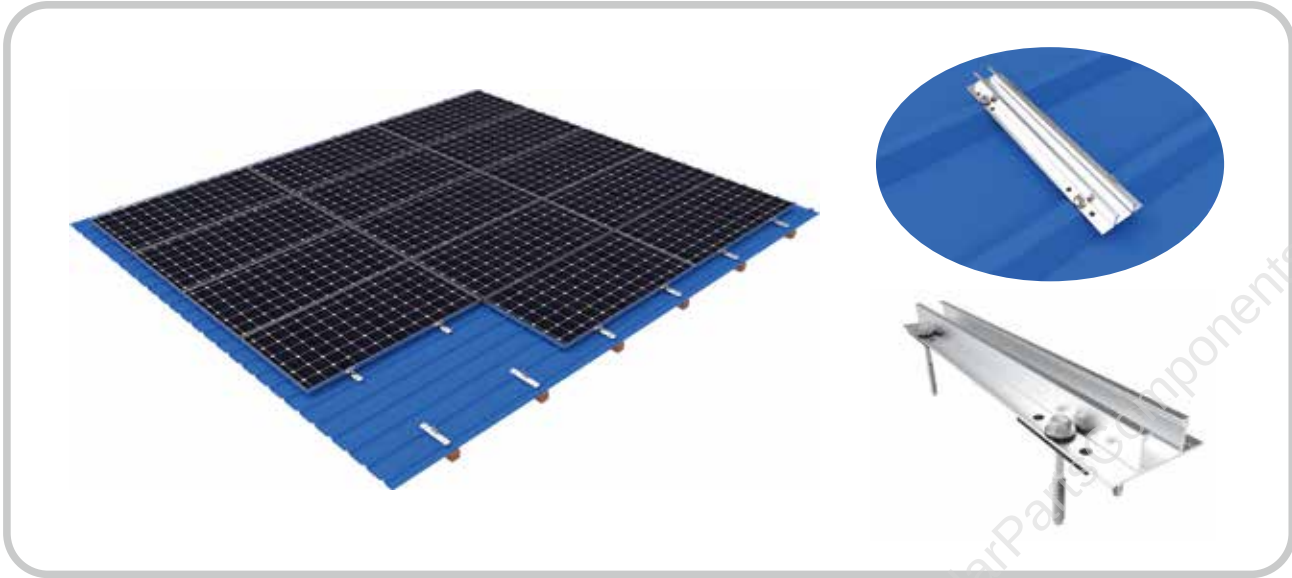
Installation steps



Others



Trapezoidal roof mini rail system

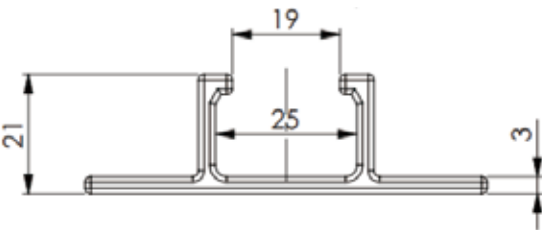


Data Sheet

Installation site	Trapezoidal metal roof	Wind Speed	60m/s
Material	SUS304,AL6005-T5 (Anodized)	Snow Load	3.6KN/M2
Tilt Angle	0-60°	Building height	20m
Modules	Frame or Franeless	Standard	AS/NZS1170 & DIN 1055
Array	Customized	Warranty	10years
Orientation	landscape,Portrait	Service life	25 years

Introduction

The metal roof railless system is designed for trapezoidal metal. It can be fixed on the roof without additional guide rails directly, saving costs. It is easy to install and has a wide range of applications. It is suitable for large commercial and utility PV systems and is suitable for framed and frameless module installations, in portrait or landscape orientation.



Advantage

- 1. Safe and Stable**

The system is designed by skilled engineers to meet international standards, the main support components make the stand stable and safe.
- 2. Easy installation**

All components are pre-assembled, and the entire system has fewer parts, helping to save labor costs and time.
- 3. Various solutions**

This system is suitable for almost solar panel residential and commercial projects, small rail length can be customized.

Components



Mini rail
Material: AL6005-T5



Mid clamp
Material: AL6005-T5, SUS304



End clamp
Material: AL6005-T5, SUS304



Grounding Lugs
Material: AL6005-T5, SUS304



Grounding washer
Material: SUS304



Self-tapping screw
Material: SUS304

Installation steps

1



2



3



4



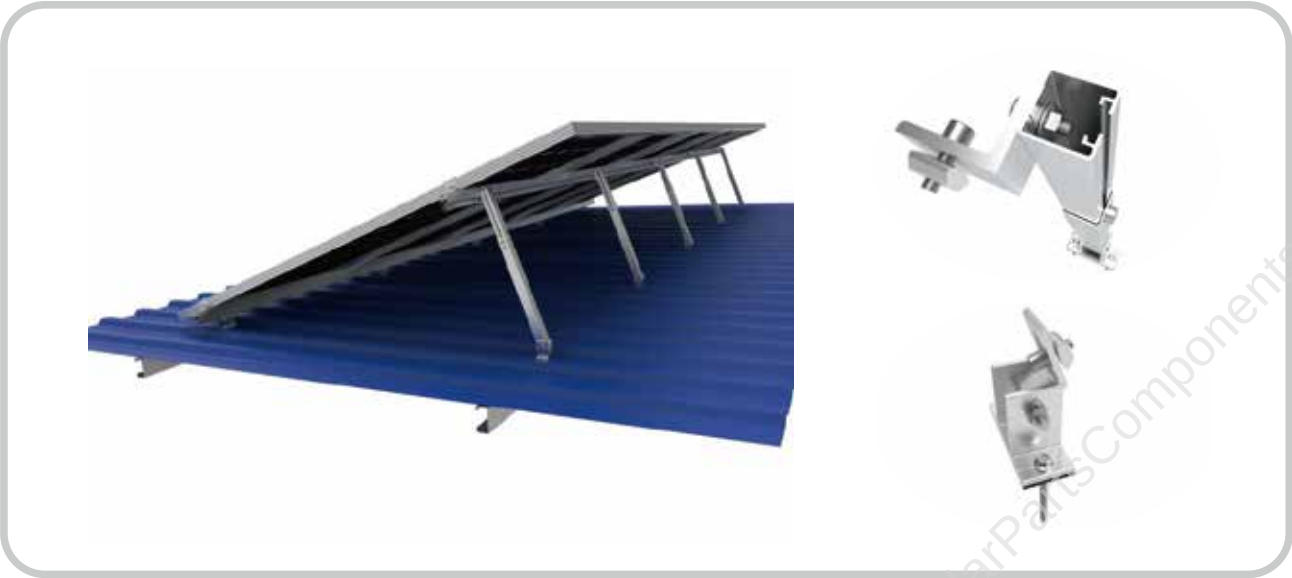
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Mini rail type



Flat roof adjustable kits system



Data Sheet

Installation site	Metal flat roof or cement flat roof	Wind Speed	60m/s
Material	SUS304,AL6005-T5 (Anodized)	Snow Load	3.6 KN / M2
Tilt Angle	0-60°	Building height	20m
Modules	Frame or Frameless	Standard	AS/NZS1170 & DIN 1055
Array	Customized	Warranty	10years
Orientation	landscape,Portrait	Service life	25years

Introduction

It is suitable for commercial, industrial and residential metal and mixed soil flat roofs, its professional design can realize the perfect connection of clamps and roofs to meet customers' installation requirements. The adjustable tilt system is 10-15 degrees, 15-30 degrees, 30-60 degrees. It can meet different installation requirements, carry out multiple designs and excellent structural strength calculations for different conditions, and is suitable for framed and frameless solar panels. It is easy to install, simple in structure, and durable.

Advantage

1. Suitable for almost all metal roofs/flat roofs.
2. Save installation cost and time, easy to install.
3. Angle, height adjustable for practical installation.
4. The layout can be adjusted according to the actual situation of the building.

Components



Adjustable rear legs

Material: AL6005-T5



Rail

Material: AL6005-T5



Rail connector

Material: AL6005-T5, SUS304



End clamp

Material: AL6005-T5, SUS304



Mid clamp

Material: AL6005-T5, SUS304



Grounding washer

Material: SUS304



Grounding Lugs

Material: AL6005-T5, SUS304



Adjustable front legs

Material: AL6005-T5

Installation steps

1



2



3



4



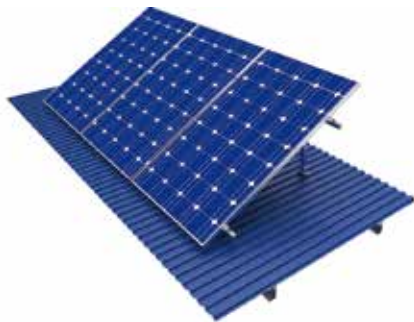
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6



Application



Flat roof triangle solar mounting system



Components



Triangle
Material: AL6005-T5, SUS304



Rail
Material: AL6005-T5



Rail connector
Material: AL6005-T5, SUS304



End Clamp
Material: AL6005-T5, SUS304



Mid Clamp
Material: AL6005-T5, SUS304



Ground Washer
Material: SUS304



Ground Lug
Material: AL6005-T5, SUS304



L Connector
Material: AL6005-T5, SUS304



Ballasted Plate
Material: AL6005-T5

Installation steps

1



2



3



4



5



6



Application



Data Sheet

Installation site	Residential/Commercial metal/flat roofing	Wind Speed	60m/s
Material	SUS304,AL6005-T5 (Anodized)	Snow Load	3.6 KN / M2
Tilt Angle	0-60°	Building height	20m
Modules	Frame or Frameless	Standard	AS/NZS1170 & DIN 1055
Array	Customized	Warranty	10years
Orientation	l andscape,Portrait	Service life	25 years

Introduction

Triangle mounting systems are suitable for all types of flat concrete roofs, designed for flat roofs with non-permeable solutions. Highly pre-assembled, reducing installation time. Suitable for frame and frameless solar panels, easy installation, simple structure, strong and durable. Highly pre-assembled, reducing installation time. Suitable for frame and frameless solar panels, easy installation, simple structure, strong and durable.



Advantage

- 1. Suitable for most types of concrete roofs;
- 2. High strength aluminum alloy material to ensure. The overall stability and strength of the system.
- 3. It can be customized according to the actual situation of the building.



Flat roof ballasted mounting system



Data Sheet

Installation site	Residential/Commercial Concrete roofing	Wind Speed	60m/s
Material	SUS304,AL6005-T5 (Anodized)	Snow Load	3.6 KN / M2
Tilt Angle	0-60°	Building height	20m
Modules	Frame or Frameless	Standard	AS/NZS1170 & DIN 1055
Array	Customized	Warranty	10 Years
Orientation	Landscape,Portrait	Service life	25 Years

Introduction

Adjustable ballast systems can be angled towards the sun, so they take full advantage of UV rays from the sun and the light is not reflected off the panel

This system is easy to beinstalled, good stability. It is widely used in concrete foundation or metal sheet rooftop solar projects. The simple yet robust rack structure enables it to take full advantage of the existing roof, and the adjustable Angle greatly increases the power generation.



Advantage

- 1. Safety and good stability
Ensure strength, stability and safety.
- 2. Easy to install All components are pre-installed, helping to save labor costs and time.
- 3. Adjustable Angle The Angle can be adjusted to greatly increase the power generation.

Components



Adjustable Bracket
Material: AL6005-T5, SUS304



Rail
Material: AL6005-T5



Rail connector
Material: AL6005-T5, SUS304



End Clamp
Material: AL6005-T5, SUS304



Mid Clamp
Material: AL6005-T5, SUS304



Ground washer
Material: SUS304



Grounding Lug
Material: AL6005-T5, SUS304



Wind shield
Material: AL6005-T5, SUS304



Ballasted Plate
Material: AL6005-T5

Installation steps

1



2



3



4



5



6



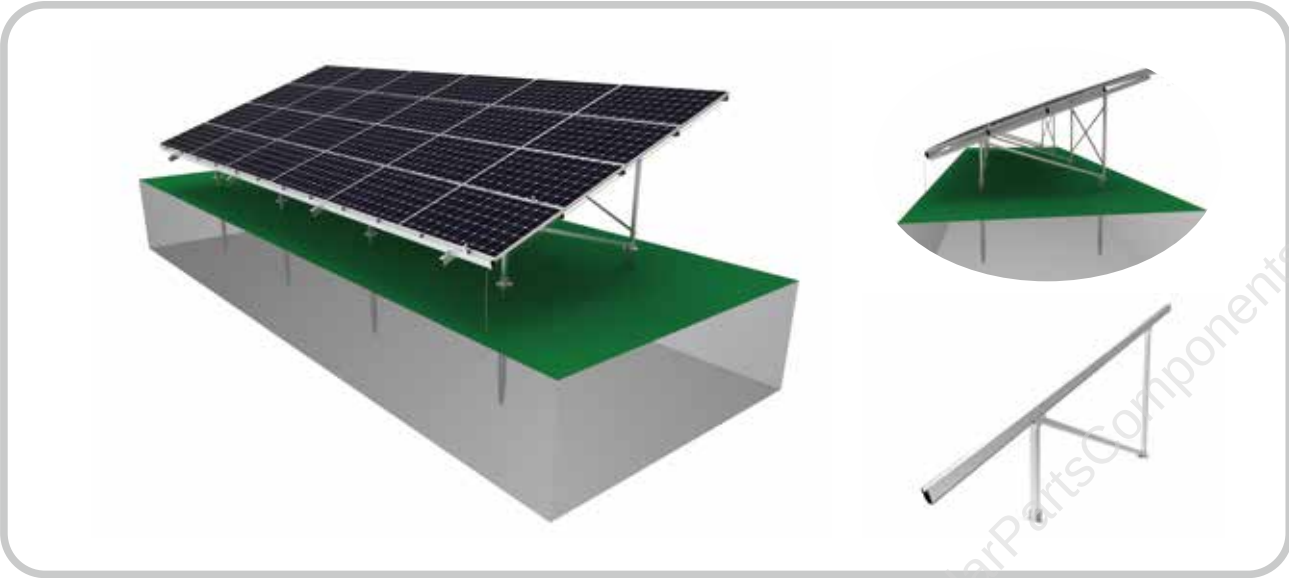
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Application



Solar ground mounting system



Data Sheet

Installation site	Open Area	Wind Speed	60m/s
Material	SUS304,AL6005-T5	Snow Load	3.6 KN / M2
Tilt Angle	0-30°	Building height	20m
Modules	Frame or Frameless	Standard	AS/NZS1170 & DIN 1055
Array	Customized	Warranty	10 Years
Orientation	Landscape,Portrait	Service life	25 Years

Introduction

Depending on the situation, there are several solution options and the system proceeds according to structural mechanics. Calculation and strict testing, the material is made of zinc, aluminum, magnesium and aluminum alloy, both of which have strong anti-corrosion performance and can be used outdoors for at least 25 years.



Advantage

Features:

1. Optional material: zinc aluminum magnesium and aluminum alloy
2. Solid structure, strong corrosion resistance
3. Both the cement foundation and the spiral ground pile are compatible and can be optimized for different terrain, suitable for a variety of uneven ground.
4. Less installation parts, highly pre-assembled, saving construction time.
5. Flexible tilt Angle and ground height design
6. Lightweight structure with high strength

Components



Beam
Material: AL6005-T5



Rail
Material: AL6005-T5



Rail connector
Material: AL6005-T5



Square tube 1
Material: AL6005-T5



H Connector 1
Material: AL6005-T5, SUS304



H Connector 2
Material: AL6005-T5, SUS304



Square tube 2
Material: AL6005-T5



Base
Material: AL6005-T5, SUS304



Rail Clamo
Material: AL6005-T5, SUS304



Reinforcement
Material: AL6005-T5



Mid Clamp
Material: AL6005-T5, SUS304



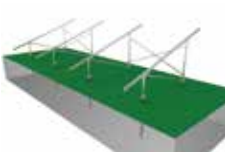
End Clamp
Material: AL6005-T5, SUS304

Installation steps

1



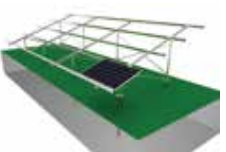
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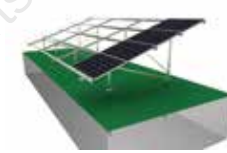
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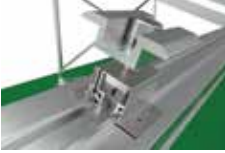
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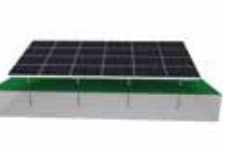
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8



Rack Type



A Type



N Type

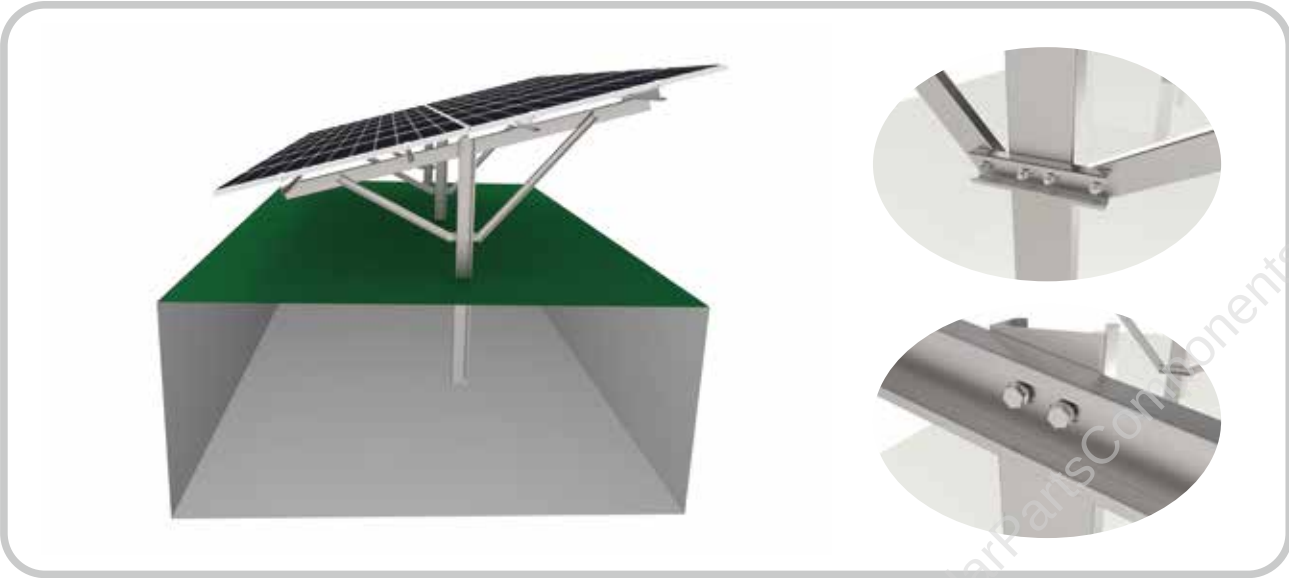


W Type



V V Type

Solar pile ground mounting system



Data Sheet

Installation site	Open Area	Wind Speed	60m/s
Material	SUS304 S350GD ZAM	Snow Load	3.6 KN / M2
Tilt Angle	0-60°	Building height	20m
Modules	Frame or Franeless	Standard	AS/NZS1170 & DIN 1055
Array	Customized	Warranty	10 Years
Orientation	Landscape,Portrait	Service life	25 Years

Introduction

Single column system is one of the most economical solutions for solar ground mounting. HDG steel is used to drive directly into the ground. The simple structure design greatly improves the installation efficiency and reduces the installation cost, while its hot galvanized surface treatment ensures that the system has a long service life even when installed in harsh environments.

This system is suitable for the installation of large commercial and public utility power plants, especially for the occasion of uneven terrain. The support structure is firm and stable, mainly made of carbon steel material, and has the advantages of high wind speed and large snow load. The unique structure design ensures the strength and can effectively reduce the installation time and labor cost. To bring customers more lucrative investment returns.

Single column solar support installation is widely used in various types of terrain, especially in large solar power stations, solar farms, etc.

Advantage

Features:

1. Fast and easy to install.
2. Highly preinstalled, easy installation, low labor cost.
3. The Angle can be adjusted within a certain range.
4. The system layout can be adjusted according to the actual situation on site, and can be adjusted in vertical, east-west, southwest and north-south directions to maximize the realization of photovoltaic power generation with good component compatibility.
5. One-arm and two-arm designs.

Components



I Beam

Material: HDG Steel



C Rail

Material: S350GD ZAM



Bracing

Material: AL6005-T5 , SUS304



Rail Splice

Material: S350GD ZAM



Connector 1

Material: S350GD ZAM



Connector 2

Material: S350GD ZAM



Beam

Material: S350GD ZAM



Mid Clamp Kit

Material AL6005-T5



End Clamp

Material: AL6005-T5

Installation steps

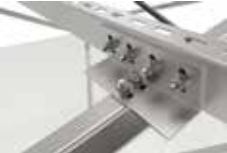
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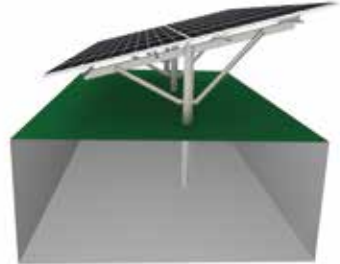


Rack Type

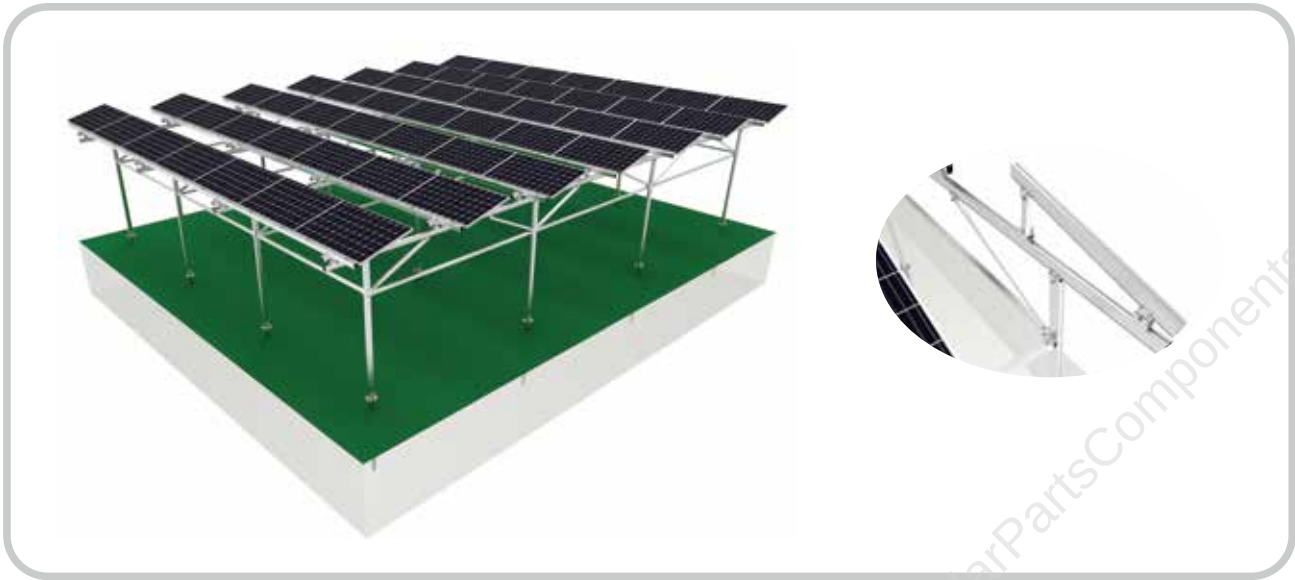
Single Spportor



Double Supportor



Solar ground systems – Agriculture



Data Sheet

Installation site	Open Area	Wind Speed	60m/s
Material	SUS304,AL6005-T5	Snow Load	3.6 KN / M2
Tilt Angle	0-30°	Building height	20m
Modules	Frame or Franeless	Standard	AS/NZS1170 & DIN 1055
Array	Customized	Warranty	10 Years
Orientation	Landscape,Portrait	Service life	25 Years

Introduction

Agricultural greenhouse support system is widely used in farmland with pile foundation. Solar panels can be arranged at different angles, leaving some gaps on each side of the solar panels to meet the sunlight demand of crops.



Advantage

Feature:

1. Light transmittance can be adjusted according to demand to meet crop growth.
2. High corrosion resistance, ensure long-term use.
3. Ensure the construction needs of modern agricultural machinery and equipment.
4. The height of the system can be adjusted to adapt to a variety of complex terrain.

Components



Beam
Material: AL6005-T5



Rail
Material: AL6005-T5



Rail connector
Material: AL6005-T5 , SUS304



Square Tube
Material: AL6005-T5



H Connector 1
Material: AL6005-T5 , SUS304



H Connector 2
Material: AL6005-T5 , SUS304



Base 1
Material: AL6005-T5 , SUS304



Base 2
Material: AL6005-T5 , SUS304



Rail Clamp
Material: AL6005-T5



Top structure kits
Material: AL6005-T5 , SUS304



End Clamp
Material: AL6005-T5 , SUS304

Installation steps

1



2



3



4



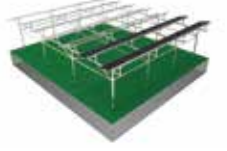
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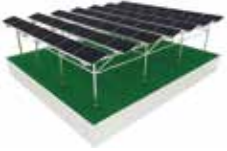
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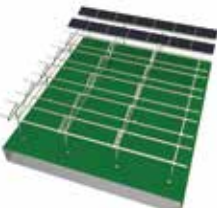
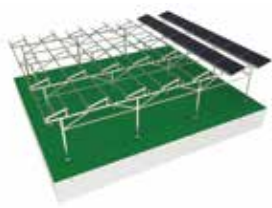
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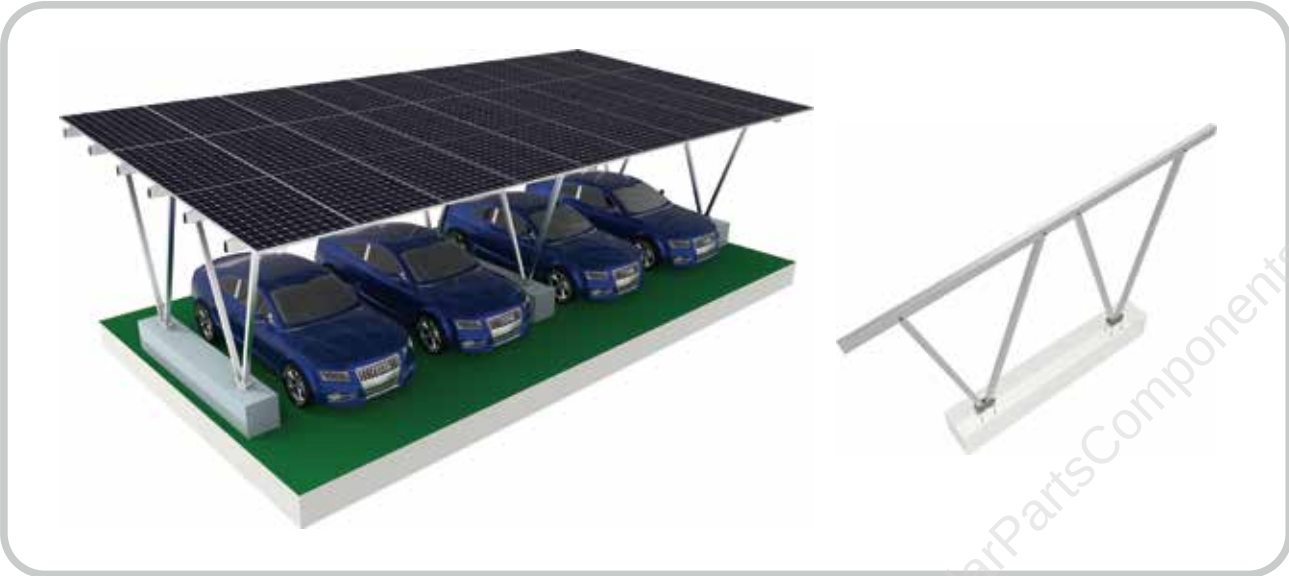
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Rack Details



Solar Aluminum carport system

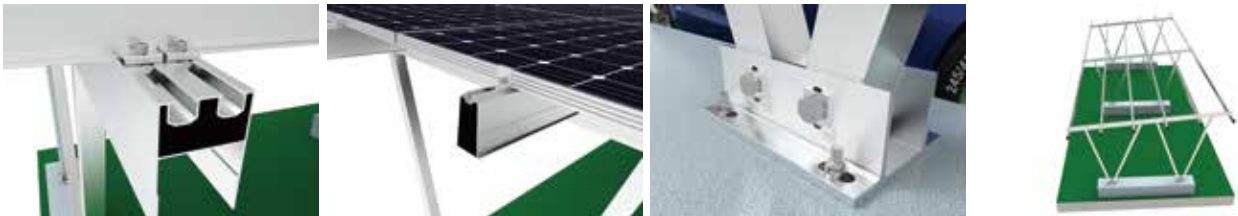


Data Sheet

Installation site	Open Area	Wind Speed	60m/s
Material	SUS304,AL6005-T5	Snow Load	3.6 KN / M2
Tilt Angle	0-30°	Building height	20 m
Modules	Frame or Franeless	Standard	AS/NZS1170 & DIN 1055
Array	Customized	Warranty	10 Years
Orientation	Landscape,Portrait	Service life	25 Years

Introduction

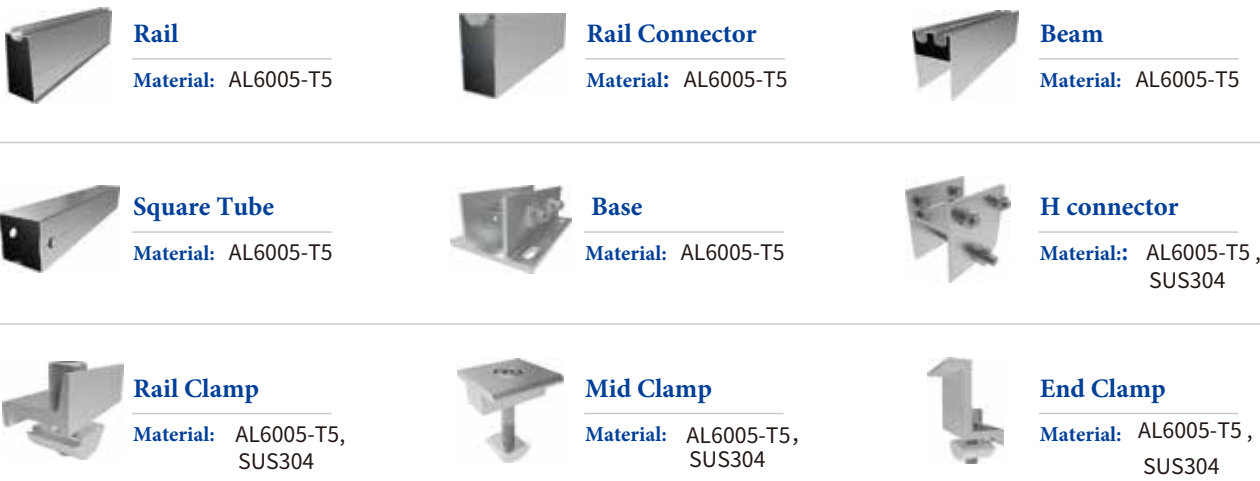
This solar waterproof carport system is designed with high strength aluminum alloy to ensure its safety, this aluminum carport mounting system is suitable for most photovoltaic modules on the market, only available in solar panel specifications, using space and sunlight to convert into electricity, they can be used for lighting or car AC charging...



Advantage

- 1. High pre-assembly , easy installation and reduces labor costs
- 2. The height and Angle can be adjusted
- 3. Light material, easy to transport and install
- 4. The layout of the system can be adjusted according to the actual situation on site

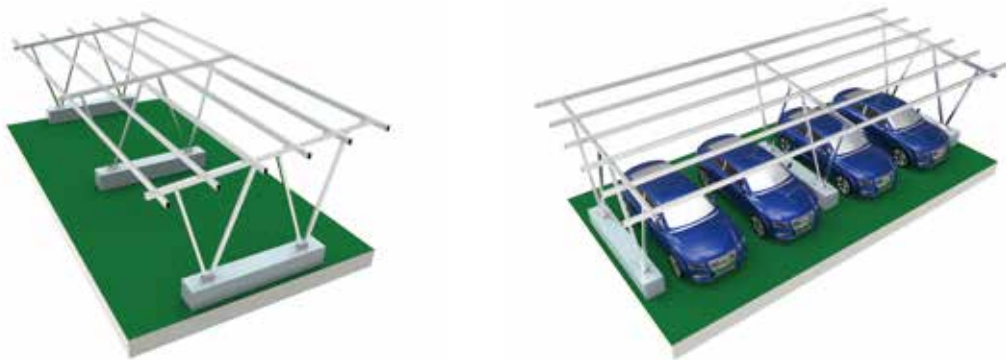
Components



Installation steps



Rack Type

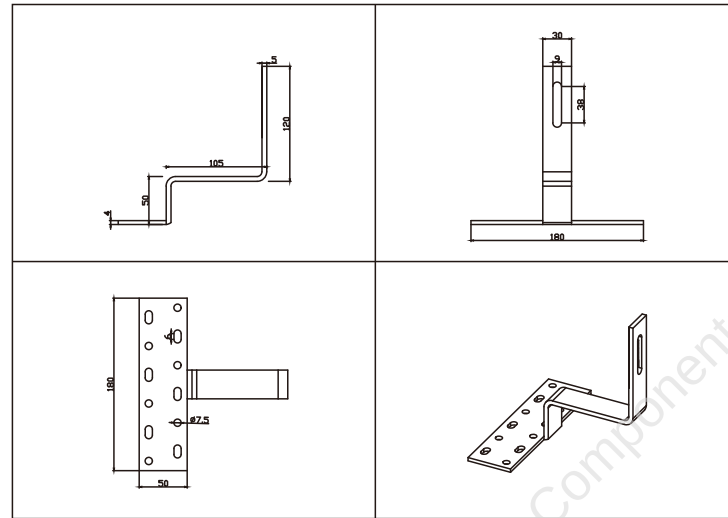


Hooks Series >>>>>>>>>>

Description: Tile hook-01

Item No.: 100080032

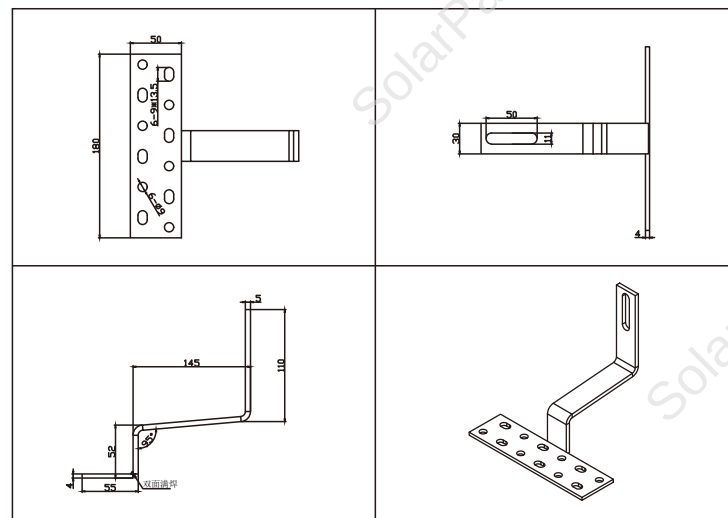
Material: SUS304



Description: Tile hook-03

Item No.: 100080053

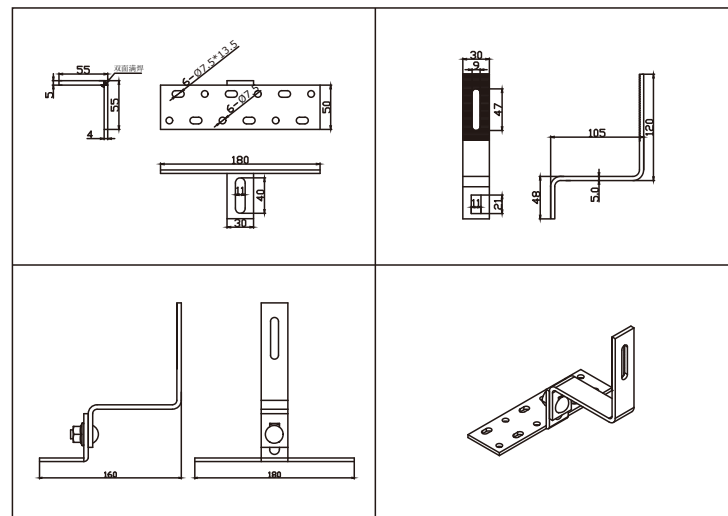
Material: SUS304



Description: Adjustable Tile hook-04

Item No.: 100080045

Material: SUS304

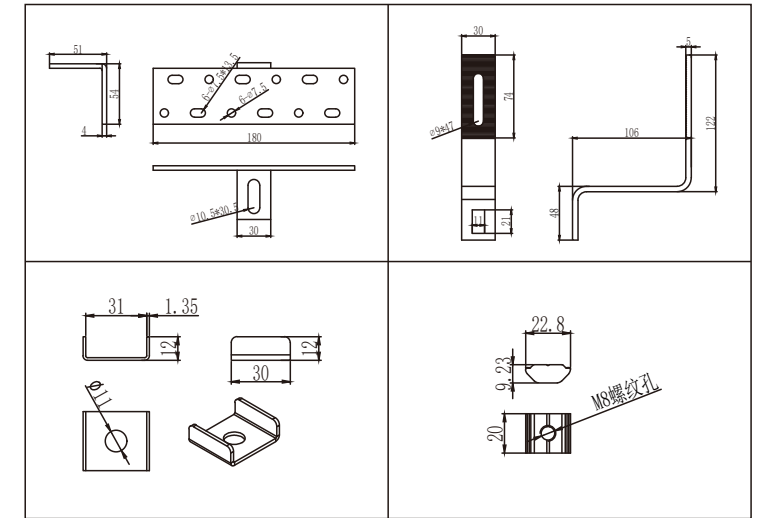


Hooks Series >>>>>>>>>

Description: Adjustable Tile hook1858

Item No.: 100080017

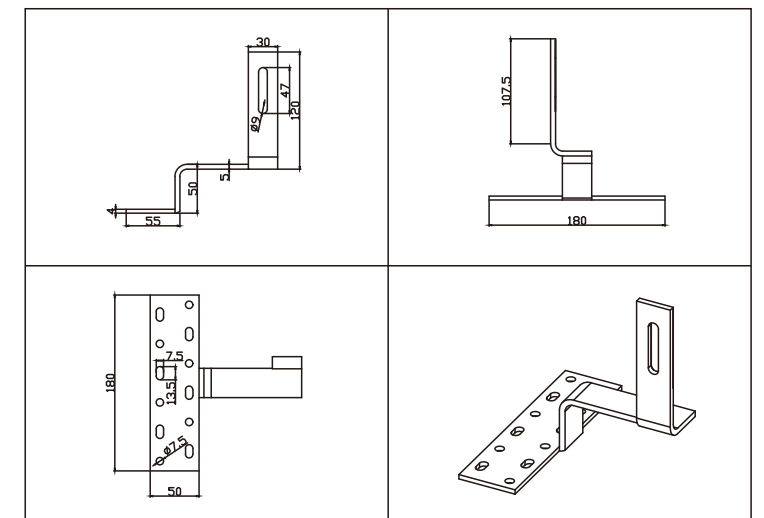
Material: Q235B+SUS304+AL6005-T5



Description: Tile hook-02

Item No.: 100080021

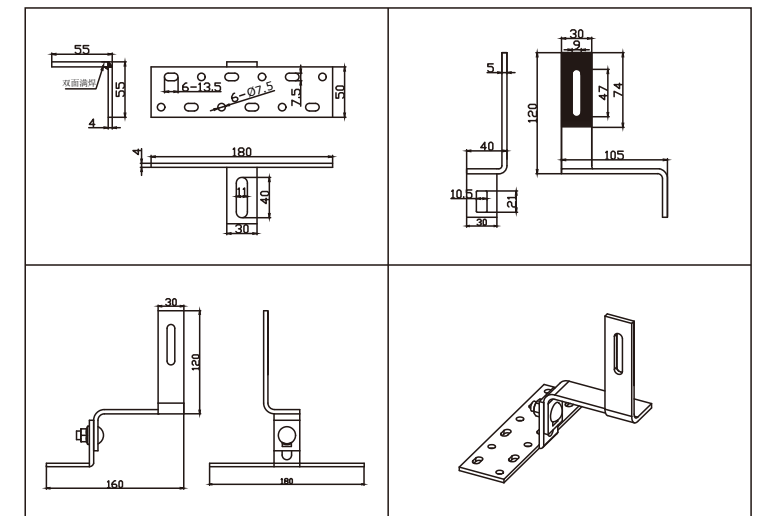
Material: SUS304



Description: Adjustable Tile hook-02

Item No.: 100080050

Material: SUS304

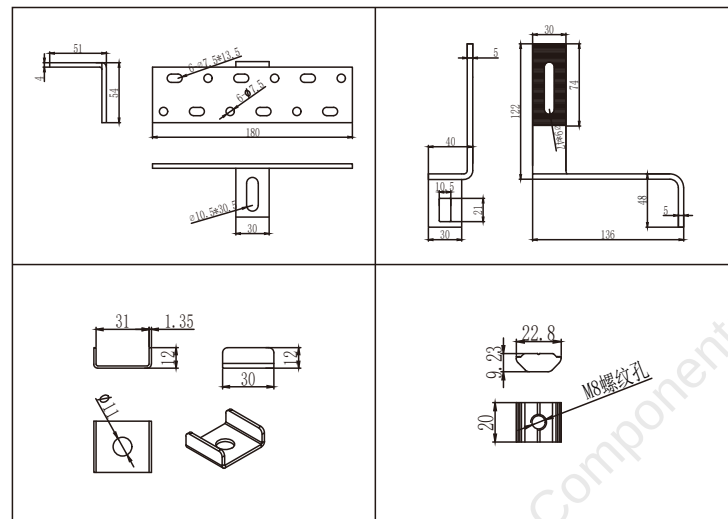


Hooks Series>>>>>>>>>>

Description: Adjustable Tile hook1858L

Item No.: 100080018

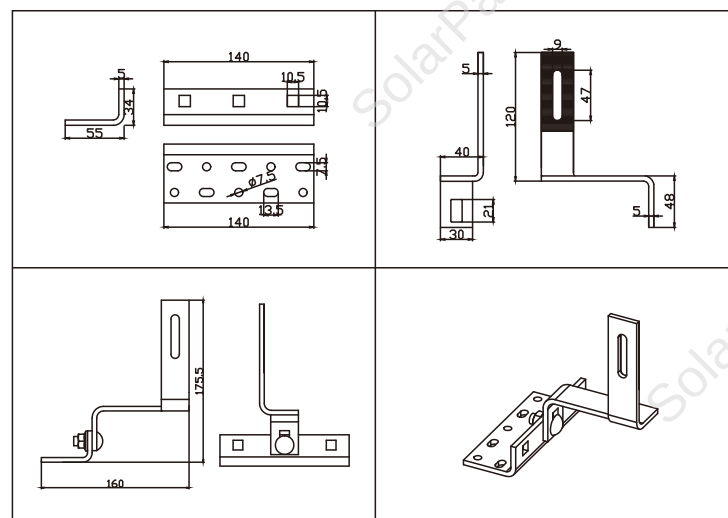
Material: Q235B+SUS304+AL6005-T5



Description: Adjustable Tile hook-01

Item No.: 100080036

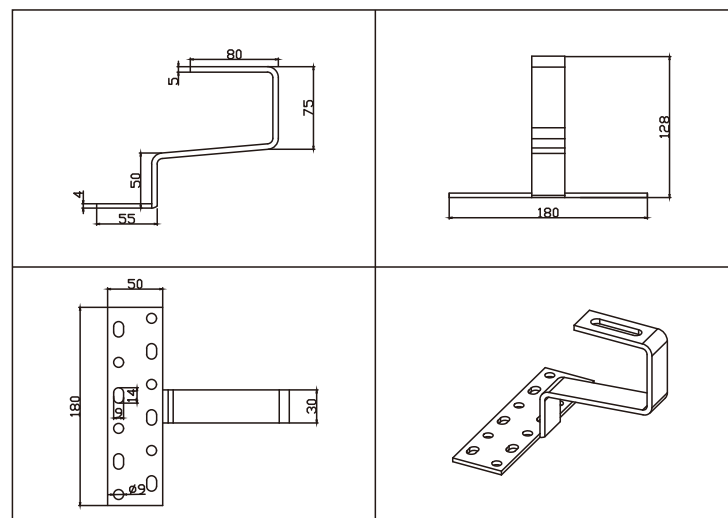
Material: SUS304



Description: Fixed Tile hook--01

Item No.: 100080038

Material: SUS304

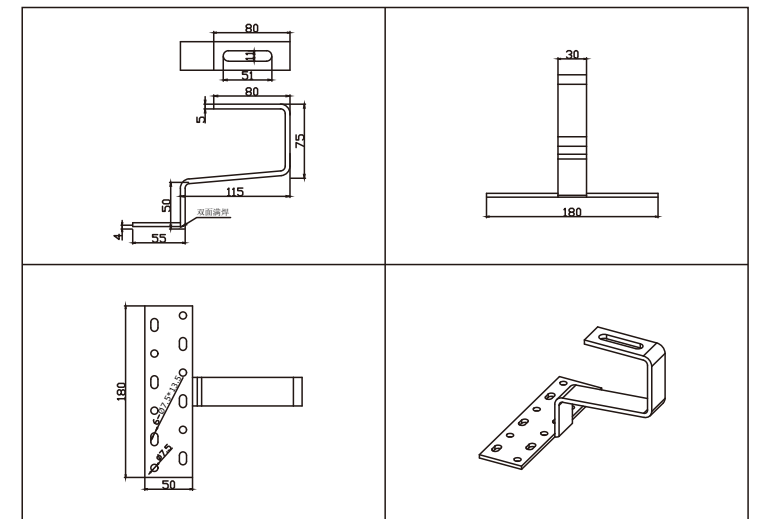


Hooks Series▶▶▶▶▶▶▶▶▶▶

Description: Flat Tile hook-02

Item No.: 100080020

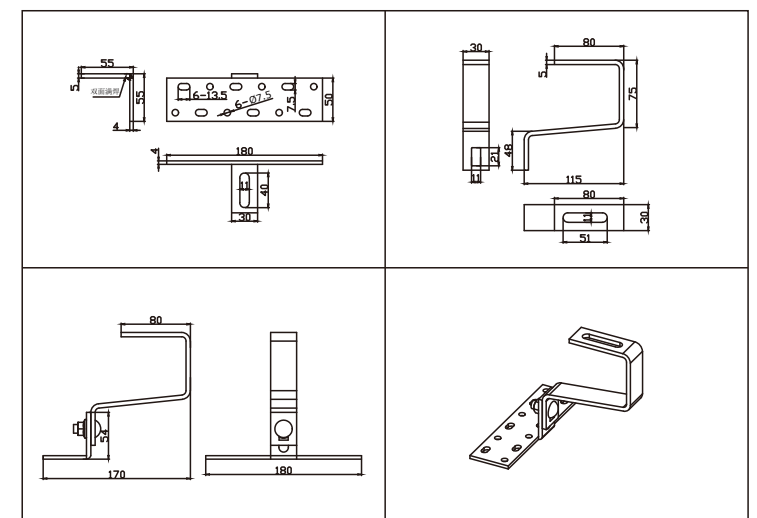
Material: SUS304



Description: Flat bottom adjustable hook-01

Item No.: 100080044

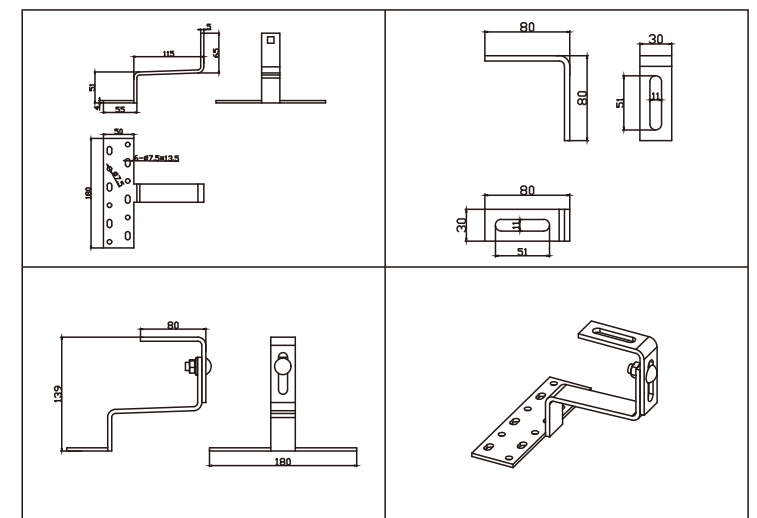
Material: SUS304



Description: upper adjustable hook-03

Item No.: 100080033

Material: SUS304

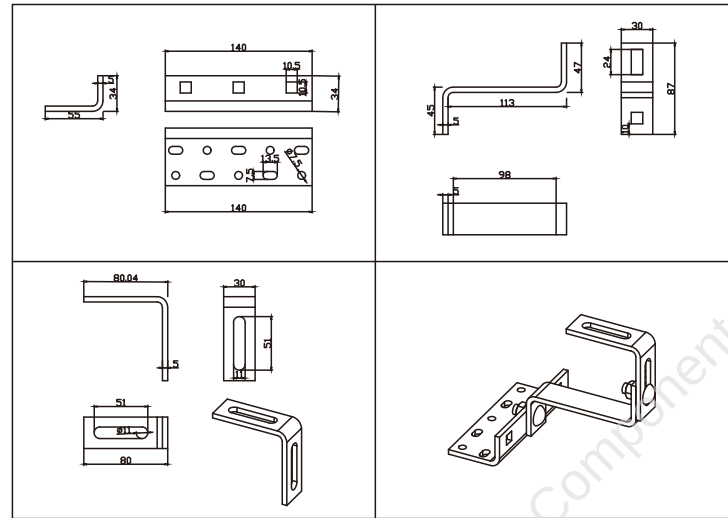


Hooks Series >>>>>>>>>

Description: Double adjustable flat hook-01

Item No.: 100080025

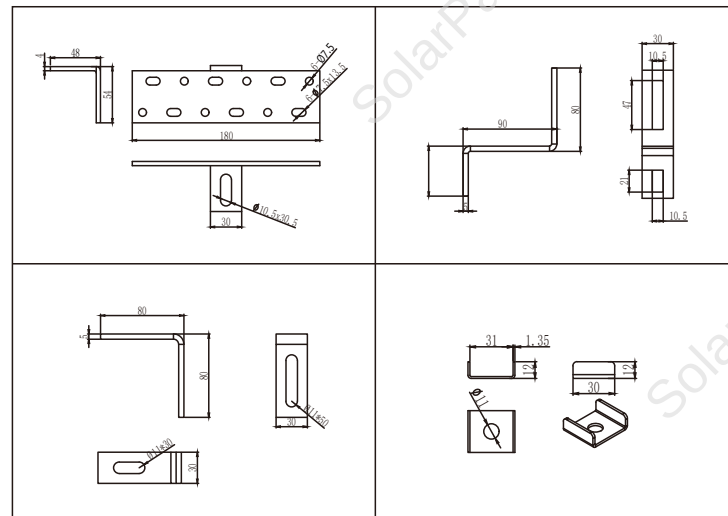
Material: SUS304



Description: Steel hook combination

Item No.: 100080047

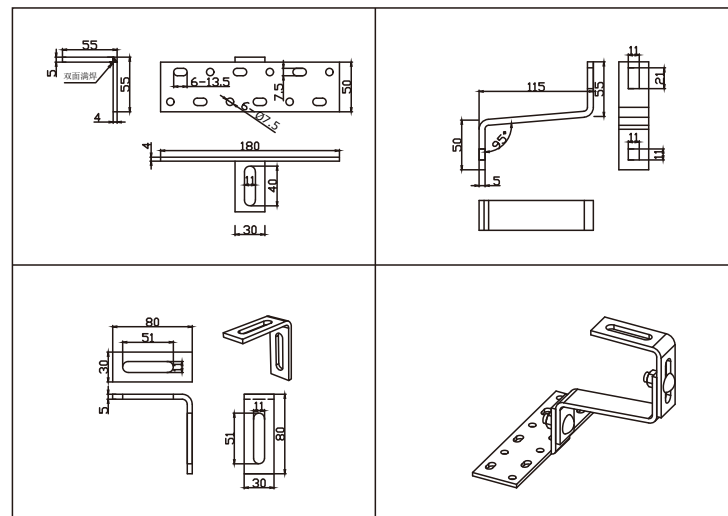
Material: Q235B+SUS304



Description: Up and down adjustable hook-03

Item No.: 100080046

Material: SUS304



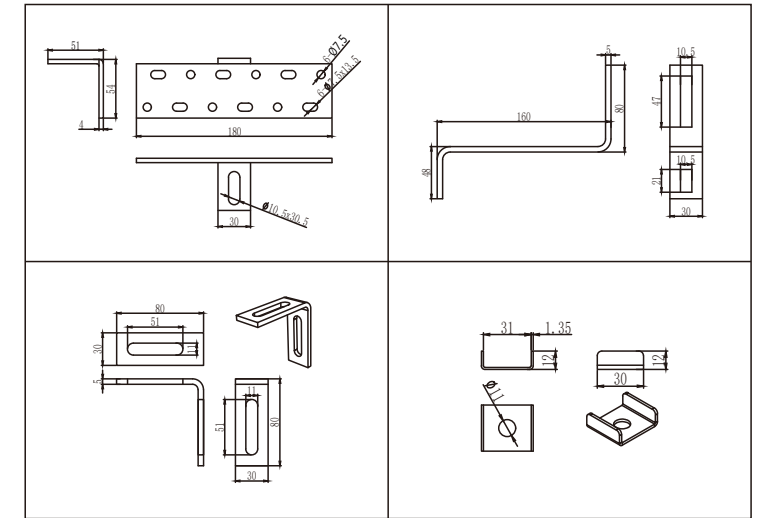
Hooks Series>>>>>>>>>>

Description: C steel hook combination

(Integral base plate)

Item No.: 100080030

Material: Q235B+SUS304

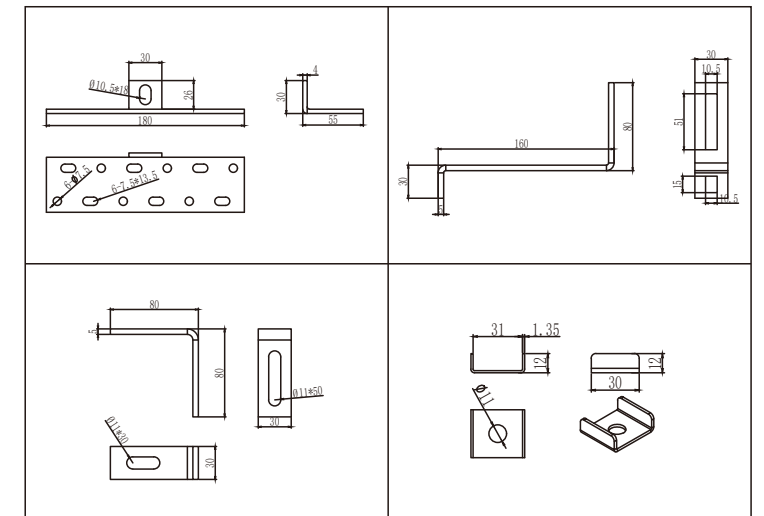


Description: U steel hook combination

(Integral base plate)

Item No.: 100080049

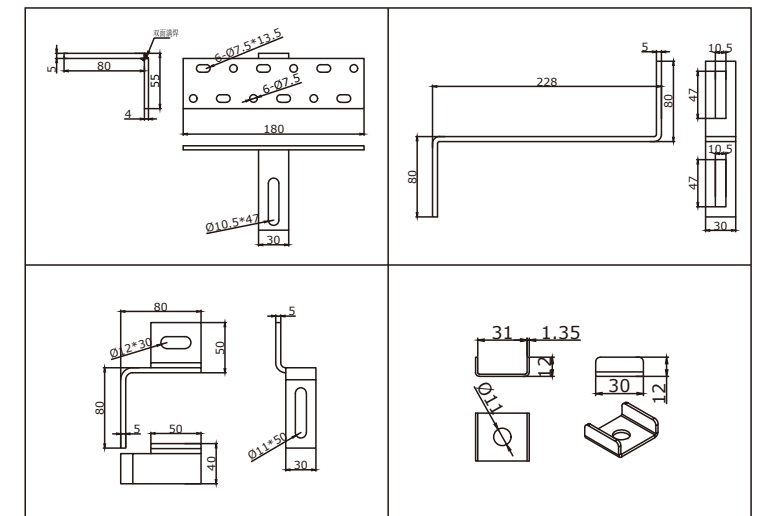
Material: Q235B+SUS304



Description: Side mounted C steel hook

Item No.: 100080027

Material: Q235B+SUS304

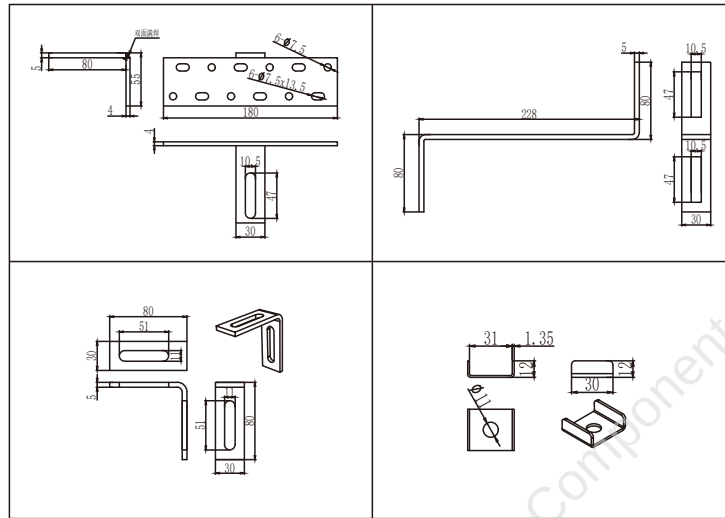


Hooks Series>>>>>>>>>>

Description: C steel hook

Item No.: 100080029

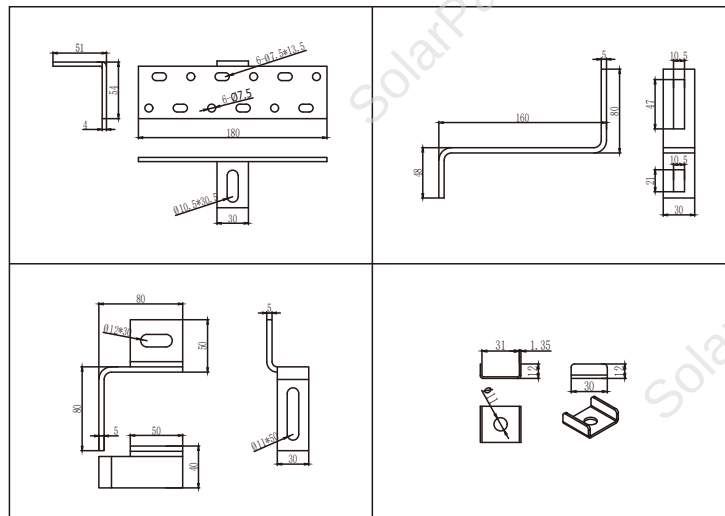
Material: Q235B+SUS304



Description: Side mounted C steel hook
(integrated bottom plate)

Item No.: 100080028

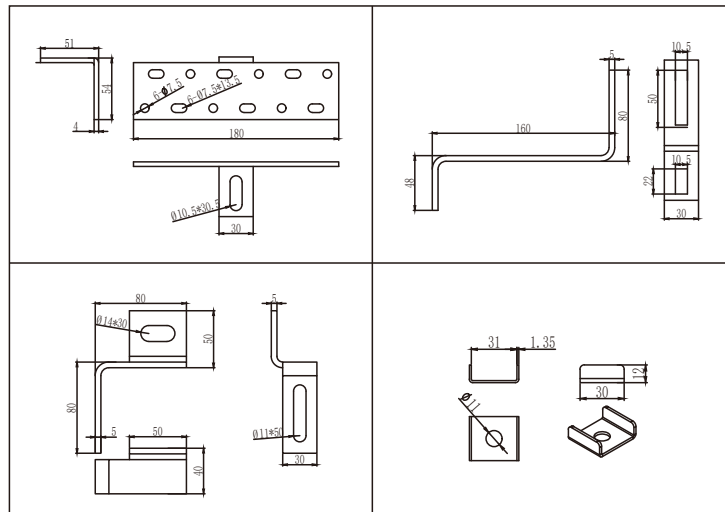
Material: Q235B+SUS304



Description: Side mounted C steel hook
(integrated bottom plate)

Item No.: 100080014

Material: Q235B+SUS304

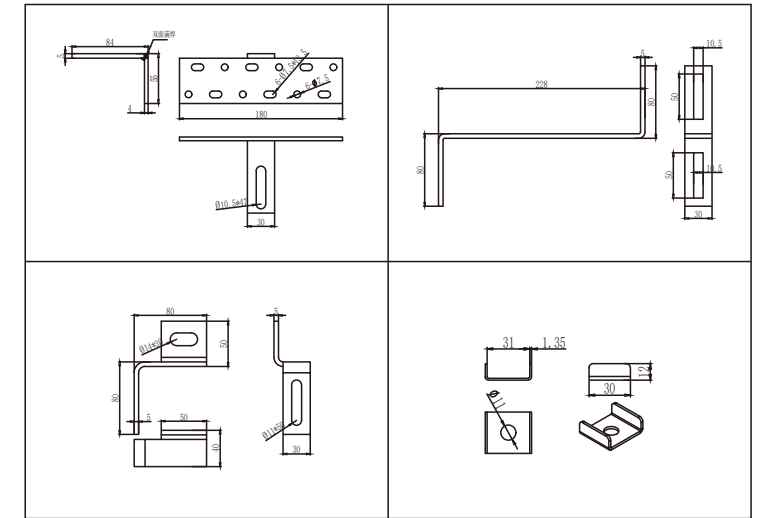


Hooks Series >>>>>>>>>

Description: Side mounted C steel hook

Item No.: 100080015

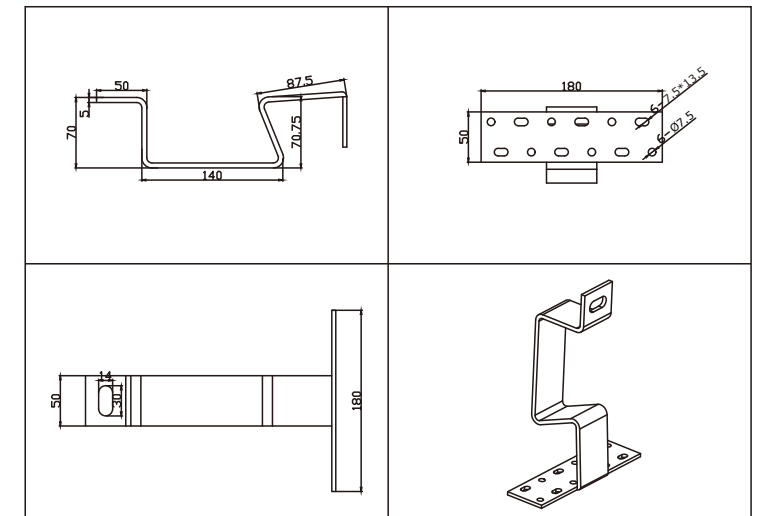
Material: Q235B+SUS304



Description: C steel side mounted bending hook

Item No.: 100080024

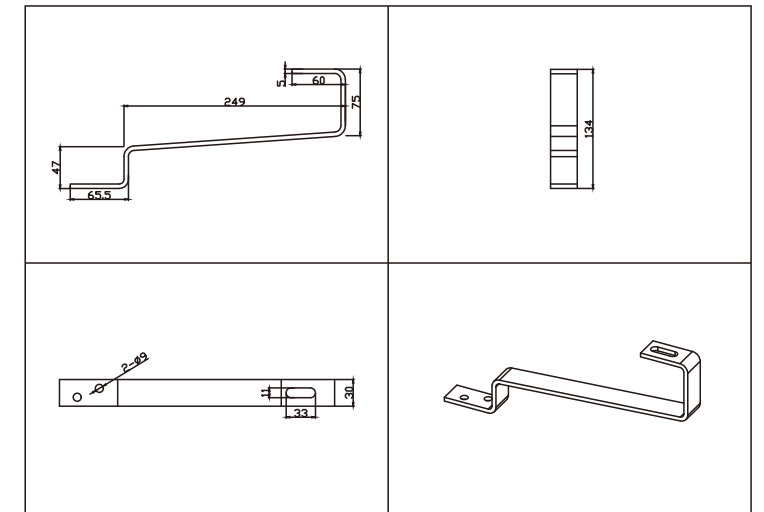
Material: Q235B+SUS304



Description: one piece flat hook-05

Item No.: 100080005

Material: SUS304

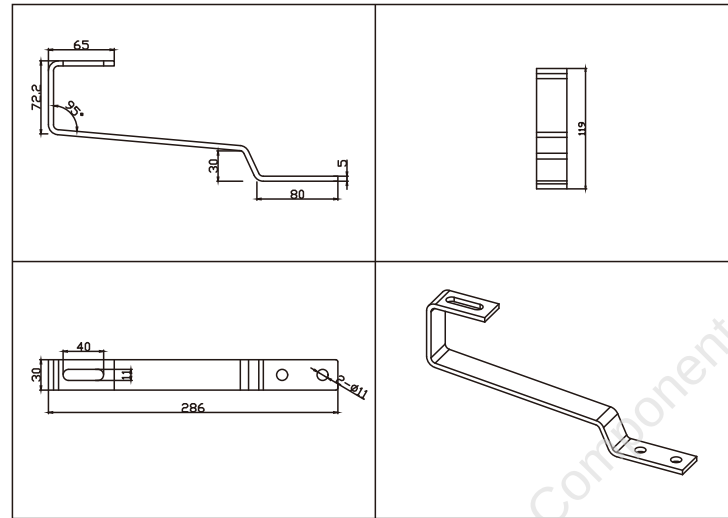


Hooks Series >>>>>>>>>>

Description: One piece flat hook-02

Item No.: 100080007

Material: SUS304

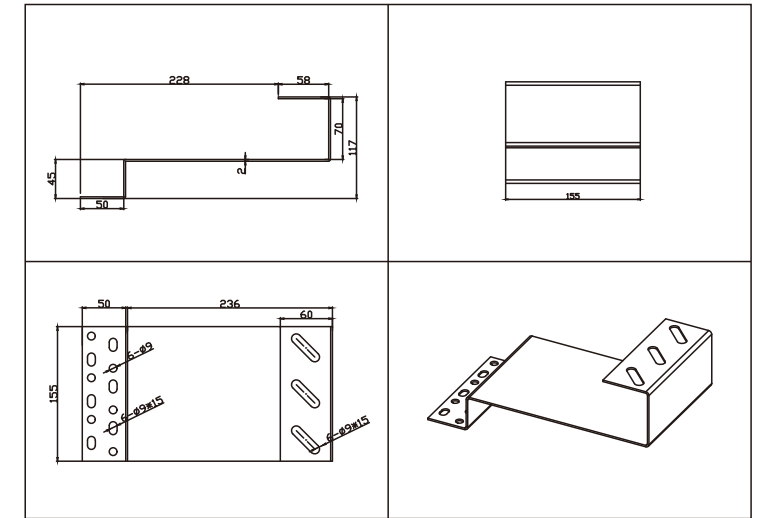


Hooks Series >>>>>>>>>

Description: One piece flat hook-06

Item No.: 100080006

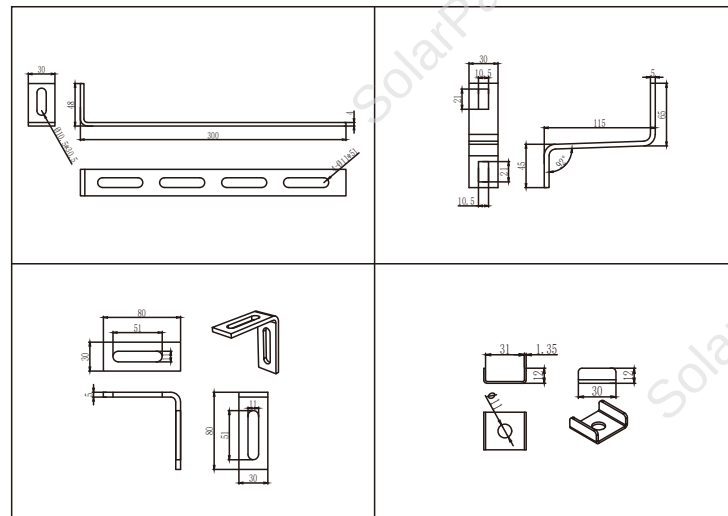
Material: SUS304



Description: C steel hook - vertical base

Item No.: 100080031

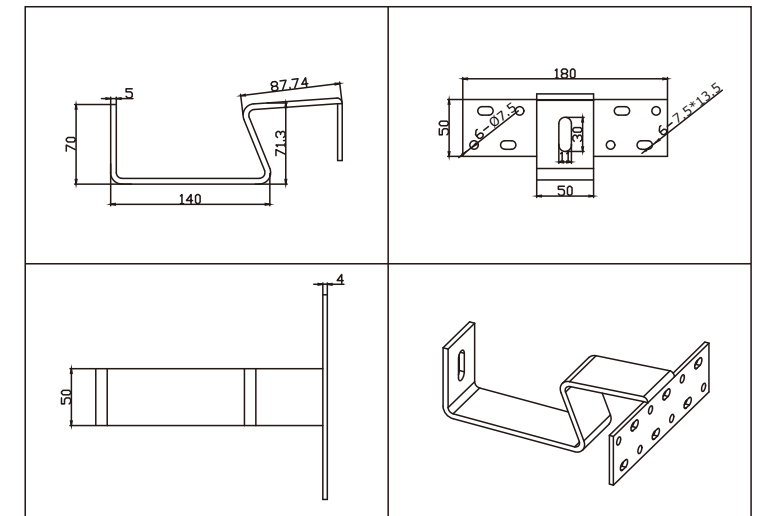
Material: Q235B+SUS304



Description: U steel bending hook

Item No.: 100080055

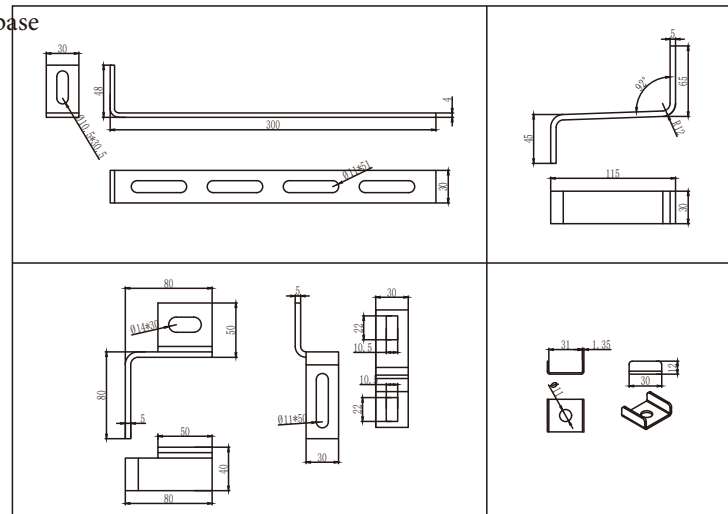
Material: SUS304



Description: Side mounted C steel hook - vertical base

Item No.: 100080016

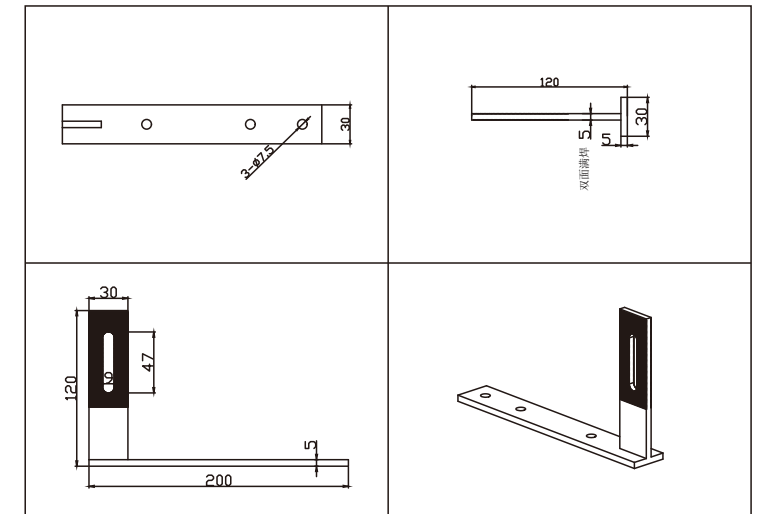
Material: Q235B+SUS304



Description: Fixed side hook-02 vertical base

Item No.: 100080019

Material: SUS304

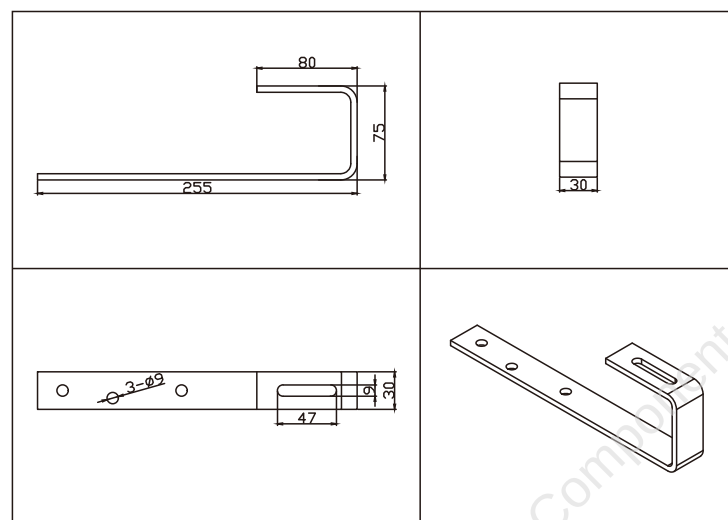


Hooks Series >>>>>>>>>

Description: One piece flat hook-04

Item No.: 100080003

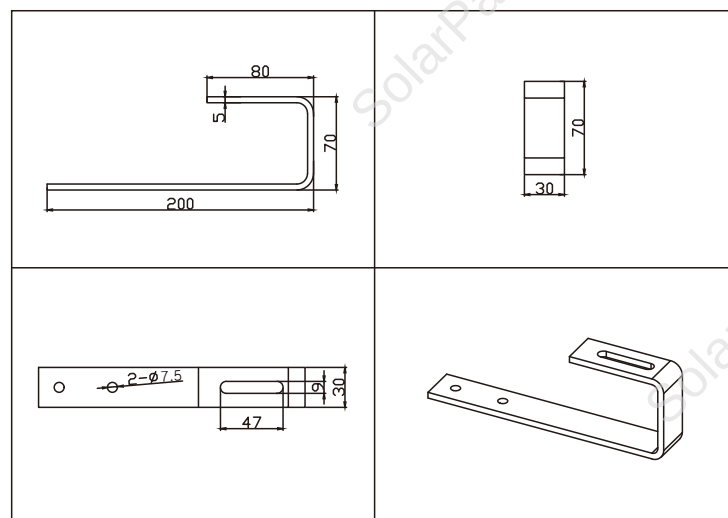
Materia: SUS304



Description: One piece flat hook--01

Item No.: 100080002

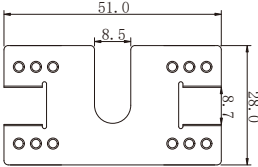
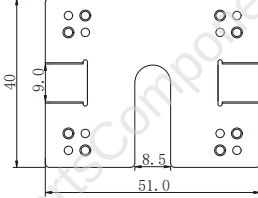
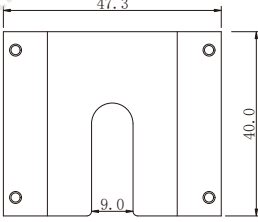
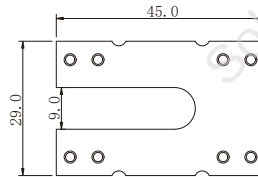
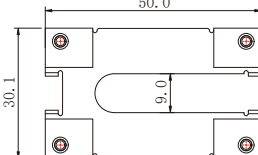
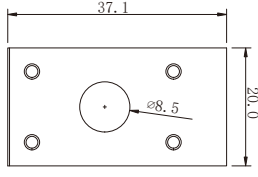
Material: SUS304



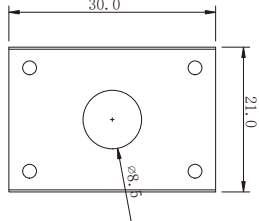
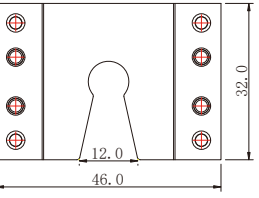
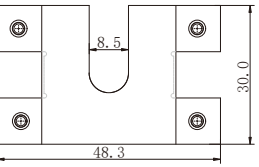
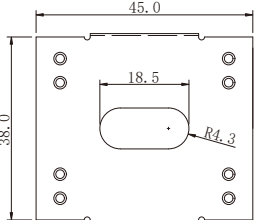
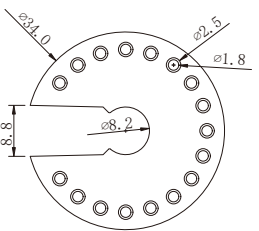
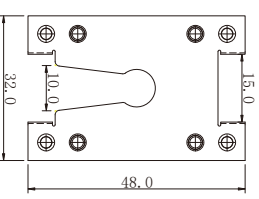
Grounding washer Series >>>>>>>>

Item No.	Name	Picture	Specification	Drawing
100060001	01 Grounding washer		0.3x32x30mm	
100060002	02 Grounding washer		0.3x30x50mm	
100060003	03 Grounding washer		0.3x34x32mm	
100060004	04 Grounding washer		0.3x40x50mm	
100060005	05 Grounding washer		0.3x34x44mm	
100060006	06 Grounding washer		0.3xφ44mm	

Grounding washer Series>>>>>>>>

Item No.	Name	Picture	Specification	Drawing
100060007	07 Grounding washer		0.3x51x28mm	
100060008	08 Grounding washer		0.3x51x40mm	
100060009	09 Grounding washer		0.3x40x47mm	
100060010	10 Grounding washer		0.3x45x29mm	
100060011	11 Grounding washer		0.3x50x30mm	
100060012	12 Grounding washer		0.3x37x20mm	

Grounding washer Series>>>>>>>>

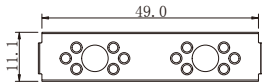
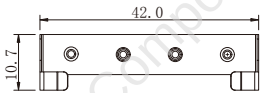
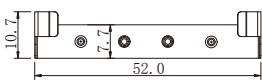
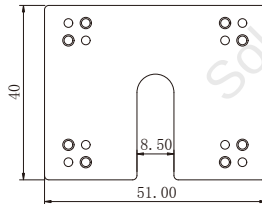
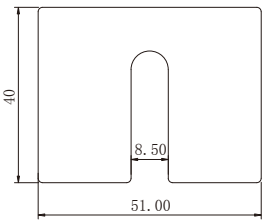
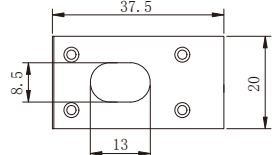
Item No.	Name	Picture	Specification	Drawing
100060013	13 Grounding washer		0.3x30x21mm	
100060014	14 Grounding washer		0.3x32x46mm	
100060015	15 Grounding washer		0.3x30x48mm	
100060016	16 Grounding washer		0.3x45x39mm	
100060017	17 Grounding washer		0.3xφ34mm	
100060018	18 Grounding washer		0.3x48x32mm	

m	
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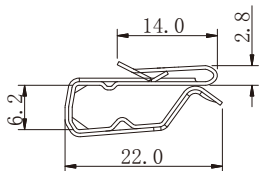
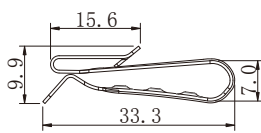
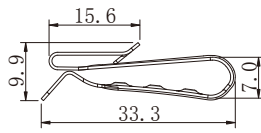
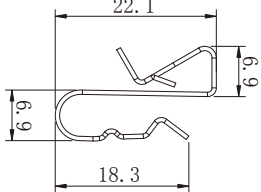
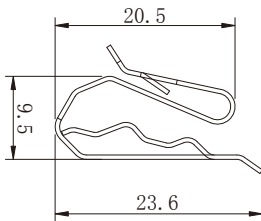
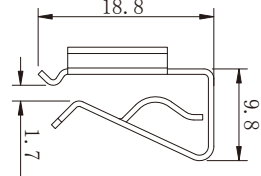
es

		washer
	100060027	27 Grounding washer
	100060028	28 Grounding washer
	100060029	29 Grounding

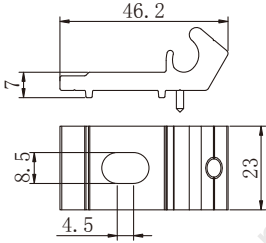
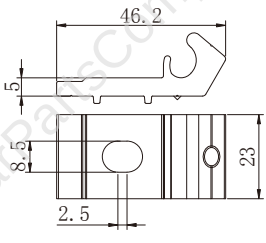
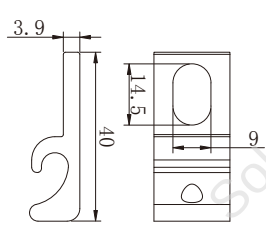
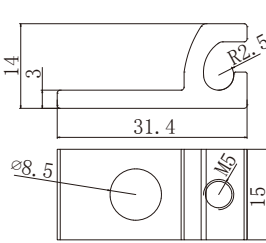
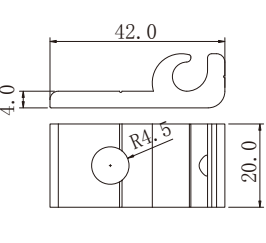
Grounding Washer Series >>>>>>>>

Product Code	Product Name	Picture	Basic Size Description	Drawing
100060031	31 Grounding washer		0.3x11x50mm	
100060032	32 Grounding washer		0.3x11x42mm	
100060033	33 Grounding washer		0.3x11x52mm	
100060034	34 Grounding washer		0.3x40x51mm	
100060035	35 Grounding washer		0.3x40x51mm	
100060036	36 Grounding washer		0.3x20x37.5mm	

Cable Clip Series >>>>>>>>

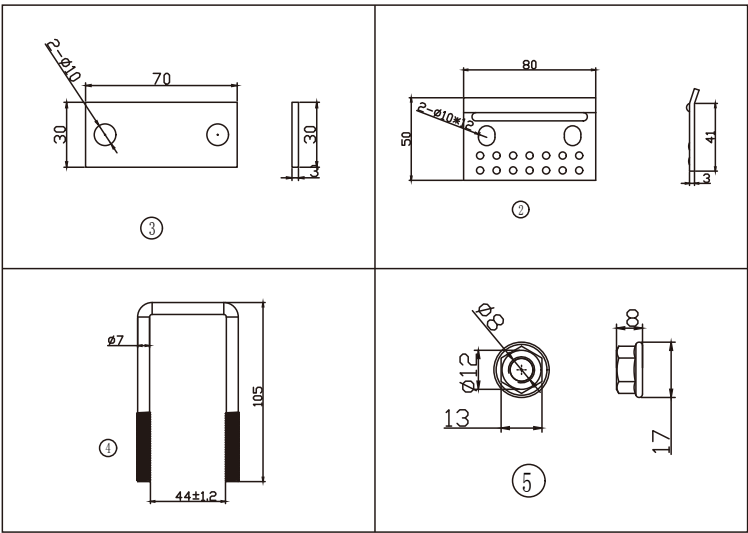
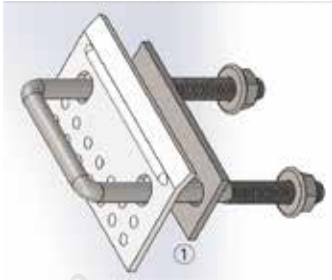
Product Code	Product Name	Picture	Basic Size Description	Drawing
100070001	01 Cable Clip (1-2lines)		0.5x22x18mm	
100070002	02 Cable Clip (3-4lines)		0.5x33.3x16.5mm	
100070003	03 Cable Clip (3-4lines)		0.5x33.3x16.5mm	
100070004	04 Cable Clip (1-2lines)		0.5x22x10mm	
100070005	05 Cable Clip (1-2lines)		0.5x23.6x12.5mm	
100070006	06 Cable Clip (1-2lines)		0.5x18.8x9.3mm	

Grounding Lug Series >>>>>>>>

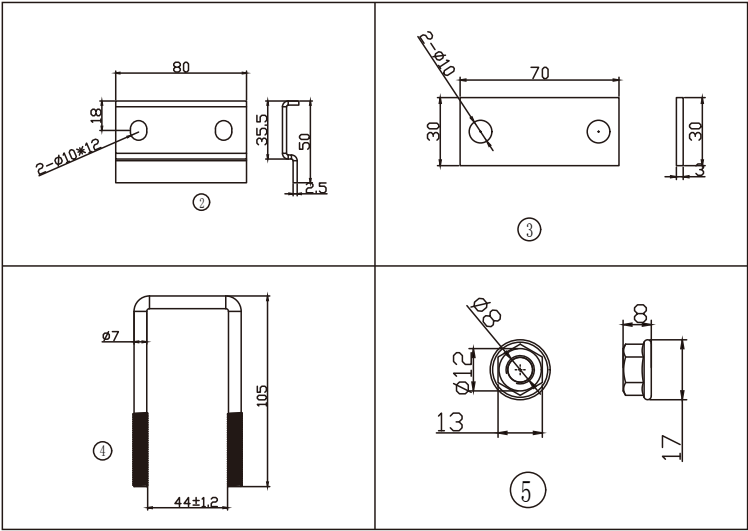
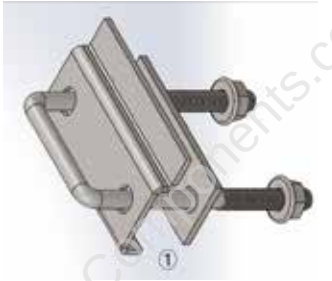
Product Code	Product Name	Picture	Basic Size Description	Drawing
100090001	01 Copper Grounding Lugs		T7xW46.2xL23mm	
100090002	02 Copper Grounding Lugs		T5xW46.2xL23mm	
100090003	03 Copper Grounding Lugs		T3.9xW40xL18mm	
100090004	04 Copper Grounding Lugs		T3xW31.4xL15mm	
100090005	05 Copper Grounding Lugs		T4xW42xL20mm	

Sunshine product Series>>>>>>>>

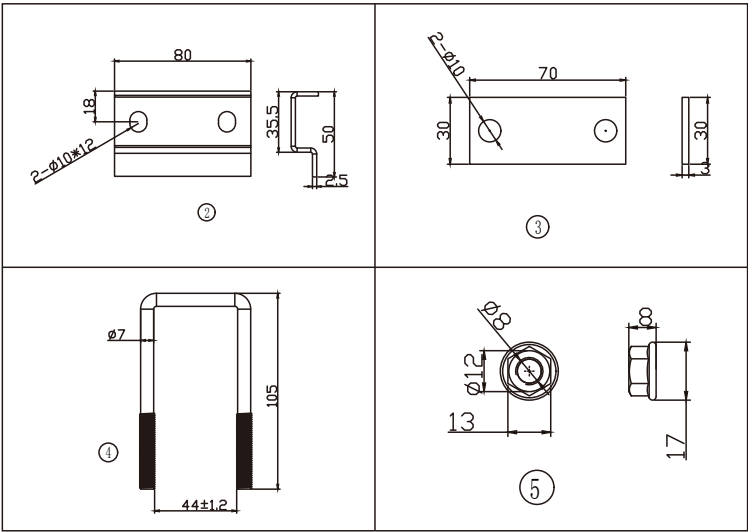
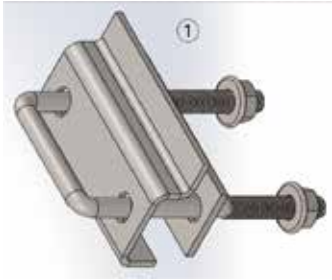
Description: Buckle
Item No.: 100050040
Material: S350GD-ZM+Q325B



Description: Buckle H9
Item No.: 100050041
Material: S350GD-ZM+Q325B

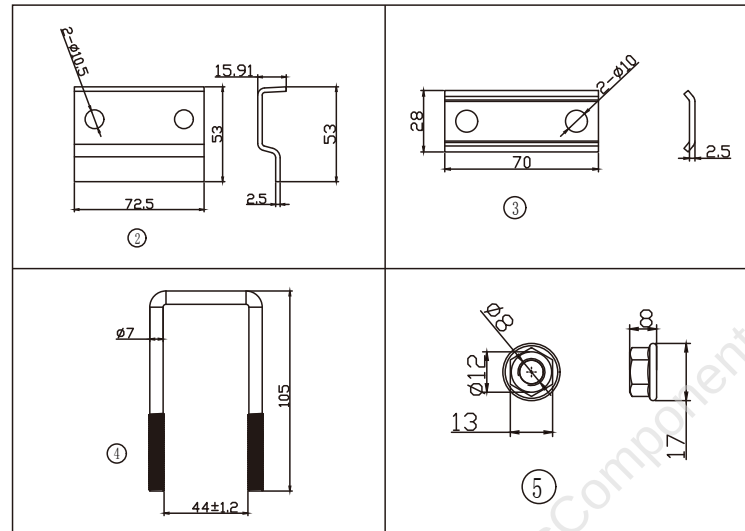
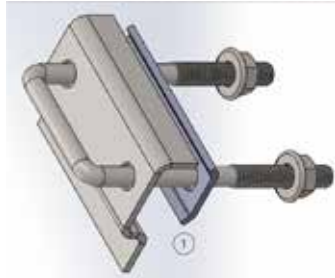


Description: Buckle H15
Item No.: 100050042
Material: S350GD-ZM+Q325B



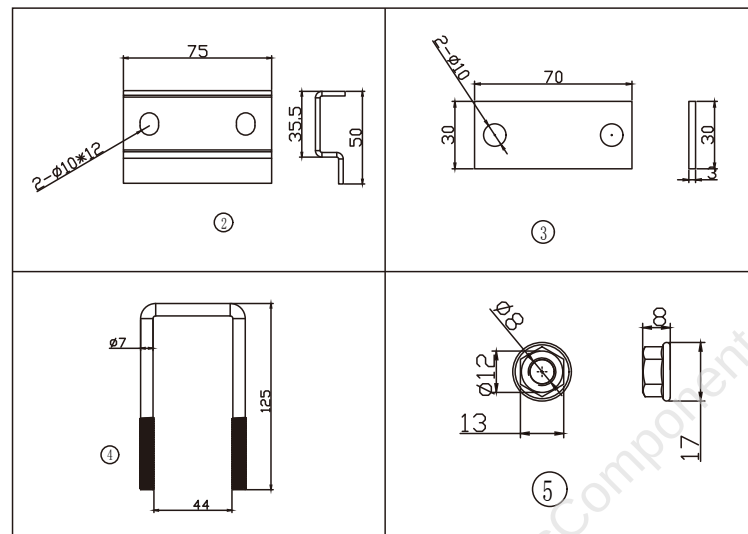
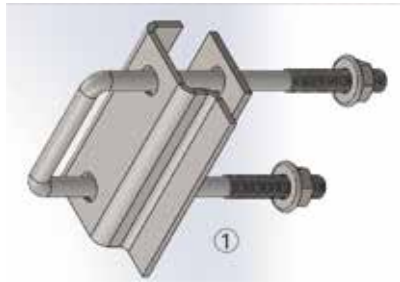
Sunshine product Series >>>>>>>>>>

Description:	Buckle L73
Item No.:	100050043
Material:	S350GD-ZM+Q325B

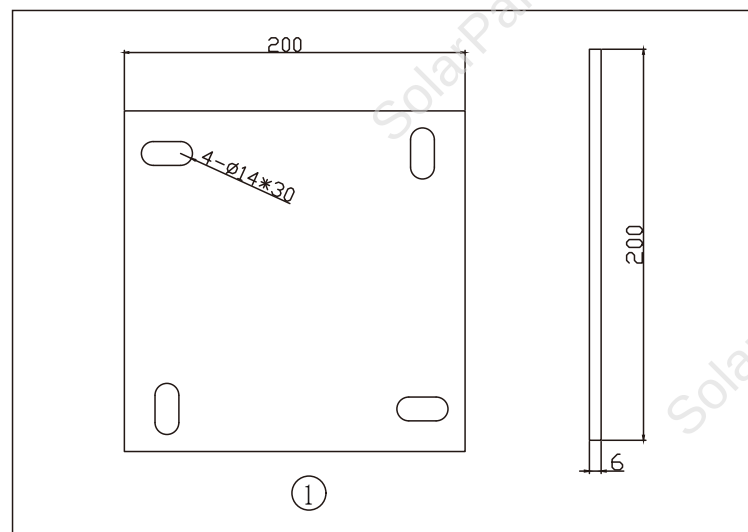
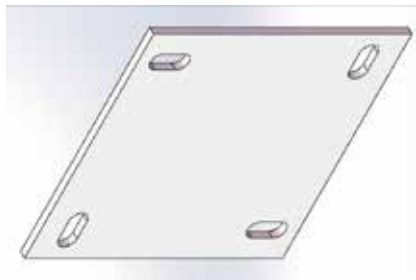


Sunshine product Series>>>>>>>>>>

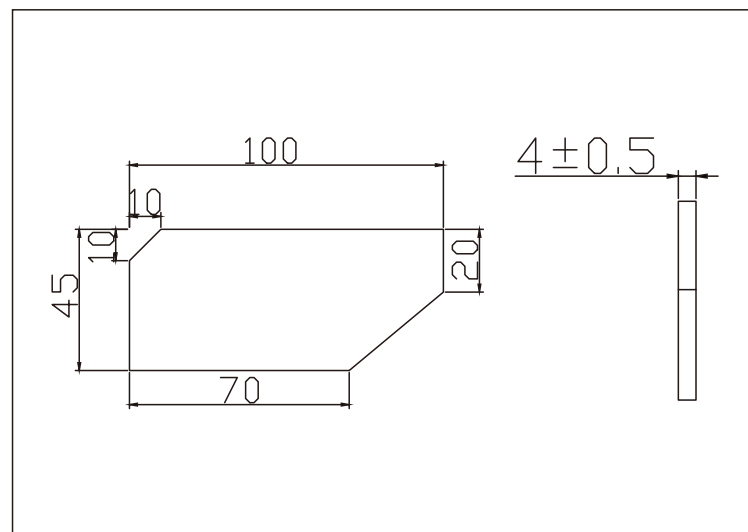
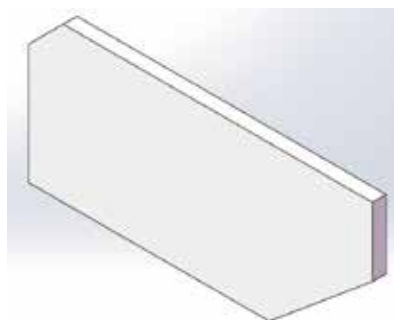
Description:	Buckle L75
Item No.:	100050049
Material:	S350GD-ZM+Q325B



Description: Sun room post base plate 6x200x200
Item No.: 100050035
Material: Q325B

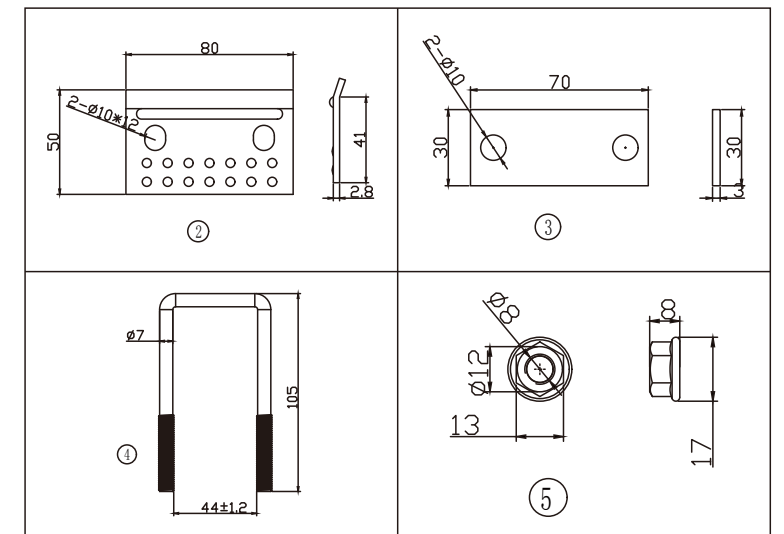
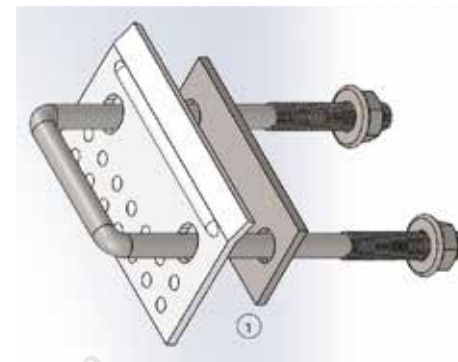


Product Name: Column base stiffener4x100x45
Item No.: 100050036
Material: Q325B



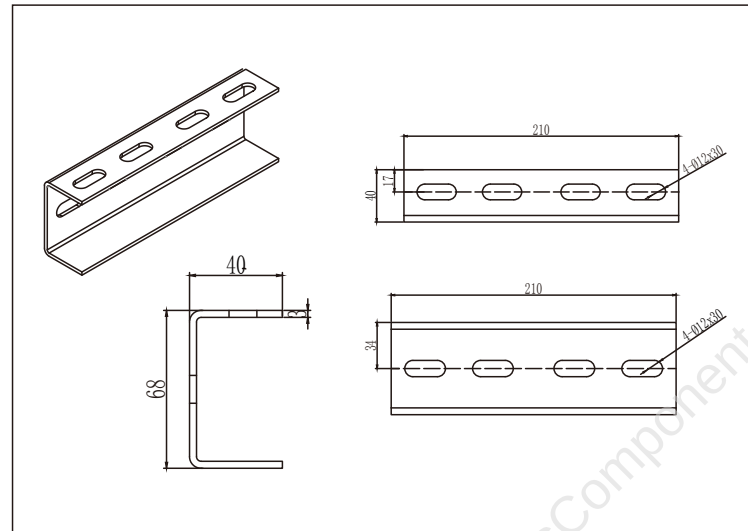
Sunshine product Series >>>>>>>

Description :	Buckle
Item No.:	100050055
Material:	S350GD-ZM+Q325B

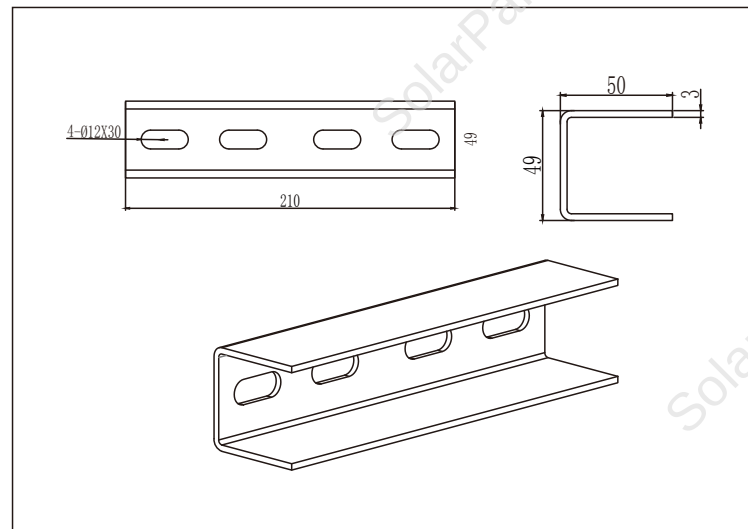


Connector Series

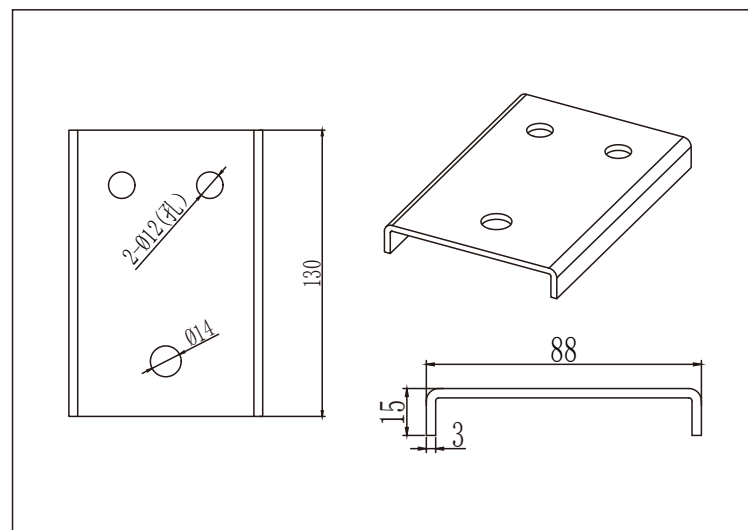
Description:	0427 inclined beam connection 60C steel L210
Item No.:	100010001
Material:	S350GD-ZM



Description:	4489 Beam Connector U49X50X3.0 L=210
Item No.:	100010003
Material:	S350GD-ZM

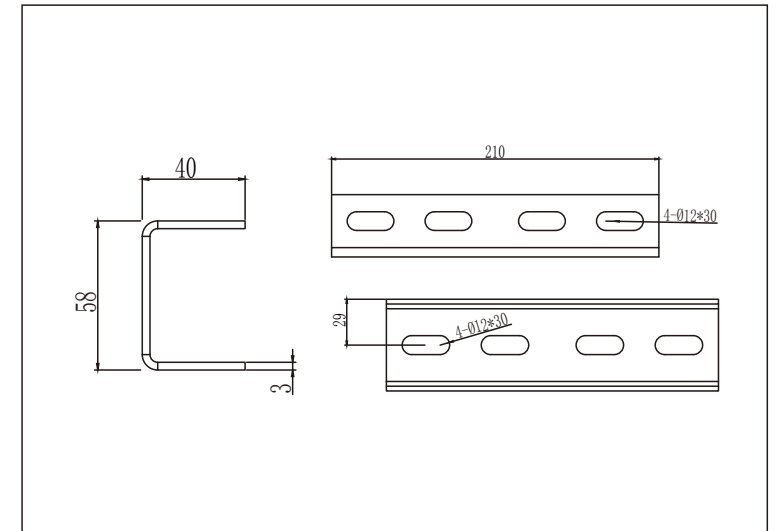


Description:	4491 Bracing Connector U88x15x3.0 L=130
Item No.:	100010005
Material:	S350GD-ZM

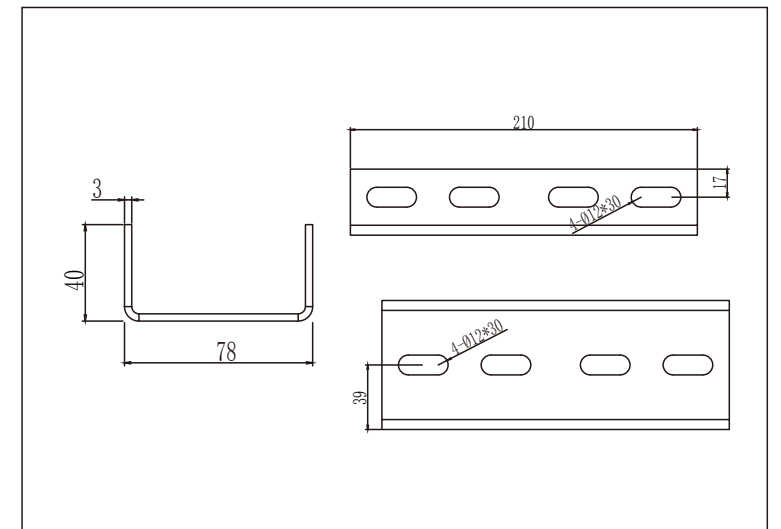


Connector Series >>>>>>>

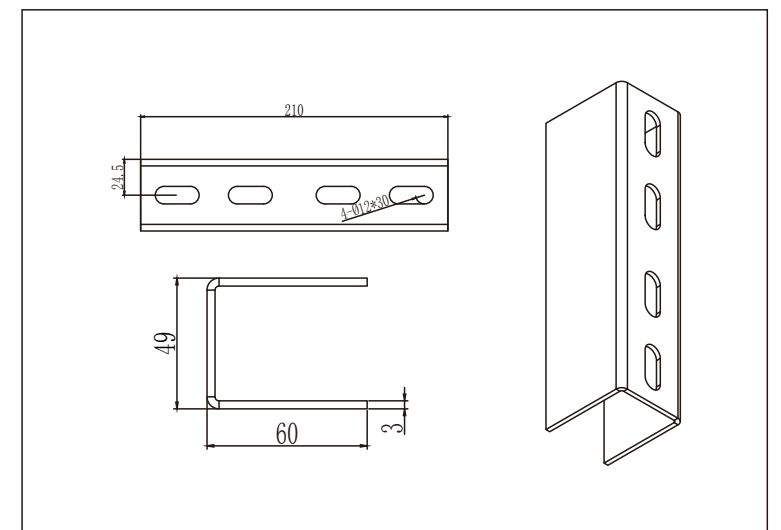
Description:	5033 inclined beam connector 50C steel L=210
Item No.:	100010006
Material:	S350GD-ZM



Description:	5034 inclined beam connector 70C steel L=210
Item No.:	100010007
Material:	S350GD-ZM



Description:	6325 Beam connector H60
Item No.:	100010010
Material:	S350GD-ZM

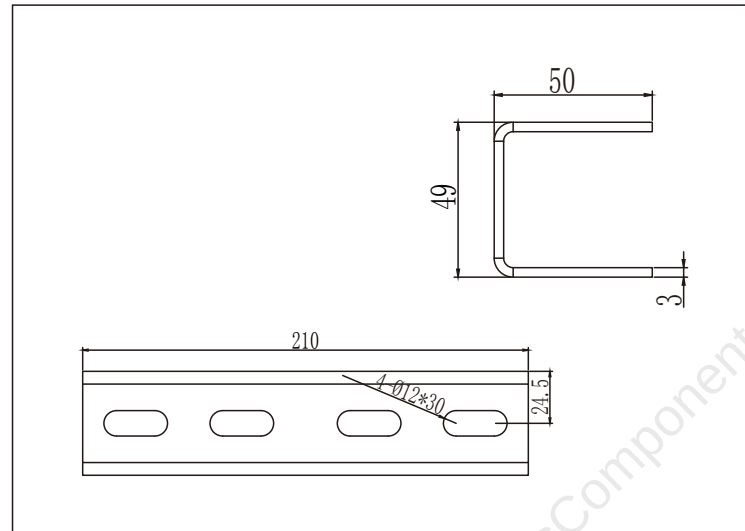


Connector Series

Description: 1440 Beam Connector H50

Item No.: 100010028

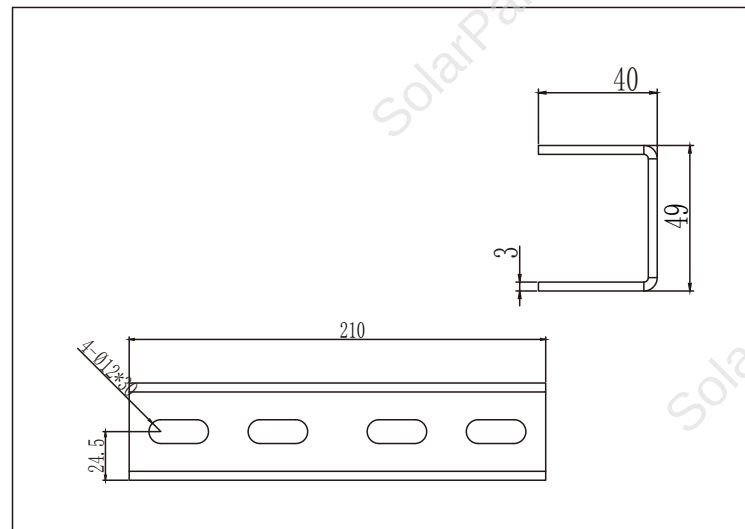
Material: Q235B



Description: 2325 Beam Connector H40

Item No.: 100010056

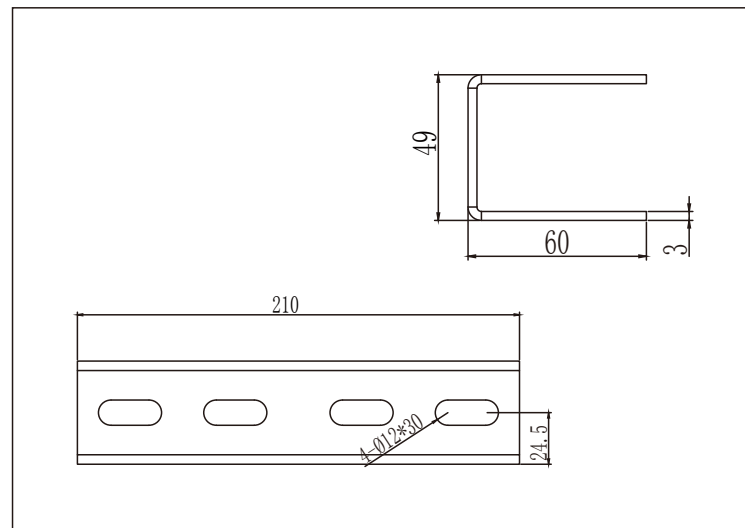
Material: Q235B



Description: 4063 Beam connector H60

Item No.: 100010102

Material: Q235B

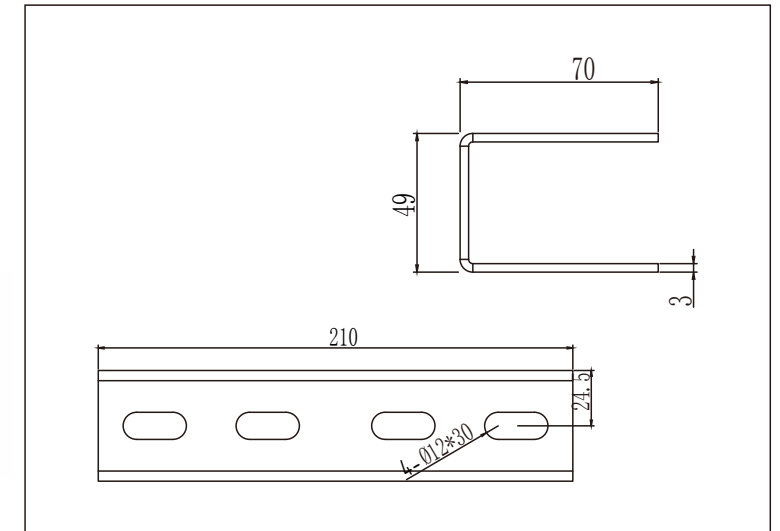


Connector Series

Description: 4126 C steel connector H70

Item No.: 100010110

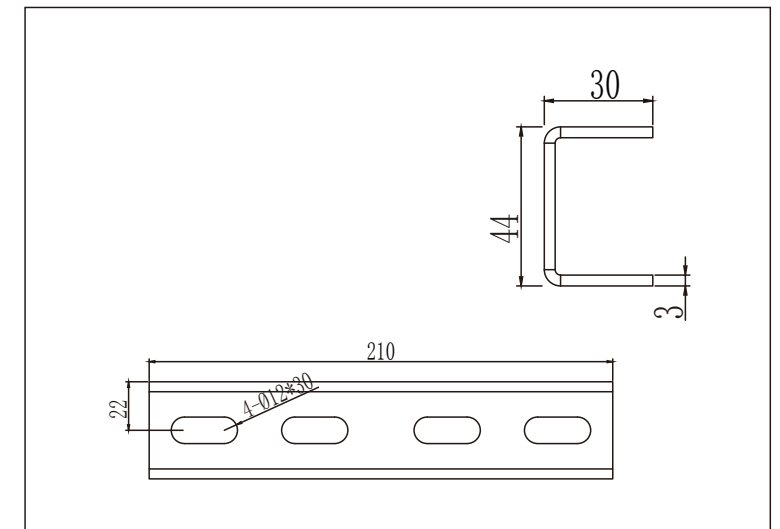
Material: Q235B



Description: 4283 C-shaped steel connectors

Item No.: U44x30x3.0 L=210

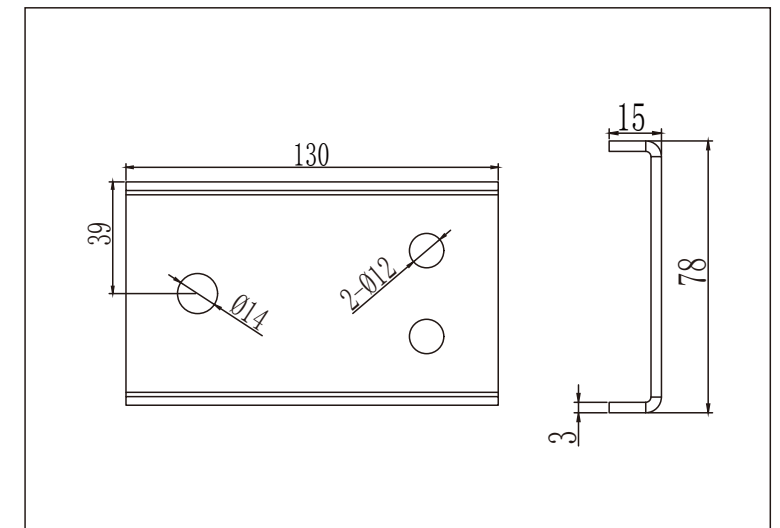
Material: 100010124 Q235B



Description: 4285 Bracing Connector

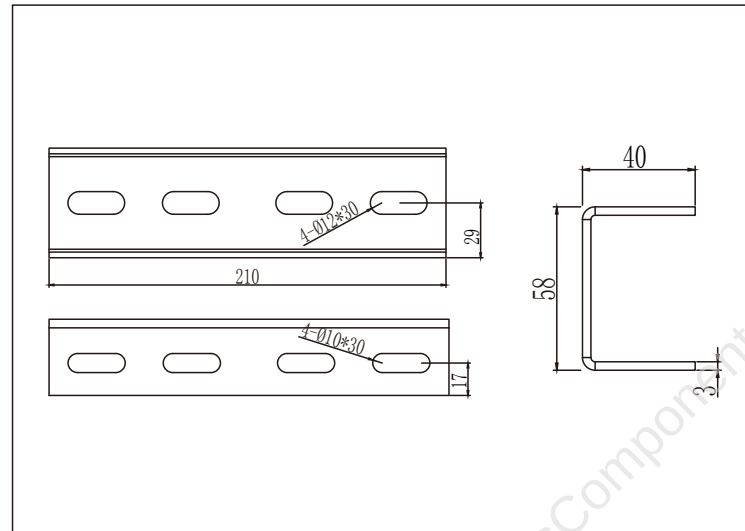
U78x15x3.0 L=130

Item No.: 100010

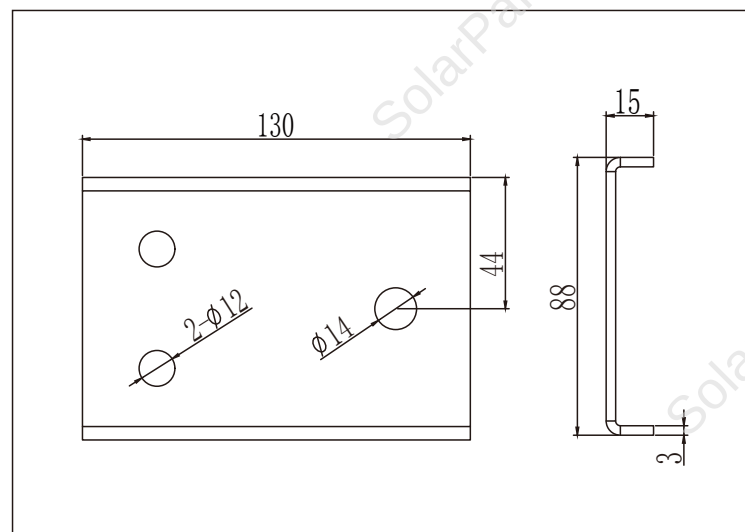


Connector Series >>>>>>>>>

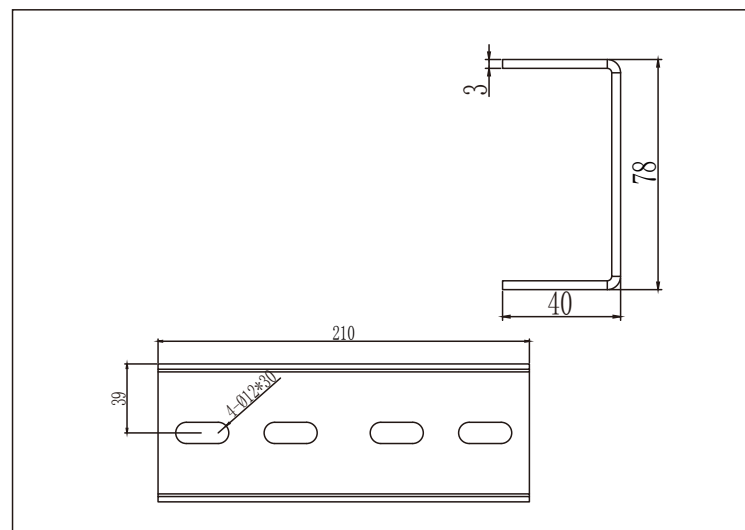
Description:	4359 C-shaped steel connectors
Item No.:	U58x40x3.0 L=210 100010130
Material:	Q235B



Description:	4360 Diagonal bracing connector U88x15x2.0 L=130
Item No.:	100010131
Material:	Q235B

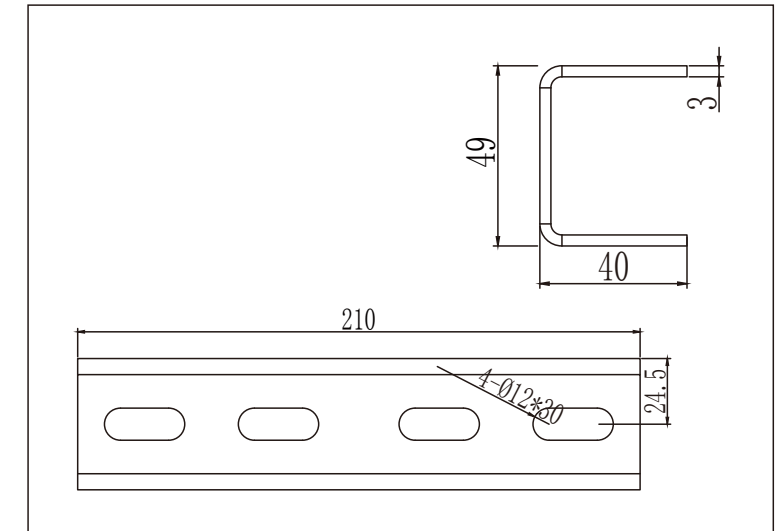


Description:	4364 70 C steel connector U78x40x3.0 L=210
Item No.:	100010132
Material:	Q235B

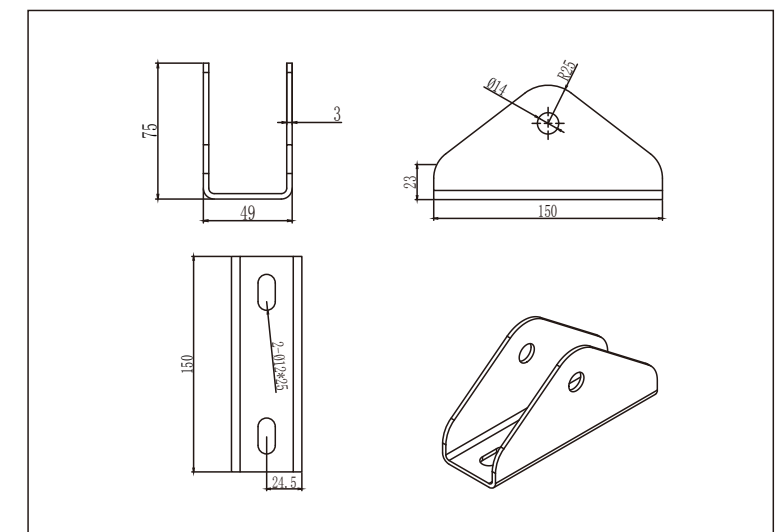


Connector Series >>>>>>>

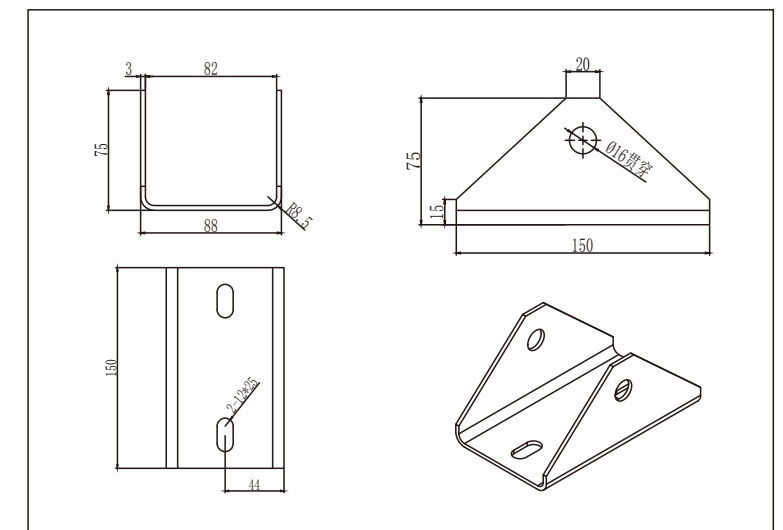
Description:	0582 Beam connector U49X40X3.
Item No.:	100010283
Material:	S350GD-ZM



Description:	6326 New Triangular connector
Item No.:	100010011
Material:	S350GD-ZM

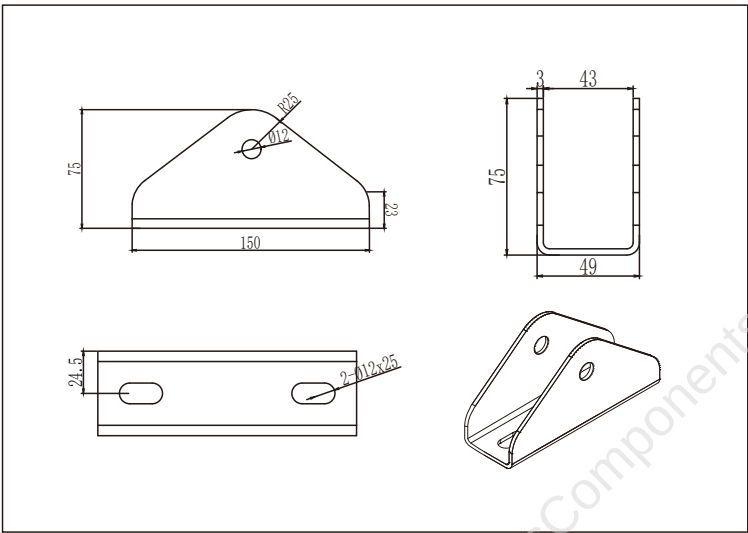


Description:	6327 80 Triangular connector
Item No.:	100010012
Material:	S350GD-ZM

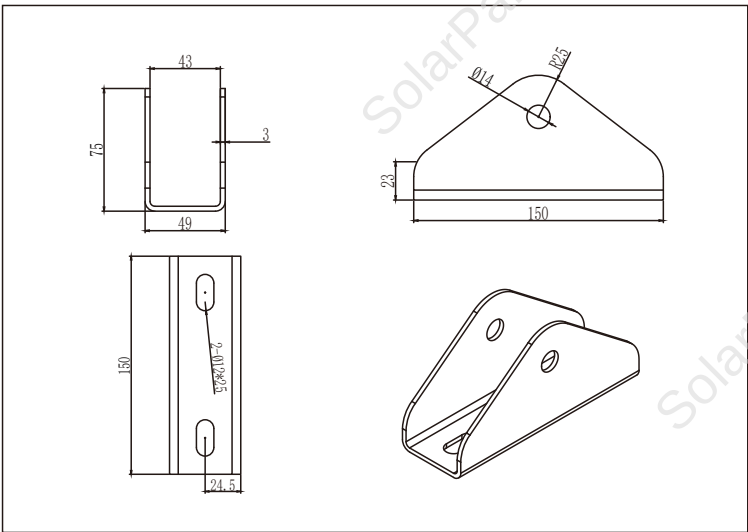


Connector Series >>>>>>>>

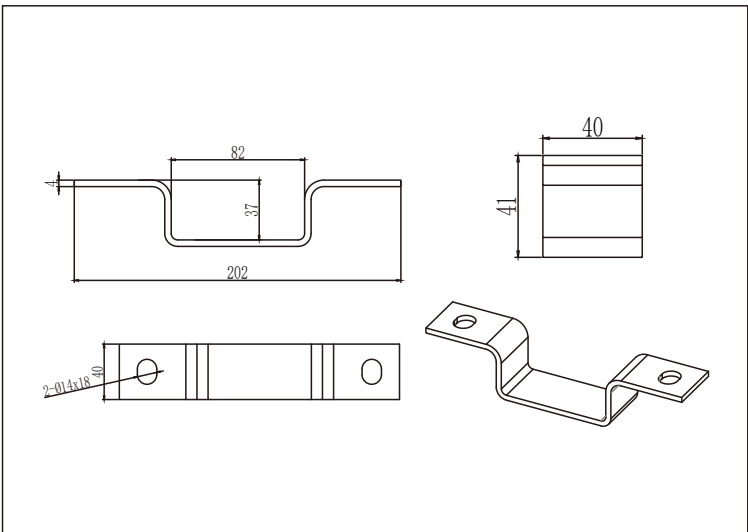
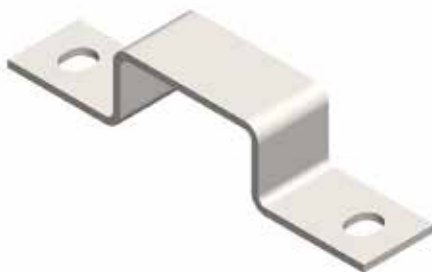
Description: 0539 New Hinge Parts
(T: 3mm, L:150mm)
Item No.: 100010023
Material: S350GD-ZM



Description: 3653 New Hinge Parts
(T3.0*H150)
Item No.: 100010061
Material: Q235B

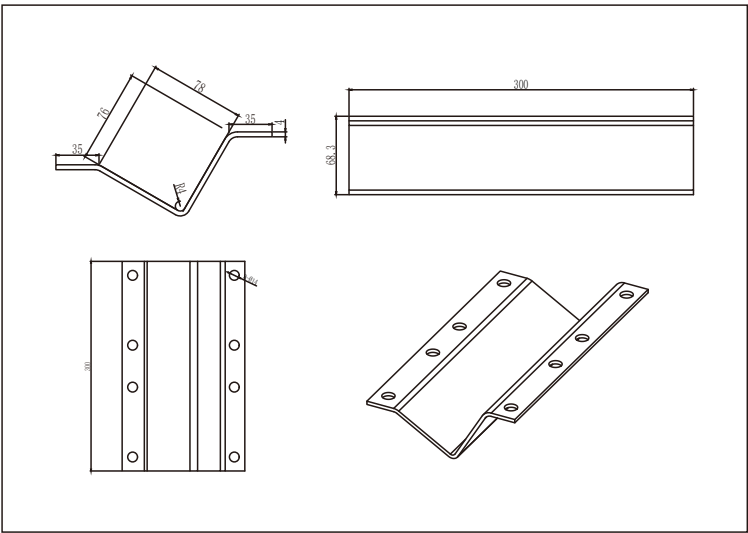


Description: 4233 Race Connection
Item No.: 100050026
Material: Q235B

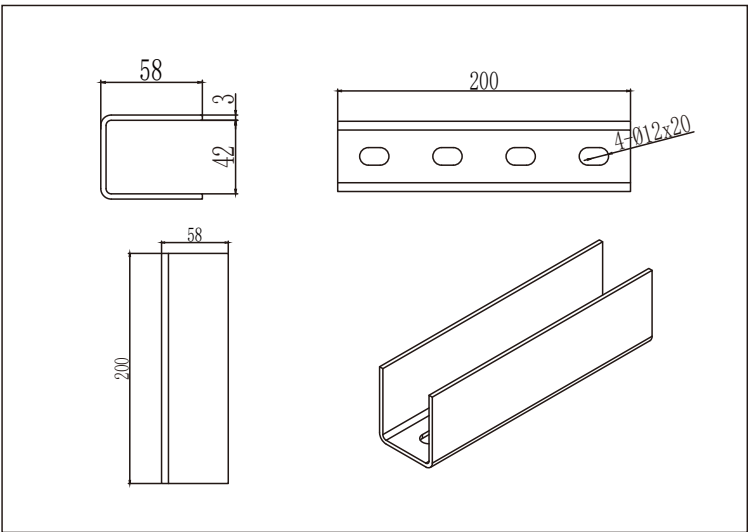


Connector Series >>>>>>>>

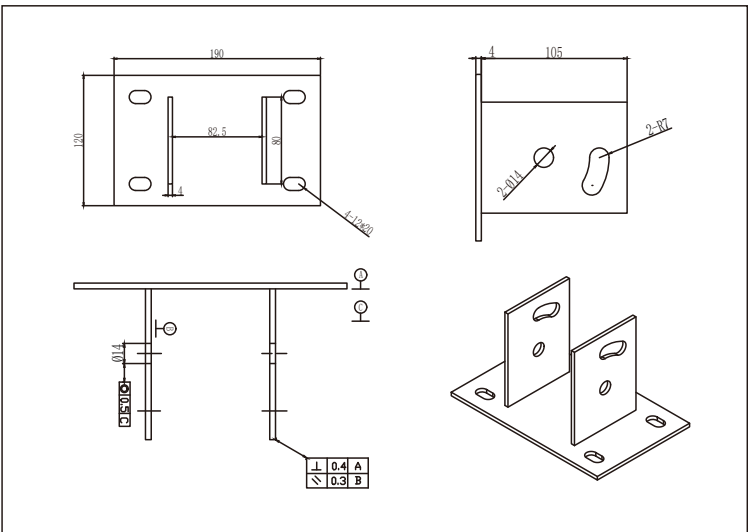
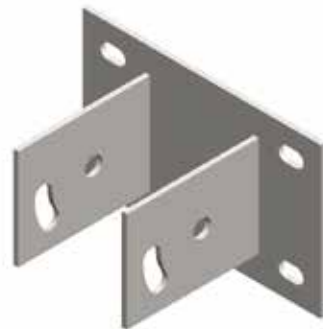
Description: 4234 Beam SPlice
Item No.: 100050027
Material: Q235B



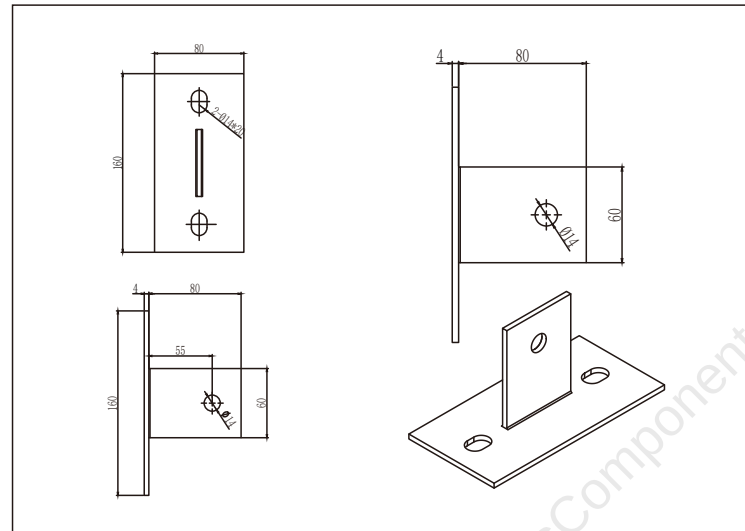
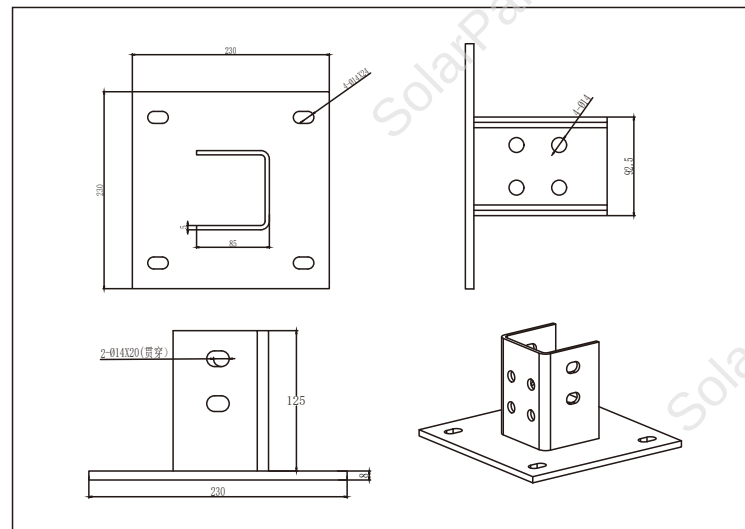
Description: 4235 Beam SPlice
Item No.: 100050028
Material: Q235B



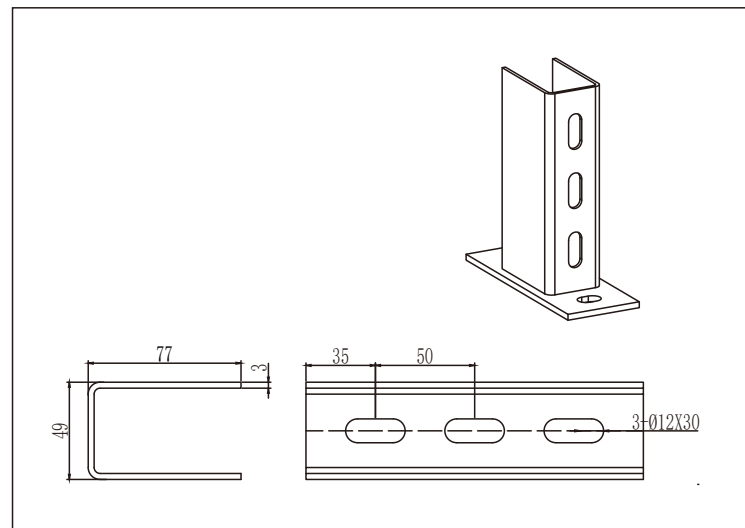
Description: 4229 Adapter for beam & Column
Item No.: 100050007
Material: Q235B



Connector Series >>>>>>>>

Description 4306 Base Connector**Item No.:** 100050010**Material:** Q235B**Description** 4416 U Column Base**Item No.:** 100050012**Material:** Q235B**Description** 4074 C Column Base

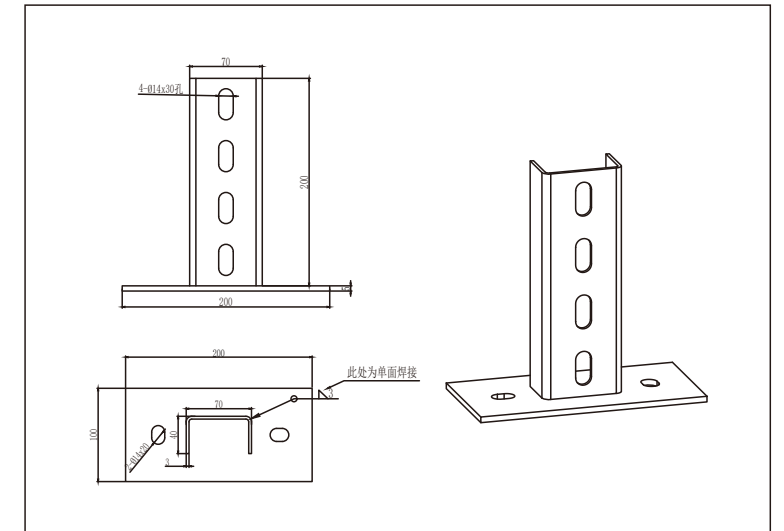
U49x77x3.0mm L=175mm

Item No.: 100050017**Material:** Q235B

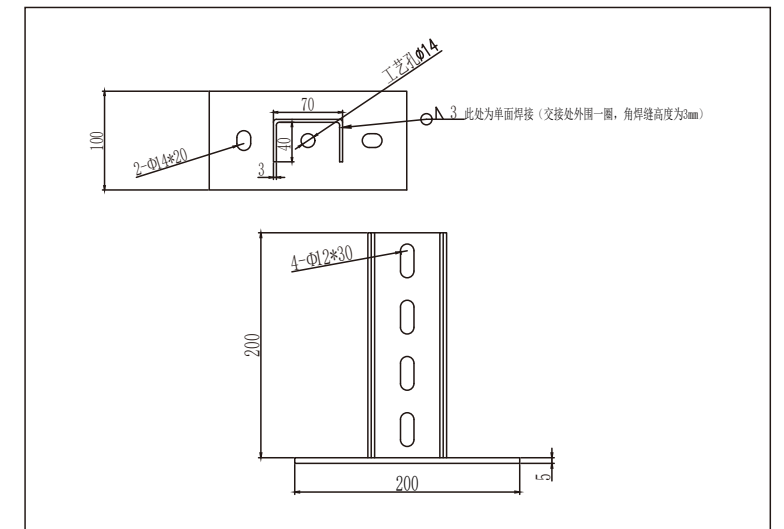
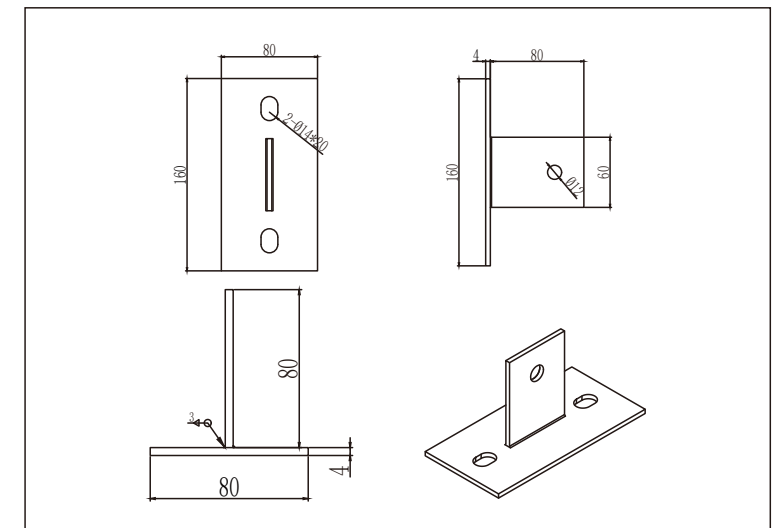
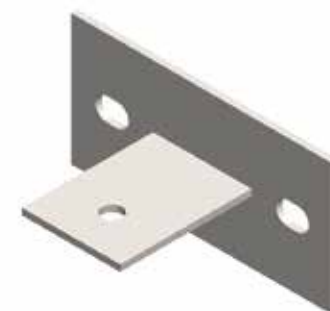
Connector Series >>>>>>>>

Description 4282 Base Connector

U70x40x3.0 L=200

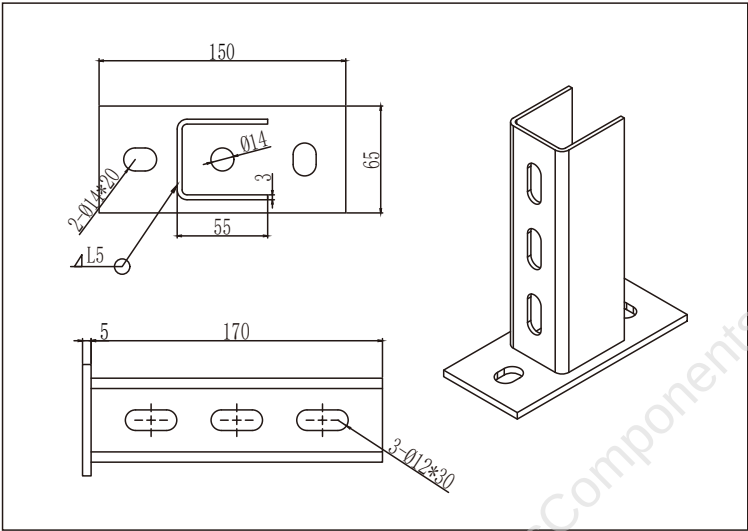
Item No.: 100050019**Material:** Q235B**Description** 0521 Base Connector

U70x40x3.0 L=200

Item No.: 100050022**Material:** Q235B**Description** 0541 Base Connector**Item No.:** 10005**Material:** 0023 Q235B

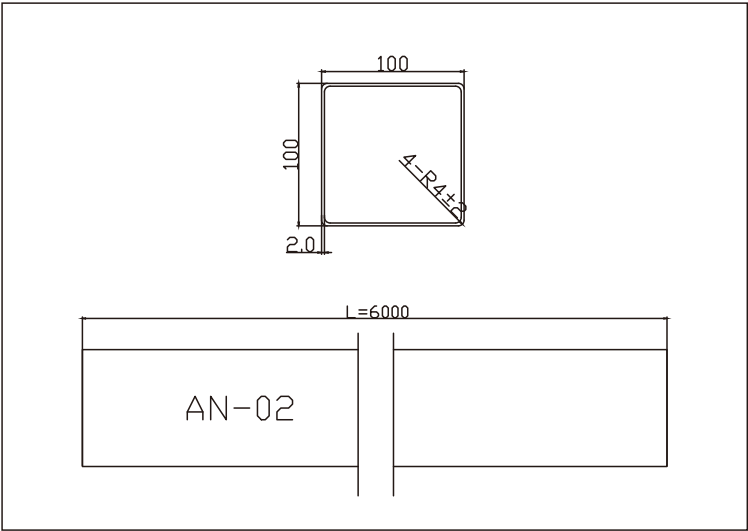
Connector Series >>>>>>>>>>

Description 3806 C Column Base
U49X55X3.0 L=175
Item No.: 100050025
Material: Q235B

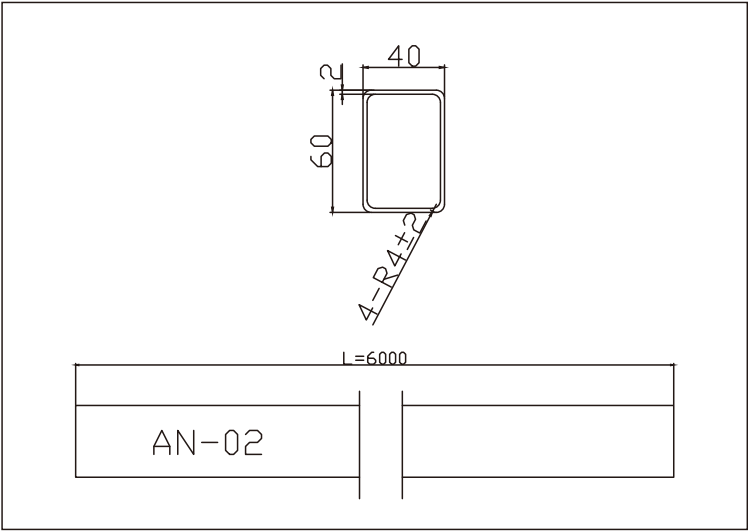


Square Tubes >>>>>>>>>>

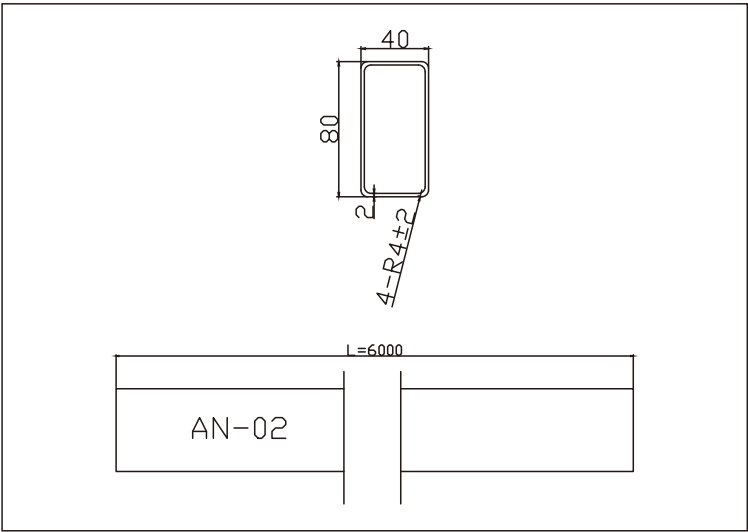
Description 100*100*2.0 ZAM
Square Tube L=6000
Item No.: 100030022
Material: S350GD-ZM



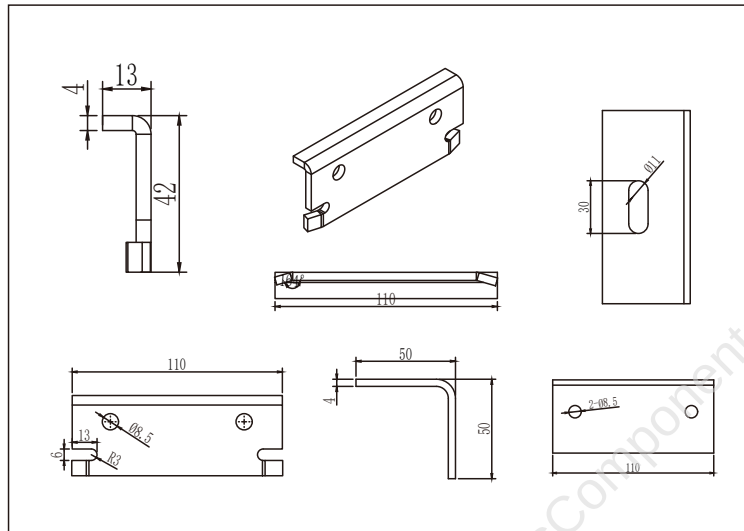
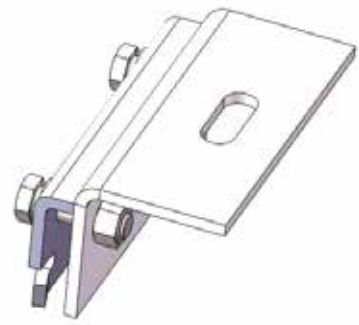
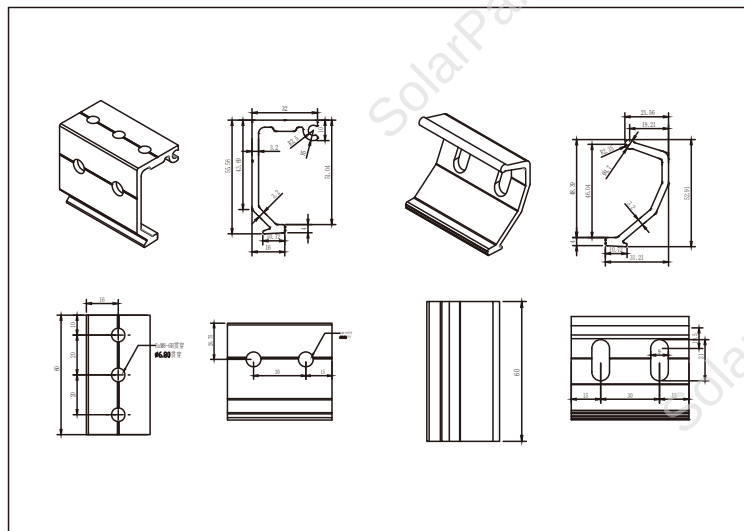
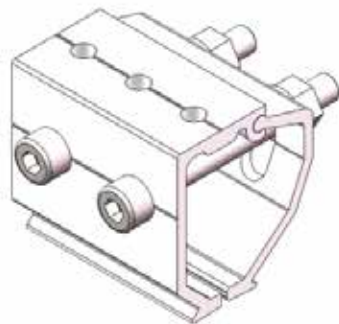
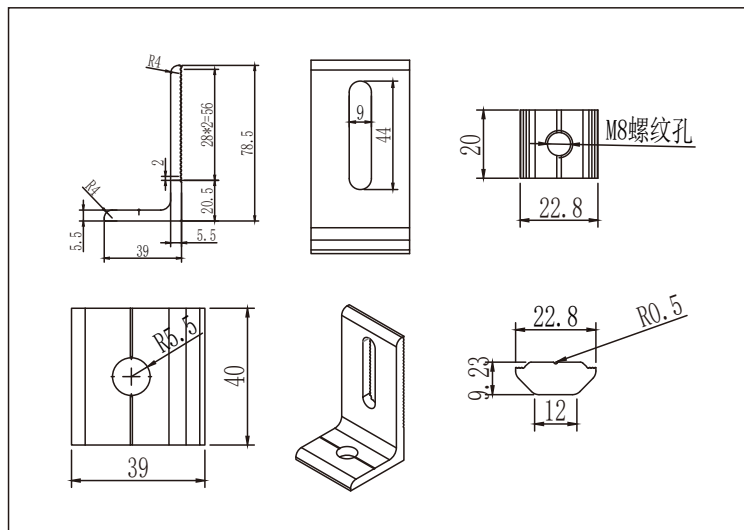
Description 40*60*2.0 ZAM
Square Tube L=6000
Item No.: 100030023
Material: S350GD-ZM



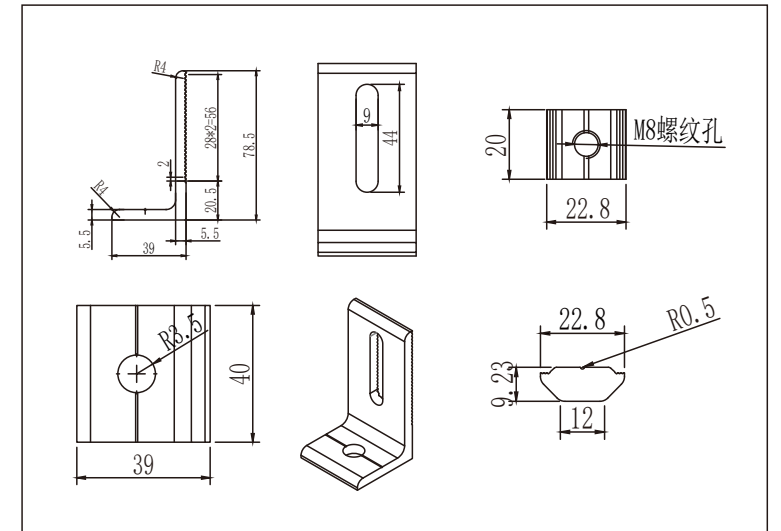
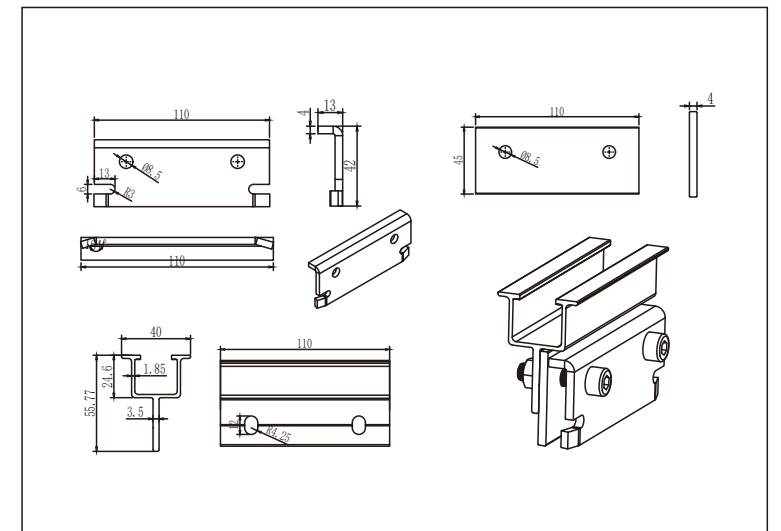
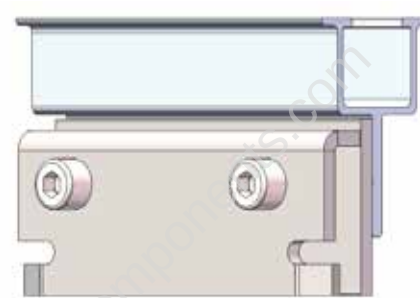
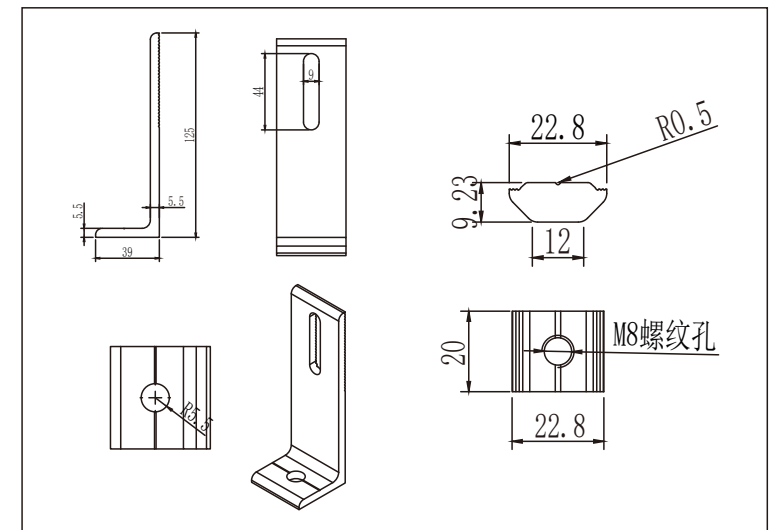
Description 40*60*2.0 ZAM
Square Tube L=6000
Item No.: 100030024
Material: S350GD-ZM



Metal Roof Clamps >>>>>>>>

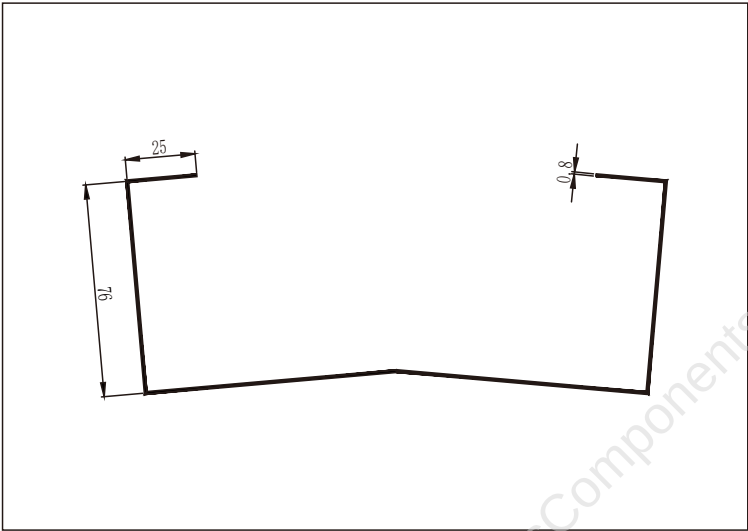
Description Standing Seam Clamp**Item No.:** 100120001**Material:** SUS304**Description** Universal Clamp**Item No.:** 100120002**Material:** AL6005-T5+SUS304**Description** L Feet kit L=40 (φ11)**Item No.:** 100120003**Material:** AL6005-T5+SUS304+EPDM

Metal Roof Clamps >>>>>>>>

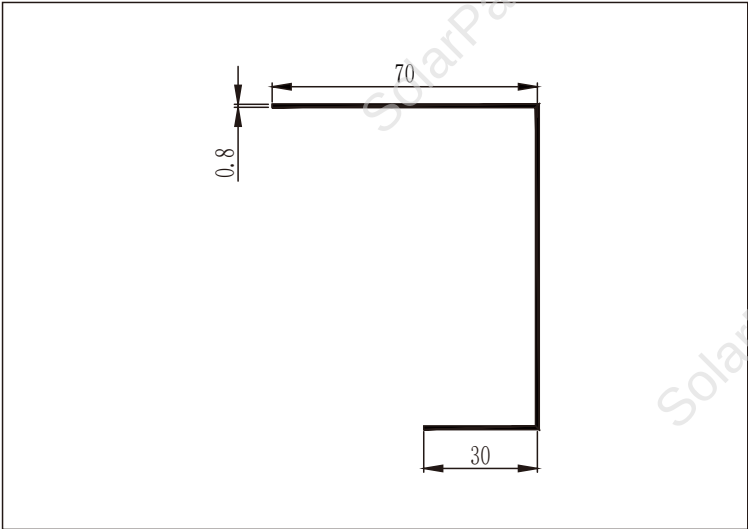
Description L Feet kit L=40**Item No.:** 100120004**Material:** AL6005-T5+SUS304+
EPDM+Q235B**Description** Railless Roof Clamp L=110**Item No.:** 100120005**Material:** SUS304+AL6005-T5**Description** LFeet Kit H125 (φ10)**Item No.:** 100120006**Material:** SUS304+AL6005-T5+EPDM

Guiding Gutters >>>>>>>>

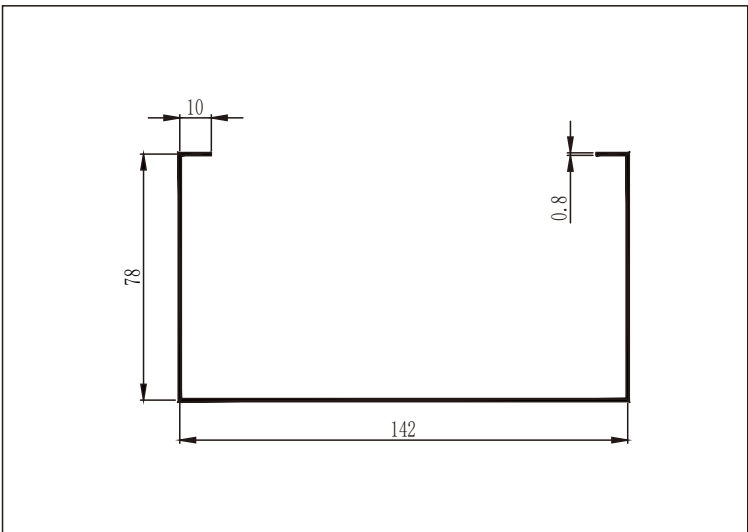
Description Roof Ridge Gutter L=4000
Item No.: 100040019
Material: AL3003



Description Edge Gutter L=4000
Item No.: 100040021
Material: AL3003

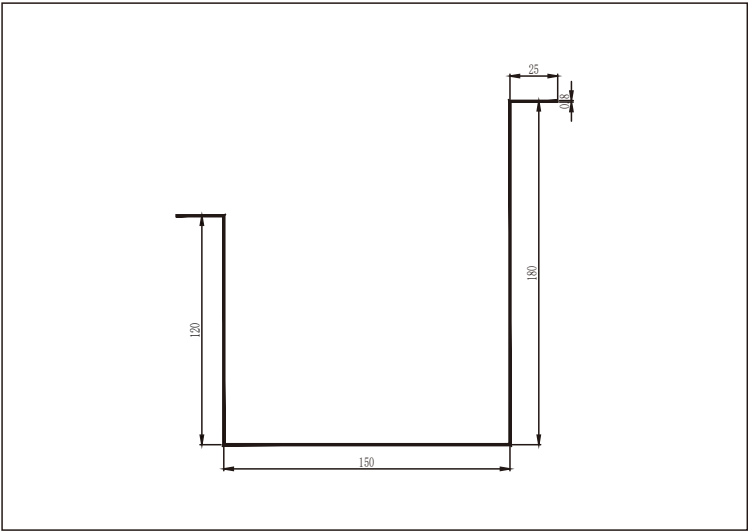
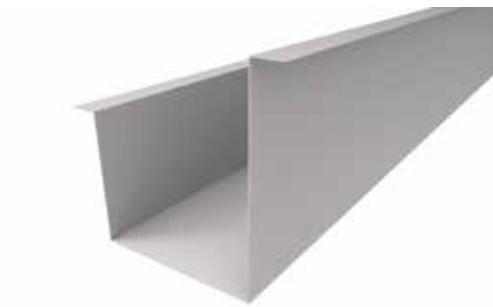


Description Horizontal Gutter L=4000
Item No.: 100040022
Material: AL3003

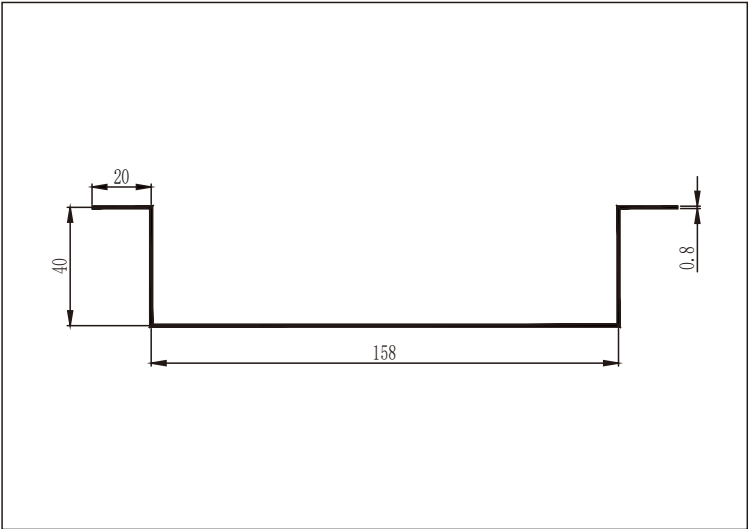


Guiding Gutters >>>>>>>>

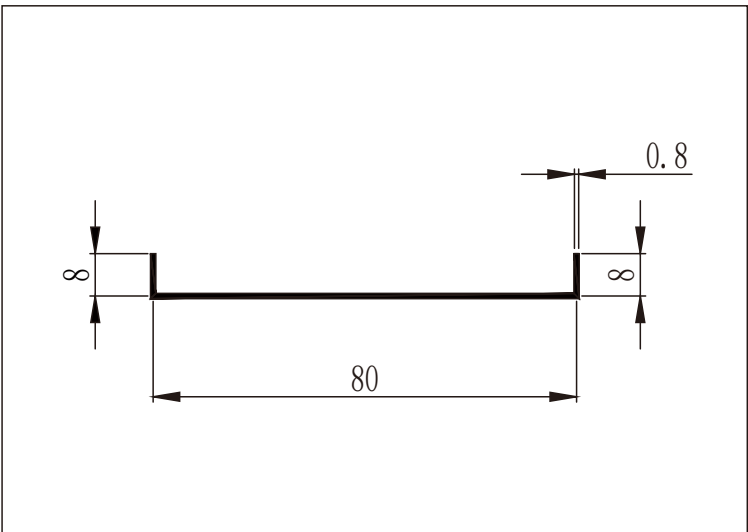
Description SW Gutter L=4000
Item No.: 100040023
Material: AL3003



Description Vertical mid Gutter L=4000
Item No.: 100040024
Material: AL3003

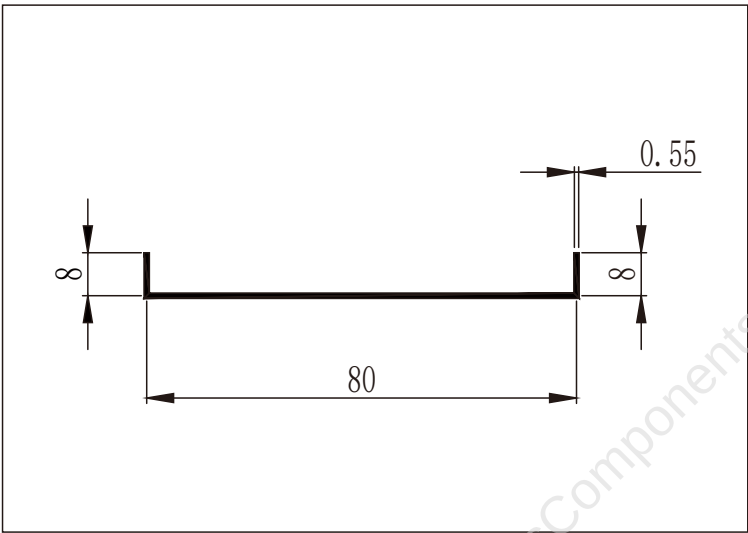


Description Vertical small Gutter L=2425
Item No.: 100040025
Material: AL3003

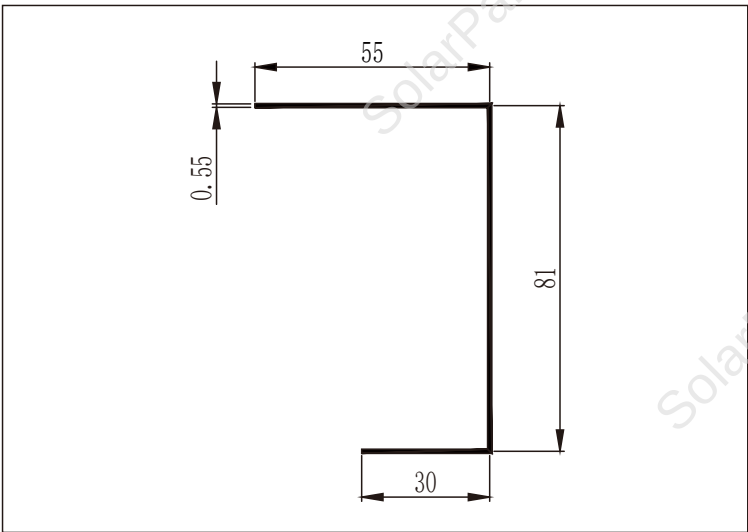


Guiding Gutters >>>>>>>>

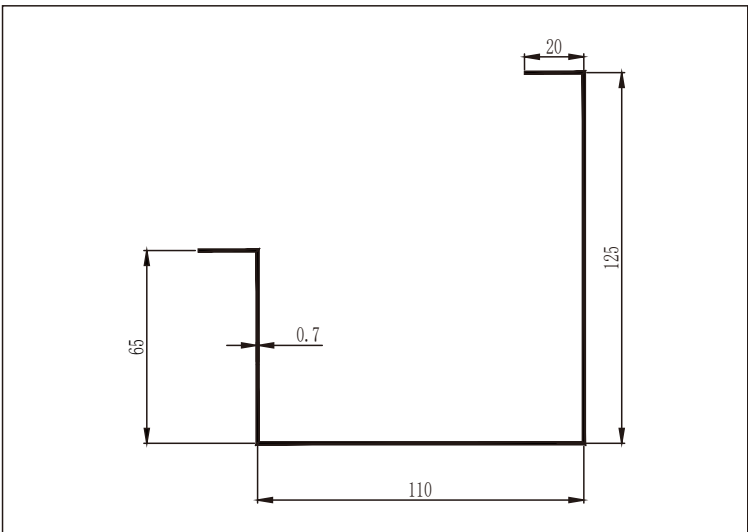
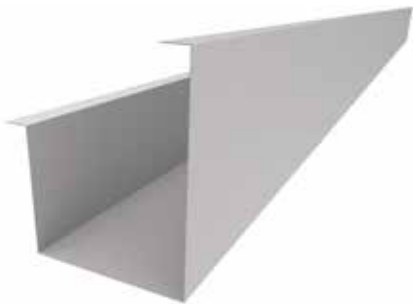
Description Horizontal water tankL=2240
Item No.: 100040053
Material: AL3003



Description Edge Water Tank L=2400
Item No.: 100040054
Material: AL3003



Description N&W Water Tank L=4000
Item No.: 100040055
Material: AL3003



Guiding Gutters >>>>>>>>

Description Water TankL=4000
Item No.: 100040056
Material: AL3003

