

INSTALLATION MANUAL

AW GROUND SOLAR MOUNTING SYSTEM

General	01
Tools overview	02
Components	03
Steps for installing mounting system	04
• Concrete foundation and fix the base	04
• Assemble and fix the AW legs	05
• Assemble the rail to the AW leg	06
• Install the Strength kit	07
• Install End Clamps to Fix Solar Panels	08
• Install Mid Clamps to Fix Solar Panels	09
• Install Grounding Lug on Rail	10

Quality tested – several certifications

WOCHN Systems stands for secure connections, highest quality and precision. Our customers and business partners have known that for a long time. Independent institutes have tested, confirmed and certified our capabilities and components

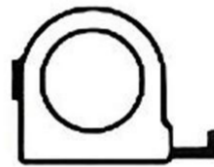
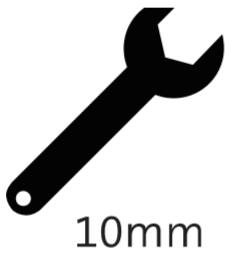
Please find our quality and product certificates under:

<https://www.wochnmounting.com/>

Disclaimer

This manual describes the proper installation procedures and provides minimum standard required for product reliability and warranty. This installation instruction is based on the state of the art and many years of experience in how our systems can be installed on site. Due to the many variables and requirements associated with a specific installation. Because of this, these instructions only serve as a guideline for the installation of the product described in this manual.

- The equipment may only be installed and operated by qualified and adequately trained installers.
- Prior to installation, ensure that the product complies with on-site static loading requirements
- National and local building regulations and environmental requirements must be adhered to.
- All work must comply with national, state and local installation procedures, product and safety standards.
- Compliance with health and safety regulations, accident prevention guidelines and applicable standards is required.
- Protective equipment such as safety helmet, boots and gloves must be worn.
- Validate foundation parameters prior to installation, We recommend consulting with a local engineer familiar with local regulations and build site requirements, including soil conditions, terrain and load criteria. All parameters may impact foundation requirements.
- At least two people must be present for the duration of the installation work in order to provide rapid assistance in the event of an emergency.
- At least one copy of the assembly instructions should be available on site throughout the duration of the installation.
- Failure to adhere to our general safety and assembly instructions and not using all system components,
- WOCHN is not liable for any resulting defects or damages. We do not accept liability for any damage resulting in the use of competitor's parts. Warranty is excluded in such cases.
- Dismantling of the system is performed in reverse order to the assembly
- The manual provides guidelines for installation, but it does not guarantee the quality of installation work. Please complete the installation in a responsible and professional manner.



Torque Values

Base fixed concrete foundation : 12 N · m

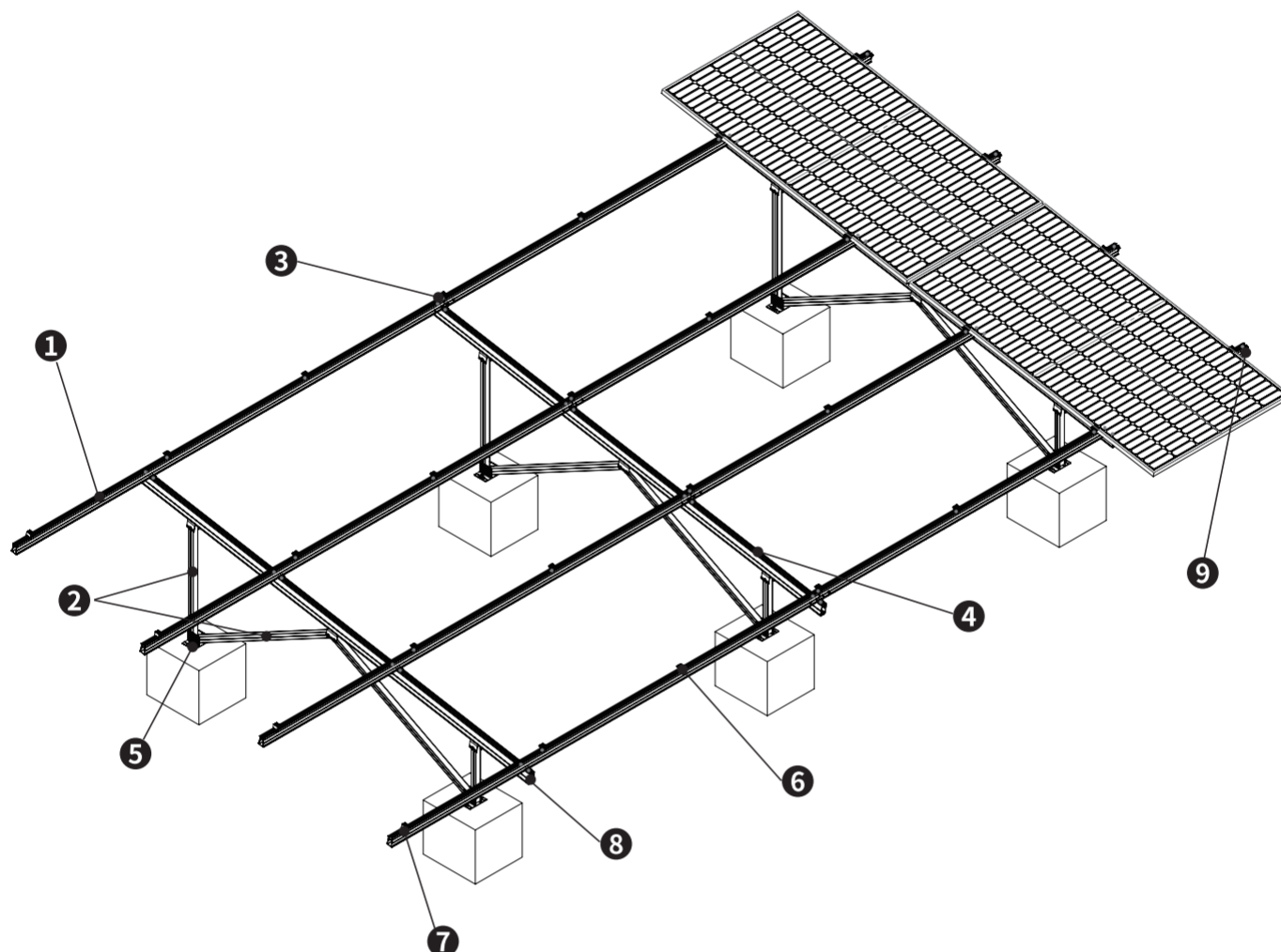
Base fixed the front and rear columns and diagonal bracesl: 10 N · m

Adapter fixed inclined beam: 10 N · m

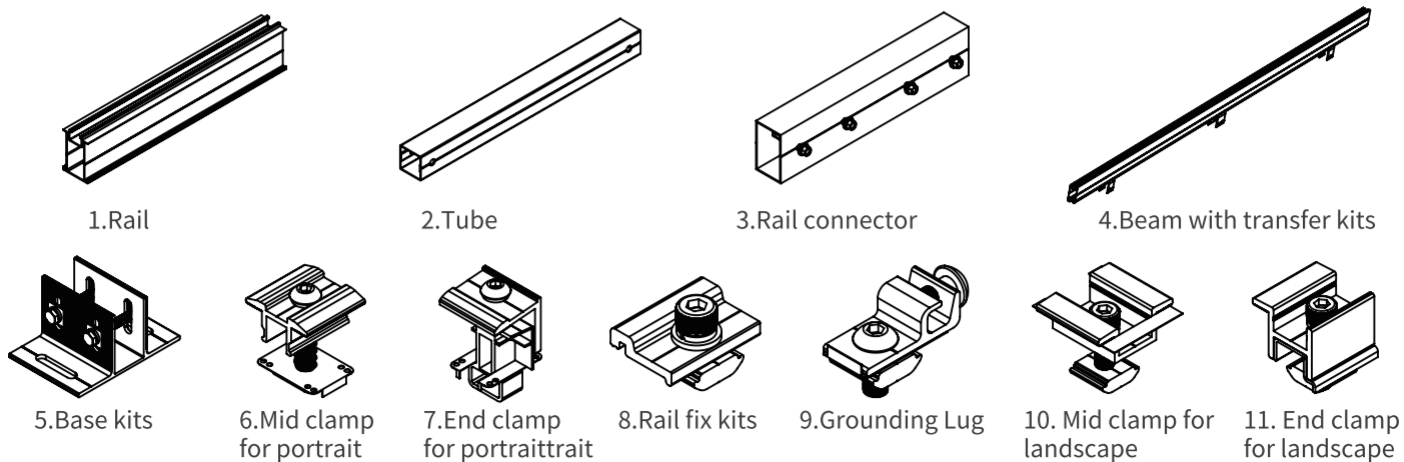
Diagonal beam adapter fixed the front and rear columns and diagonal braces: 10 N · m

Mid clamp, end clamp and grounding lug fixed with rail: 8 N · m

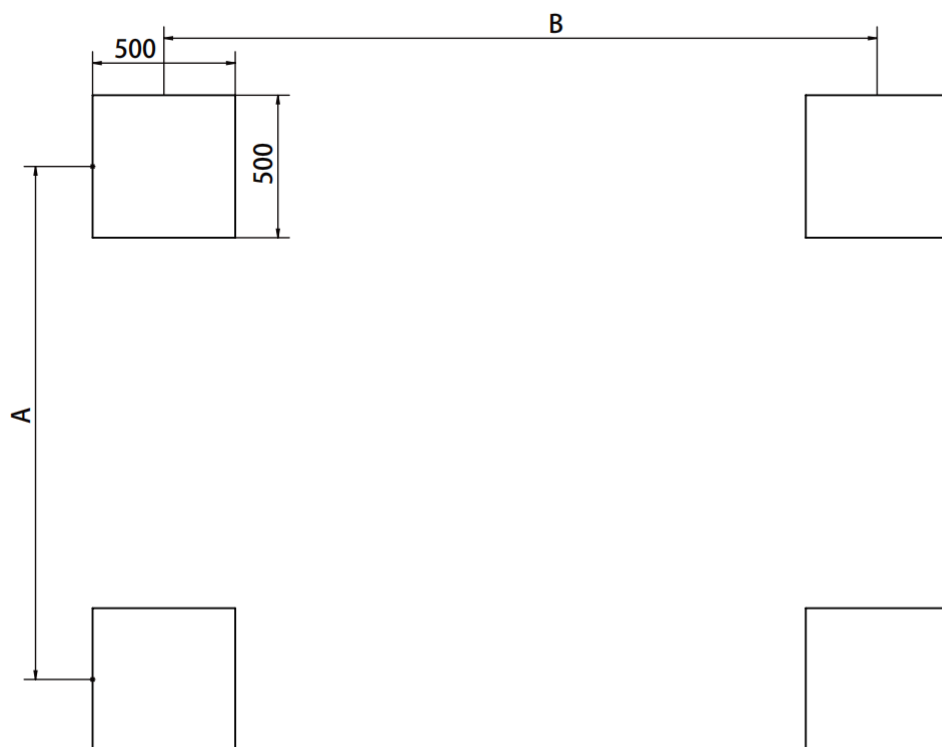
1. PARTS OVERVIEW



2. Components



1. Confirm the Foundation Position According to the Drawings



A : Longitudinal span

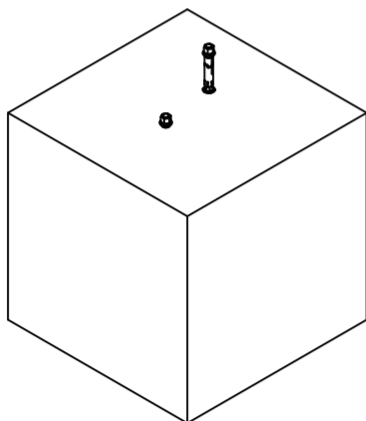
B : Transverse span

The concrete size is based on several factors including the array surface area, maximum design wind speed. Determine position according to drawings.

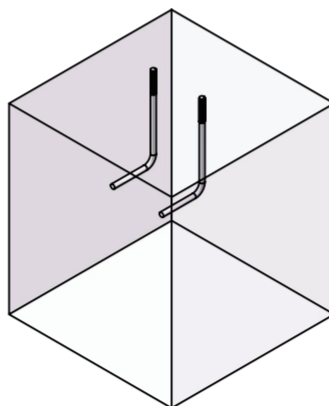
2. Fixed the Base on Foundation

Three choice:

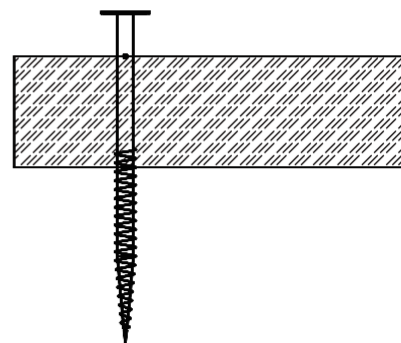
1. Drill M12 expansion screws into holes in the concrete foundation



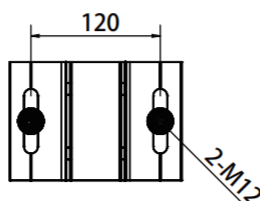
2. While making the concrete base, bury the embedded bolt together.



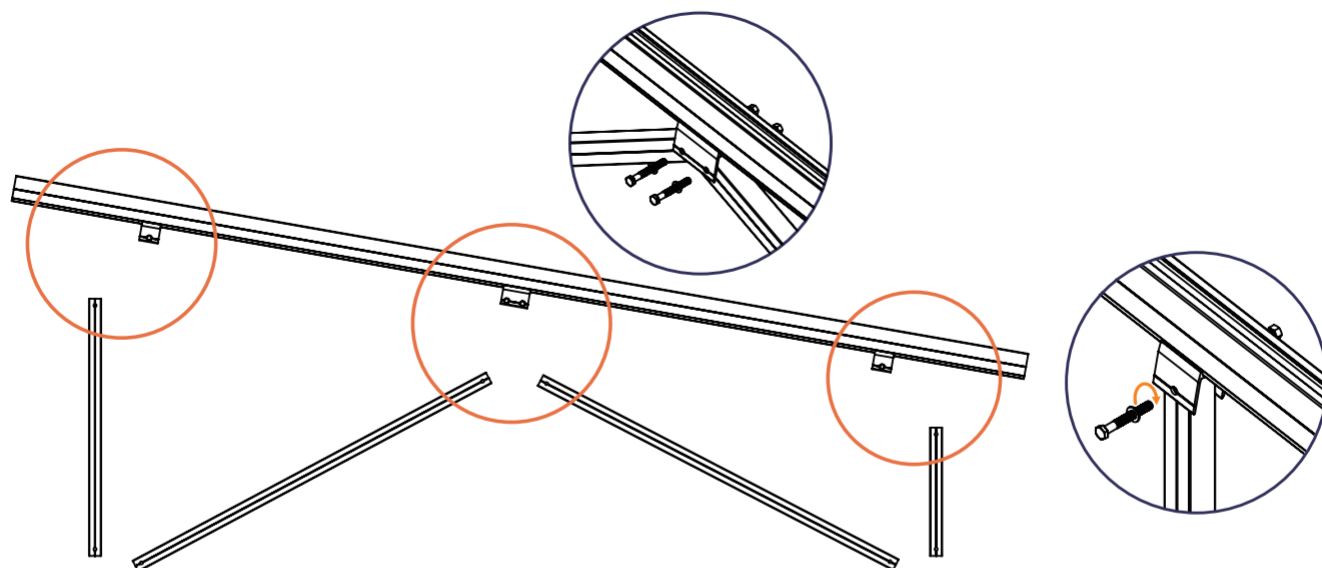
3. Ground screws driven directly into the ground



⚠ Notice: Confirm the distance between bases according to the drawing
Screw spacing reference:



3. Fix the Tubes and Beams and Connecting Together



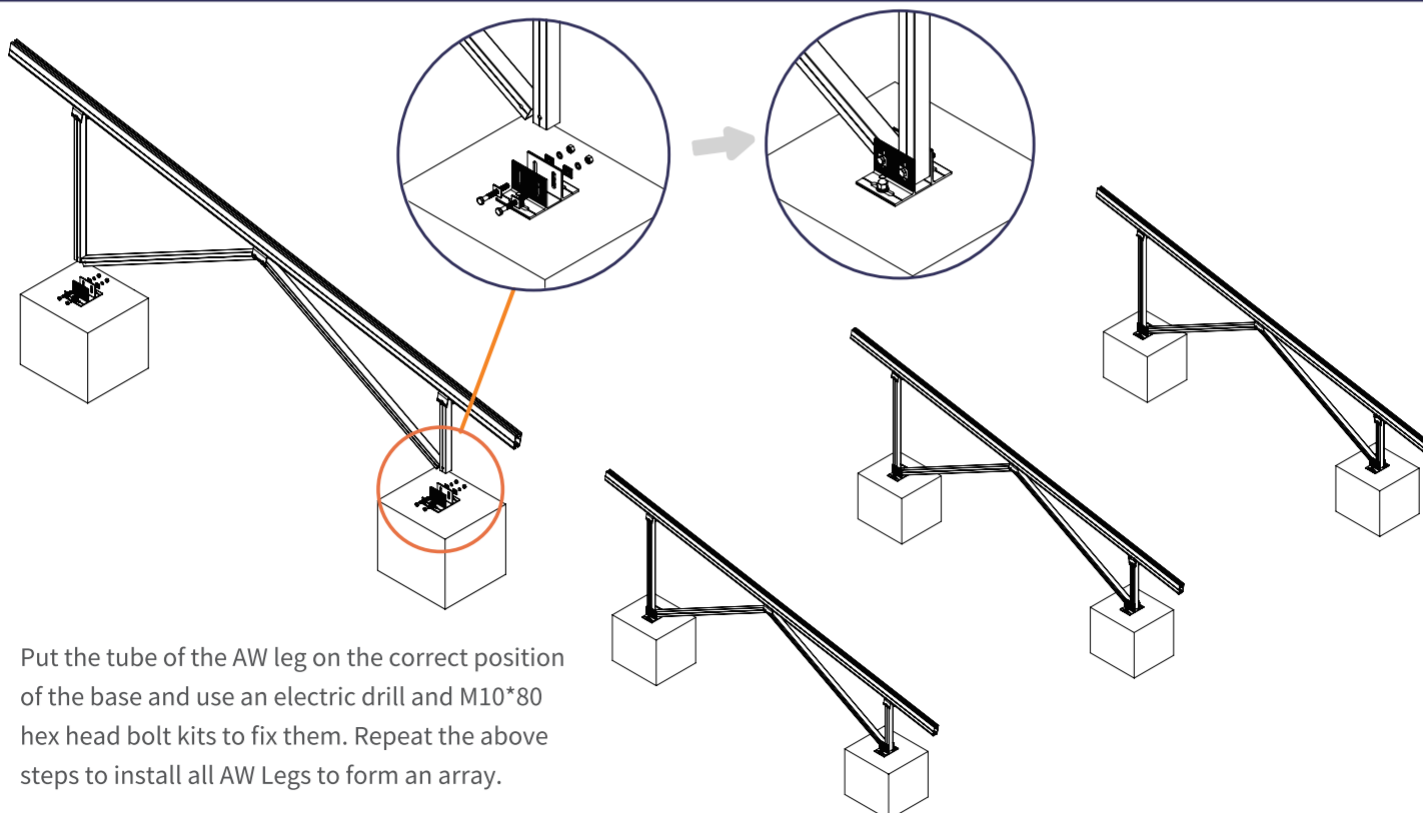
Select the correct tubes length according to the drawings from WOCHN engineer team, use the electric drill and M10*75 hex head bolts to connect the tubes on the transfer kits of the beam.



Notice:

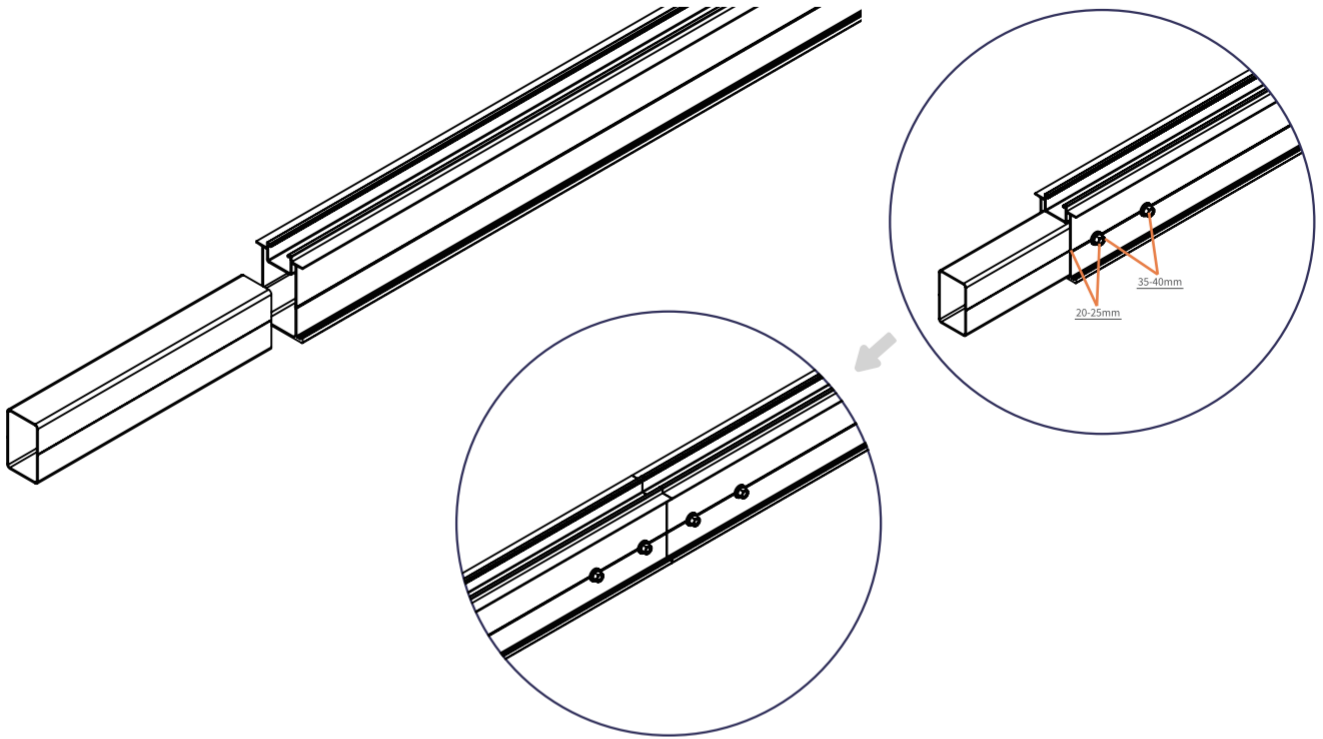
- The small transfer kits position with 1 PCS M10*75 hex head bolt
- The big transfer kits position with 2 PCS M10*75 hex head bolt

4. Fix the AW Leg to the Base



Put the tube of the AW leg on the correct position of the base and use an electric drill and M10*80 hex head bolt kits to fix them. Repeat the above steps to install all AW Legs to form an array.

5. Fix the Rails and Rail Splice

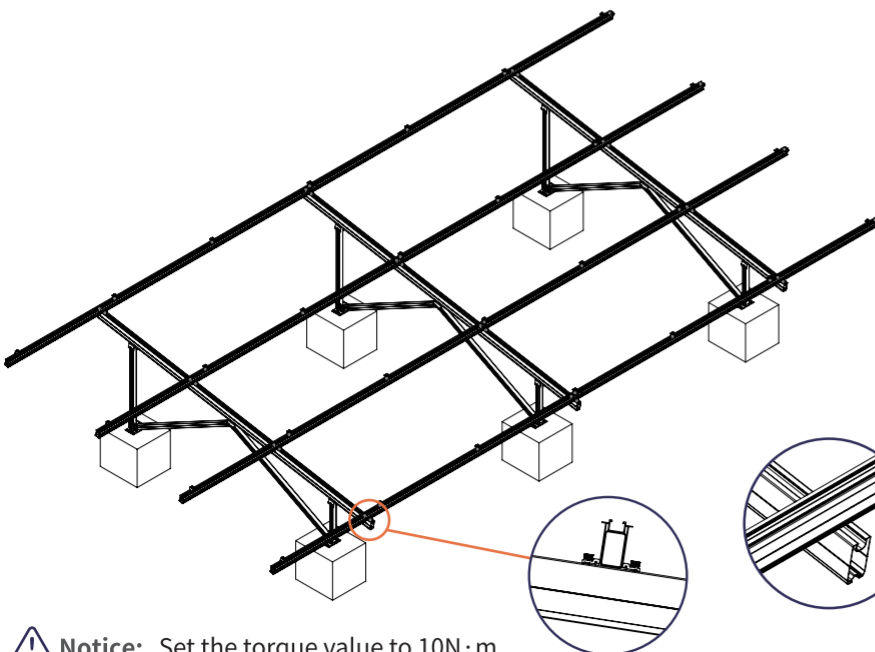


Confirm the three points of the rail splice, the center and the two marked positions, fix them with M6.3 drill nails.

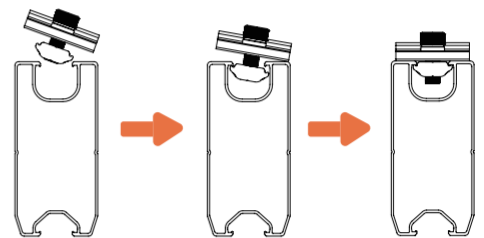
⚠ Notice: Set the torque value to $10\text{N} \cdot \text{m}$.

6. Install the Rail to the AW Leg

To confirm the position of rail on the AW leg follow drawings. Then put the rail on marked position, use rail fasteners to fix on the AW leg. Repeat above steps, to ensure all rails install on the AW legs.



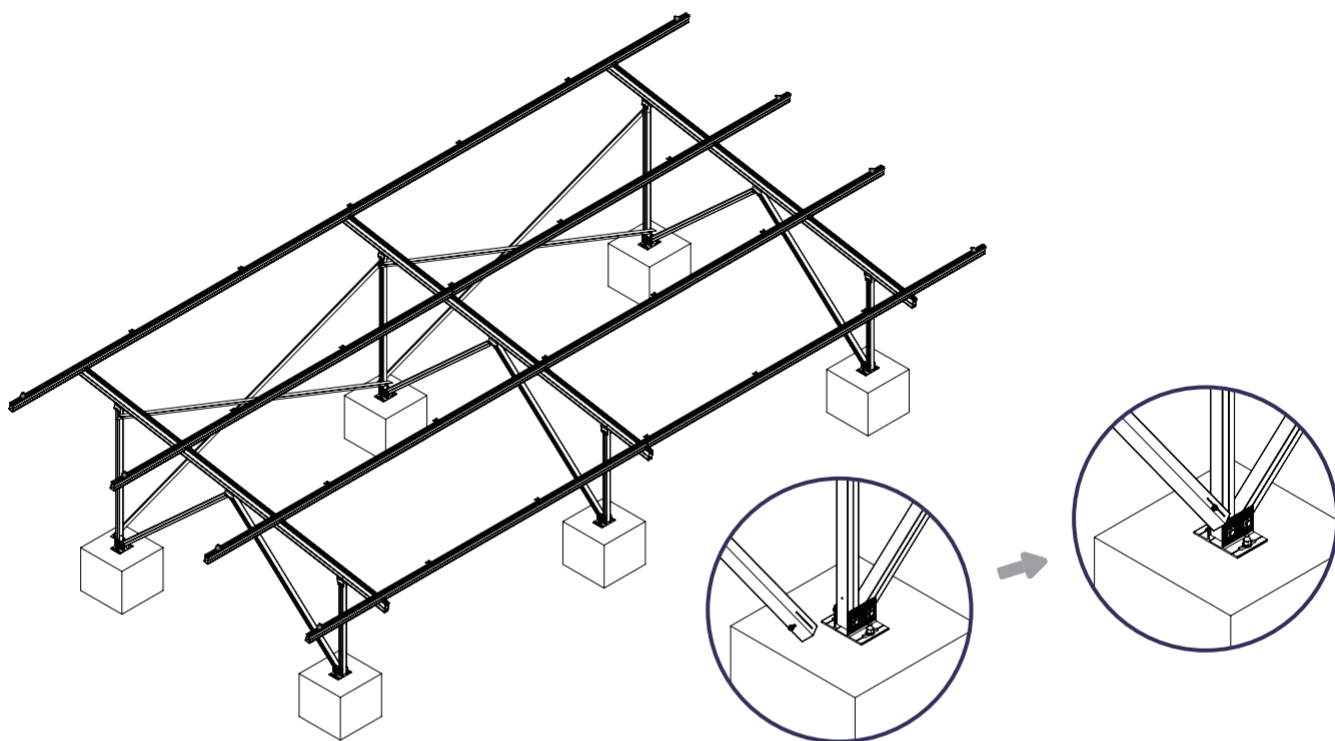
⚠ Notice: How to fix rail fastener



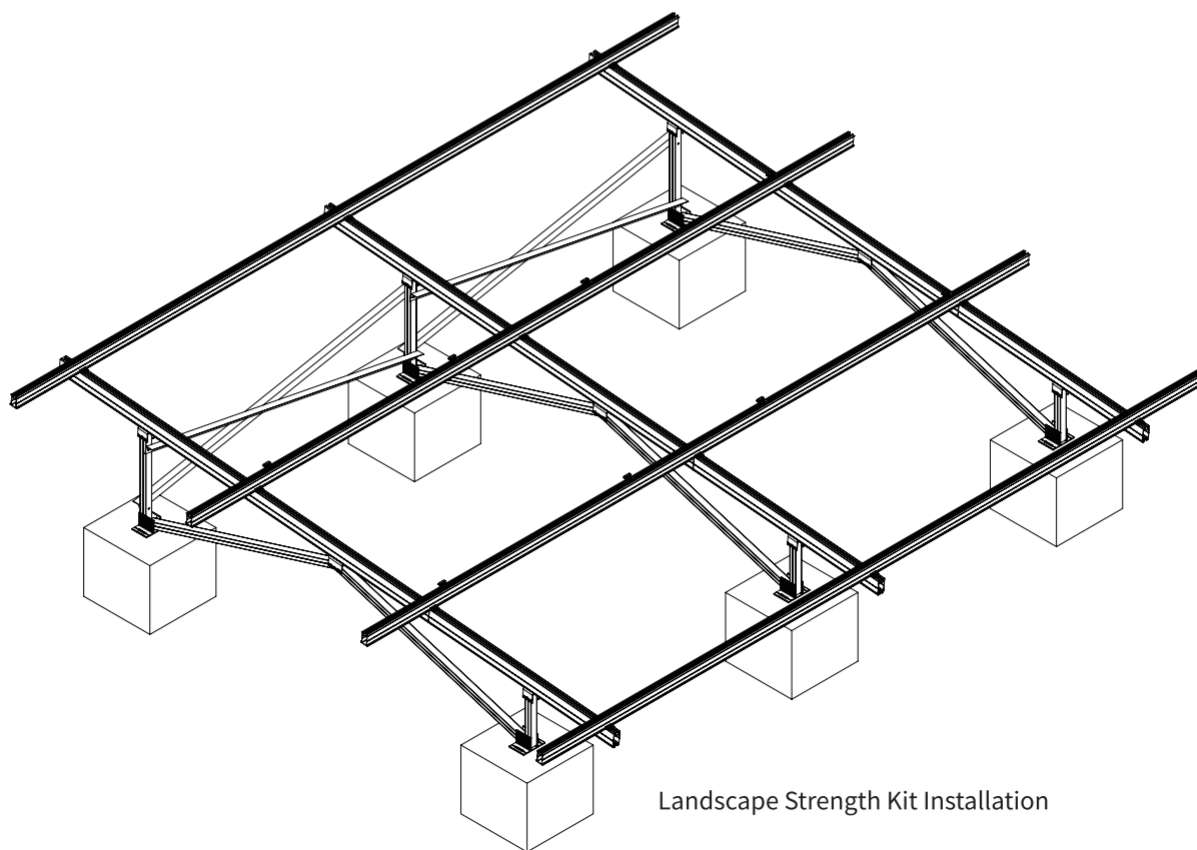
⚠ Notice: Set the torque value to $10\text{N} \cdot \text{m}$.

7. Install the Strength kit

After confirming the position according to the drawing, drill holes and fix them with M6 drill nails.



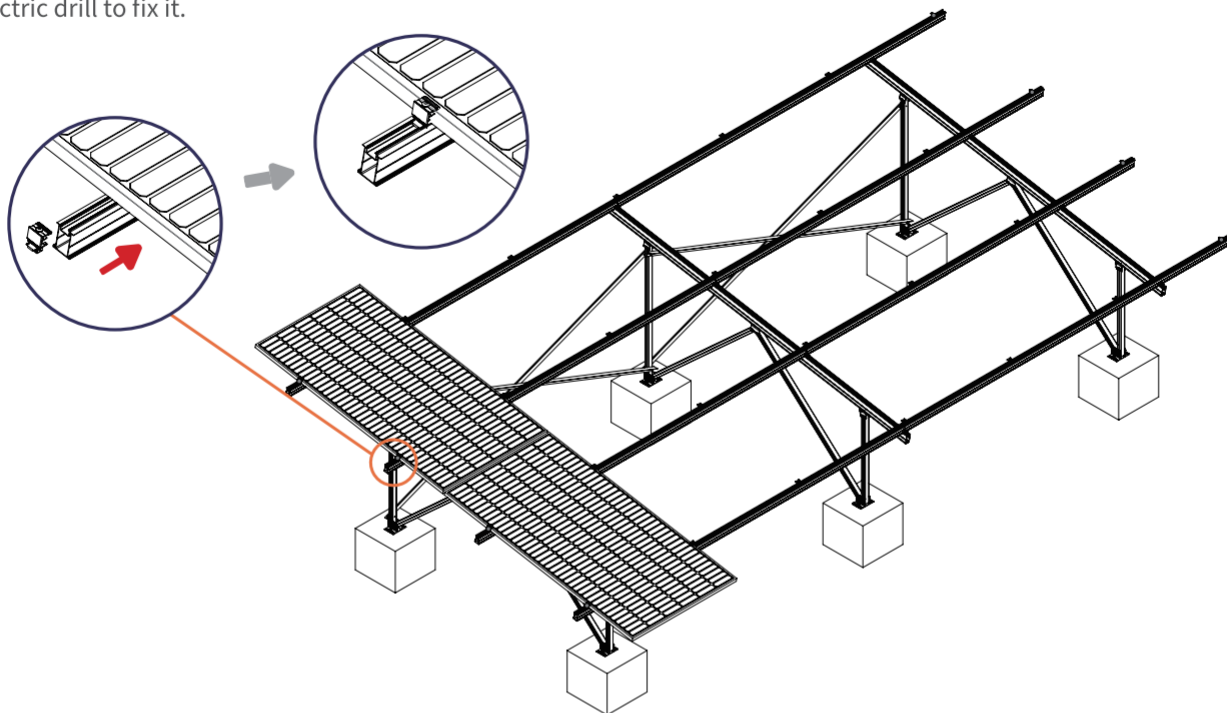
Portrait Strength Kit Installation



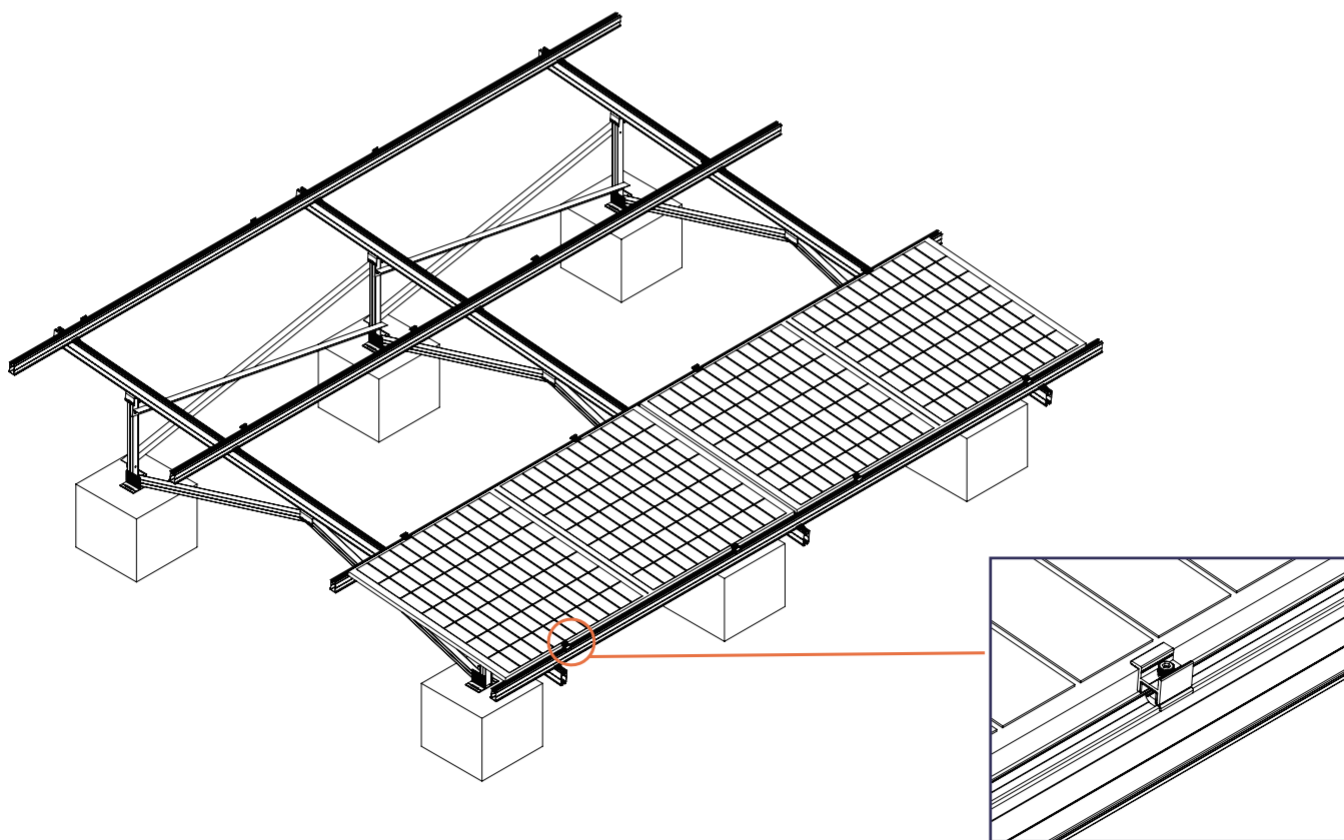
Landscape Strength Kit Installation

8. Install End Clamps to Fix Solar Panels

Slide the End clamp into the rail notch from the side, confirm that the solar pv panel is properly placed, and use M8 hex key or electric drill to fix it.



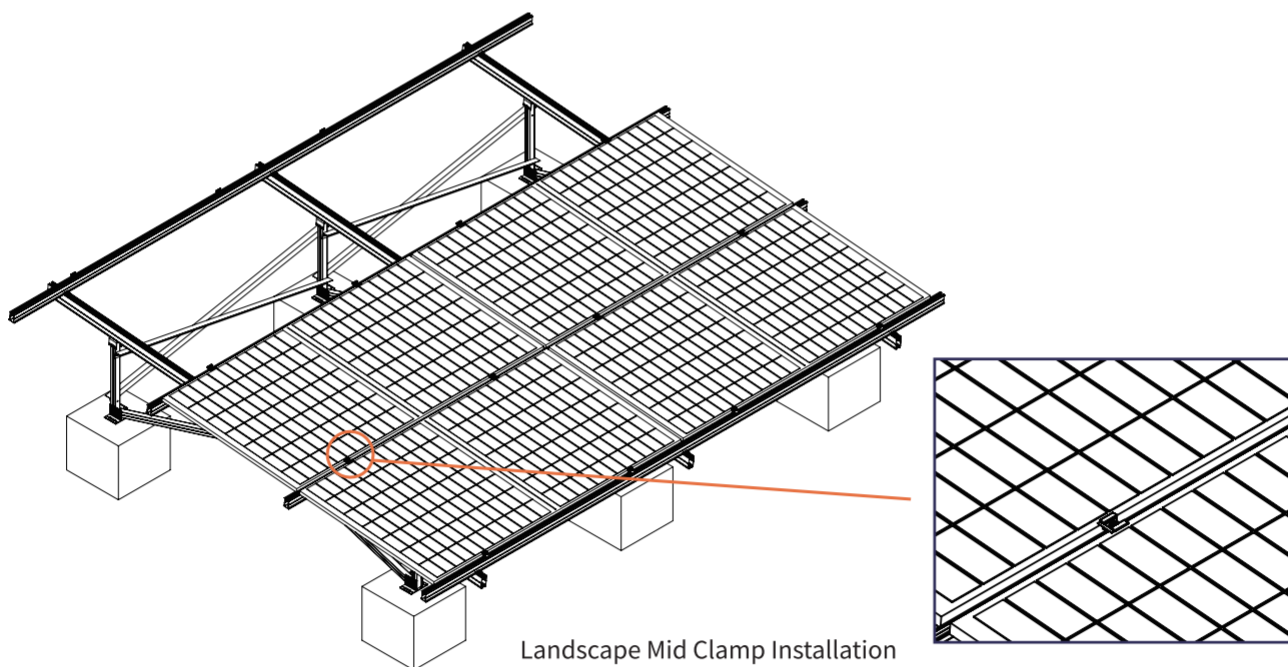
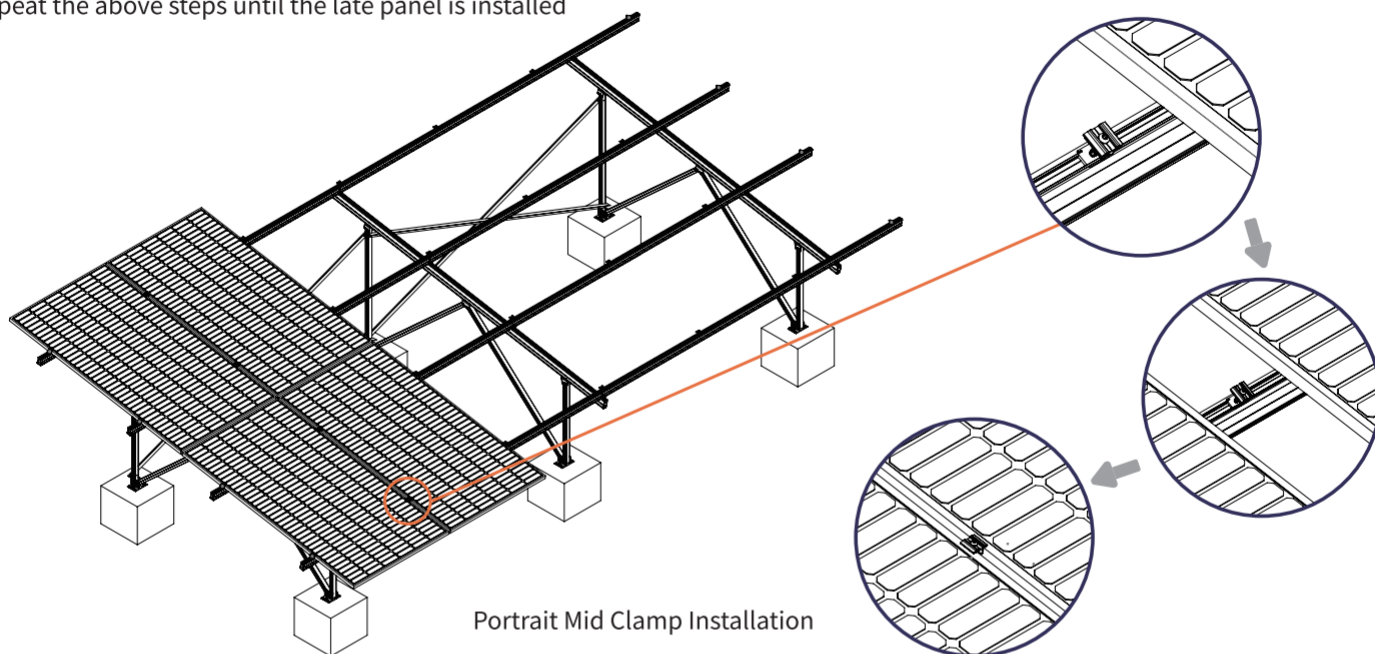
Portrait End Clamp Installation



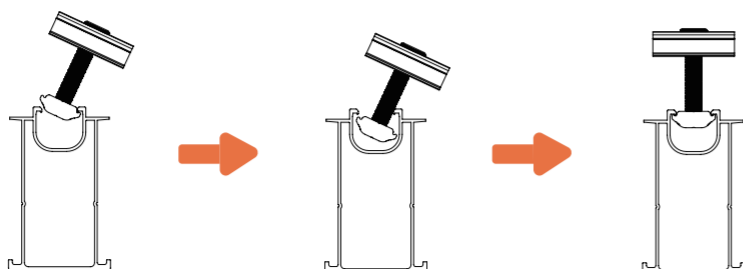
Landscape End Clamp Installation

9. Install Mid Clamps to Fix Solar Panels

Place the Mid clamp into the rail notch, confirm that the solar pv panels are aligned, and use M8 hex key or electric drill to fix it.
Repeat the above steps until the late panel is installed

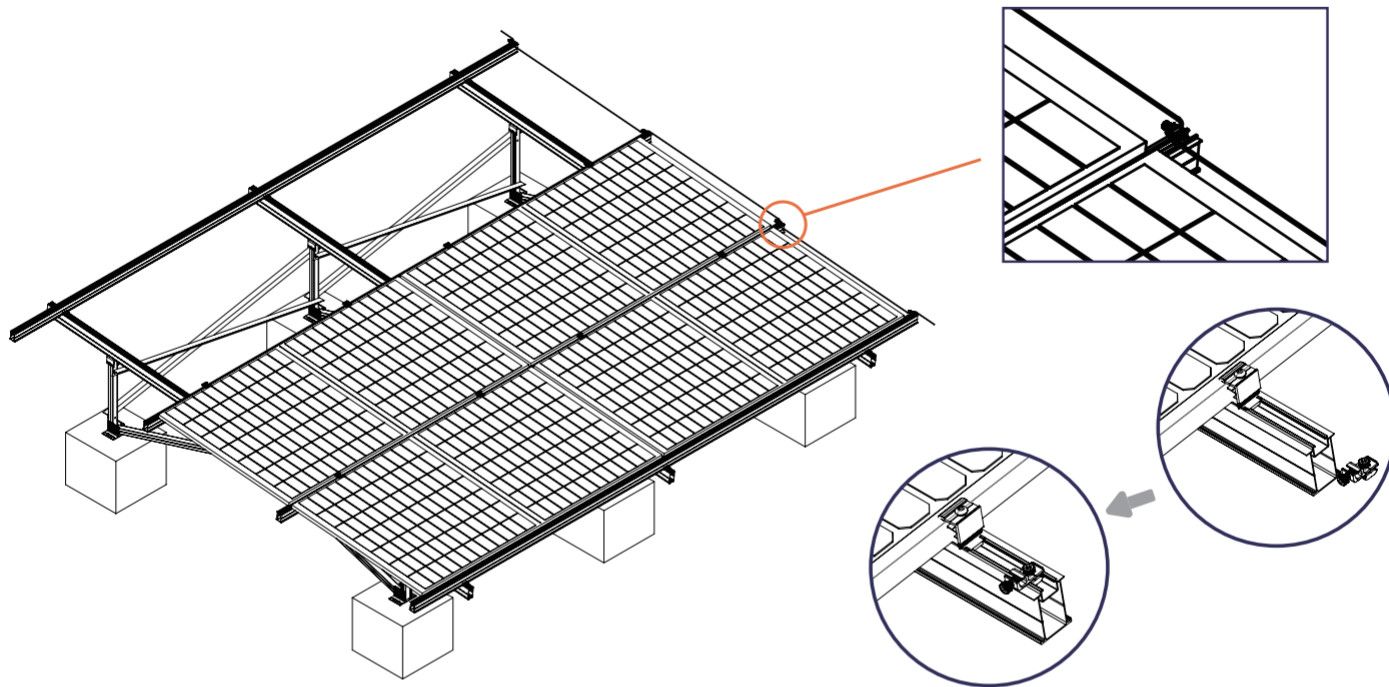


⚠ Notice: How to fix mid clamp

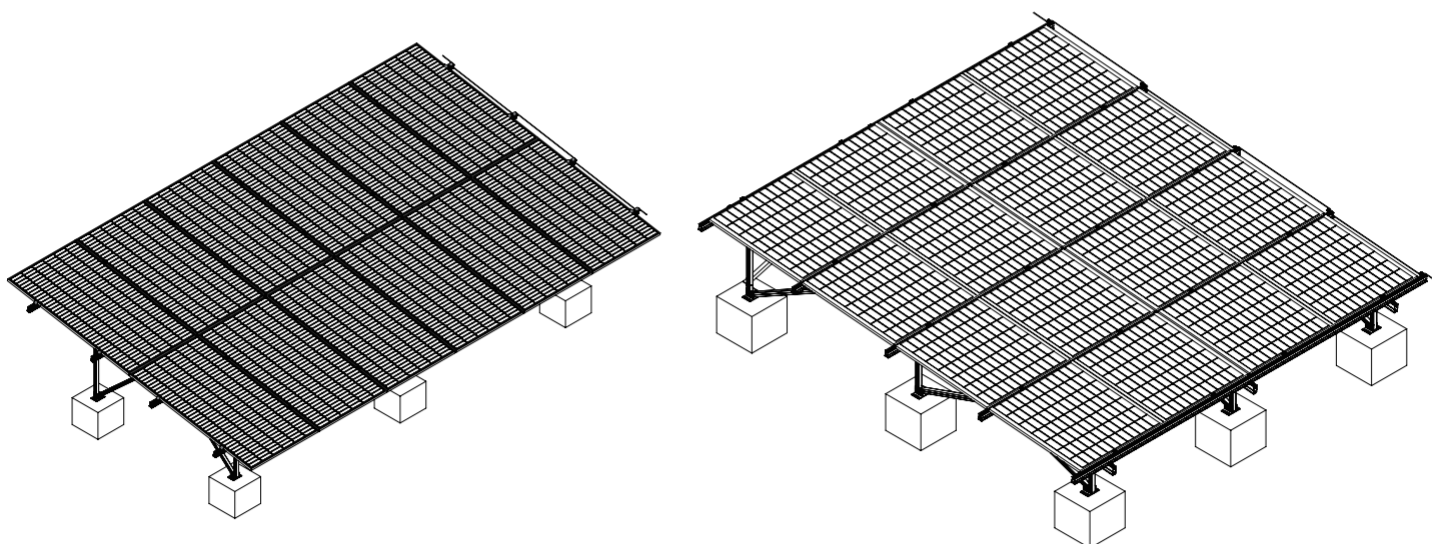


10. Install Grounding Lug on Rail

After installing the last end clamps, start installing the ground lug. Slide the ground lug into the rail notch, and use M8 hex key or electric drill to fix it, finally snap the solar cable into it.



11. Final Installation Check



Make sure all components are securely fastened. Verify that the AW Ground Solar Mounting system is installed correctly, reaches the required height, angle and position.