

INSTALLATION MANUAL

ALUMINUM CARPORT SOLAR MOUNT SYSTEM

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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.



6.3、10、12、18



10mm



NM



Torque Values

Expansion Bolts and Base: 135N • m

Fix Transfer Kit and front and rear Tube: 40N • m

Fix Base and front and rear Tube: 40N • m

Fix Rail and Rail Splice: 10N • m

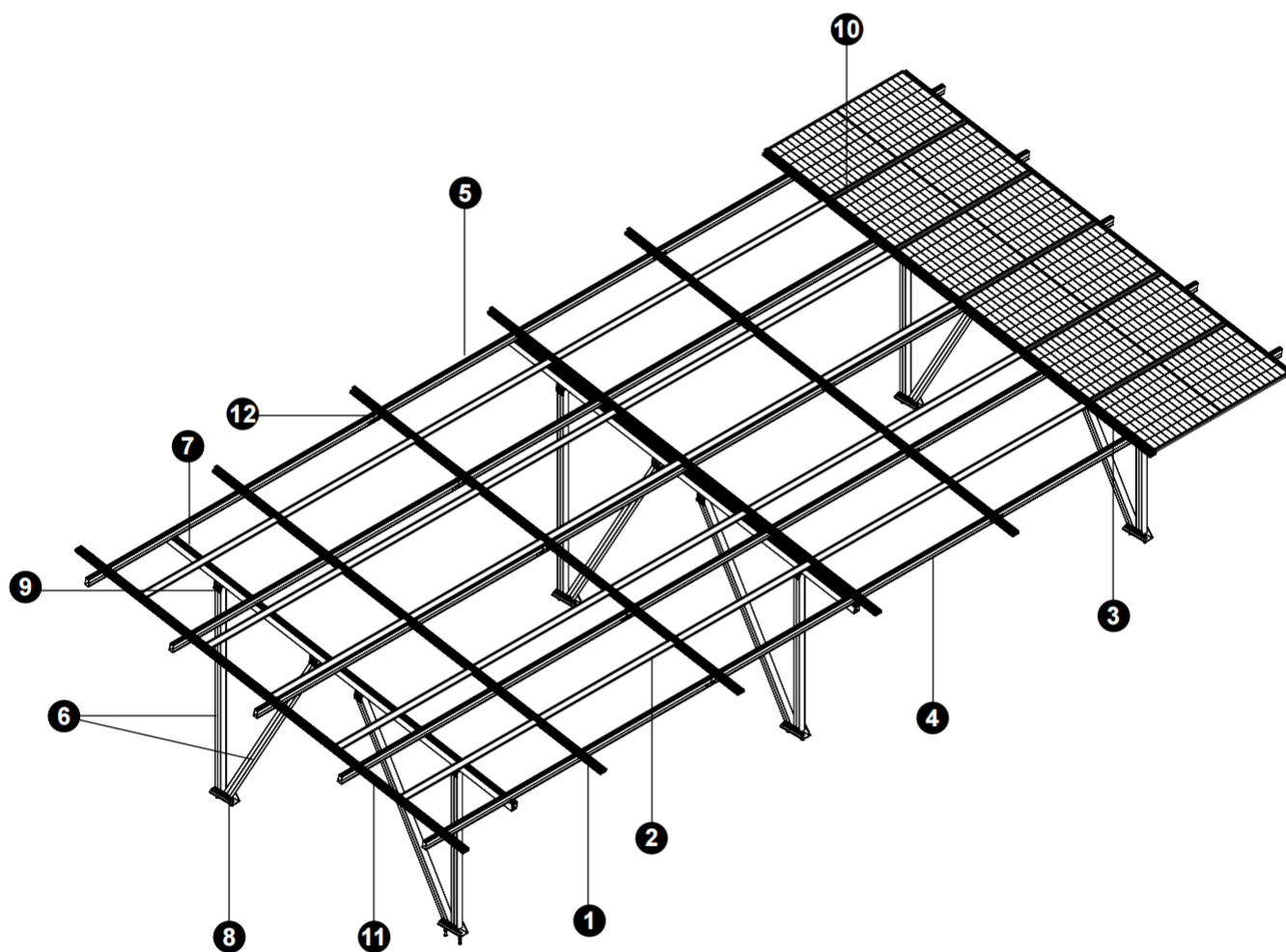
Fix Rail and Beam: 10N • m

Fix Vertical Sink Rail and Rail: 10N • m

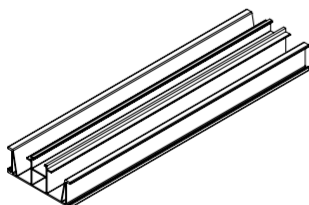
Fix End Clamp and Mid Clamp: 10N • m

Fix Edge and Edge Fixing Kit: 10N • m

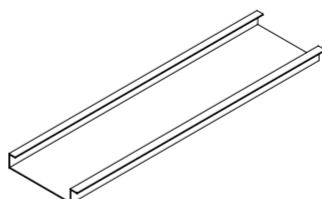
1.PARTS OVERVIEW



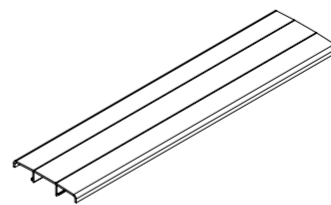
2. Components



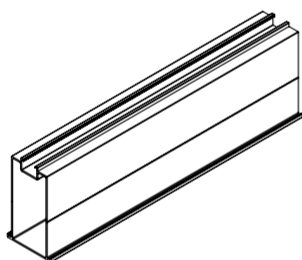
1. Vertical Sink Rail



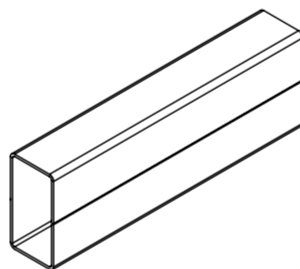
2. Horizontal Sink Kit



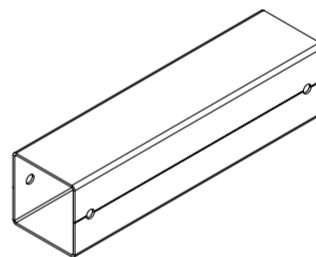
3. Cap



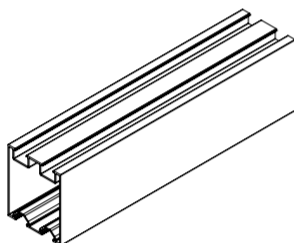
4. Rail



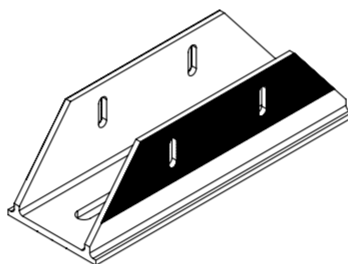
5. Rail Splice



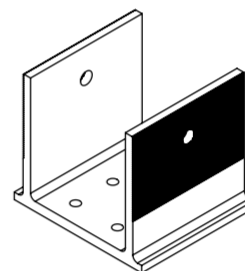
6. Tube



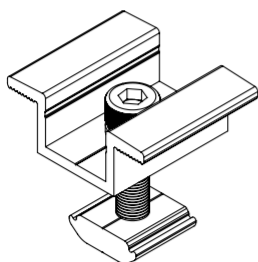
7. Beam



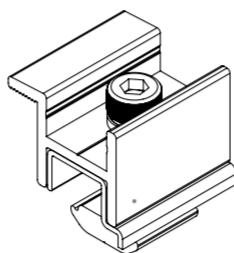
8. Base Kit



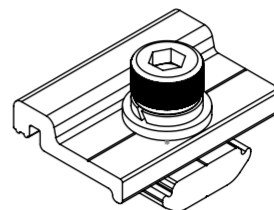
9. Transfer Kit



10. Landscape Mid Clamp

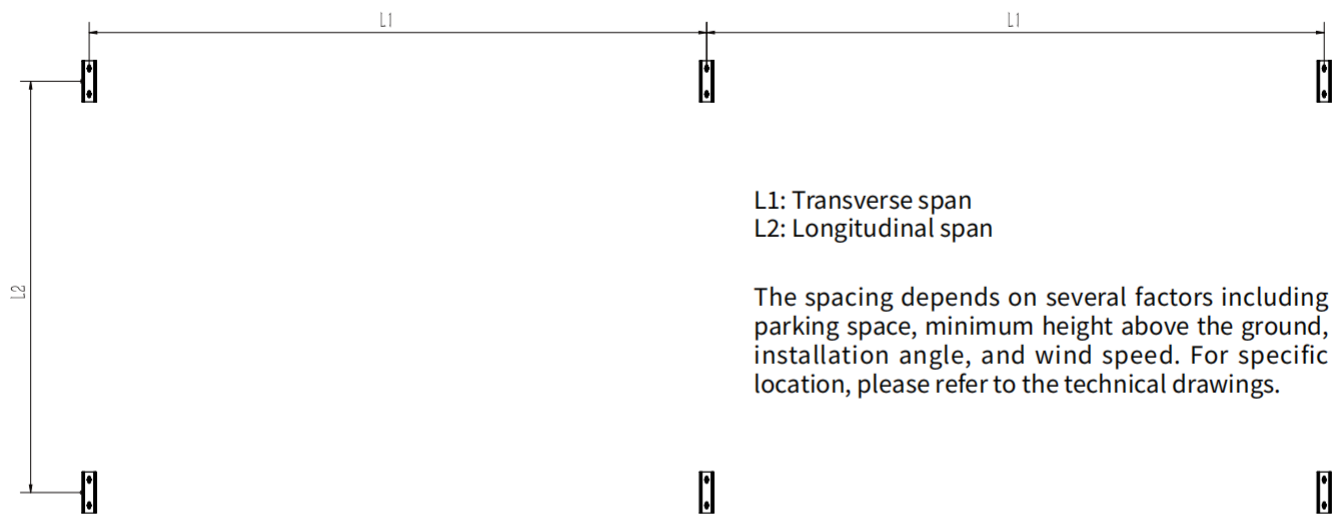


11. Landscape End Clamp 35



12. Ground Rail Fix Kit

1. Confirm the Base Position According to the Technical Drawings

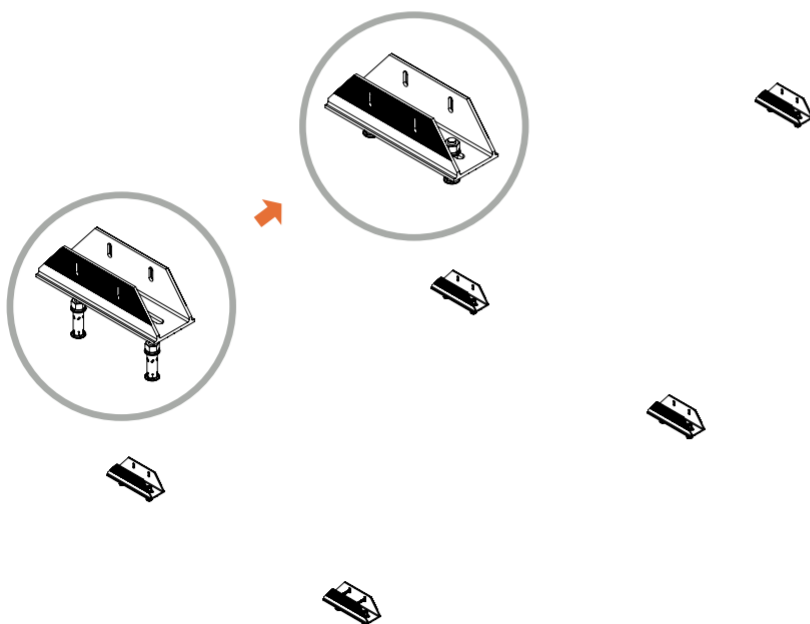


2. Fix the Base on Ground or Foundation

2.1 Option1: Use M20*300 Expansion Bolts

2.1.1 Drill holes at the location selected in the step 1 according to the M20*300 Expansion Bolts.

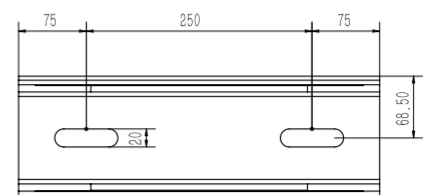
2.1.2 Then fix the Base with the Expansion Bolts.



Notice:

Set the torque value to 135N · m

Confirm the distance between Bases according to the drawings Base spacing reference

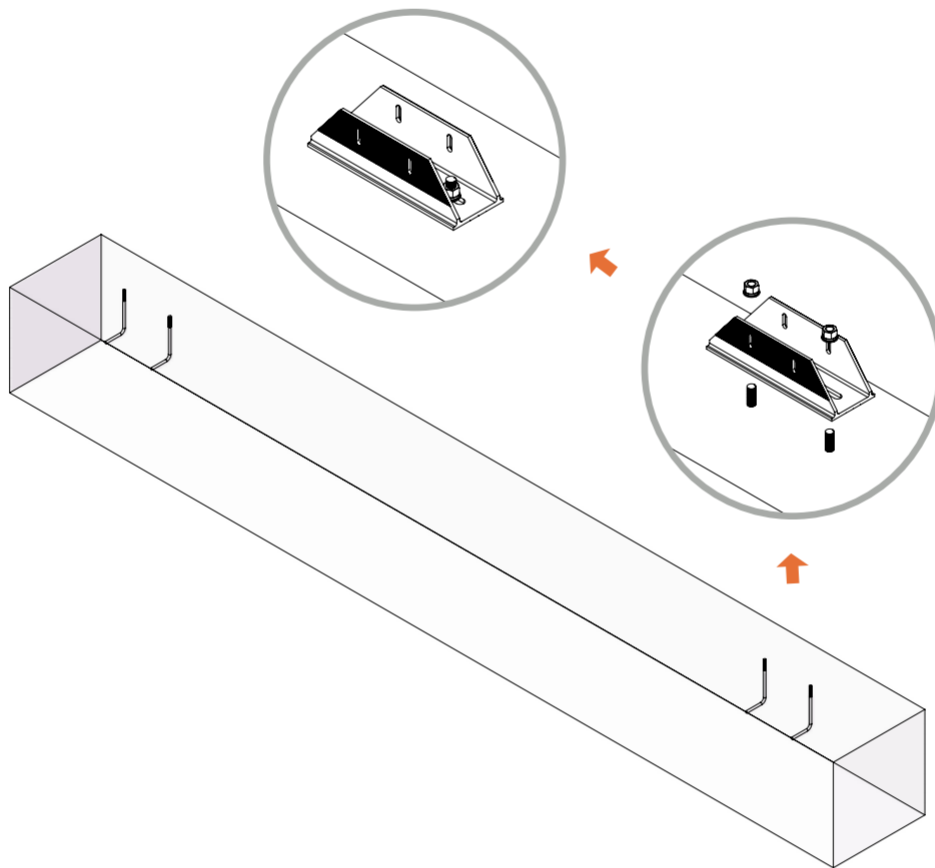


2. Fix the Base on Ground or Foundation

2.2 Option2: Use Embedded Screws

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

2.2.2 Place the Base on the Embedded Screws and secure it firmly.



3. Fix the Transfer Kit on the Beam

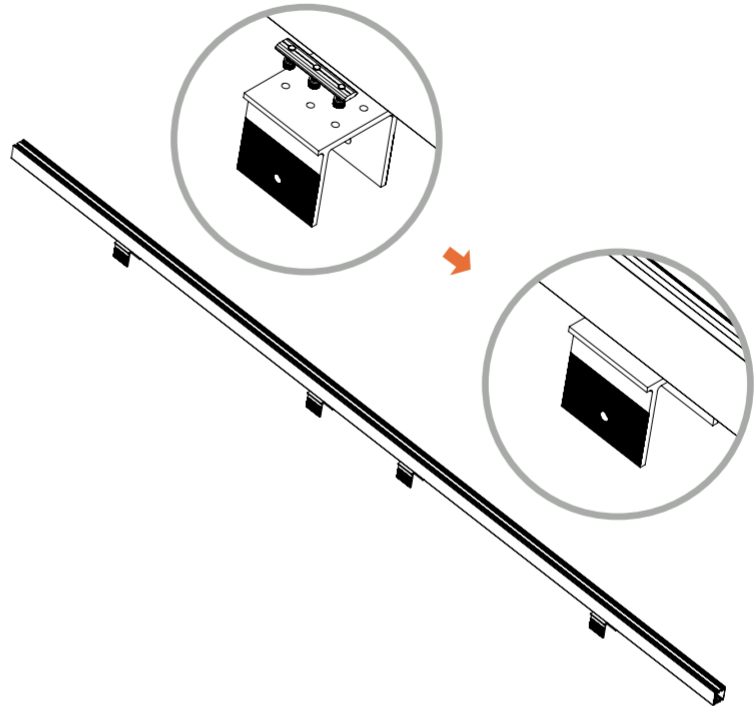
3.1 Confirm the position where the Transfer Kit installed on the Beam according to the technical drawings from WOCHN design team.

3.2 Install the Transfer Kit on the Beam through the nut kits.

3.3 Repeat steps 3.1 and 3.2 to ensure all Transfer Kits are fixed tightly on the Beam.

Notice:

Set the torque value to $40\text{N} \cdot \text{m}$
One Transfer Kit with 2PCS 110mm Nut Kits

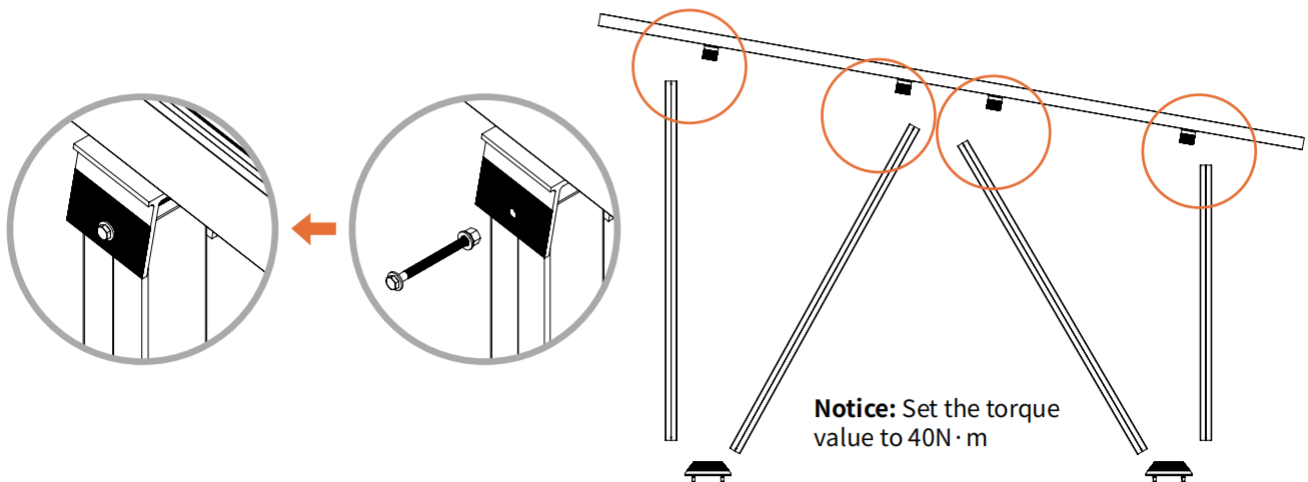


4. Install the Tubes on the Beam

4.1 Select the Tube of the correct length according to the technical drawings from WOCHN.

4.2 Use an electric drill and 1PCS M12*140 external hexagonal screws to install the Tube on the Transfer Kits of the Beam.

4.3 Repeat steps 4.1 and 4.2 to ensure all Tubes are fixed tightly on the Beam.

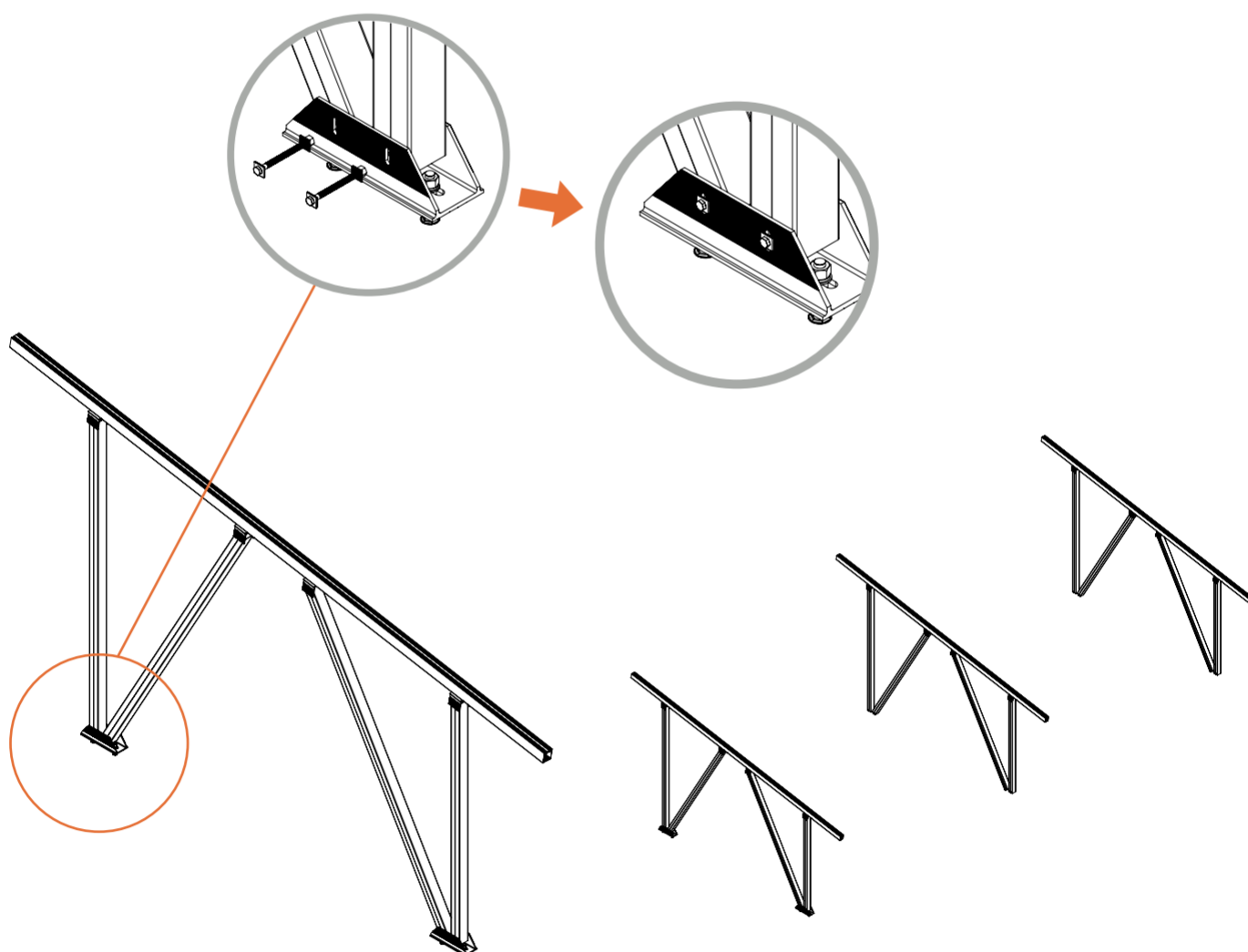


5. Install the Tubes on the Base

Move the Tube to the corresponding base, and use an electric drill and M12*140 external hexagonal screws to fix the Tube to the Base. Make sure all the Tubes are mounted on the Base to form an array.

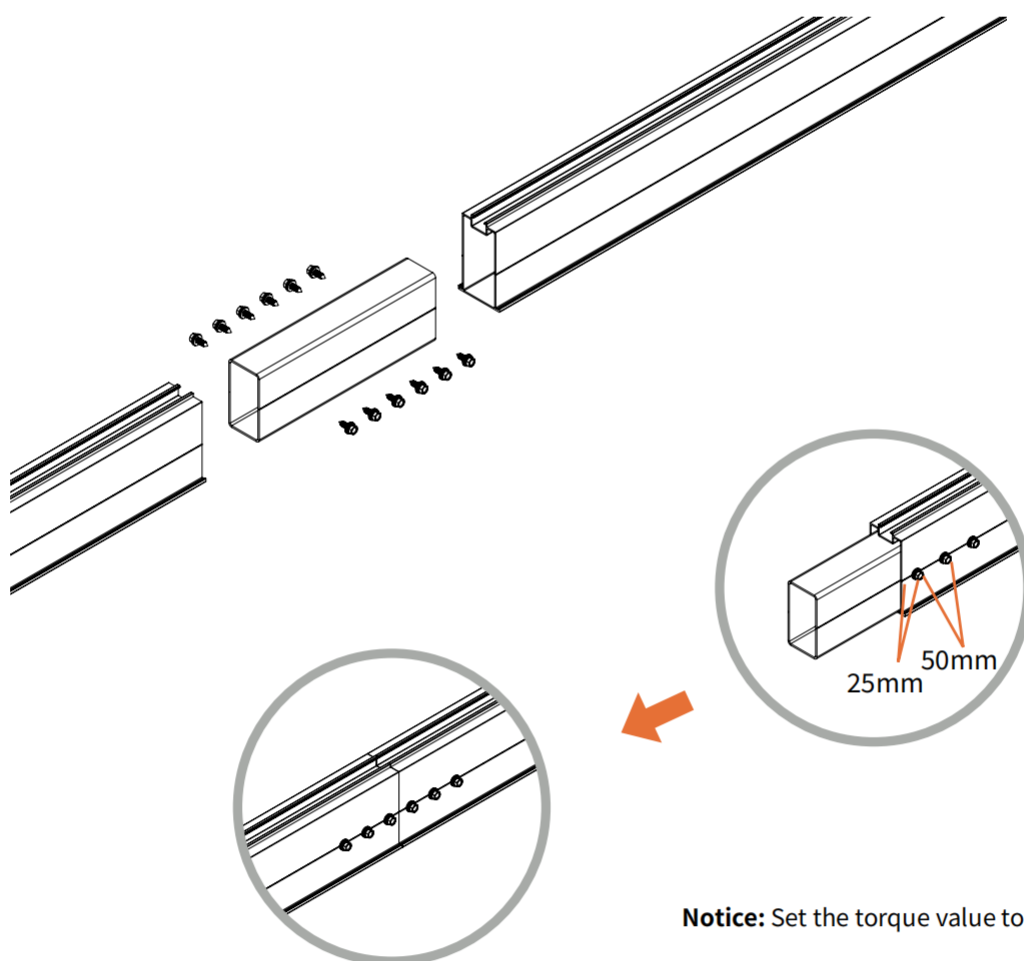
Notice:

Please check the front and rear position of the Tube according to the drawings, and lift the Tube to the correct Base. Set the torque value to 40N • m



6. Connect the Rails with Rail Splice

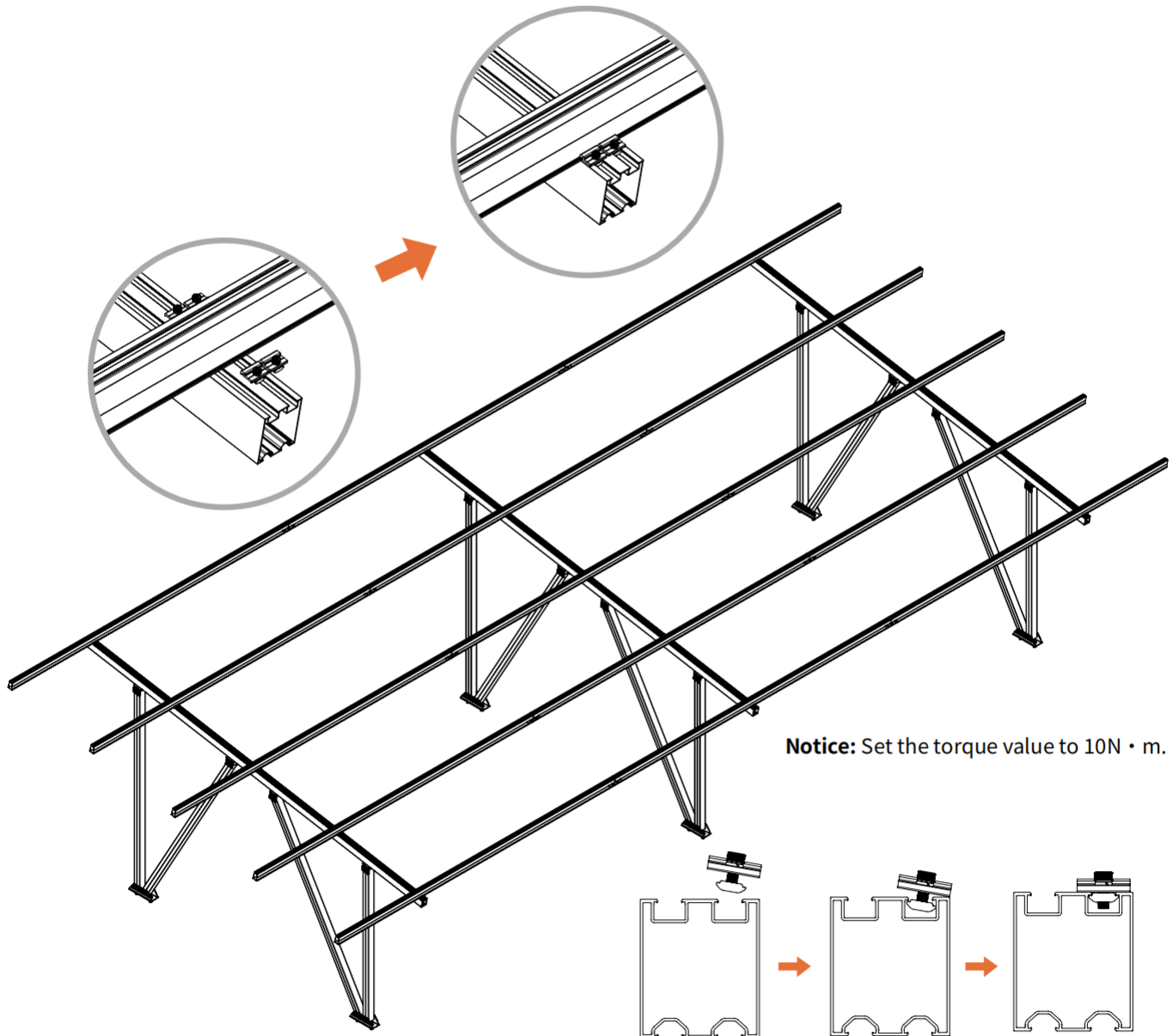
Confirm the three points of the Rail Splice, the center and the three marked positions, fix them with 12PCS M6.3*19 steel screws.



Notice: Set the torque value to 10N • m.

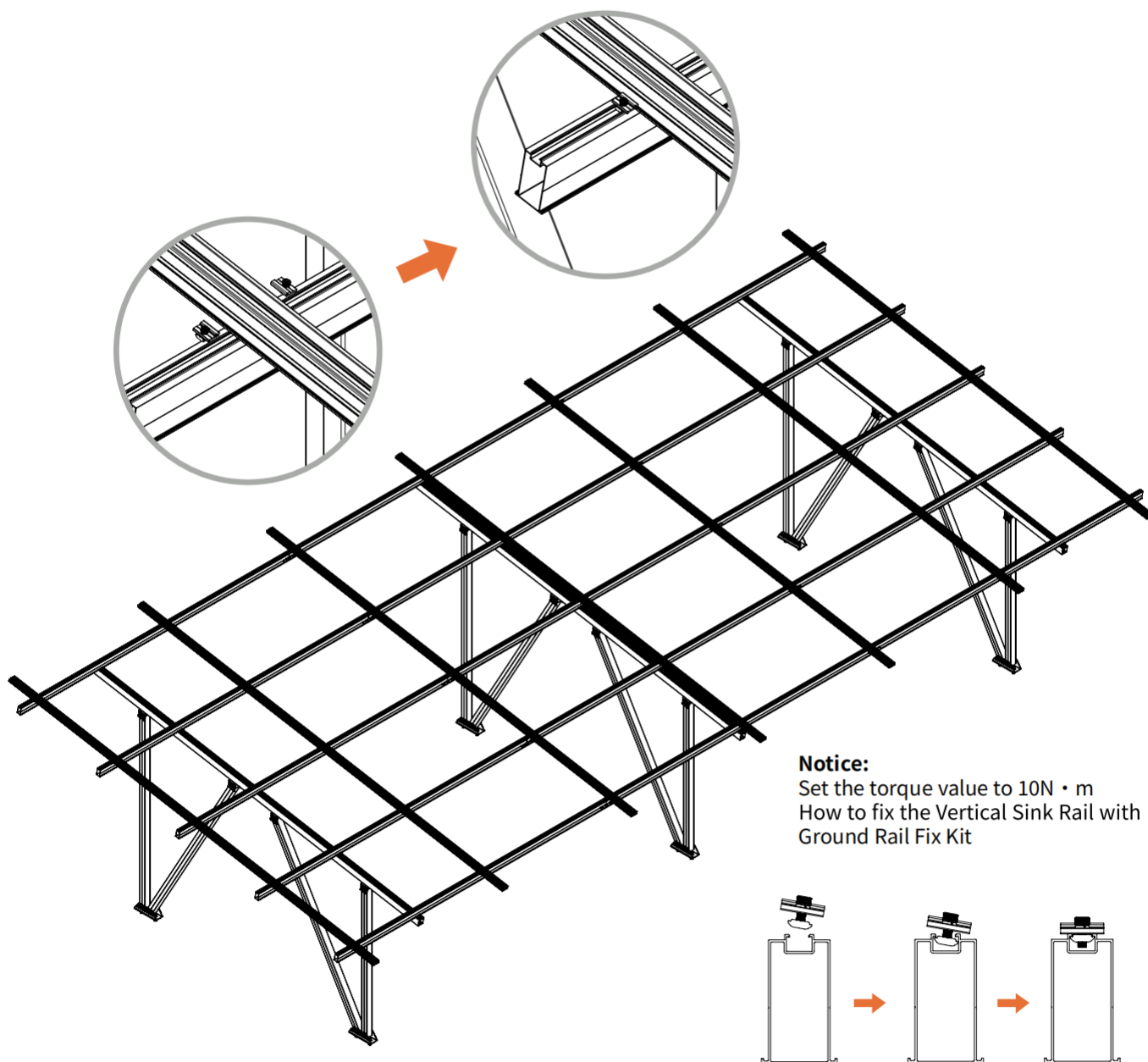
7. Fix the Rails on the Beam

- 7.1 Confirm the position of the Rail on the Beam according to the drawings.
- 7.2 Fix the Rails to the Beam, each connecting site use 4 sets Ground Rail Fix Kit.
- 7.3 Repeat steps 7.1 and 7.2 to ensure all Rails are fixed tightly on the Beam.



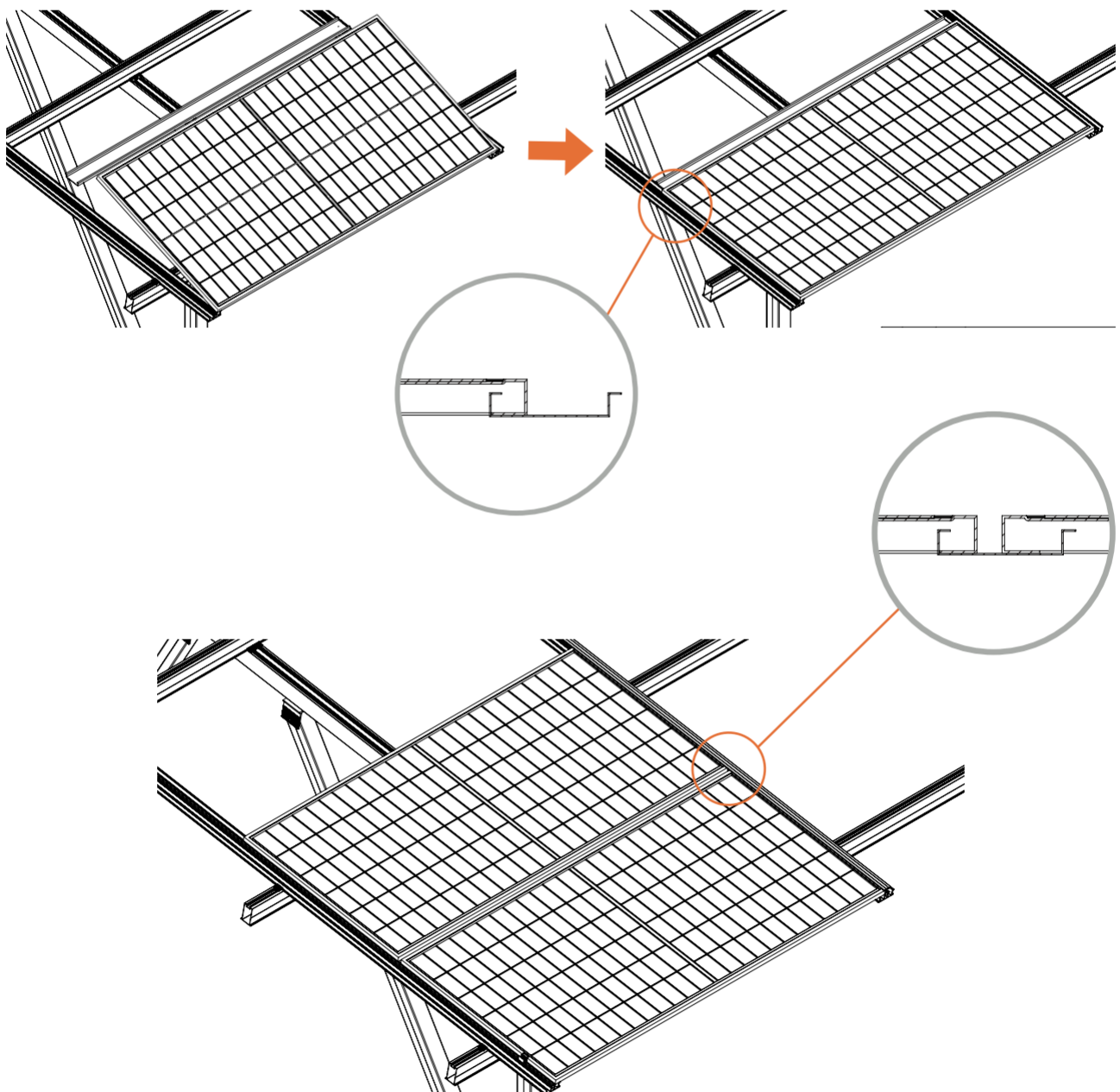
8. Install the Vertical Sink Rail on the Rail

- 8.1 Confirm the position of the Vertical Sink Rail according to the drawings.
- 8.2 Install the Vertical Sink Rail on the Rail, each connecting site use 2 sets Ground Rail Fix Kit.
- 8.3 Repeat steps 8.1 and 8.2 to ensure all Vertical Sink Rail are fixed tightly on the Rail.



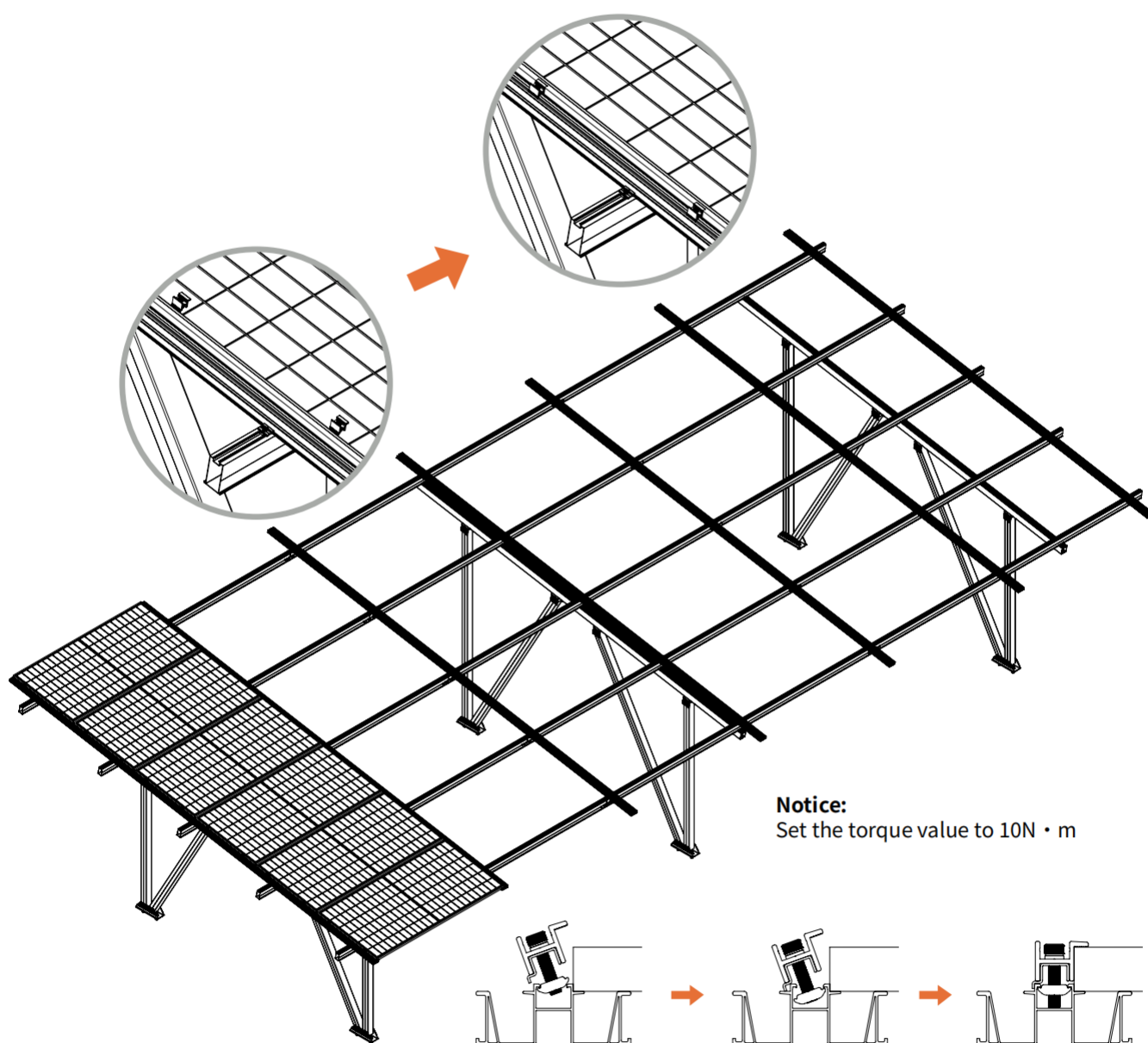
9. Place the Solar PV Panels and Horizontal Sink Kit on the Vertical Sink Rail Together

- 9.1 Place the Solar PV Panels and Horizontal Sink Kit on the Vertical Sink Rail.
- 9.2 Use the edge of the Solar PV Panel to clamp the edge of the Horizontal Sink Kit.
- 9.3 Place the other Solar PV Panel on the other side of the Horizontal Sink Kit and clamp it.



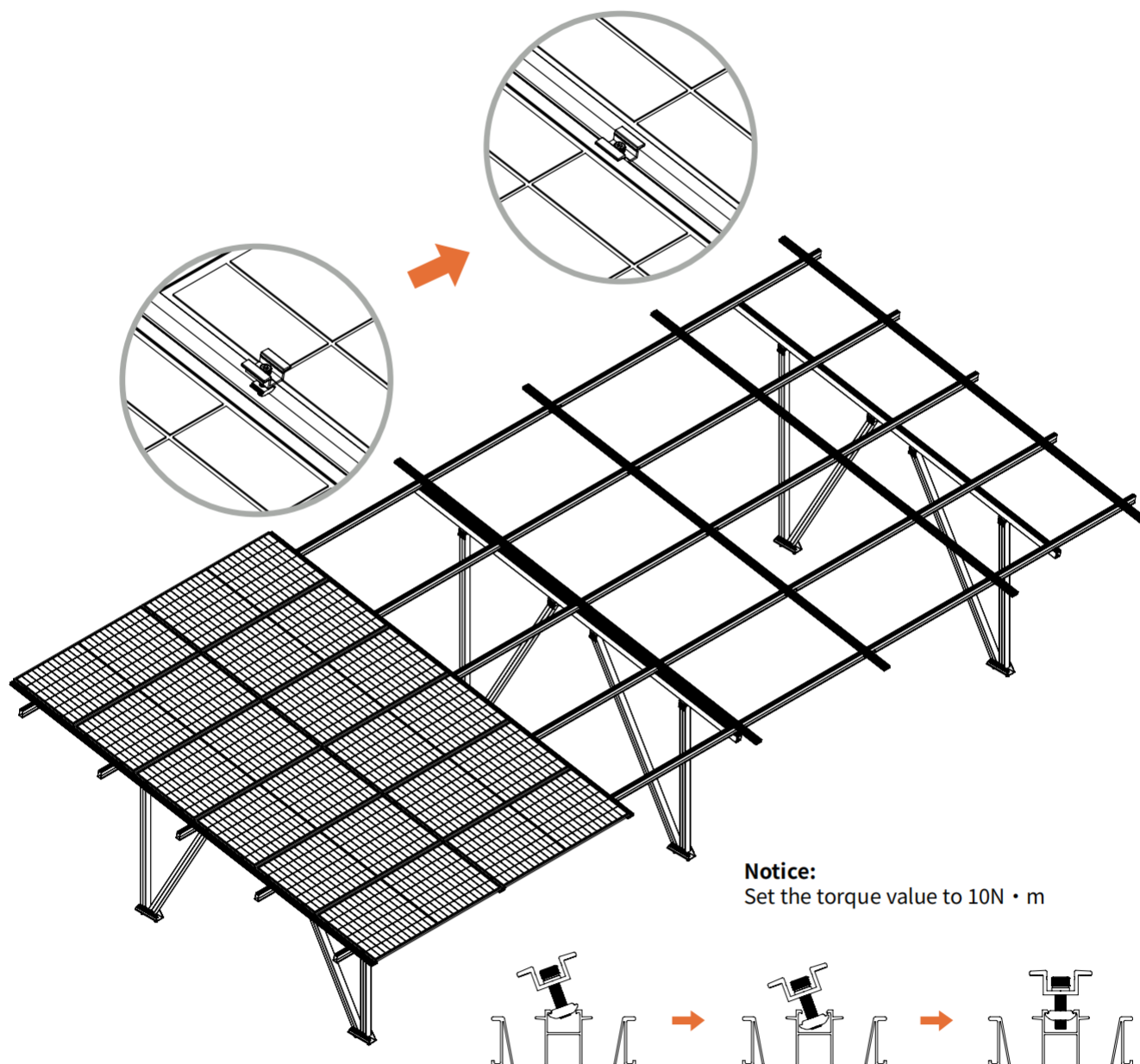
10. Fix Solar Panels with End Clamp

Place the End Clamp into the Rail notch, confirm that the Solar PV Panel is placed correctly, and then use the M8 hex wrench or drill to fix it.



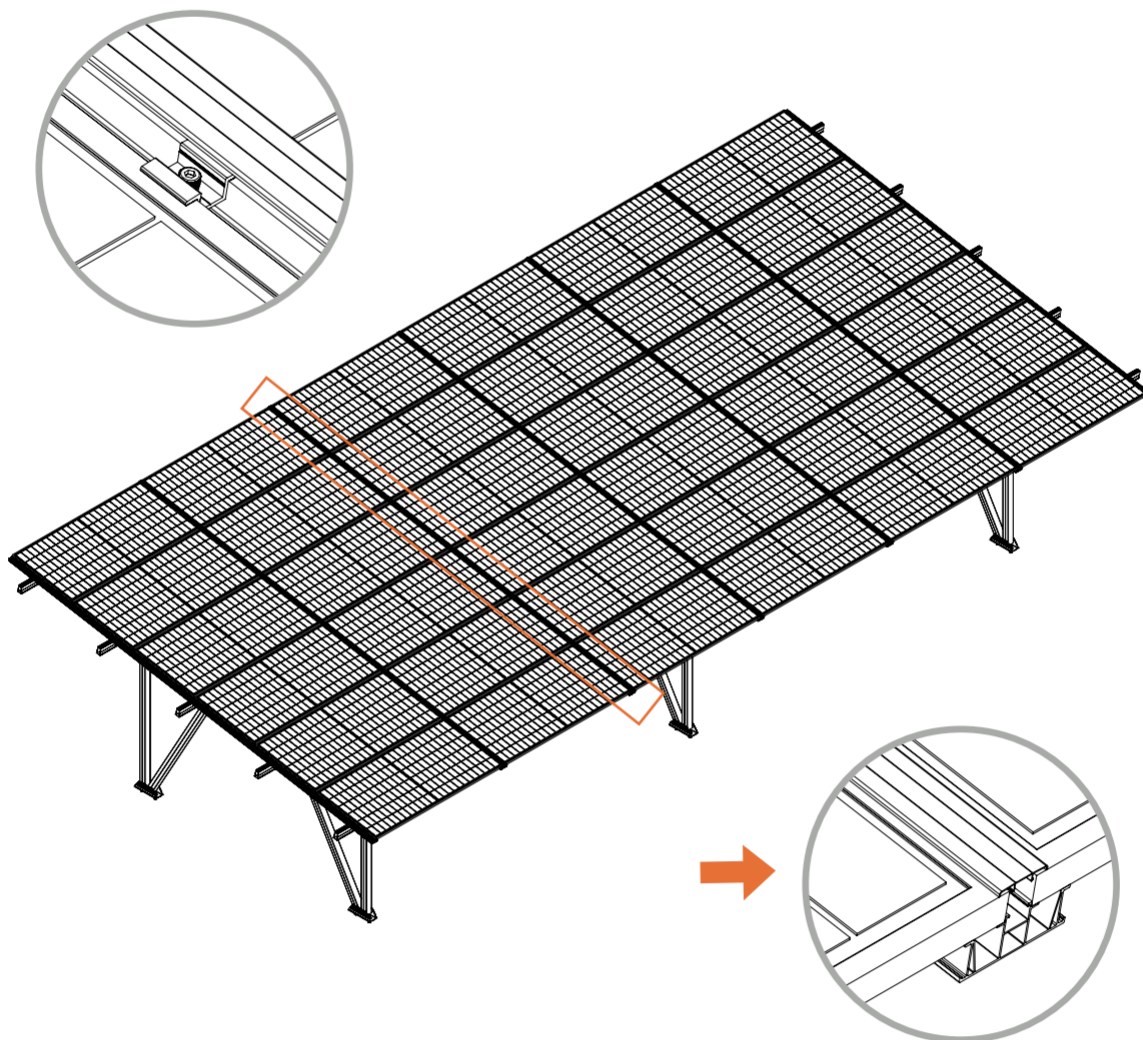
11. Fix Solar Panel with Mid Clamp

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



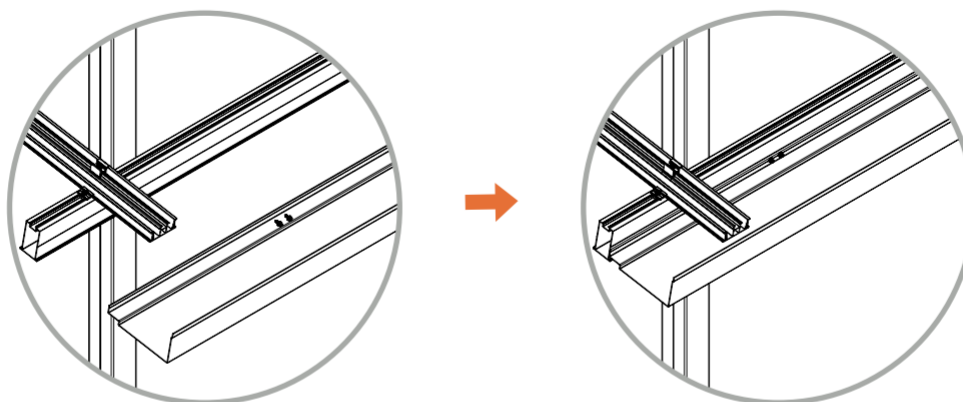
12. Install the Cap

Align the Cap with the gap, and then press the Cap down firmly.

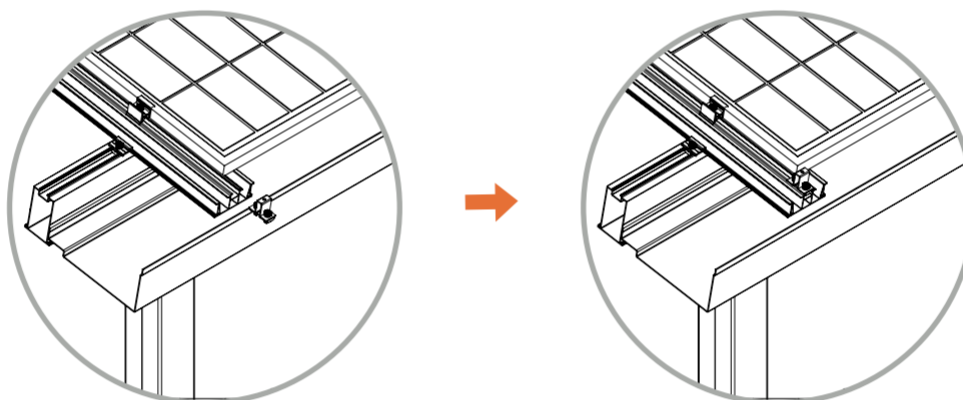


13. Optional Waterproof Carport with Edging

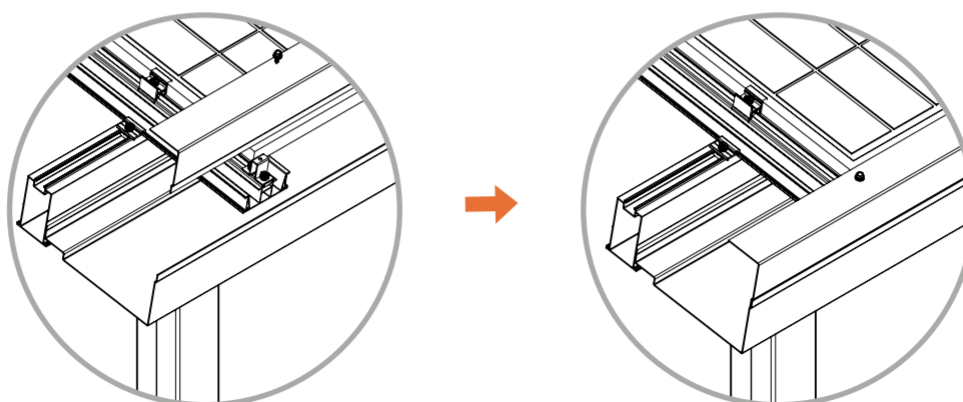
13.1 Install the Front Edge 1 on the Beam and the Rail using M6.3*19 steel screws



13.2 Install the Edging Fixing Kits on the Rail

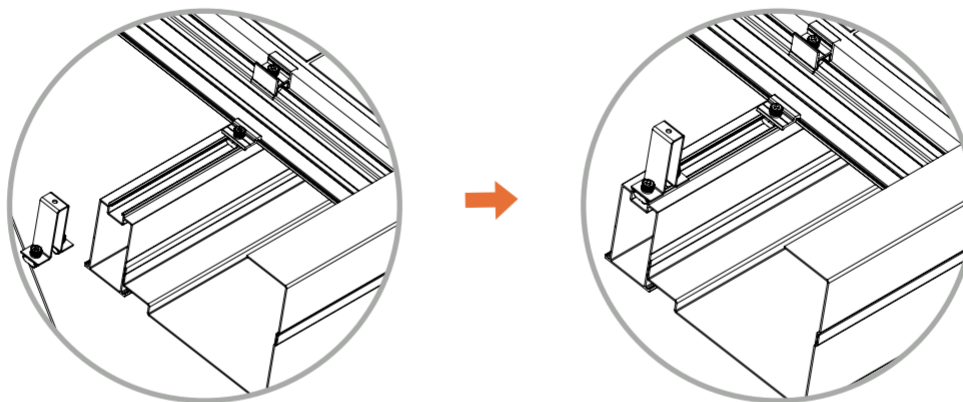


13.3 Install the Front Edge 2 on the Edge Fixing Kits with M6.3*19 steel screws

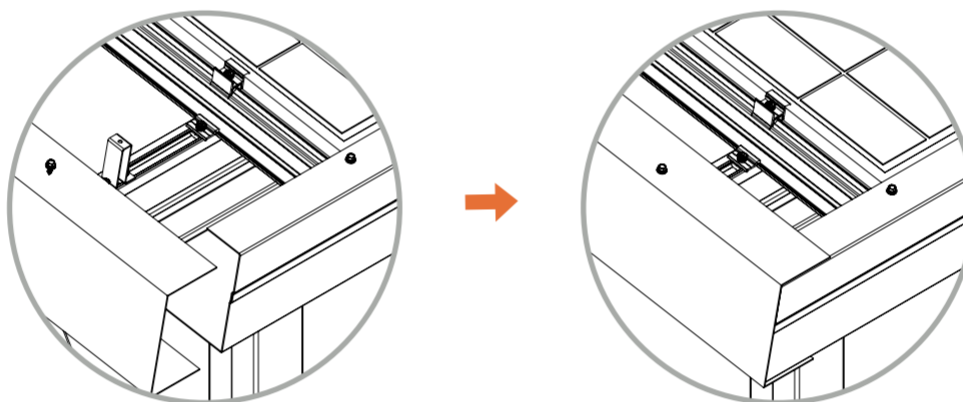


13. Optional Waterproof Carport with Edging

13.4 Install the Side Edge Fixing Kits on the Rail

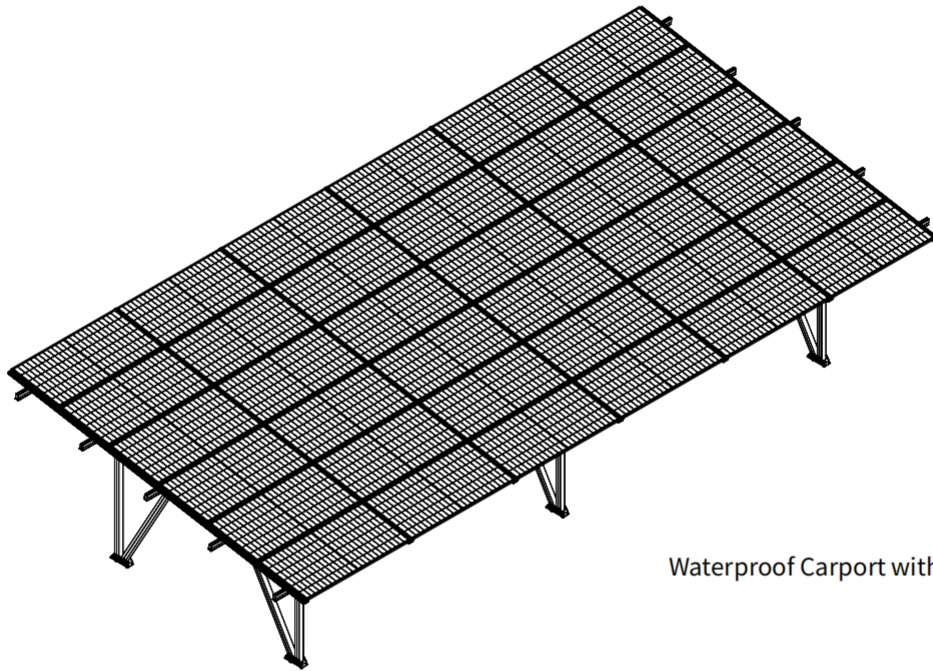


13.5 Install the Side Edge onto the Side Edge Fixing Kit with M6.3*19 steel screws

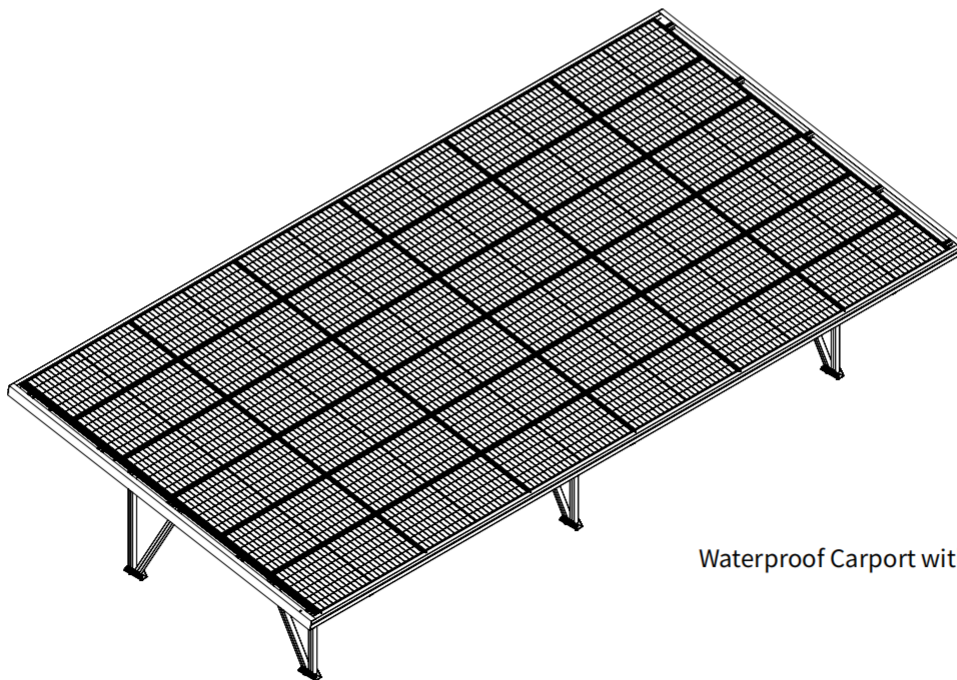


14. Final product display

Make sure all components are securely fastened. Verify that the Aluminum Waterproof Carport System is installed correctly, reaches the required height, angle and position.



Waterproof Carport without Edging



Waterproof Carport with Edging