



CHOOSE PRO. , CHOOSE PROFESSION



PRO.ENERGY

Solar mounting system solution provider

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Ground projects



Ground projects



Carport projects



Roof projects



Agricultural projects



Fence projects



I About us

PRO.ENERGY was established in 2014 with a focus on the design and manufacturing of solar mounting systems and related products, including perimeter fences, roof walkways, roof guardrails, and ground piles to support the development of renewable solar energy. Over the past decade, we have provided professional solar mounting solutions to global customers in countries such as Belgium, Italy, Portugal, Spain, Czech Republic, Romania, Japan, Korea, Malaysia, the Philippines, and more. We have maintained an excellent reputation among our customers and our cumulative shipment has reached 6 GW by the end of 2024.



I Company history

- 2014** PRO.ENERGY was established
- 2015** PRO.ENERGY built factory in Hebei
- 2016** PRO.ENERGY debuted PV EXPO, JAPAN
- 2017** Shipment records in Japan up to 1GW
- 2020** PRO.METAL factory was built ,daily output up to 100tons
- 2021** Korea branch was established
- 2022** Shipment records to globe up to 5GW
- 2023** Production facility expanded 12,000 square meters
- 2024** Global shipment records have reached up to 6 GW



PRO.ENERGY is recognized as a reliable supplier of solar mounting systems in China.



PRO.ENERGY factory owns the advance modern profile processing machines, with 10 years manufacturing experience, could supply high quality products at stable delivery



More than 6GW solar mounting system and fence completed construction around globe with up to 98% customers' satisfaction



PRO.ENERGY factory has been certificated by ISO9001:2015 and TUV SUD, which processes products strictly control quality as per standards.

Qualification



Advantage ▶▶

- 1 12000m² automatically production plant strictly comply with ISO standards which promise stable quality products and fast delivery
- 2 Manufactured by owned factory without much additional cost will largely benefit customers
- 3 Tailor-designed products as per site wind speed, snow loading, soil value comply with local standards.
- 4 Guarantee 10 years quality warranty and at least 25years practical life
- 5 Cooperated with brand listed steel enterprise which could stand long-term after-sale service.
- 6 Professional engineering team to support solution on design, construction, and maintenance.



Factory presentation



Top reliable
supplier



6GW shipping
records



12000m²
producing plant



100 ton daily
output

Steel Mounting System Producing flow

Raw material→Rolling→Cutting→Punching→Hot dipped galvanized→
Inspection→Packing



▲ Raw material



▲ Cutting



▲ Punching



▲ Hot dipped galvanized

- ① **Pre-production Inspection**
All raw material fully
inspected before
production as per checklist
- ② **In-line Inspection**
First article inspection for
each processing procedure
as per processing drawing
- ③ **Final Inspection**
Pre-assemble the whole
structure include all
accessories after all
process done

Aluminum Mounting System Producing Flow

Profile purchasing →Cutting →Punching→Pre-assemble→Inspection→
Packing→Delivery



▲ Warehousing, Inspection



▲ Cutting



▲ Punching



▲ Pre-assemble ,Package

Fence Producing Flow



▲ Steel wire rod



▲ Straighten wire rod



▲ Coating



▲ Cutting & Welding

Single-Post Ground Mounting System



Features

- ▼ **Applicable for complicated terrains**
Suitable for installation on complicated terrains including various slopes and uneven ground
- ▼ **Fast Installation**
One-piece pile and highly pre-assembled racking before shipment will save cost on labor
- ▼ **Tailored design**
The brace could be options of single or double design as per site conditions and module arrays
The pile could be options of C or U shaped design to meet different ground
- ▼ **Abundant options on material**
The pile processed in Q235 and Q355 carbon steel for better strength. The rail, beams and braces could be Aluminum, Hot dipped galvanized steel or Zn-Al-Mg coated steel for choosing.

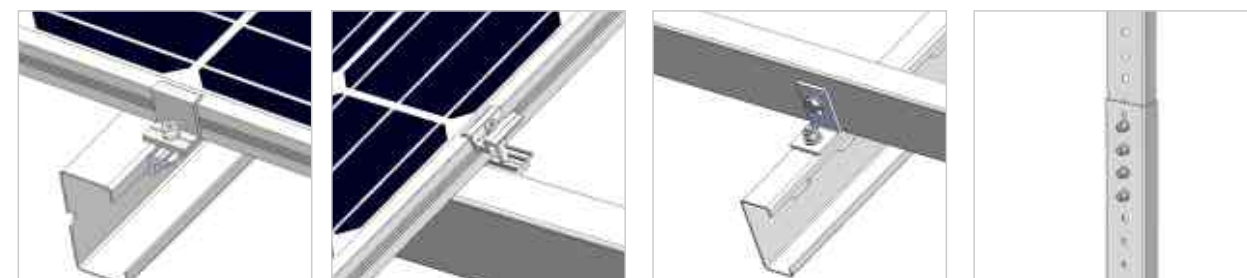


Double-post Steel Ground Mounting System



Features

- ▼ **High cost-effective**
Constructed from carbon steel S350 with a minimum yield strength of 350MPa, ensuring exceptional resistance to high wind and snow loads.
- ▼ **Fast installation**
Simplify design eliminates the need for braces, facilitating easy on-site installation.
- ▼ **Versatility**
The tilt angle can be adjusted between 20-30°, making it suitable for various applications.
- ▼ **Small MOQ**
Our standardized production process enables fast delivery even for small quantities.



Aluminum Ground Mounting System



Features

- ▼ Low Maintenance
- ▼ Light in weight and easily assemble
- ▼ High performance on anti-corrosion
- ▼ Various shaping acceptable to meet need on site conditions
- ▼ Highly convenient installation will save cost on labor



T-shaped Carbon Steel Carport Solar Mounted System



Features

- ▼ Constructed from high-strength carbon steel to guarantee the safety of the carport
- ▼ Maximum utility on space while generating green electricity
- ▼ Single post design for enhanced parking convenience
- ▼ Customized color coating acceptable as per environments
- ▼ Good performance on water proof prevent vehicles from raining



II-shaped Carbon Steel Carport Solar Mounted System

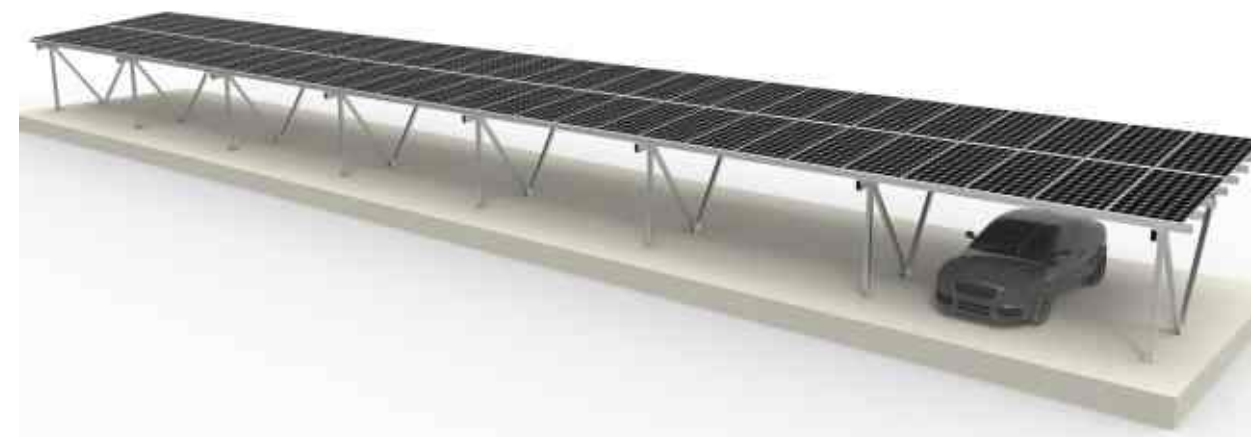


Features

- ▼ A dual-post design to enhance structural integrity under high wind and snow loads
- ▼ Maximum utility on space while generating green electricity
- ▼ Highly cost-effective
- ▼ Customized color coating acceptable as per environments
- ▼ Good performance on water proof prevent vehicles from raining



IV-shaped Aluminum Carport Mounted System



Features

- ▼ Constructed from the aluminum alloy for easy installation on site
- ▼ Demonstrate superior anti-corrosion performance
- ▼ Maximum utility on space while generating green electricity
- ▼ Possess a highly cost-effective
- ▼ Customized color coating acceptable as per environments
- ▼ Good performance on water proof prevent vehicles from raining



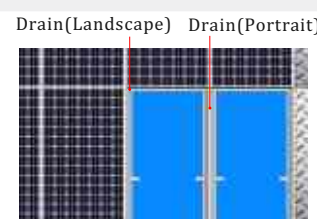
100% Waterproof Carport Mounted System



100% Waterproof

- ▼ The drains are attached underneath the module in both portrait and landscape orientations to ensure waterproofing, even during heavy rainfall.

The drains are constructed from Zn-Al-Mg coated steel, which provides excellent anticorrosion performance and high strength.



▼ Drain cover

Install the drain cover to effectively prevent water from entering the structure.

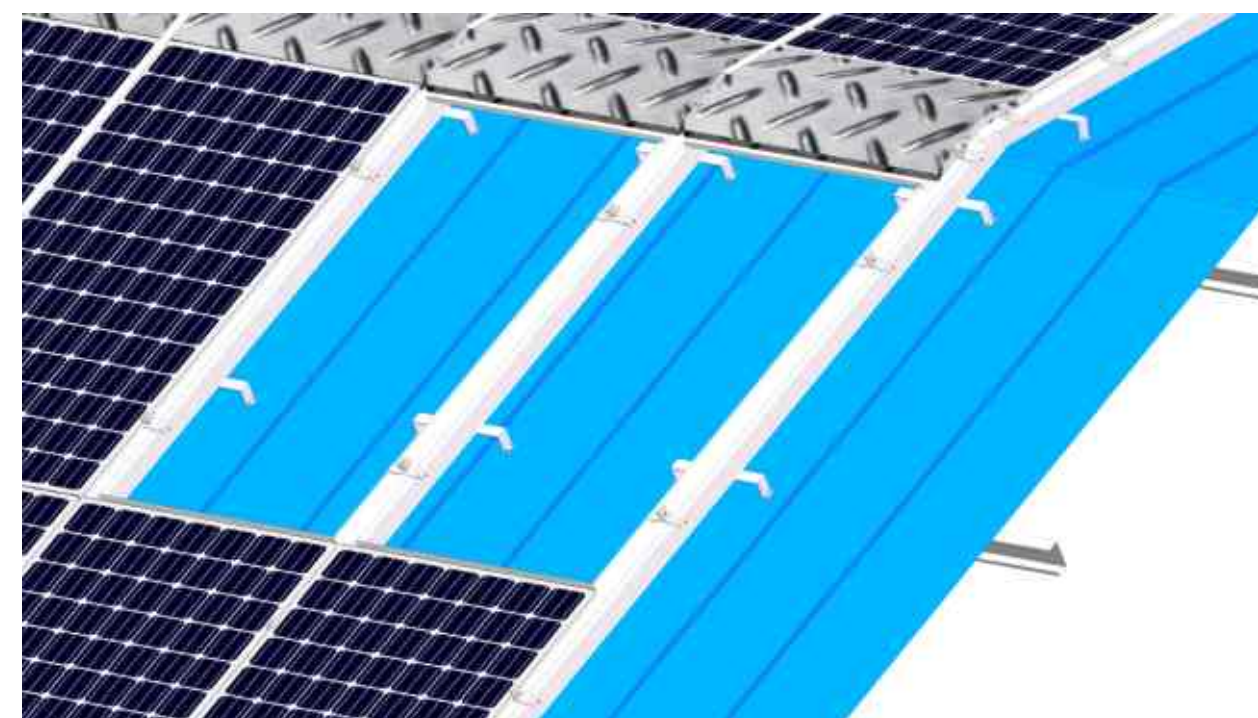


▼ Drainage system

Incorporated a comprehensive drainage system comprising gutters and downpipes.



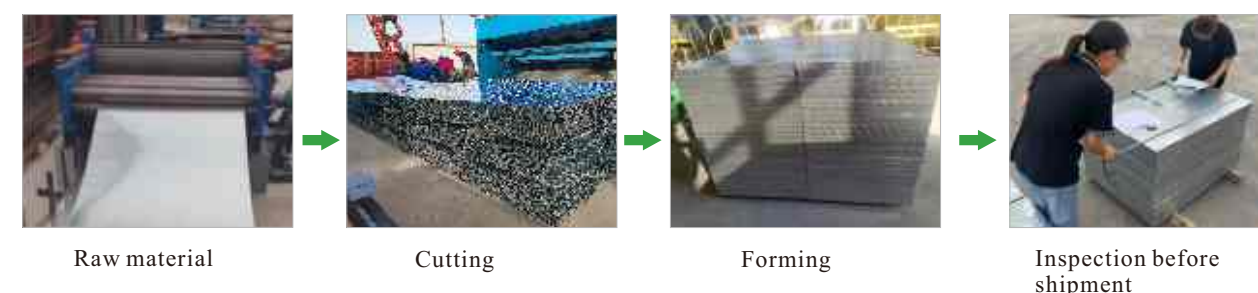
Rooftop walkway



Features

- ▼ Can be used as scaffolding for maintenance personnel to facilitate inspection
- ▼ The surface is designed with anti-slip features to enhance construction safety.
- ▼ Avoid to step on the module during construction and maintenance,
- ▼ Covering the cable helps protect it from direct sunlight.

Production flow



Solar-powered Greenhouse



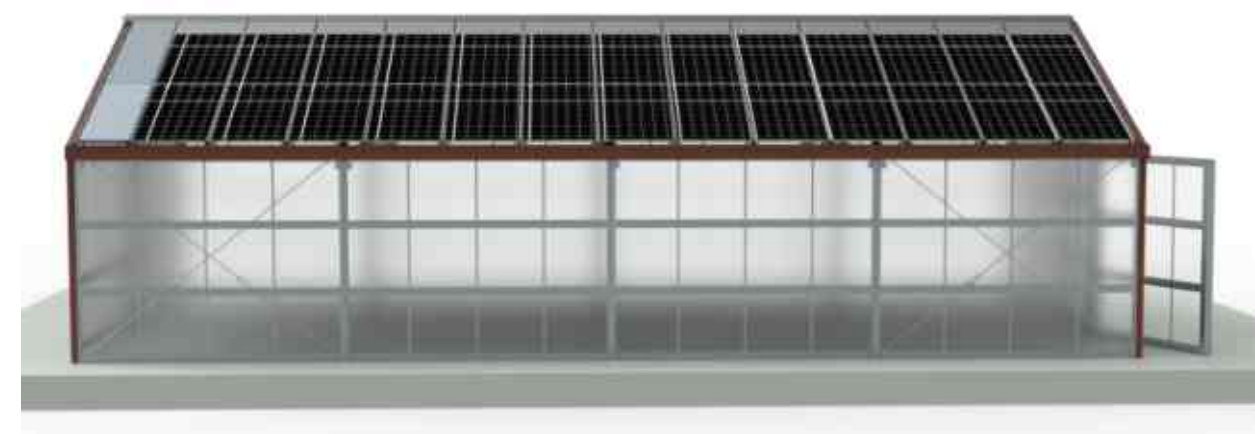
Structural design:

The greenhouse farm sheds employ square tubes as the framework and C-shaped steel profiles as cross beams, offering advantages of high strength and stability in extreme weather conditions.



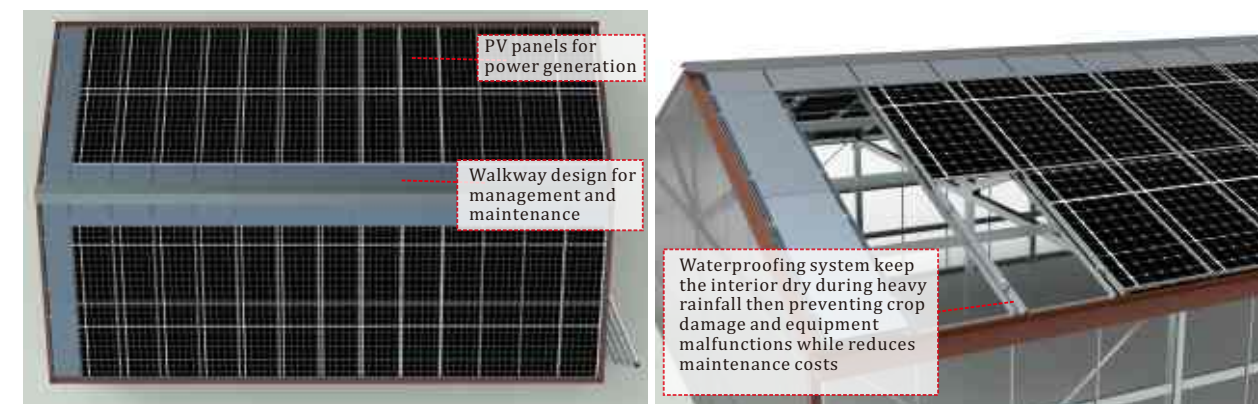
PC Sheet (Polycarbonate hollow sheet)

The greenhouse farm utilizes polycarbonate (PC) sheets as the covering material.



Features

- ▼ **Light transmittance performance**
PC sheets excel in transmitting sunlight, thereby ensuring optimal conditions for crop growth.
- ▼ **Durability**
The PC sheet has excellent weather resistance and impact resistance, capable of withstanding extreme weather conditions such as strong winds and hail.
- ▼ **Insulation and Thermal Retention**
PC sheet provides excellent heat insulation, maintaining winter greenhouse temperatures, reducing heating costs and enhancing efficiency. In summer, it blocks direct sunlight, minimizing heat entry and protecting crops from high temperatures.
- ▼ **Lightweight and easy to process on site**
The PC sheet can be easily cut and drilled to meet specific needs. Installation is simple and fast, requiring no complex tools. It is environmentally friendly, safe, and non-toxic.



Steel Agricultural Solar Mounting System

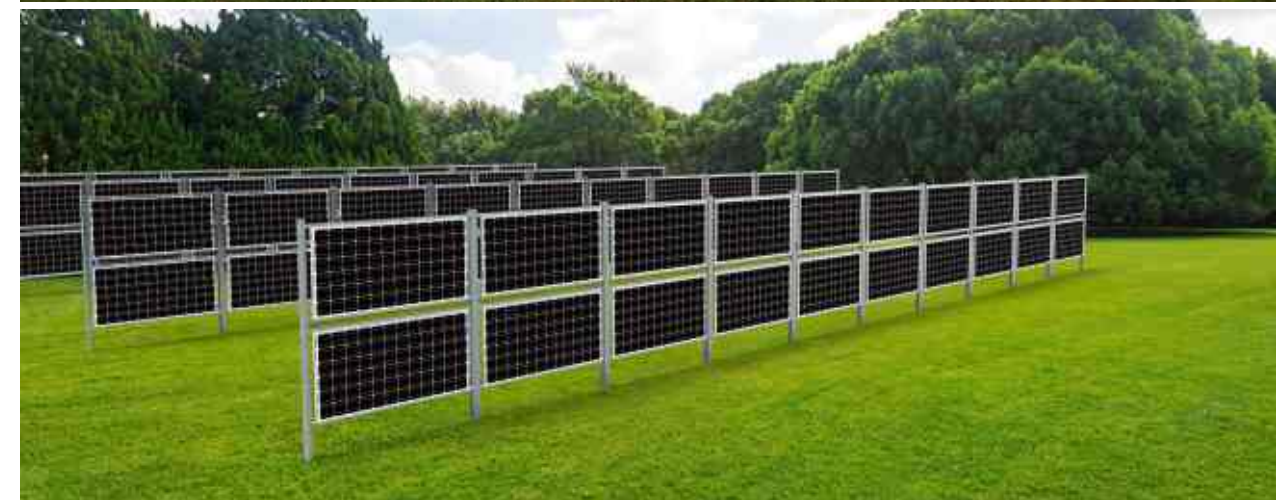


Features

- ▼ Long span between foundations for possible passing of large agricultural equipment
- ▼ Made of high strength carbon steel with stable structure with longer practical life
- ▼ Finished in hot dipped galvanized or Zn-Al-Mg with good performance on anti-corrosion
- ▼ Highly pre-assemble before shipping will save cost on labor
- ▼ L-shaped foot-base connecting post and ground piles from both directions for better stability
- ▼ 15% cost saved than Aluminum structure



Vertically Solar Mounted System



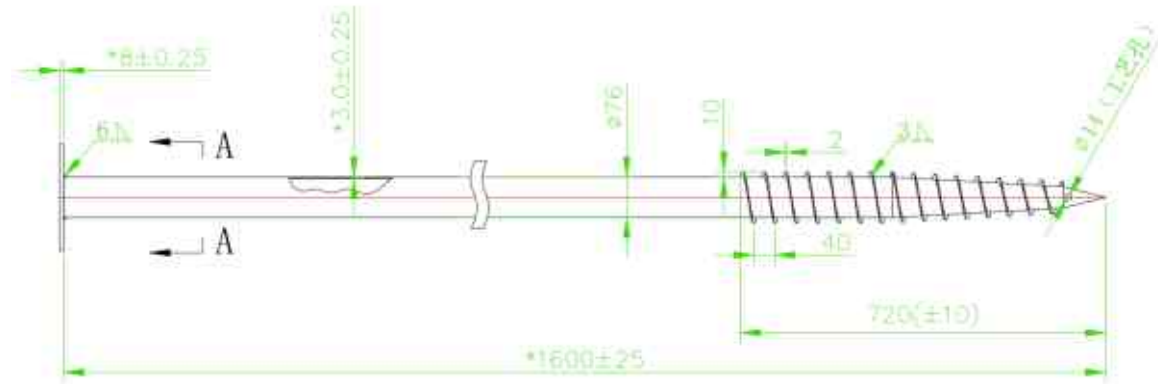
Features

- ▼ Made of high strength carbon steel well withstand wind pressure
- ▼ High performance on anti-corrosion
- ▼ High cost-effective solution for agriculture planting while power generation.
- ▼ Strictly design as per site conditions to extend the practical life



Screw Piles

★ ease of installation ★ ease of removal ★ reduced costs



Product name	Surface treatment	Specification	Material
Ground screw pile	Hot dipped galvanized(80μm at average)	Φ76*L1200*T3.0	Carbon steel Q235
	Hot dipped galvanized(80μm at average)	Φ76*L1600*T3.0	Carbon steel Q235
	Hot dipped galvanized(80μm at average)	Φ76*L1800*T3.0	Carbon steel Q235
	Hot dipped galvanized(80μm at average)	Φ76*L2000*T3.0	Carbon steel Q235
	Hot dipped galvanized(80μm at average)	Φ76*L2200*T3.0	Carbon steel Q235
	Hot dipped galvanized(80μm at average)	Φ76*L2500*T3.0	Carbon steel Q235



How are they installed?

Powerful hydraulic motors are used to apply the large torques that are required to screw a screw pile into the ground. The motors are fastened onto handling machines that range in size from ½ T Bobcats, 20T Excavators, or up to 100T mast mounted crane rigs. The combination of hydraulic motor and handling machine is determined by:

1. Minimum installation torque requirements
2. Torsional capacity of the shaft
3. Site access limitations (height/width)
4. Soil profile and site ground conditions
5. Positional Tolerances

Flat Roof Ballasted Mounted System



Features

- ▼ Stronger structure made of carbon steel well withstand high snow pressure
- ▼ Zn-Al-Mg coated surface treatment promise 30 years practical life
- ▼ Assembled by U-shaped profile with a rows of slotted holes for flexible installation



Tile Roof Mounting

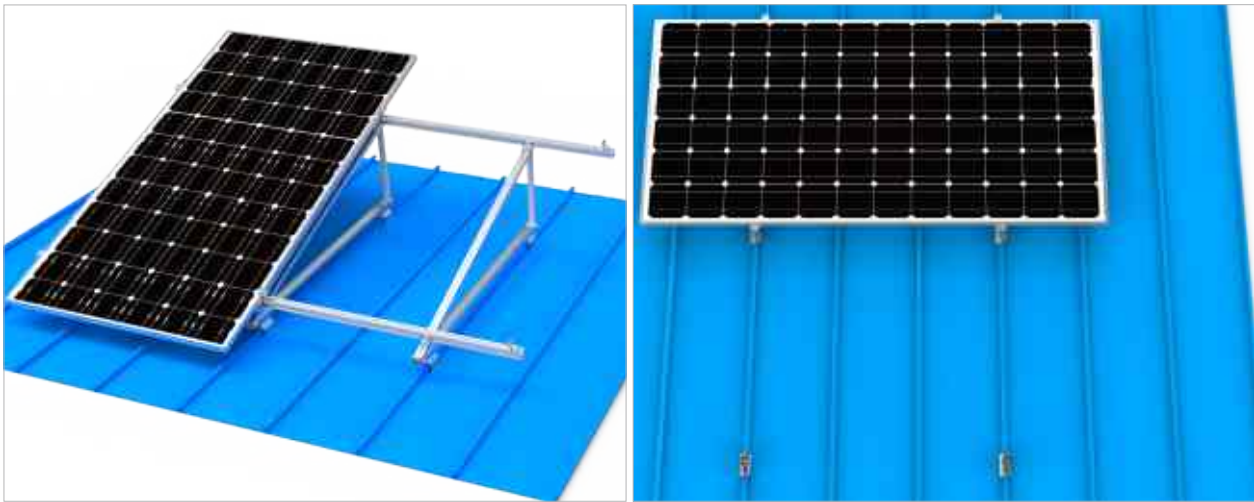


Features

- ▼ Applicable for most roof types of tile include flat tile, slate tile, asphalt shingle tile
- ▼ Mid clamp and End clamp matched for most panels
- ▼ Innovative design of rail suitable for tile roof and also metal roof
- ▼ Provide a wide range of hooks for customers' options



Metal Roof Mounting



Features

- ▼ No damage to the roof
- ▼ Simple and quick installation
- ▼ Module installed without restriction
- ▼ Rail mounting or tripod structure available
- ▼ Universal for most metal sheet roof

Roof rail series

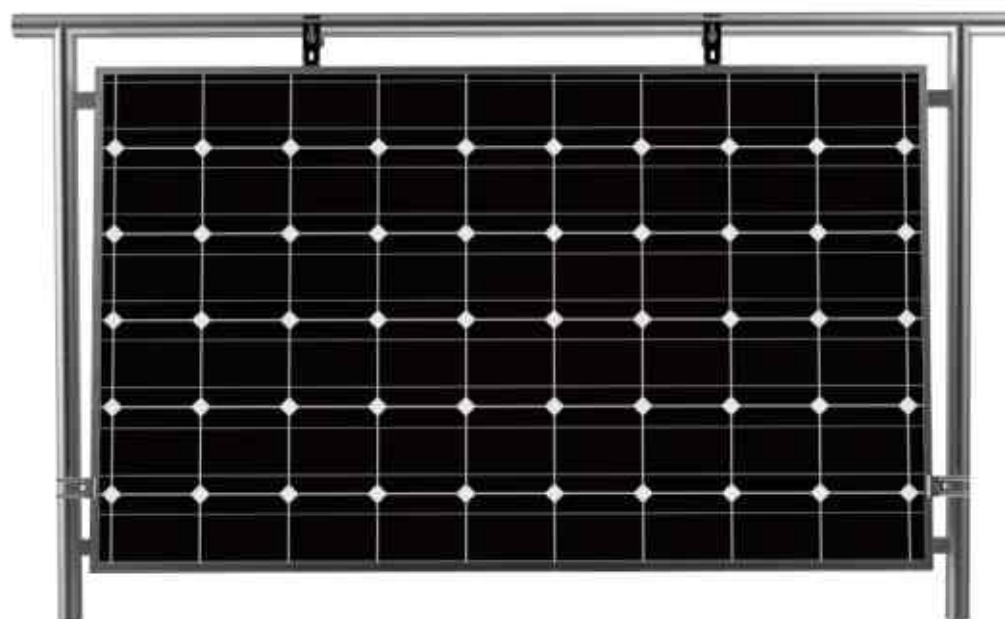
H36 Rail	HX40 Rail	BHX40 Rail	R46 Rail	R47 Rail
				

Roof clamp series

Standing seam 10	Standing seam 21	Angle clamp 28	Ladder clamp	Universal clamp	Standing seam 14	Standing seam 7
						

Balcony Solar Mounting System

Maximize Energy, Minimize Space



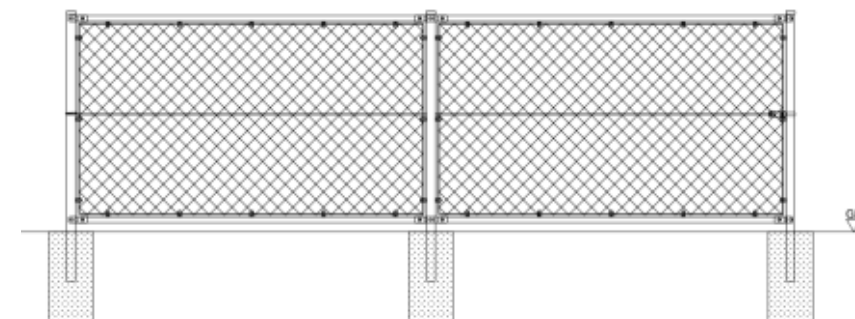
Features

- ▼ Space-Saving Innovation: Designed for urban balconies, railings, or small outdoor spaces.
- ▼ Easy Installation: Secure hooks fit most railings in minutes.
- ▼ All-Weather Durability: Premium carbon steel with ZAM coating.
- ▼ Adjustability: 0–30° tilt range for optimal sun exposure year-round.



Framed Chain Link Fence

★ Stronger structure ★ High anti-shocking ★ Snow area applicable



Features

- ▼ Long span between foundation is accepted
- ▼ Framed structure with better strength even high snow pressure
- ▼ Woven wire withstand shocking from outside
- ▼ One-piece pile, ground pile, concrete piling are available



Rail end connecting



Intermediate connecting



Corner connecting

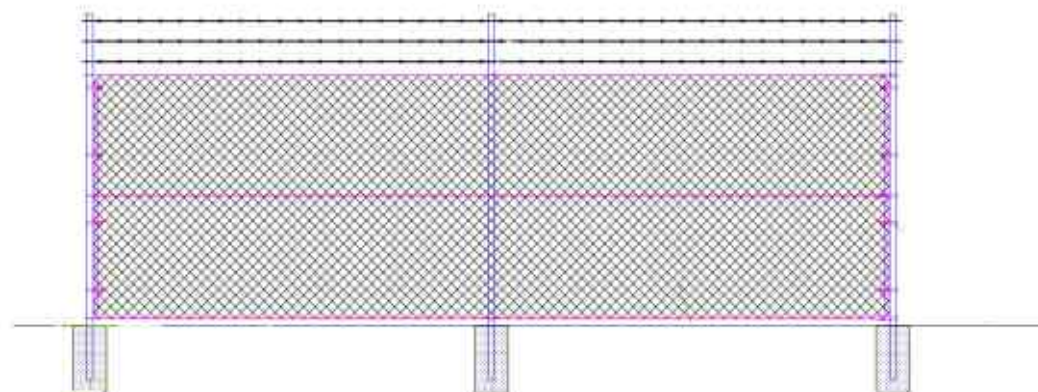


Rail & mesh connecting



Chain link fence

★ High cost-effective ★ Quick installation ★ High anti-shocking



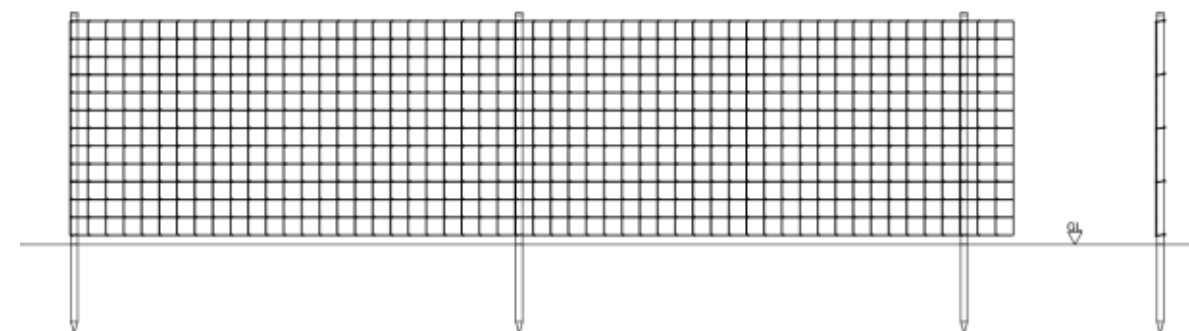
Features

- ▼ Simplified structure without top and bottom rail is easily installed on site
- ▼ Woven wire withstand shocking from outside
- ▼ One-piece pile, ground pile, concrete piling are available



Farm Wire Mesh

★ Quick installation ★ Lowest cost ★ Large loading capacity



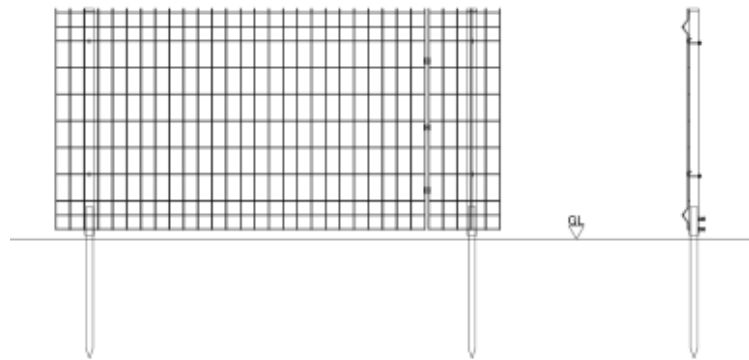
Features

- ▼ Woven processing in unique knot well withstand shocking of animals
- ▼ Simplified structure without accessories make the competitive price
- ▼ Easily assemble, quick installation



Welded Wire Fence

★ One-piece pile ★ Ground pile ★ Concrete foundation



Features

- ▼ Applicable for various ground include mountain, soft soil, slope
- ▼ Wide range of mesh connector withstand different wind and snow pressure
- ▼ Unique designed slope connector for easily installation on the slope
- ▼ Customized is accepted include bending shape



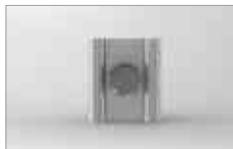
Mesh clamp



Slope connector



L-size panel connector



M-size panel connector



S-size panel connector



Customized accepted >>>

Wire diameter, mesh spacing, bending shape could be customized
Powder coating in White, Brown, Green, Black color are available
Surface treatment of hot dip galvanized, powder coated, PE coated are available
Anti-climb barbed wire, razor wire are available

Cable tray



Features

- ▼ Made of premium carbon steel with a better corrosion and higher strength.
- ▼ Reduces tripping hazards by keeping wires organized.
- ▼ Facilitates easier access for inspections and repairs.
- ▼ Shields cables from UV exposure and environmental damage, extending service life.



Size	Length: 3000mm; Width: 150mm; Height: 100mm
Material	S235JR / S350GD carbon steel
Component	Wire mesh pallet + cover plate
Installation	Self-taping screw



Transformer Bracket

The bracket is specifically designed to elevate the transformer equipment, serving as a waterproof platform.



Features

- ▼ Providing adequate spacing for drainage, piping, and inspection is essential to mitigate the risk of backflow corrosion caused by rainwater and prevent power outages resulting from flooding and leakage.
- ▼ Elevate transformer equipment in a secure manner to enhance stability and facilitate maintenance and operation.
- ▼ The innovative design, crafted from premium carbon steel, offers the same reliability and strength as traditional models but at half the cost of cement.



Dimension	Tailored
Material	S355 carbon steel finished in hot dip galvanizing
Process	Drilling and welding
Installation	Expansion bolt