



**XIAMEN WINDSOROSE TECHNOLOGY CO.,LTD.**

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Factory Site: Zhangzhou High-tech Industrial Park



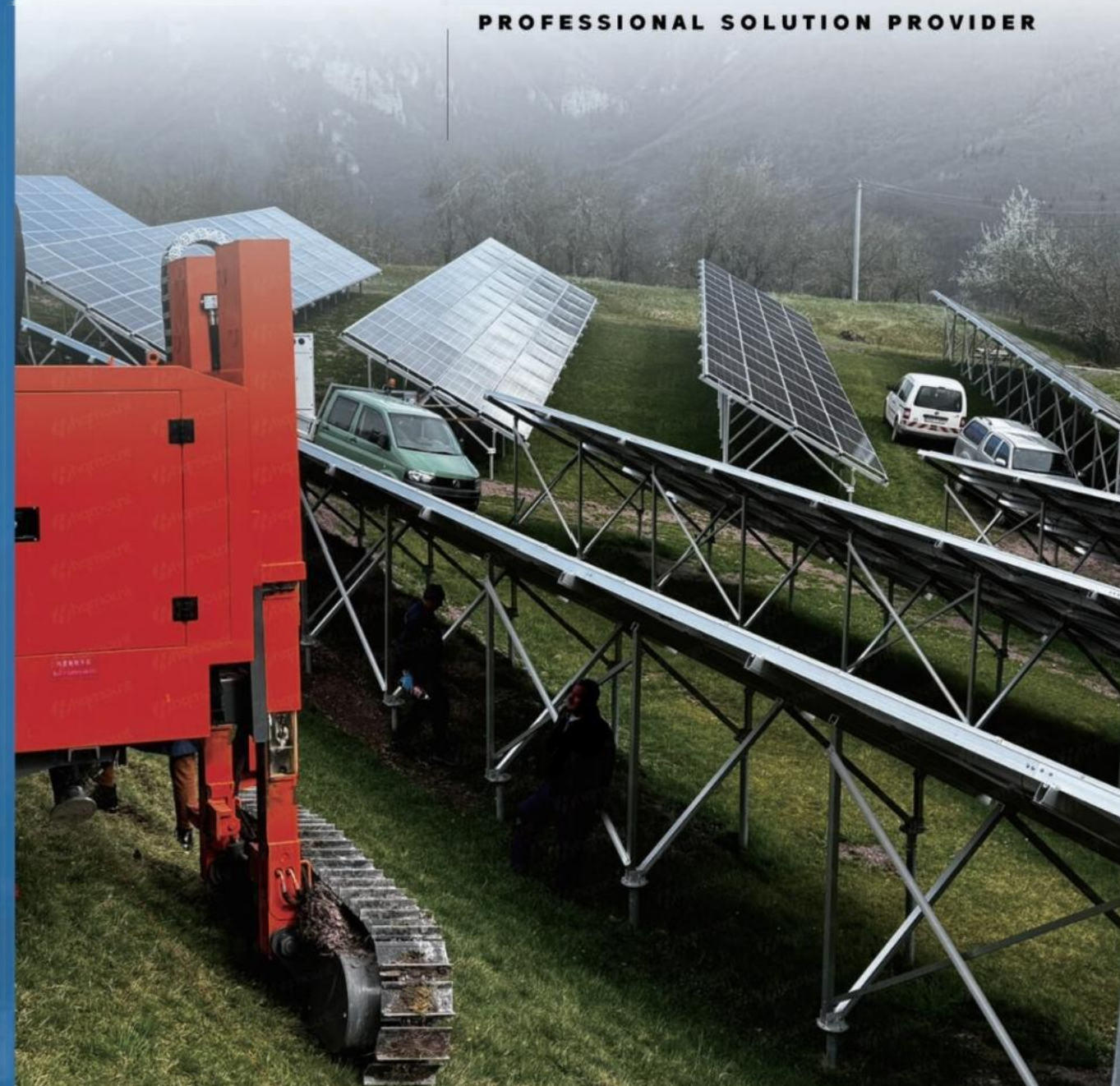
[www.Windsorose.com](http://www.Windsorose.com)  
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**Windsorose** | Solar PV mounting systems

# PHOTOVOTAIC

**PROFESSIONAL SOLUTION PROVIDER**





# GROUND-MOUNTED SOLAR SYSTEMS.

## WINDSOROSE INVESTMENTS IN THE FUTURE OF SUSTAINABLE ENERGY.

The success of these investments depend on the quality of your ground-mounted solar solutions,as they directly affect the overall performance of solar plants.

At Windsorose Solar,we specialize in developing durable,robust,and easy-to-install mounting systems made from high-quality steel to guarantee the performance and longevity of your solar investment.

Utilizing our extensive experience in providing large-scale solar plants,Windsorose Solar can provide suitable solutions for different environment and terrain conditions.Besides,Windsorose Solar provides pre-assembled products to help you achieve faster and more efficient installation.

From the moment you choose us as a solar bracket structure supplier,we will taken seriously to your solar system.

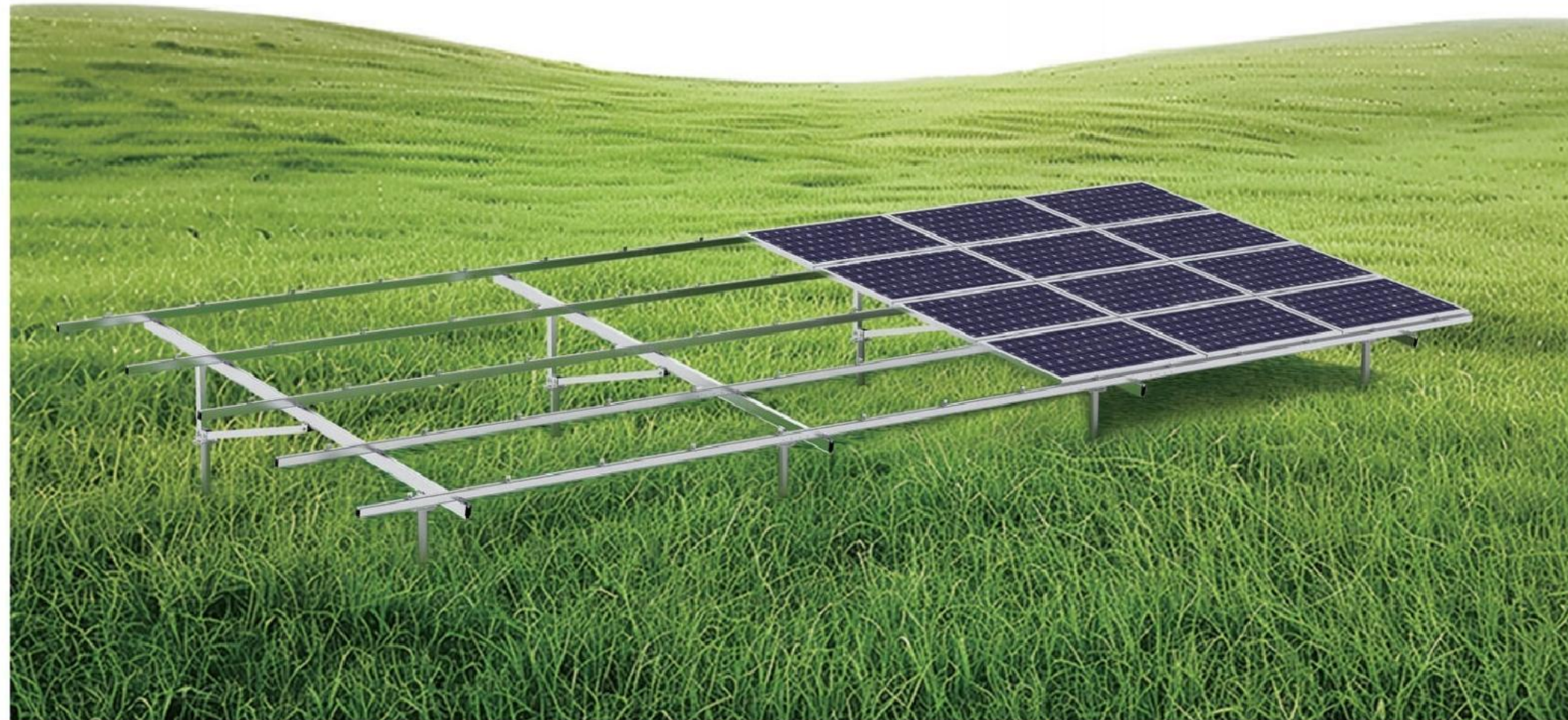




# WS-GT1. PRE-ASSEMBLED ALUMINUM

FOR MANY YEARS,WS-GT1  
HAS BEEN THE MOST  
PREFERRED SYSTEM FOR  
MORE THAN 2GW PROJECTS  
AROUND THE WORLD.

- + Cost effective.
- + 30 years lifetime.
- + Light structure,easier to install.
- + AA10 anodized,anti-corrosion.
- + East-west adjustable.
- + Pre-assemble save installation time.
- + A-N-W,allweather suitable.
- + suitable for both framed and frame-less panels



**WS-GT1**  
Concrete foundation



**WS-GT1**  
Ground screw foundation





# WS-GT2.

## PRE-ASSEMBLED RAMMING PILE

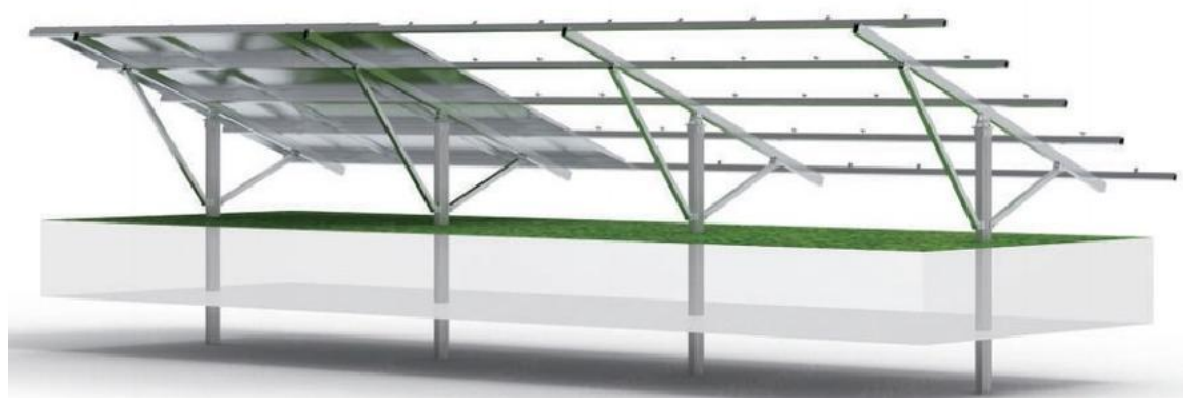
RAMMING PILE STRUCTURE HAS BEEN THE SYSTEM OF CHOICE FOR PROJECTS IN CHALLENGING TERRAIN, WHERE FEWER FOUNDATIONS HAVE TO BE USED.

- + Cost effective.
- + 30 Years lifetime.
- + East-west adjustable.
- + Ramming solution saving time.
- + Suitable for uneven terrain.
- + Different environment suitable.
- + Pre-assemble save installation time.



**ADJUSTABLE CONNECTOR**  
East-west

**WS-GT2**  
Tailor to achieve different solutions.





# WS-GT4. DOUBLE C POST

## ALUMINUM & STEEL

**THE DUAL-POST SYSTEM THAT GUARANTEES A LONG SERVICE LIFE FOR YOUR GROUND MOUNTED SOLAR INSTALLATION.**

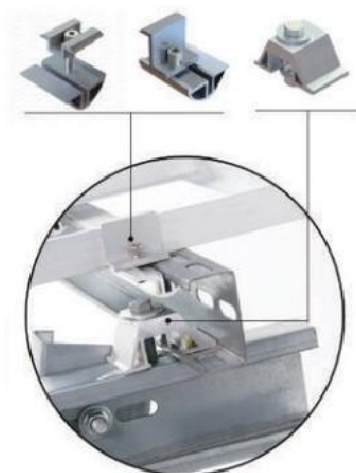
With its high degree of efficiency and stability, the HQ-GT4 is the ideal solution for level terrain as it's designed for large, multi-row module arrangements in open spaces and agricultural areas.

- + Cost effective 30 Years lifetime.
- + Ramming foundation easy to install.
- + Double posts provide balance.
- + Aluminum & Steel rail available.

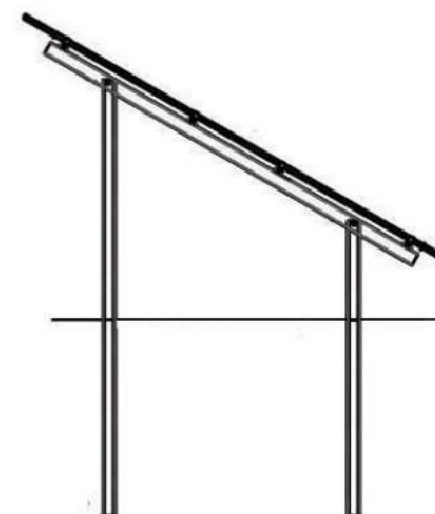


### FAST INSTALLATION

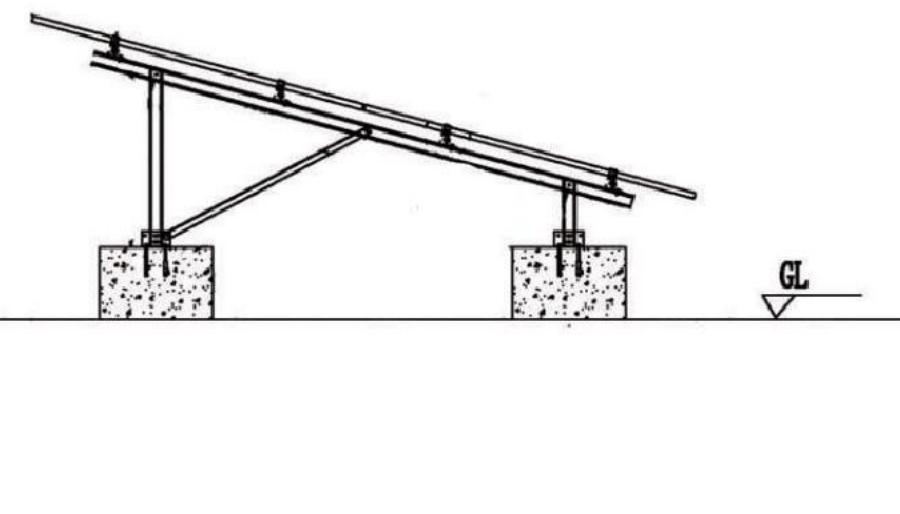
- + Rail clamp (Easier installation)
- + Module clamp (Better strength)



### HQ-GT4 Ramming solution



### HQ-GT4 Concrete foundation



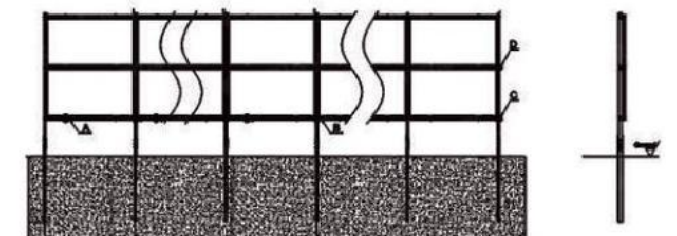
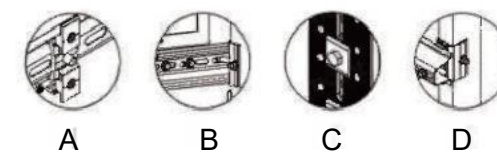
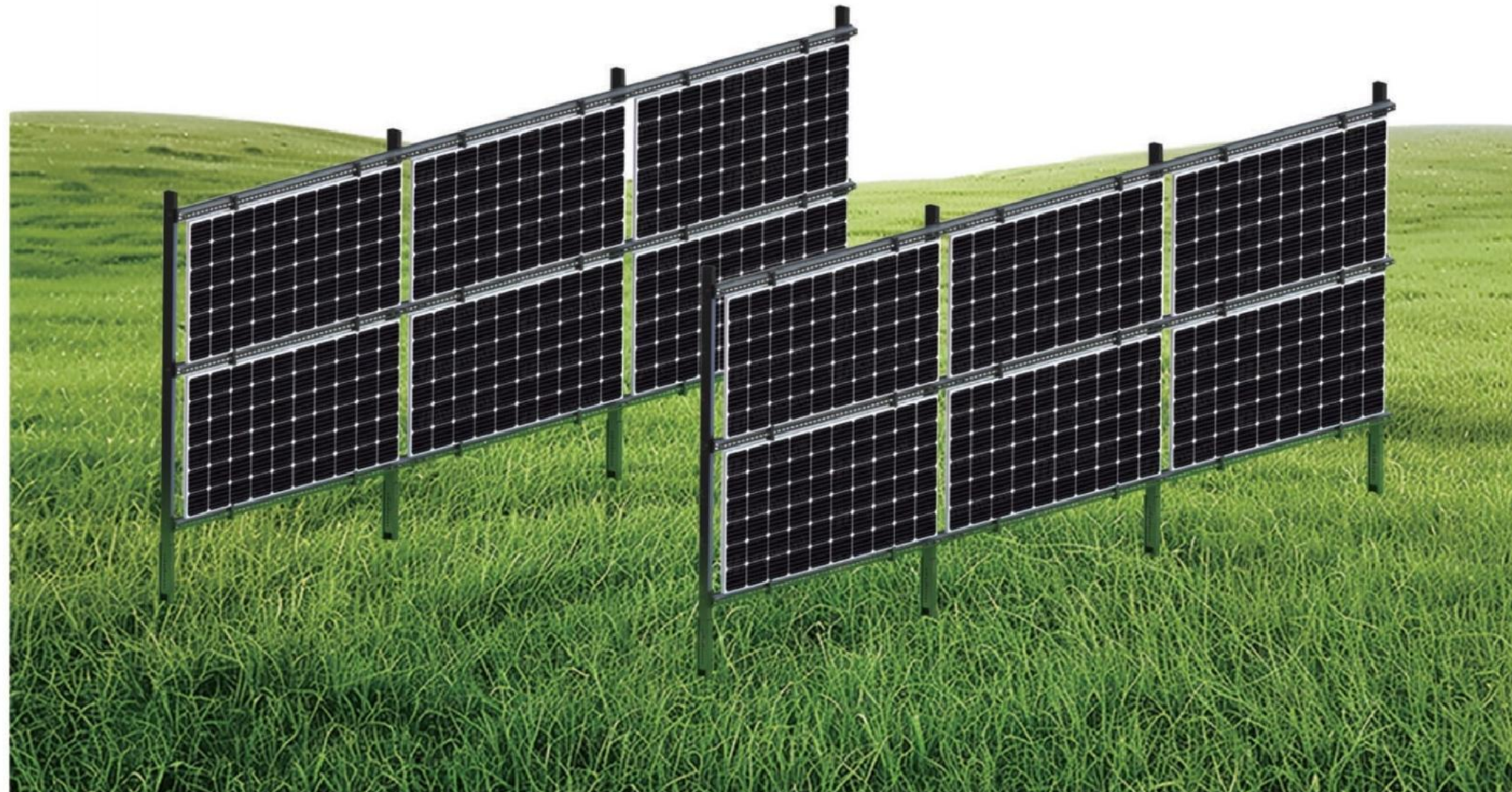


# WS-GT5. SPACE EFFICIENCY

## WS-GT5 IS OUR VERTICAL POWER PLANT SYSTEM DESIGNED TO MAXIMIZE LAND UTILIZATION.

Its vertical arrangement benefits agricultural practices by utilizing space efficiently and maximizing the amount of farmable land while enabling clean energy production.

- + Simple connections for quick installation.
- + Installable on flat or hilly terrain, compensating for height differences with its modular design.
- + Supports monofacial, bifacial modules.
- + Distance between rows can be freely adjusted to accommodate your specific crops and the size of your mower unit.



## ECONOMIC

**ADDITIONAL INCOME**  
According to local incentives.

**ENERGY coST REDUCTION**  
The price per kWh is reduced in the long run by using the vertical PV structure system to power irrigation and other operations.

**OPTIMIZED LAND UTILIZATION**  
Utilizing the same piece of land for the production of both crops and energy, optimizing land use and maximizing the benefits you gain from every acre.

## ENVIRONMENTAL

**RESILIENCE TO CLIMATE CHANGE**  
They can help regulate temperatures, protect your soil from erosion.

**CARBON REDUCTION**  
Generate clean energy, reducing reliance on fossil fuels and cutting harmful greenhouse gas emissions.

**WATER CONSERVATION**  
The shade provided by vertical PV structure system helps reduce water loss through evaporation, thus conserving water and supporting sustainable agriculture.



# SOLAR CARPORT SYSTEMS.

## SOLAR CARPORTS MAKE YOUR PARKING LOT WORK FOR YOU, AND ARE EXCELLENT ALTERNATIVES TO LARGE-SCALE PV SYSTEMS

Our solar carports combine environmental protection, cost-effectiveness and quality to create energy-saving carport solutions.

With the rising cost of electricity, solar carports provide free and sustainable electricity for years after your initial investment. In addition, solar carports provide good weather protection and are beautiful lightweight structures, taking into account environmental planning and energy utilization.





# WS-ASC01.

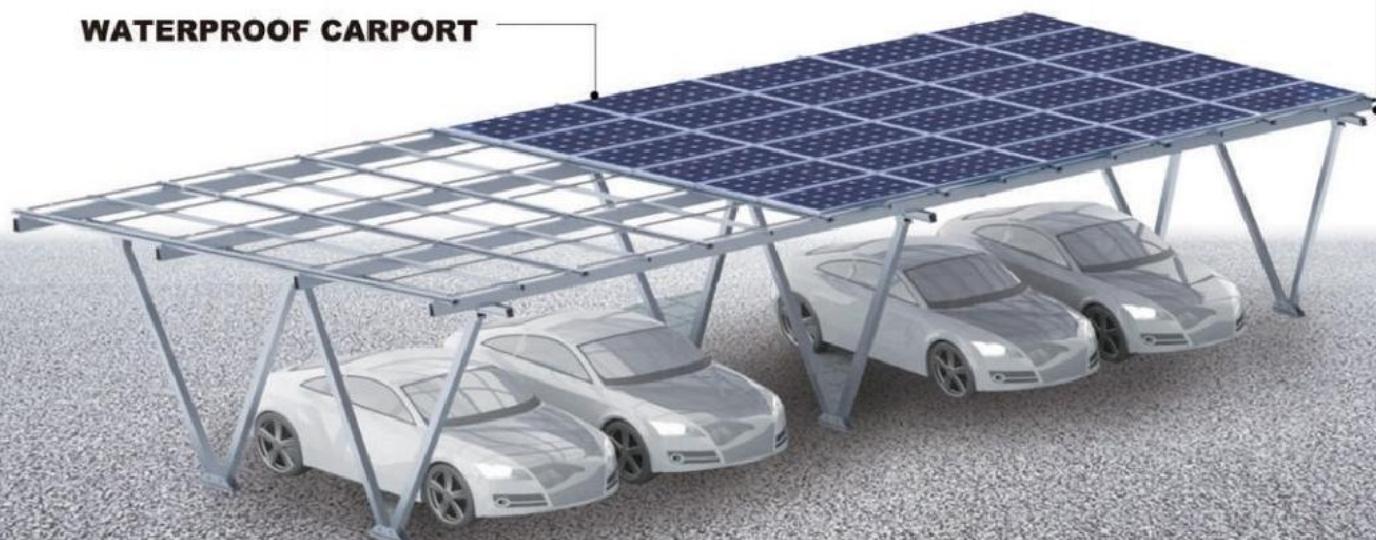
## ALUMINUM STRUCTURE CARPORT

THIS IS A PRE-ASSEMBLED ALUMINUM CARPORT BUILT ON A SMALLER BASE, WHICH IS SIMPLE IN STRUCTURE, STRONG IN STABILITY AND WATERPROOF.

- +Customization for each project.
- + Commercial and residential available.
- + Pre-assembled rack save installation time.
- + Stable structure while paying attention to aesthetic design.
- +Quality material.
- +Highly efficiency.

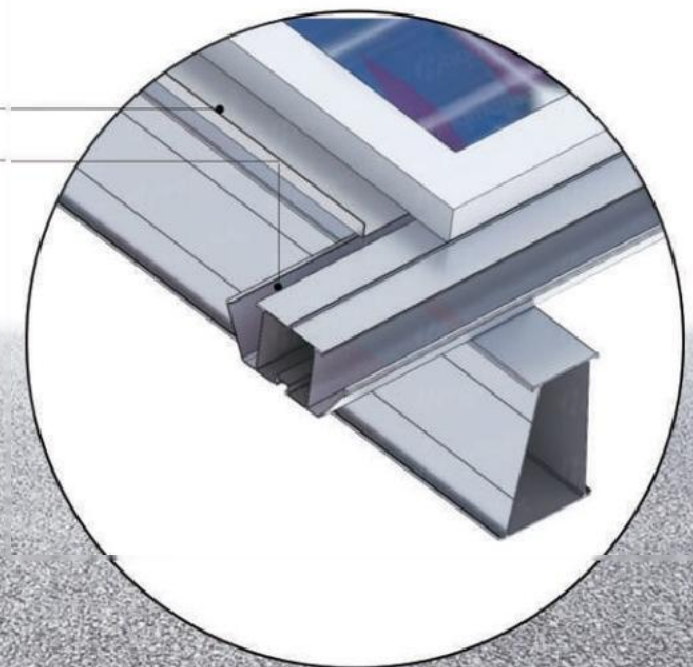


**WATERPROOF CARPORT**



## WATER PROOF

Vertical waterproof  
Landscape waterproof





# WS-SSC01. STEEL STRUCTURE CARPORT

WE DESIGN SOLAR CARPORT  
STRUCTURES FOR COMMERCIAL  
AND UTILITY SCALE PROJECTS.

- + High efficiency installation.
- + Allows for optimal use of parking space.
- + Suitable for different solar panel sizes.
- + Single/double-sided structures for you option.
- + Provides tailored solutions as your requests.
- + Made from high-strength and durable galvanized steel.
- + Creates a cost-efficient large-span space for commercial & industrial parking.

**BIFACIAL** >>>  
DOUBLE-SIDED CARPORT STRUCTUER



**UNILATERAL** >>>  
SINGLE-SIDED CARPORT STRUCTURE





# SOLAR TRIANGLE MOUNTING SYSTEM.

**TO HELP YOU ACHIEVE MORE SUCCESS BY UTILIZING OUR 15 YEARS EXPERIENCE.**

The Triangle Solar Mounting Structure is a aluminum construction. It can be used in almost all the flat roof and trapezoidal roof, as well as on the ground. It allows tilt up to ideal angle on roofs to provide the necessary tilt angle to optimize solar energy production. We offer adjustable angle type and fixed angle type.

For the foundation options, triangle mount can be combined ballast solution or roof penetration.

## Features:

- + Triangle structure design guarantees the stability;
- + Optional for rail or railless design;
- + Fold design for easy transportation;
- + High pre-assembly before shipment eliminate the need for onsite cutting;
- + Universal design for flat roof or open terrain applications.

... We see ourselves as

# 360° SUPPLIER

for photovoltaic structure





# WS-AR02.

## TRIANGLE MOUNTING SYSTEM

A SYSTEM DESIGNED AND DEVELOPED USING THE TRIANGULAR STABILITY LAW FOR ROOF AND GROUND USE.

- + Customization for every project.
- + Fixed & Adjustable angle are available.
- + Pre-assembled rack to save installation time.
- + Stable structure.
- + Quality material.
- + High efficiency.



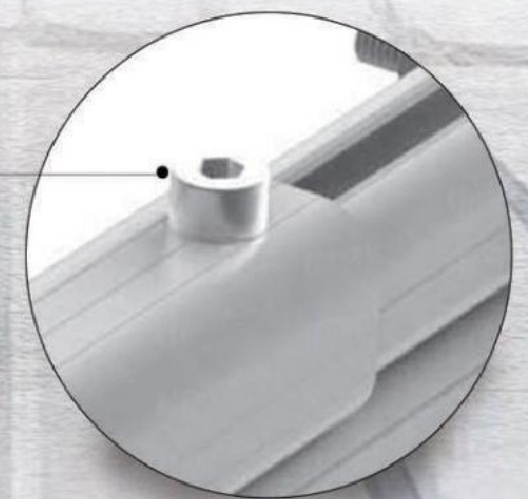
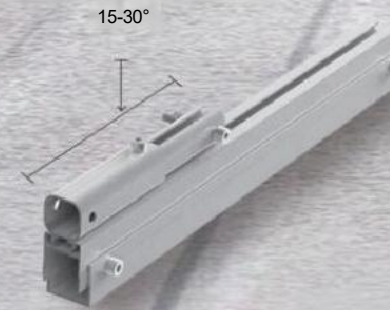
PORTRAIT ORIENTATION IS AVAILABLE.

HORIZONTAL DIRECTION AVAILABLE.

- + Pre-assembled rack
- + Rapid end clamp



ADJUSTABLE SCREWS CAN ACHIEVE 0-15° ANGLES  
15-30°





# WS-SBR02. BALCONY SOLAR SYSTEM

**FLEXIBLE INSTALLATION  
WITHOUT DAMAGE THE  
STRUCTURE OF BUILDING,  
ACHIEVING SUFFICIENT USE  
OF SPACE.**

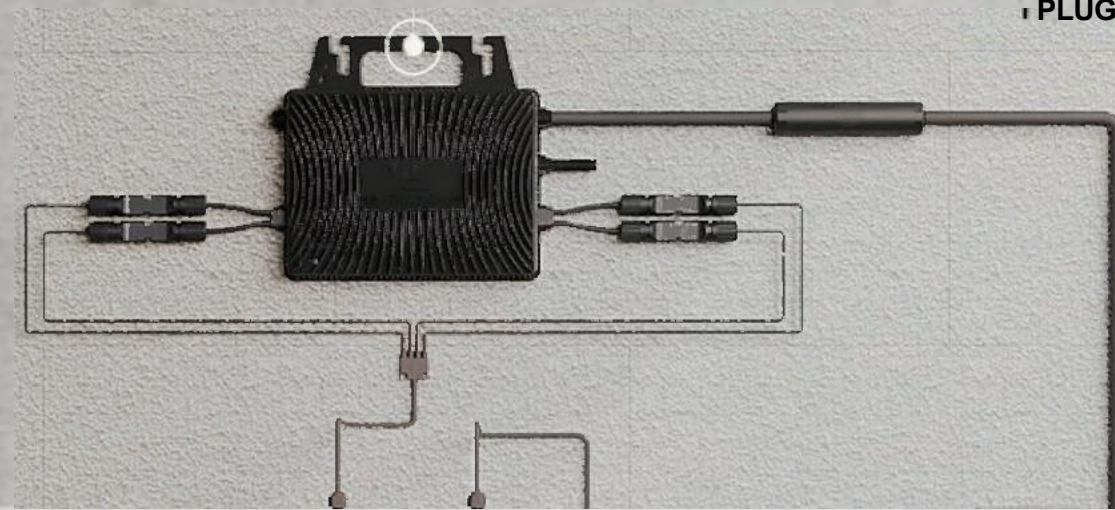
- + Adjustable tilt angle.
- + Horizontal /Vertical railing balcony.
- + Pre-assembled rack to save installation time.
- + Non-Penetrative Installation.
- + Enhanced Safety & light weight and durable construction.



**ADJUSTABLE ANGLE**

**800W**

**PLUG AND PLAY**





# SOLAR ROOF SYSTEMS.

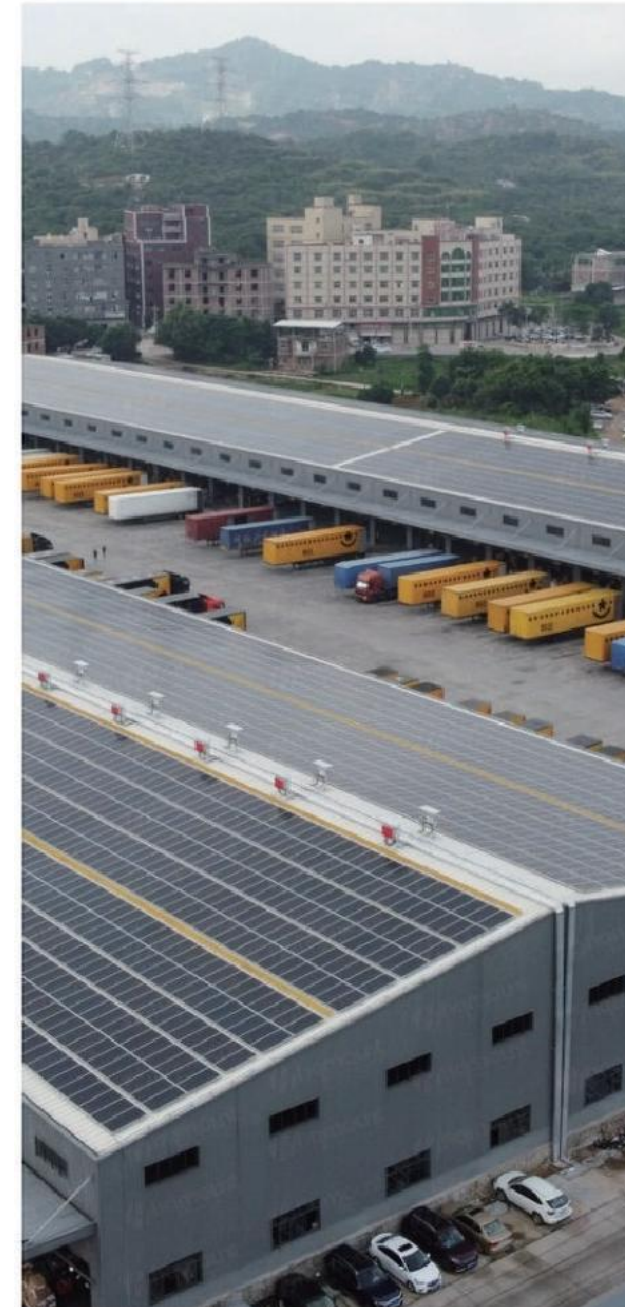
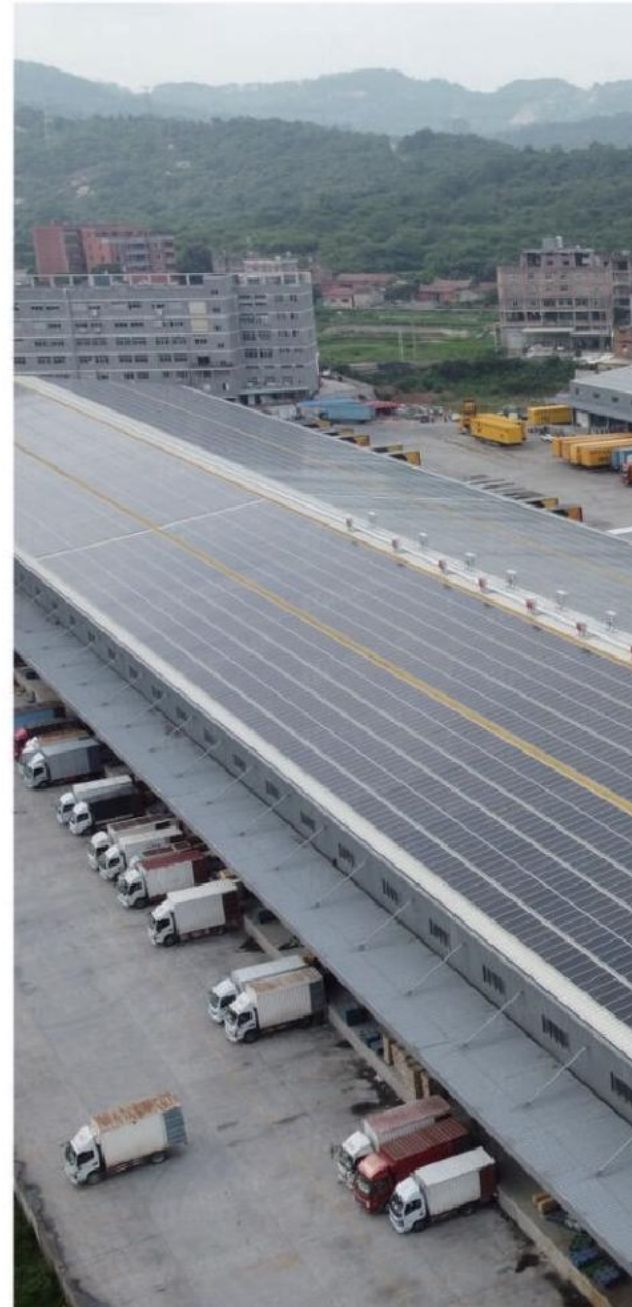
Windsorose SOLAR

## WS MOUNT OFFER A RANGE OF MOUNTING SOLUTIONS FOR CONCRETE ROOFS, CERAMIC ROOFS AND METAL ROOFS.

We have more than 15 years of technical experience in solar rooftop installation solutions. We can tailor solutions to suit different types of roofs, such as tile roofs, metal roofs and concrete roofs, based on the specific needs and architectural features of our customers. Our solutions are based on flexible needs while ensuring structural stability and safety.

Our products are rigorously tested and certified to ensure stable performance in a variety of extreme environments, providing customers with a long-term, stable energy supply.

We provide comprehensive technical support and maintenance services to ensure that any problems encountered by customers in the process of use can be solved in a timely manner.

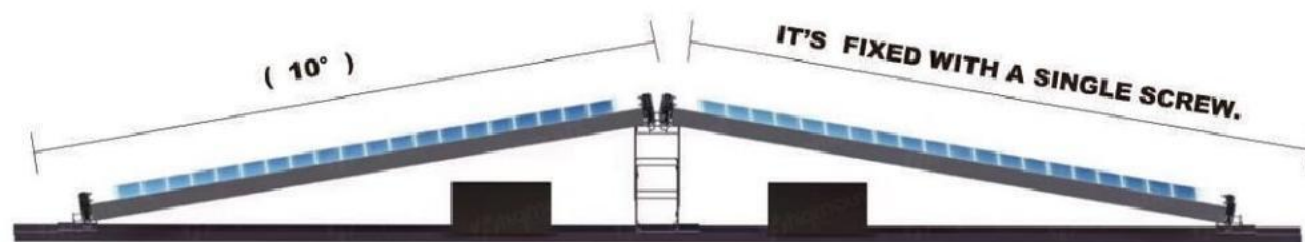
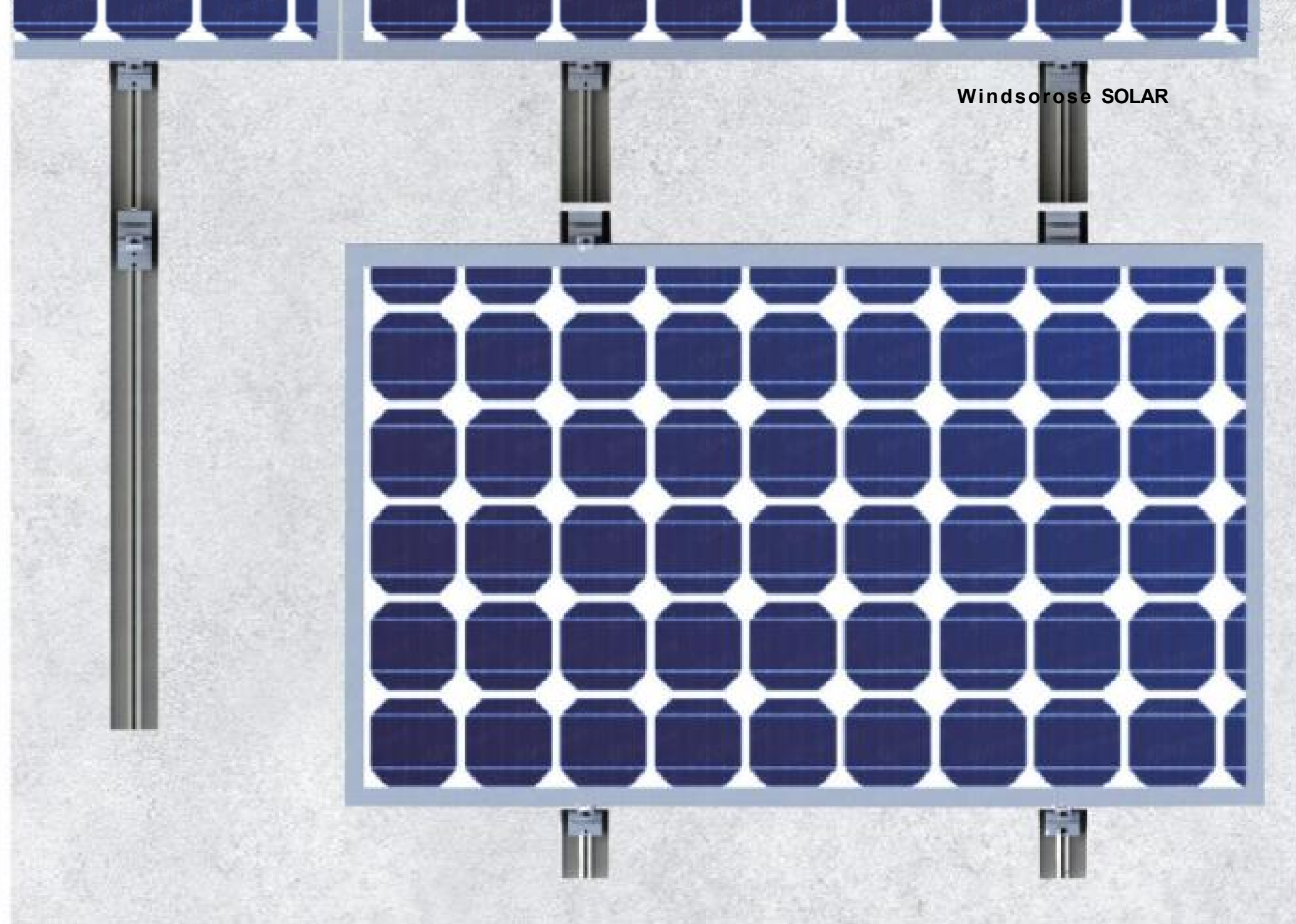




# WS-BR6. BALLASTED ROOF SYSTEM

HQ-BR6 IS CONVINCING WITH ITS HIGH LOAD CAPACITY AND RESISTANCE UNDER EXTREME WEATHER CONDITIONS.

- + Fixed with T-bolt and easy to install.
- + Short and long side mounting are available.
- + East-west and facing south solution.
- + Simple structure ,quick and easy installation.
- + Adjustable rear legs for many sizes of panels.
- + Pre-assembled EPDM prevents water accumulation and corrosion on uneven locations.



EAST-WEST SOLUTION

## FIX THE CLAMP ON THE LONG SIDE OF THE PANEL

- + If the pressure load increases, fixed the clamps to the long side of the solar panel.

## FIX THE CLAMP ON THE SHORT SIDE OF THE PANEL

- + Quick installation
- + Reduce material costs
- + The clamp can be fixed on the short side of the panel to save material under appropriate snow loads.



FACING SOUTH SOLUTION



# WS-R-TIN. TRAPEZOIDAL ROOF SYSTEM

IT IS SUITABLE FOR MOST  
METAL SHEET ROOFS, EASY TO  
INSTALL AND A COST-EFFECTIVE  
SOLUTION.

- + Less mounting material.
- + Pre-assembled packaging.
- + Railless and mini rail solution.
- + Designed for high wind speed and snow load.
- + Modular installation plan with adjustable rail height.
- + EPDM makes the screw connection securely sealed.

MINI RAIL SOLUTION

RAILLESS SOLUTION

HANGER BOLT SOLUTION

SELF-TAPPING

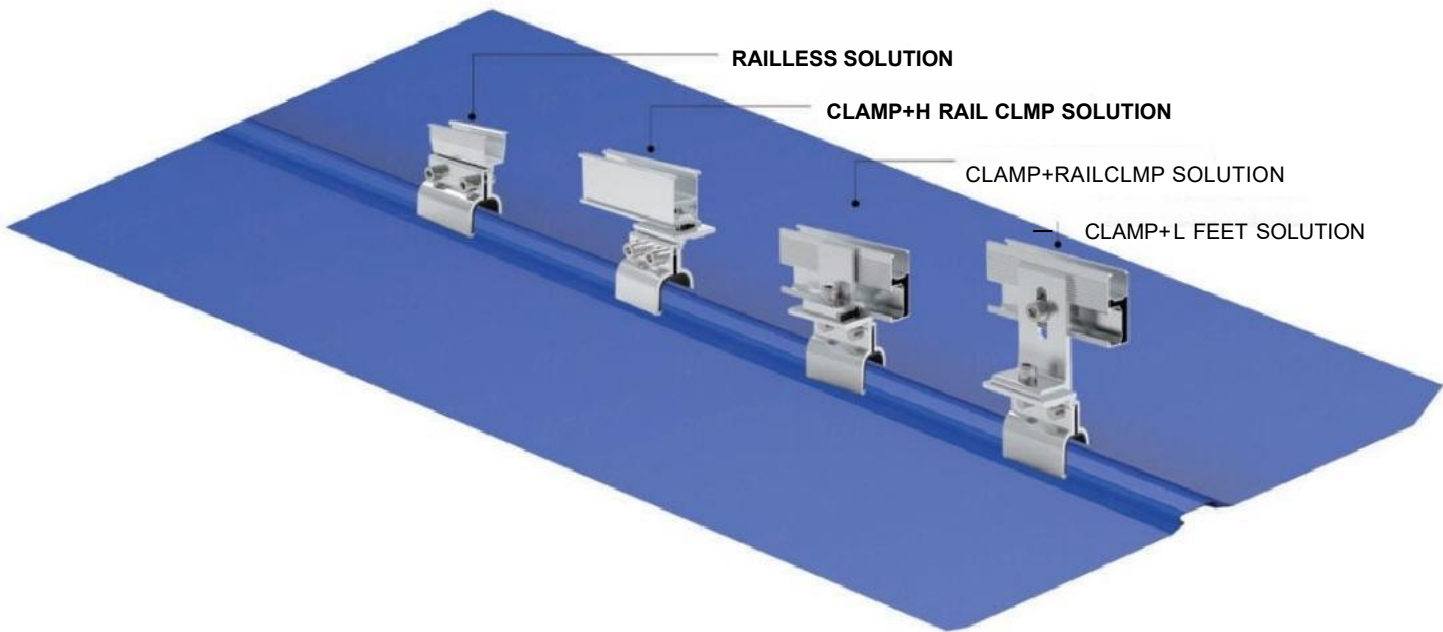
L FEET MOUNTING SOLUTION



# WS-R-SS01. STANDING SEAM ROOF SYSTEM

STANDING SEAM WITH SHORT  
RAILS,TWO IN OWE SYSTEM  
PROVIDES QUICKER,EASIER  
INSTALLATION.

- + Less mounting material.
- + Non-penetration.
- + Safe and fast assembly.
- + We offer the possibility of different combinations.
- + The best fit is achieved by concave-convex preformed fixing screws.



## HQ-OL01

OVERLAP ROOF SHEET  
Non-penetrating clamps for overlapping tin roofs.



## HQ-DC02

DIAMOND ROOF SHEET  
Non-penetrating clamp for diamond-shaped tin roofs.



## HQ-KL700S

KLIP LOK 700S ROOF SHEET  
Non-penetrating clamp with integrated short rail for trapezoidal tin roof.



## HQ-TR01

TRAPEZOIDAL ROOF SHEET  
Penetrating clamp with adjustable angles for trapezoidal metal roofs.



## HQ-SS01

STANDING SEAM ROOF SHEET  
Non-penetrating clamp standing seam metal roofs.



## HQ-SL01

SINGLE LOCKED ROOF SHEET  
Non-penetrating clamp for single-lock tin roofs.



## HQ-KZ01S

KALZIP ROOF SHEET  
material saving and easy installation.





# WS-HA02. SOLAR TILE ROOF SYSTEM

THE INNOVATIVE CONCEPT IS  
IMPRESSIVE WITH ITS HIGH  
FLEXIBILITY AND MANY  
ADJUSTMENT OPTIONS.

- + Choose click holder for quick installation.
- + Suitable for commercial and residential roofs.
- + Click holder makes it easier for installers to adjust the height.
- + Anodized aluminum and stainless steel components.

**8MM THICKNESS**  
(Expand Span)

**ADJUSTABLE**

**CLICK HOLDER**

**ALUMINUM HOOK**

**ADJUSTABLE**

## CLICK HOLDER HOOK

- + Tile roof structure with click holder installation.
- + Suitable for 40x40 rail.

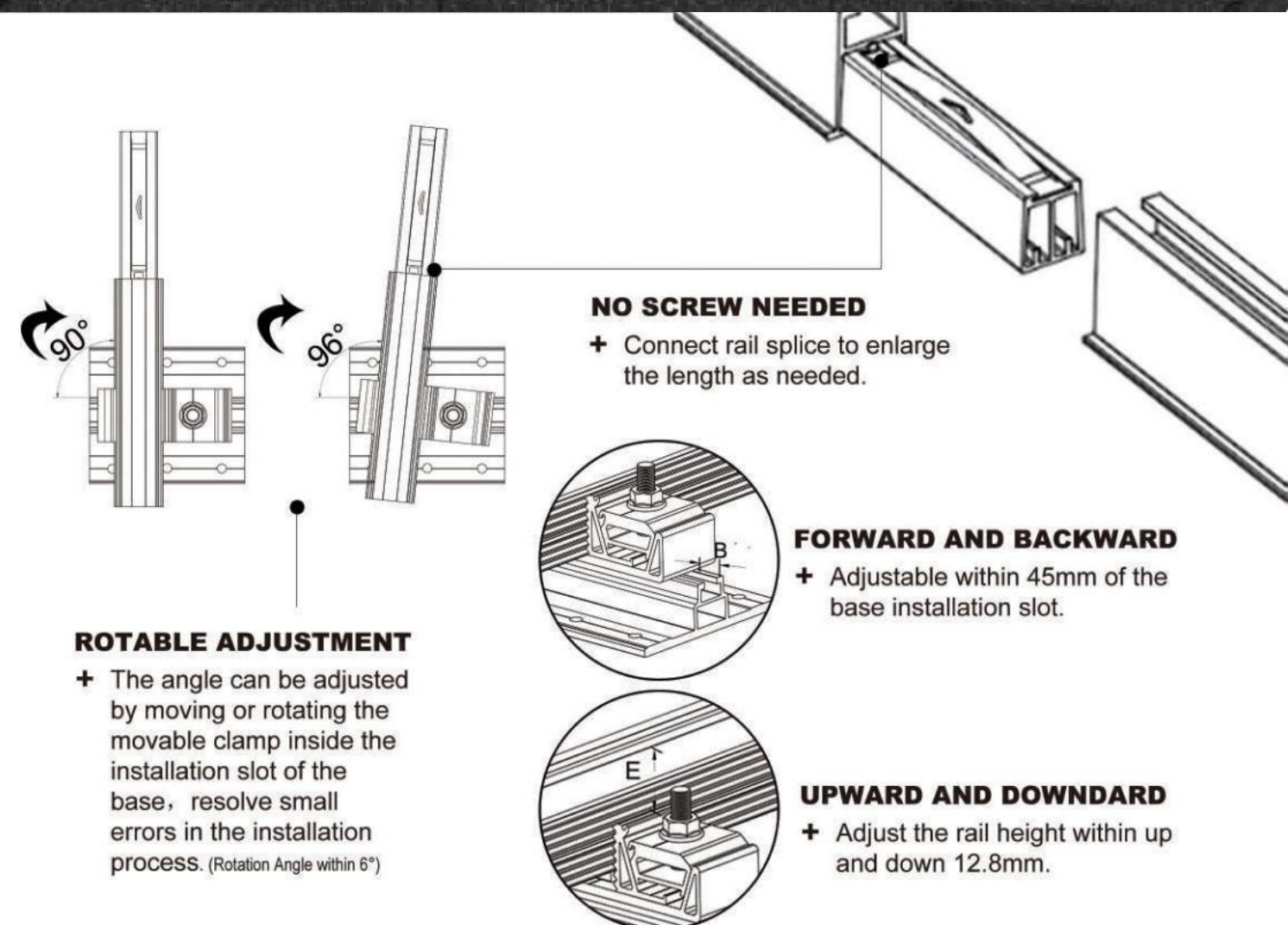
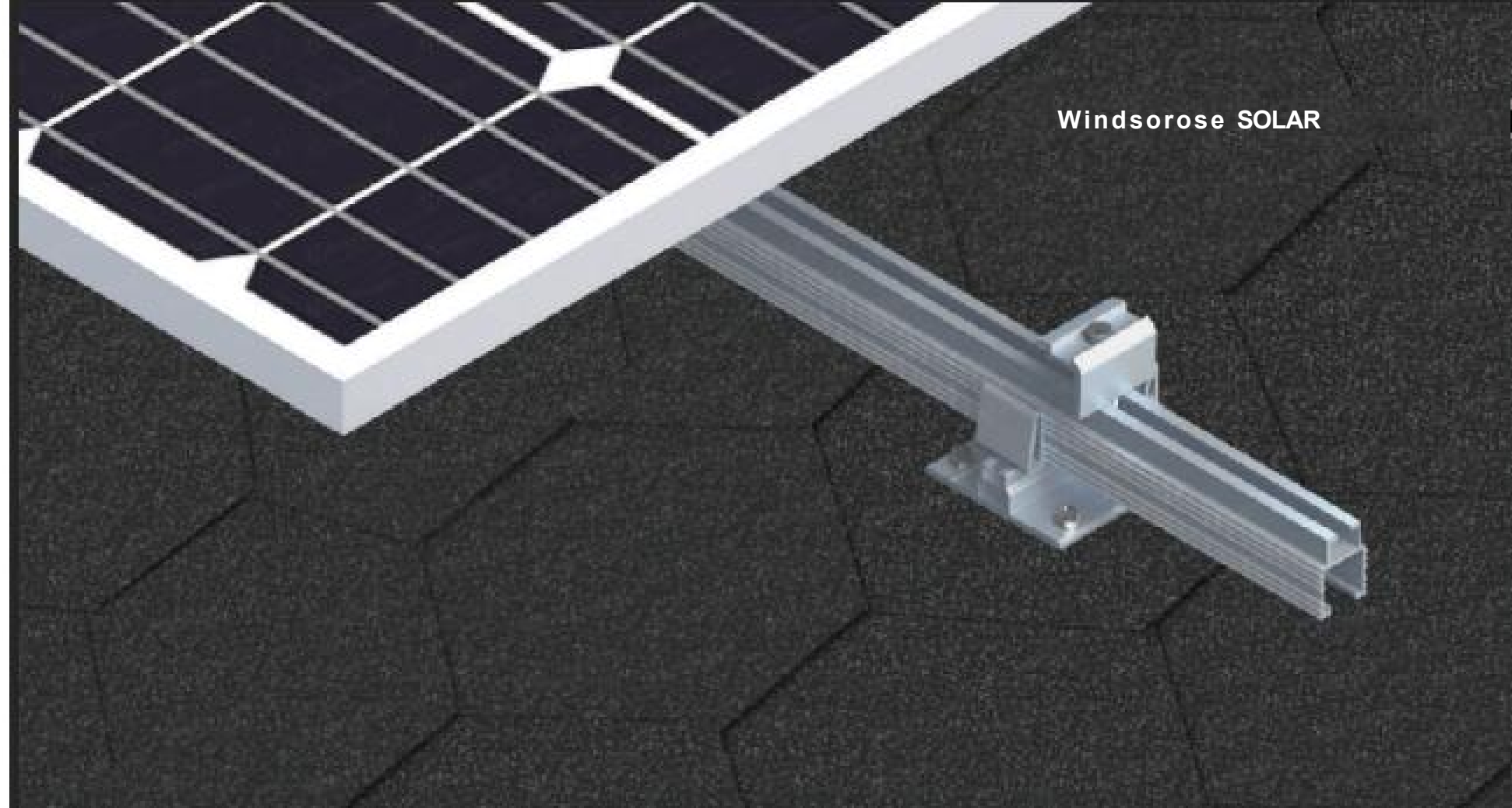




# WS-AS01. SOLAR ASPHALT ROOF SYSTEM

THE FLEXIBILITY STABILITY OF  
HIGH INSTALLATION IS THE  
STARTING POINT OF OUR  
INNOVATION.

- + Quick and easy to install.
- + The support base can be adjusted to ensure that the rail is at the same level.
- + This product is our latest patented design for asphalt shingle roofs.
- + The position and angle of the clamp in the base are changed by a movable clamps.
- + Due to the use of EPDM,screw connections have better water resistance.





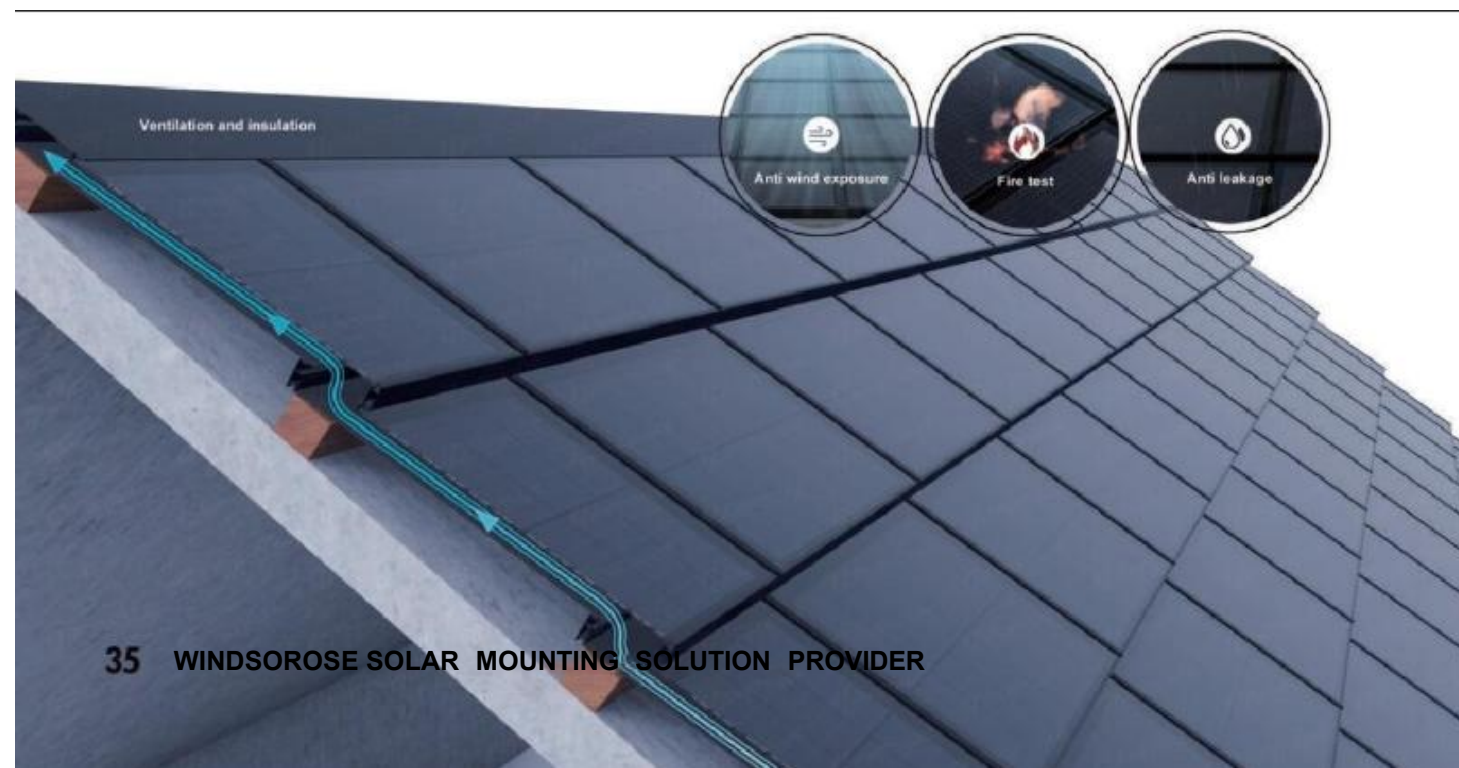
# WS-BIPV01. BIPV SYSTEM

(BIPV01)SYSTEM HAS BOTH THE FUNCTION OF GENERATING ELECTRICITY AND THE FUNCTION OF BUILDING COMPONENTS AND MATERIALS.

- + 100%Waterproof.
- + Enhance the aesthetic appeal of buildings
- + Advanced BIPV technology replaces existing roofs.
- + Seamless integration of solar power generation into building structures.
- + Independent individual,easy to disassemble.

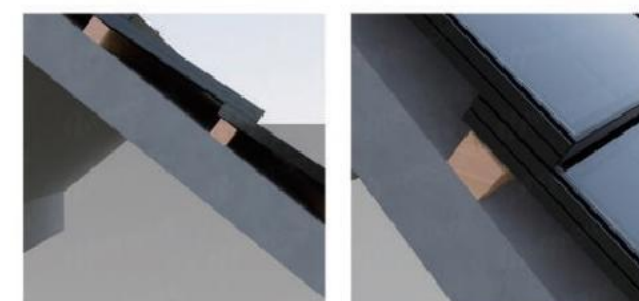


Windsorose SOLAR



## WATER-RESISTANT DESIGN

- + Multiple waterproof structures  
Perfect waterproof design.
- + Perfect fit between top and bottom  
effective waterproof effect.



## 5400pa+ NOISE PROTECTION

## CUSTOMIZE AS YOU WISH MULTI SCENARIO APPLICATION





# WS-BIPV02.

## BIPV SYSTEM

**(BIPV02)SYSTEM IS A NEW FORM OF ENERGY WITH BROAD APPLICATION PROSPECTS,WHICH IS VERY SUITABLE FOR LARGE PUBLIC PLACES AND COMMERCIAL BUILDINGS.**

- + Combines aesthetics with functionality.
- + Weather-resistant for long-term performance.
- + Customizable design:Matches unique building requirements.
- + Smart grid compatibility:Enhances energy management and resilience.
- + High color durability,easy to clear and corrosion resistance.



### CUSTOMIZE AS YOU WISH

- + According to the design requirements, we can provide customized grain,size and glass thickness for customers.
- + It can be used instead of most of the existing facade materials.