

Installation Instructions

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Section 1

1、Safe guard instruction

1.1、Construction prohibited at following environment:

1.1.1、Construction prohibited when more than five strong winds occurred in the process of open work.

1.1.2、Construction prohibited under the weather of rain, heavy snow, fog, sandstorm and severe weather.

1.1.3、Construction prohibited under bad lighting in the night.

1.2 Guard against fire



Warning

- Mounting bracket system should be far away from combustible. The installer need to prevent fire nearing flammable or combustible goods.
- When the fire happened, the first thing is to make sure the safety of aluminum pieces if permit. The Subsequent should be installed after being checked by professional people.

1.3、Guard against damage



Warning

- The parts of the system has been treated on the surface, So it needs to avoid damage during installation and transportation.
- Make sure the right installing sequence, position and procedure during installation, or the damage maybe happened.
- Components connection should be always kept in good condition, avoiding sliding and damaging.

1.4、 Other matters need attentions

Please pay attention to the following matters to prevent from any accident, injury, etc:

1.4.1、 Transport and installation



Warning

- In case of personal injuries, The installer must wear safety precautions before installing.
- In case of problems and accident, Assembling work must follow the instruction manual.
- Please don't install or operate if the system is destroyed or is short of components.
- During installing and debugging, installers should pay attention to their own security and the falling objects to avoid being injured or bruised.
- Before installation, the ice, snow and dew on the surface of the components should be cleared away on condition that their coatings are not destroyed.
- The rubbing surface of bolts should be cleaned before installation. No dirt such as droplets, mud or greasy dirt.

Section 2

2.1、 Introduction of Triangle Bracket Mounting System

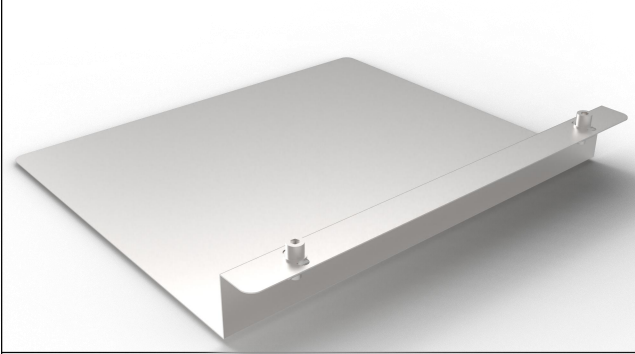

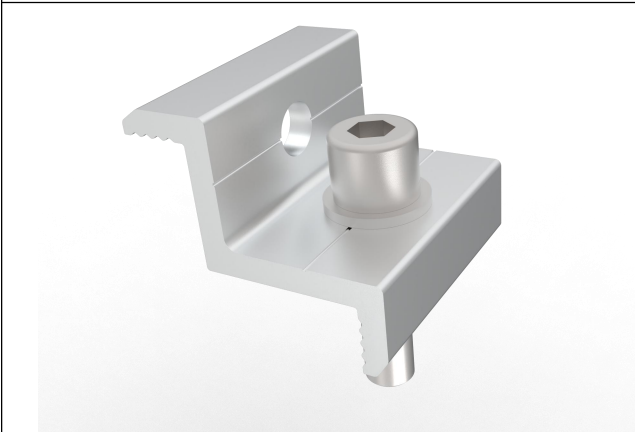
Product name and type

Product name: Modularized East-West System

Can be installed Panel thickness:

Use Frame: 30/35mm;

2.2、 Structure Components (Picture is only for reference)

Fig.	Description
	Ballast Board ×8
	Inner Clamp Kit 30/35mm ×8
	End Clamp Kit 30/35mm ×8

	Front leg ×6
	Rear leg ×6
	SSC rail-1250 ×6
	Cross Rail Connector ×3





2.3 Effect drawing








Section 3

The installation of Fixed Ground Mounting System

3.1、 Pre-installation chapter

◆ Check the goods	 Make sure the goods are in good conditions after they arrive. Then check the amount of goods according to the shipping list.
◆ Read the installation instruction	 Please read the instructions carefully before installing, to make sure the installation and debugging are conducted in order.  Warning: please install according to our instruction. Or else your peril.
◆ Make sure the installers and crane are ready to install.	 Make sure the installers and crane are ready to install.

	<p> Warning: the installer must wear safety equipment (such as safety helmet and shoes).</p>
<p>◆ Unloading and storage</p>	<p> Heavy objects should be elevated at a stable speed in order to avoid the dangers caused by their swing due to the drastic change of speed. Also they should be declined in a low speed to avoid being destroyed when falling on the ground.</p> <p> Warning: any stay or passing under the armed levers of crane of any person is forbidden.</p>
	<p> Material should be placed according to batches and sorts before they have place assigned. The material which cannot be immediately used should be stacked in order and covered by plastic cloth.</p>
	<p> Components cannot be placed on the ground directly. They should be placed on the support with a height of 200mm above the ground. The distance between the support and the ground should be determined on the basis that it will not cause residual deformation of the components.</p>

3.2、 Schedule for the required amount of the mechanical equipment and tools for installation

3.2.1、 Mechanical equipment

Crane

Fork lift

3.2.2、 Installation Tools



electric tool



monkey wrench



marking pen



Open-end wrench



Digital level bar



Sleeve



racket wrench



Tape

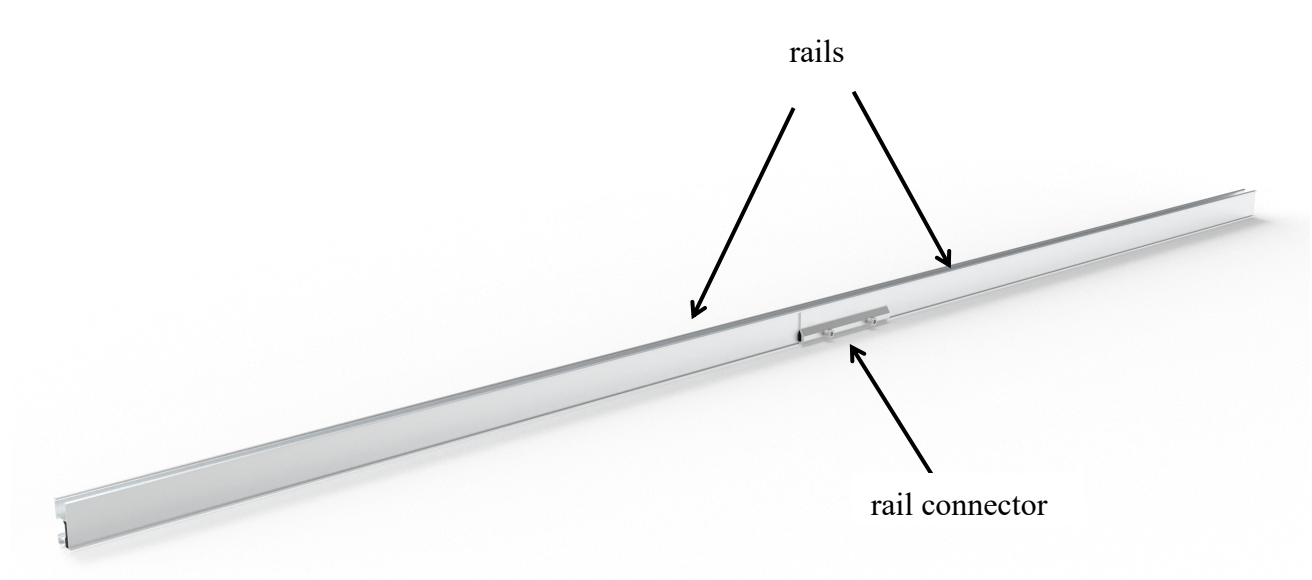


Gloves and Safety shoes

3.3、 Installation Steps

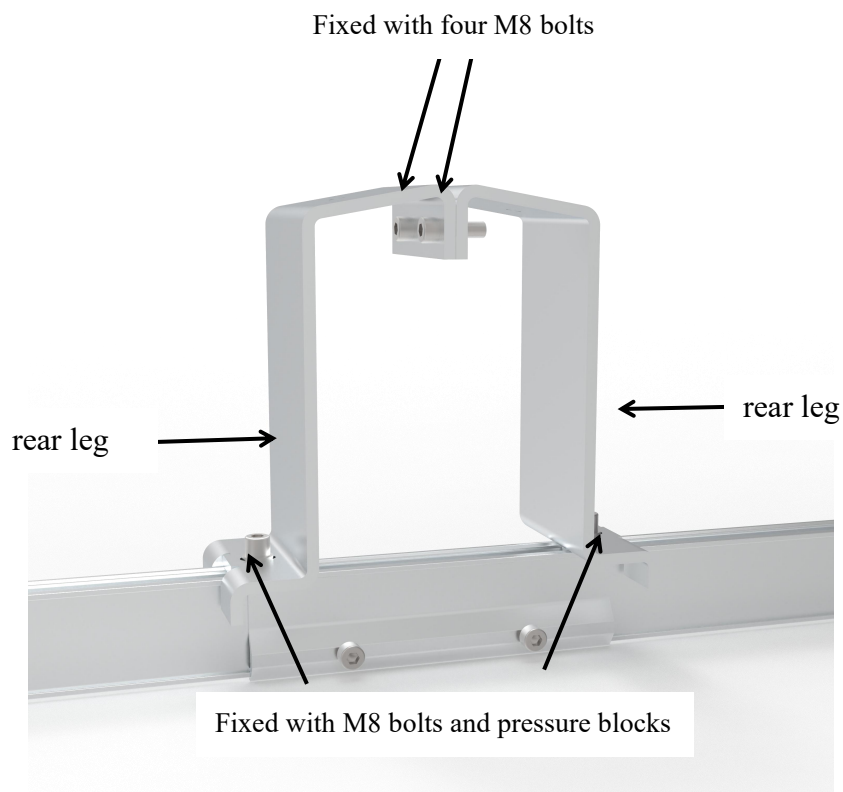
3.3.1、 Installation of rails

Remove the two 1250 long rails and align them, then lock them with the rail connectors and two M8 bolts.



3.3.2、 Installation of Rear leg

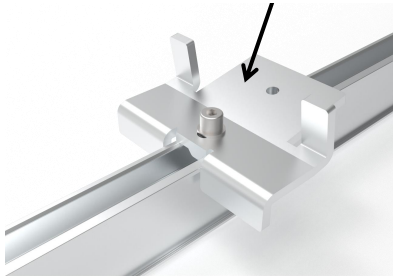
Fit the two rear legs back to back on the center of the two rails and secure them to the rails with two M8 bolts and two pressure blocks. The two rear legs are secured with four M8 bolts.



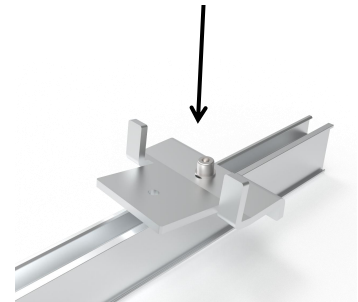
3.3.3、 Installation of Front leg

Place the two front legs at suitable positions on both ends of the rail and fix them with two M8 bolts with pressure blocks (do not lock the front leg bolts first).

Front leg 1
Fixed with M8 bolts and pressure blocks, not locking

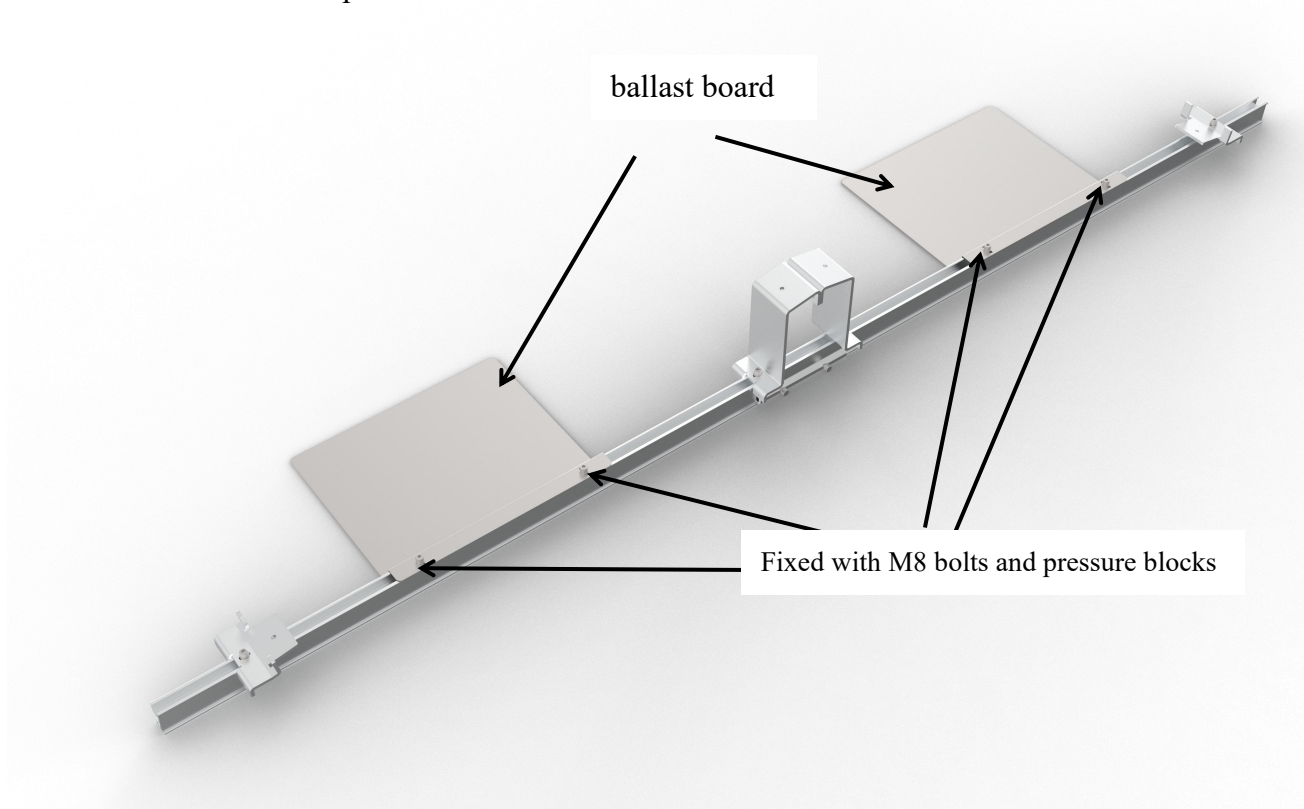


Front leg 2
Fixed with M8 bolts and pressure blocks, not locking



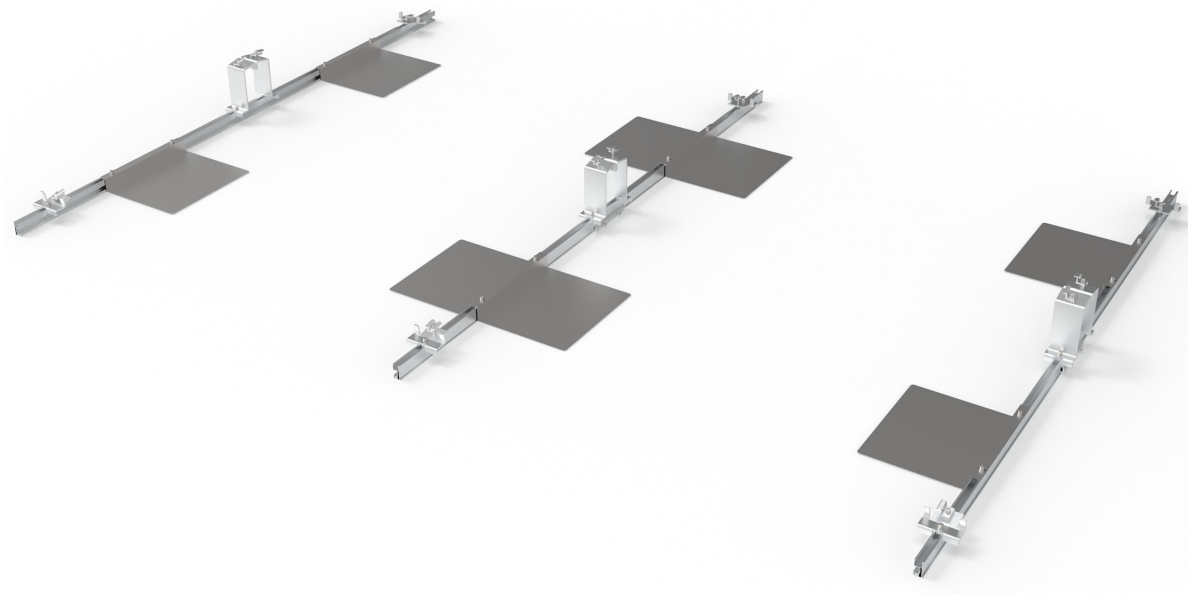
3.3.4、 Installation of Ballast Board

Attach the two ballast boards to the center of each of the two rails and secure them to the rails with two M8 bolts and pressure blocks.



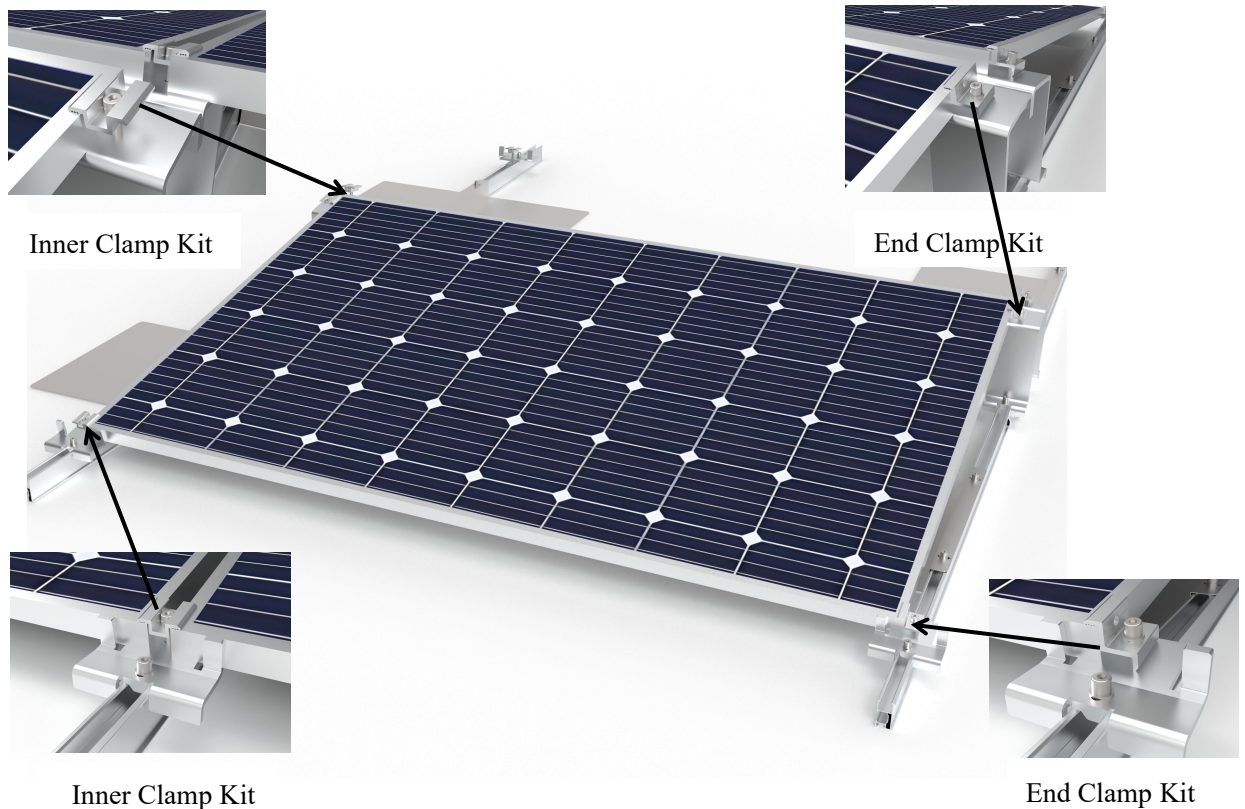
3.3.5、Schematic diagram of completed bracket installation

Note: The total number of ballast board for the center rail is four.



3.3.6、Installation of components

Fix the Inner Clamp Kits and End Clamp Kits on the front and rear legs with M8 bolts and pressure blocks, and lock the bolts on the front legs after determining the position of the front legs. (Make sure that the left and right plates are installed at the same time when installing the Inner Clamp Kits)



3.3.7、 Schematic diagram of the completed installation



3.3.8、 Bolt preload

SS304 (A2-70) Recommended Bolt Torque Table	
Bolt Specifications	Recommended torque value (N.M)
M8	8-10

Section 4

Precautions

4.1 Notes on engineering installation dimensions

Where the specific dimensions involved in the installation of the project are subject to the project construction drawings. The installation instructions are only for the purpose of explaining the installation method of the product.

4.2、 Precautions for the installation of stainless steel fasteners

Due to the good ductility of stainless steel, and carbon steel has an essential difference; improper use will lead to bolts and nuts can not be rotated after matching. That is, “locking” commonly known as “bite” . Prevention of locking mainly in the following areas:

4.2.1 Reduce the coefficient of friction:

- (1) Ensure that the threaded surface is clean (e.g., no gray sand, debris);
- (2) It is recommended to apply water wax on the surface or add lubricant (such as grease, 40# machine oil) during installation;

4.2.2. Correct operation method:

- (1) It must be screwed perpendicular to the axis of the threads, do not tilt;
- (2) In the process of screwing, the force applied must be even, and the screwing torque must not exceed the specified safe torque value;
- (3) Use torque wrenches or socket wrenches as much as possible, and avoid the use of movable wrenches or electric wrenches; use electric wrenches and also try to reduce the speed.
- (4) Avoid using it under high temperature, and do not rotate it quickly when using it, so as to avoid the locking caused by the rapid rise of temperature; (e.g. using electric wrenches, etc.)

4.3、 Final process of assembly

It needs to check the condition of all the components and parts after finishing assemble of fixed mounting system:

- Checking if there are damage
- Checking if there are something forget to assemble
- Checking if all the bolts locked tightly
- Checking if all the modules assembled accordance
- Cleaning project site after assembling.



Warning: It needs to check structure condition of mounting system before wiring.

- Please don't climb, when mounting system assembling work finished.
- Before construction of Junction box and other electric equipments which will be installed in mounting system must be confirmed by technical people .

Section 5

Daily maintenance

Maintenance instruction	Maintenance part
➤ Maintenance of connected bolts	
➤ Checking every bolt junctions once a year, tightening if the junction is loosening	