



THE POWER OF ASTRONERGY

**MOUNTING SYSTEM
INSTALLATION**



A **CHNT** COMPANY

ASTRONERGY

Contents

1. Tile on-roof mounting system installation

- 1.1 Overview
- 1.2 Drawing
- 1.3 Components
- 1.4 Installation steps

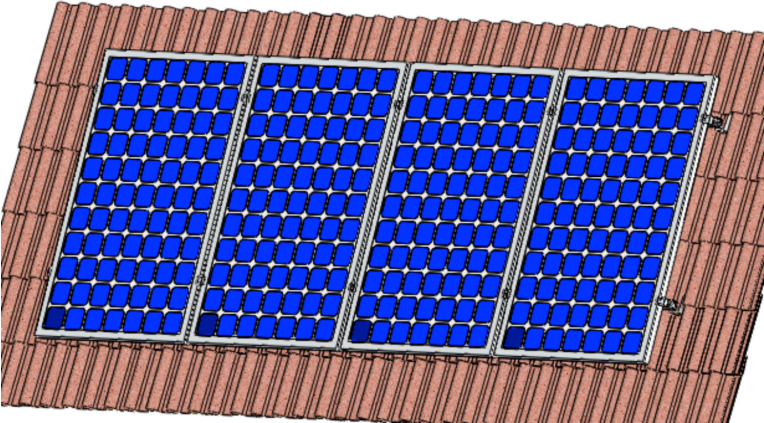
2. Corrugated metal sheet roof mounting system installation

- 2.1 Overview
- 2.2 Drawing
- 2.3 Components
- 2.4 Installation steps

3. After-sale service warranty

1 Tile on-roof mounting system installation

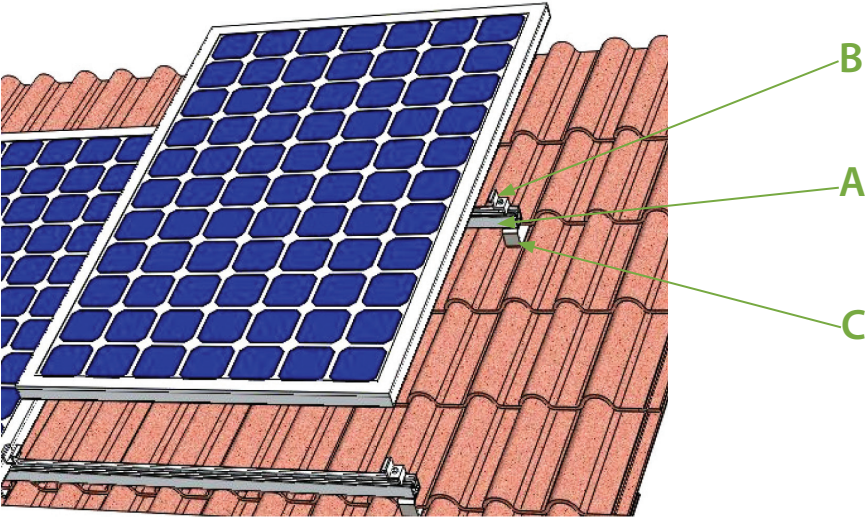
1.1 Overview



Module: CHSM6610P-250W(40mm)

Arrangement: 1*4

Tilt angle: follow the roof-top



A: Aluminum rail
Used for installing module

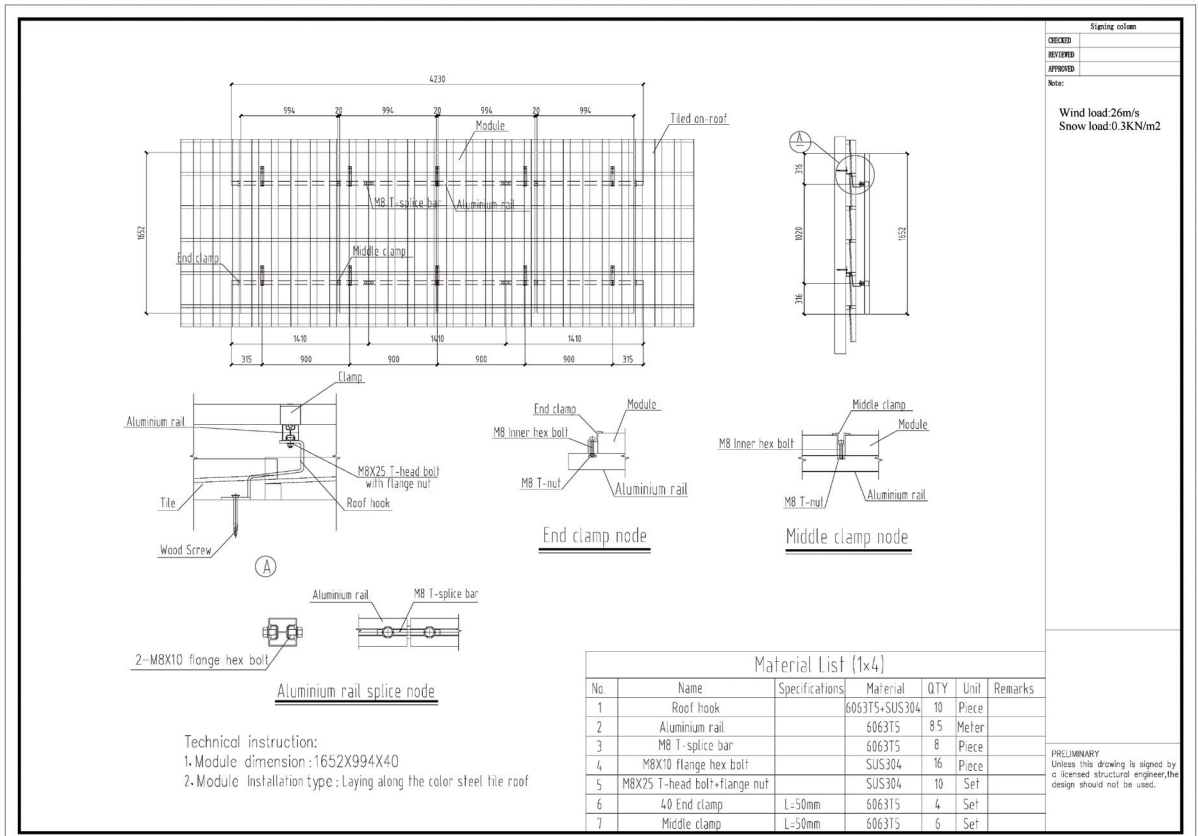
B: End clamp/Middle clamp

Used for fixing module

C: Roof hook

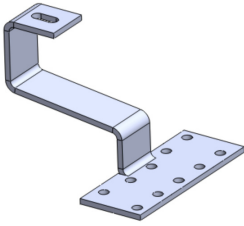
Used for connecting aluminium rail and roof rafter

1.2 Drawing

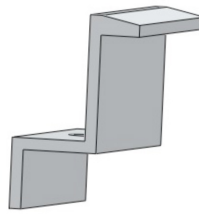


1.3 Components

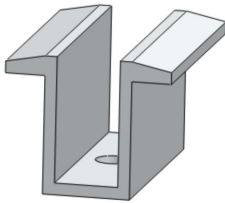
(1) Roof hook



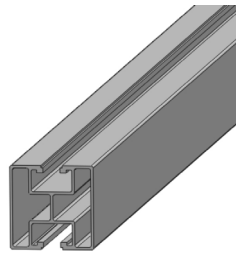
(2) End clamp



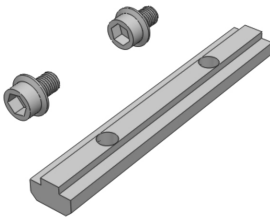
(3) Middle clamp



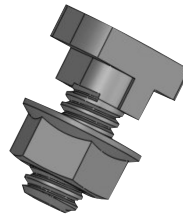
(4) Aluminum rail



(5) M8x90 T-splice bar



(6) M8*25 T-head bolt+flange nut

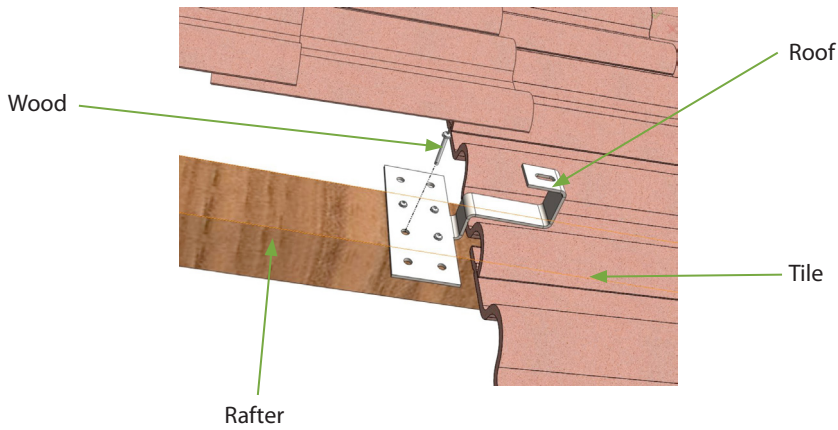


(7) Wood screw

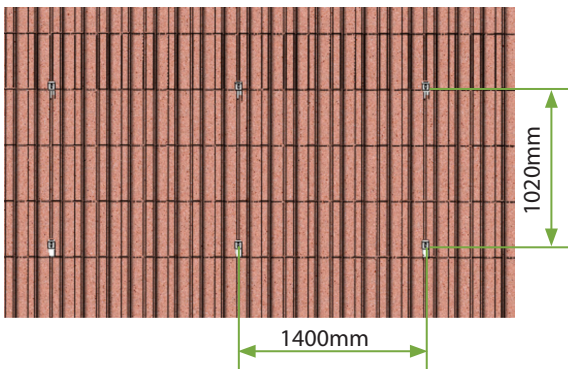


1.4 Installation steps

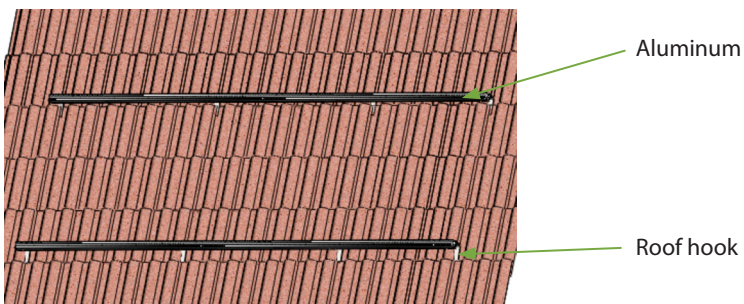
(1) Fix the roof hook to the roof rafter with M8 wood screw



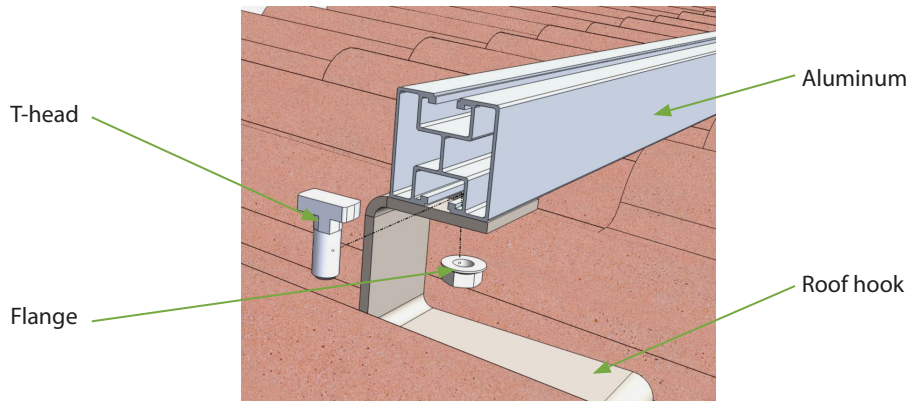
(2) Place the roof hook on the roof as the picture below, the distance between front and back is 1020mm, and between right and left is 1400mm



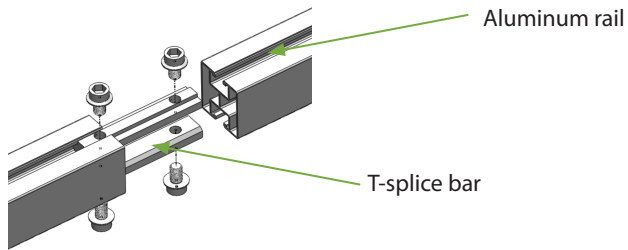
(3) Put the aluminum rail on the roof hook



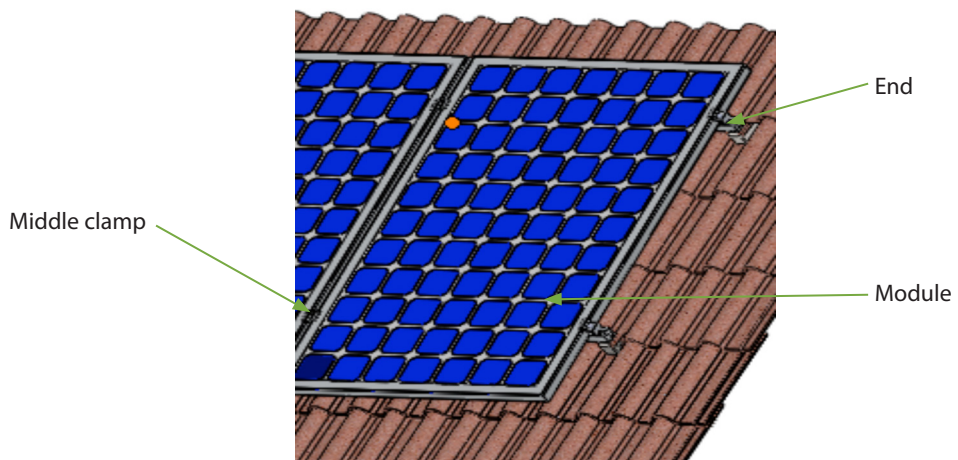
Put the T-head bolt in the notch of the aluminum rail and through the hole of the roof hook, then fix it securely with flange nut



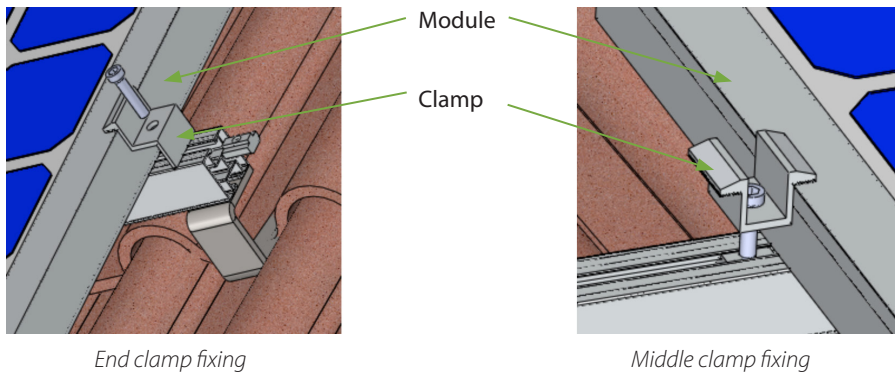
(4) Connecting the two aluminum rail with T-splice bar and M8*10 inner flange bolt



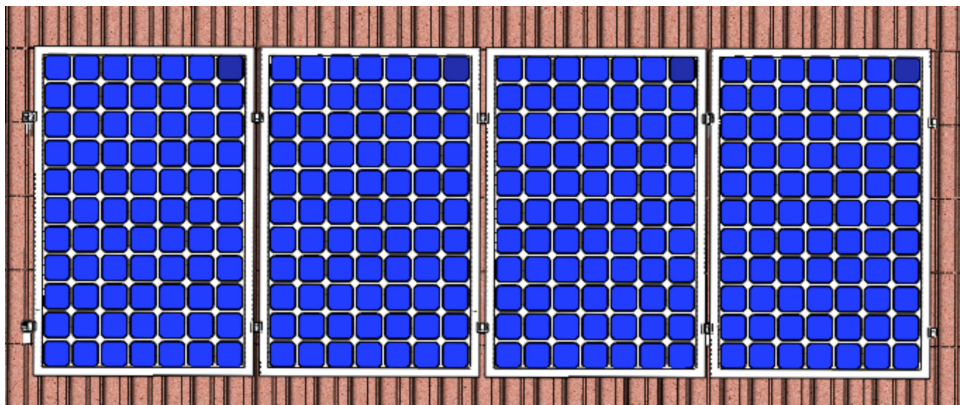
(5) Put the module on the aluminum rail and fixed with end clamp and middle clamp



(6) Installation of clamp: put the T-head bolt in the notch of the aluminum rail with M8 inner flange bolt connected and fixed securely

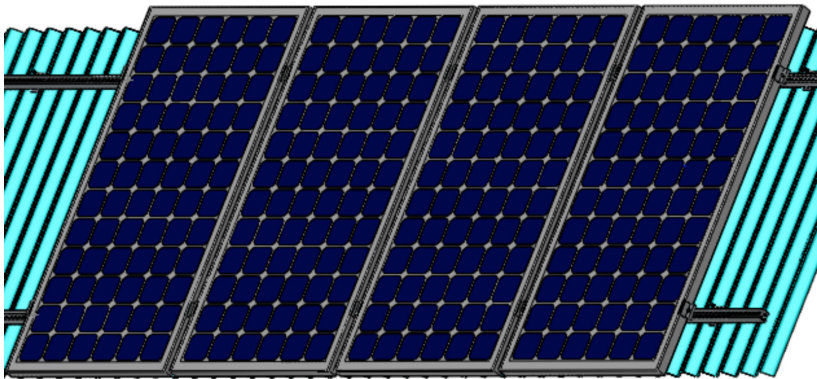


(7) Installing all the modules as 3.6 till complete.



2 Corrugated metal sheet roof mounting system installation

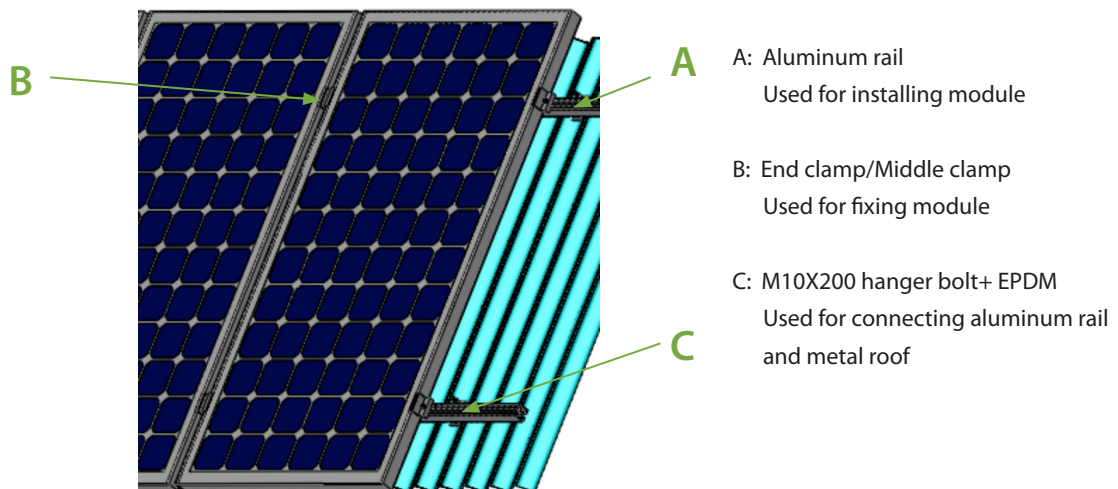
2.1 Overview



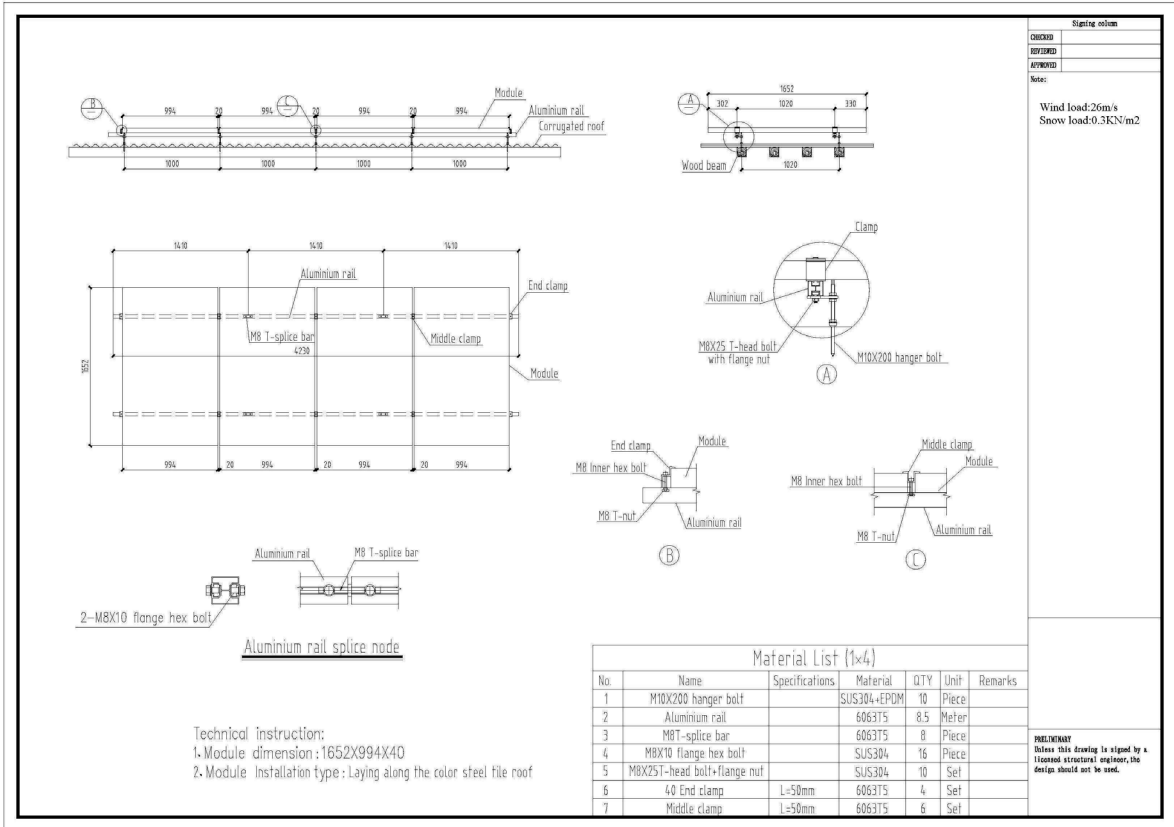
Module: CHSM6610P-250W(40mm)

Arrangement: 1*4

Tilt angle: follow the roof-top



2.2 Drawing

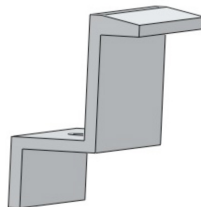


2.3 Components

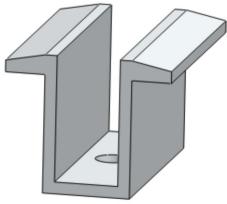
(1) M10X200 hanger bolt+ EPDM



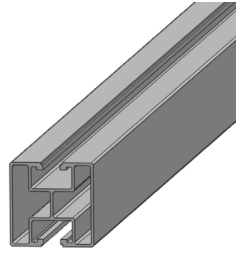
(2) End clamp



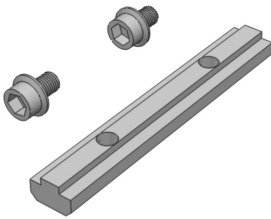
(3) Middle clamp



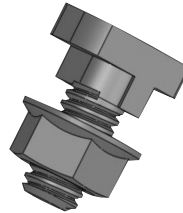
(4) Aluminum rail



(5) M8x90 T-splice bar

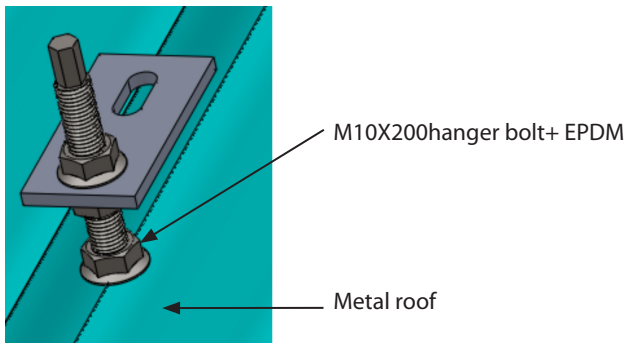


(6) M8*25 T-head bolt+flange nut

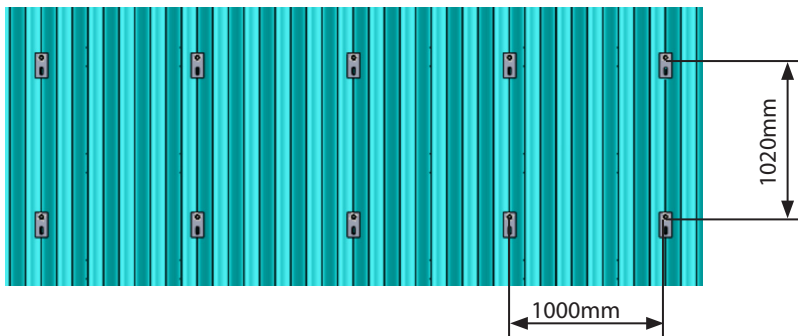


2.4 Installation steps

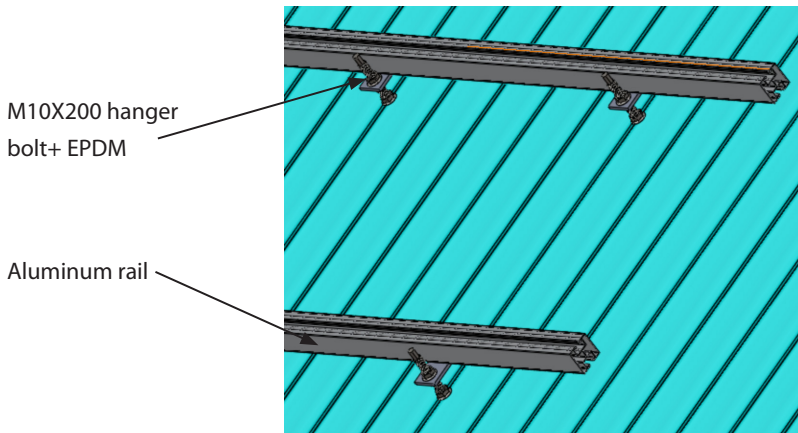
- (1) Fixing the M10X200 hanger bolt+ EPDM on the upper part of the metal roof which area planned to install the module, and check whether the flange nut is screwed securely



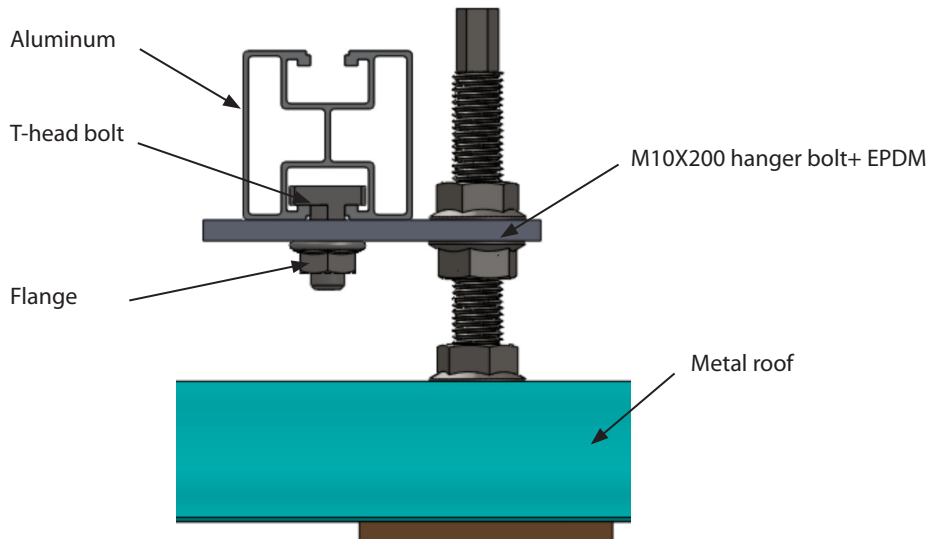
- (2) Place the hanger bolt on the roof as the picture below, the distance between front and back is 1020mm, and between right and left is 1000mm



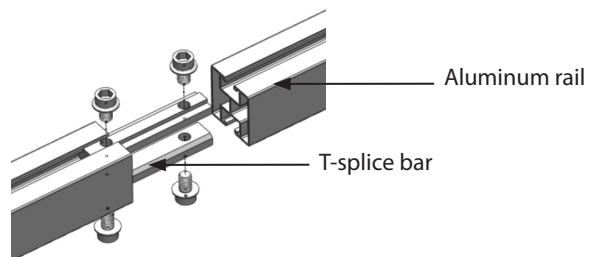
(3) Put the aluminum rail on the M10X200 hanger bolt+ EPDM



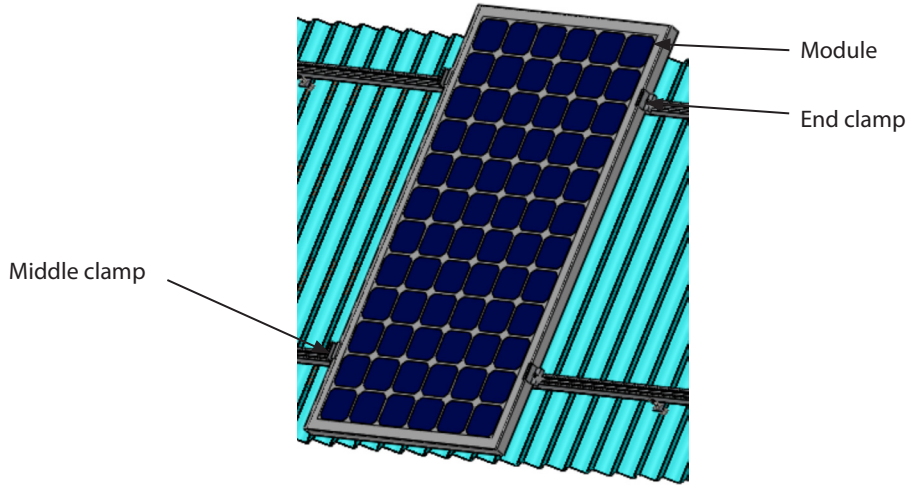
Put the T-head bolt in the notch of the aluminum rail and through the hole of the hanger bolt, then fix it securely with flange nut



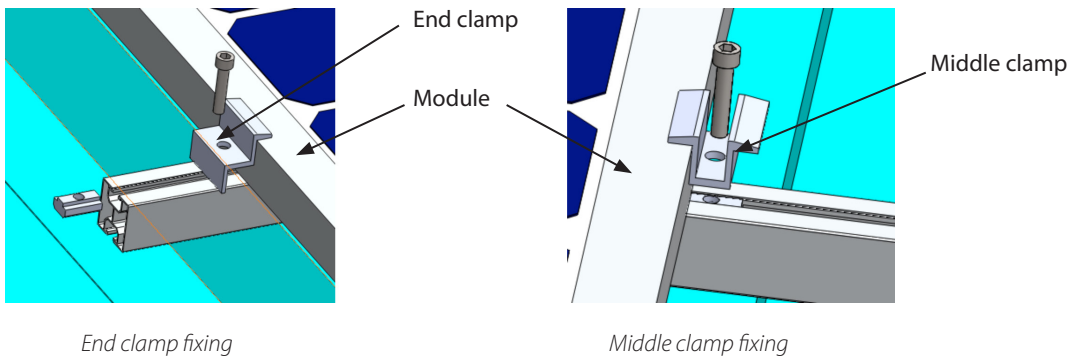
(4) Connecting the two aluminum rail with T-splice bar and M8*10 inner flange bolt



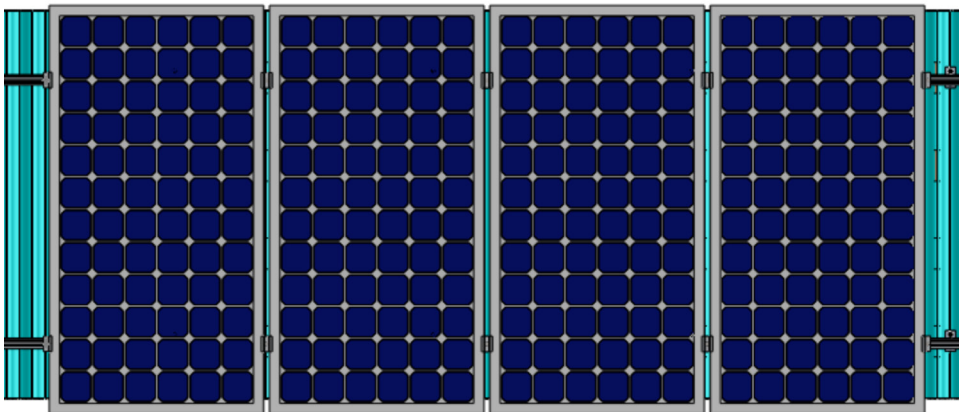
(5) Put the module on the aluminum rail and fixed with end clamp and middle clamp



(4) Installation of clamp: put the T-head bolt in the notch of the aluminum rail with M8 inner flange bolt connected and fixed securely



(5) Installing all the modules as 3.6 till complete.



3 After-sale service warranty

1 Installation guide and training service

- (1) Provide installation guide to the customers.
- (2) For project <3MW, Astronergy offers technical consultation and training by phone, Email, video clips etc.
- (3) For 3MW~10MW project, free training at Hangzhou for 2 days.
- (4) For project >10MW, free training at Hangzhou for 2 days, 5-10 days consultation and guidance on site where the project is located is also available, Astronergy bears the traveling expenses.

2 Repair and replacement

Astronergy will offer free placement for the productions with defects or discrepancies in condition that the items expressed in the "Product warranty" declared by Astronergy are all satisfied.

- (1) Astronergy will offer free placement and bear the cost of freight. (2) Astronergy will, upon getting reasonable advance notice from Buyer, pay for the cost related to the productions with defects, including the cost of reconnaissance to inspect the condition of defects on site, repairing and replacement works, and materials test etc.
- (3) If Astronergy fails to repair or collect and replace any rejected goods as and when requested by Buyer in accordance with "Product warranty", Buyer may, upon reasonable advance notice to Astronergy, itself or through third parties, repair or replace such rejected goods, and Astronergy shall reimburse Buyer the actual costs of such repair.
- (4) If the products are out of the period of warranty, customer should pay for the repairing and replacement service that Astronergy will offer.

3 Maintenance

Astronergy has no responsibility to offer maintenance service. In special cases, Astronergy and buyer can discuss about the maintenance service and making relative items in contract.

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