

(Tin Roof Mounting) Ultimate Tilt Kit Installation instructions



GB | Use

Mounting system for installing framed PV modules with heights between 30 and 50 mm on pitched roofs with the following characteristics:

- Roof pitch 5° - 60° (solar fasteners), 20° - 60° (Roof hooks)
- Single and double roman, plain tile, natural slate, and flat tiles with wooden substructures.
- PV-panel landscape and portrait oriented

Static calculation must exist and be considered according to local regulations.

Installation guidelines

Ensure that the roof construction is suitable for the introduction of forces at the fixing points and their subsequent transmission. In order to compensate thermal expansion, include a break every 12 meters when planning the PV-system. For module positioning/fastening points please refer to manufacturers recommendations. Please follow your local timber construction standard. Please do not use installed roof connections as ladder. If installation is located within 10km from the coast, we advise not to use zinc coated material. For further information please contact your sales representative or the technical department at Hopergy.



The structural stability of the PV-system must be verified before installation. The building must be able to support the additional weight safely.

Installation notes

Please read these installation instructions carefully before starting the installation and familiarise yourself with the system components. During the installation and in particular whilst working on the roof, ensure to work according to the relevant health and safety guidelines, safety guidelines and please follow the current rules and regulations for your corresponding region.

The individual installation instructions are merely recommendations in accordance with the current state of technology and are based on previous experiences of how Hopergy systems can be installed.

If any special characteristics of the roof or object need to be taken into account, we recommend you to consult specialists such as roofers or structural engineers where necessary. Please check that the applied manual which is up to date. All manuals are available in the download area at www.hopergy.com

Testing/certification:

- TÜV
- MCS012 (IK0197)
- ISO 9001

Applicable Documents

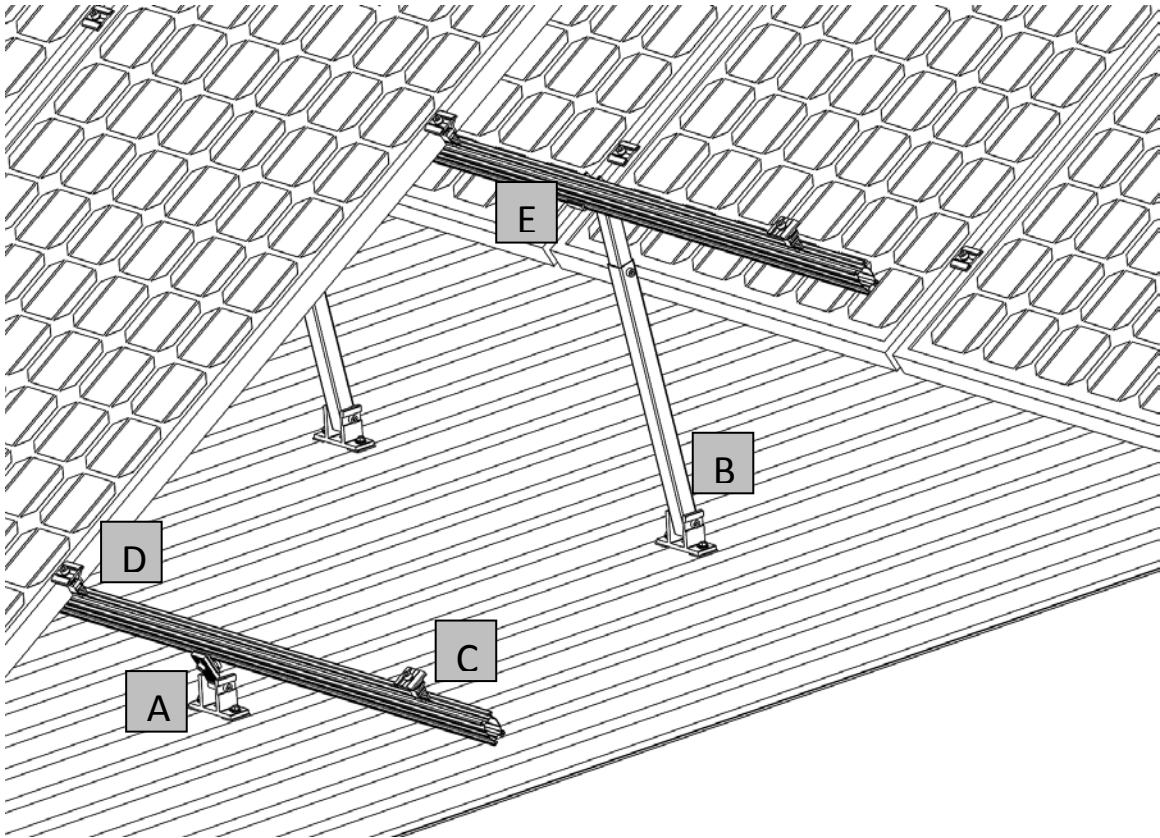
"General installation, maintenance and assembly instructions"
"Safety Instructions for Installation Instructions"
"Warranty and Disclaimer."
These documents are available at www.hopergy.com

Warranty:

The warranty only applies if an original and complete Hopergy system is used, with a layout designed by Hopergy.

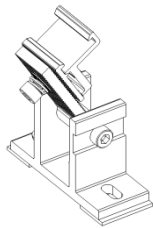
Hopergy is not accountable for the roofs capability to maintain the introduced forces. Please check the roofs compatibility with a static engineer.

Ultimate Tilt Kit System

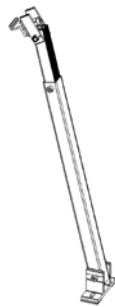
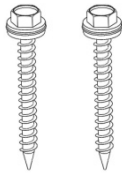


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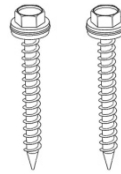
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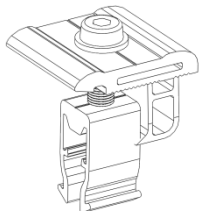


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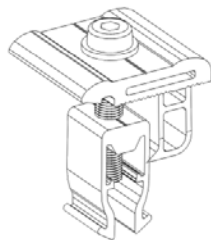


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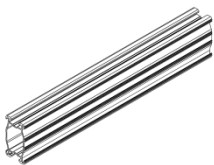


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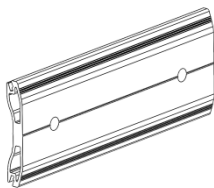


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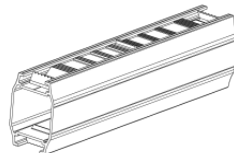
E



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OR



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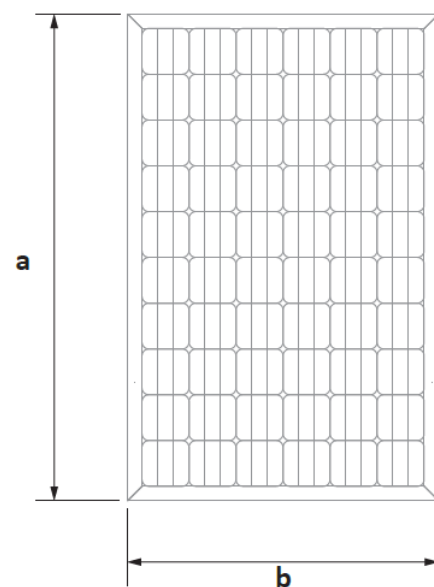
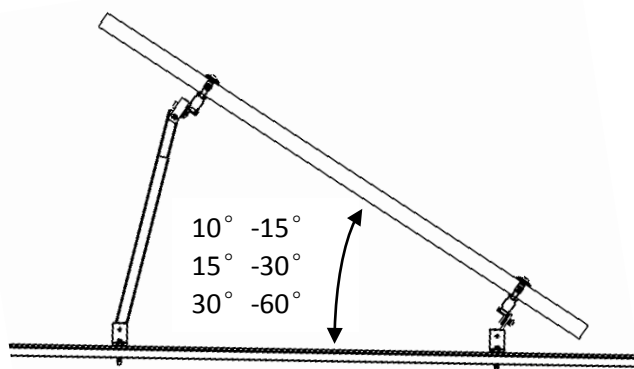
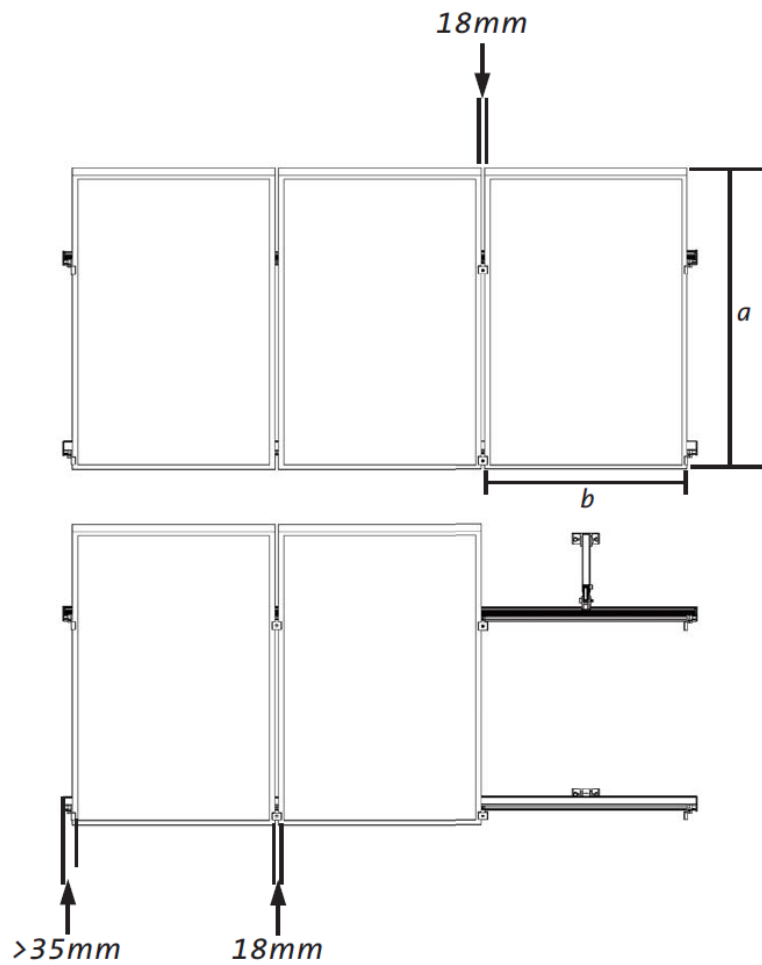
M8



13mm



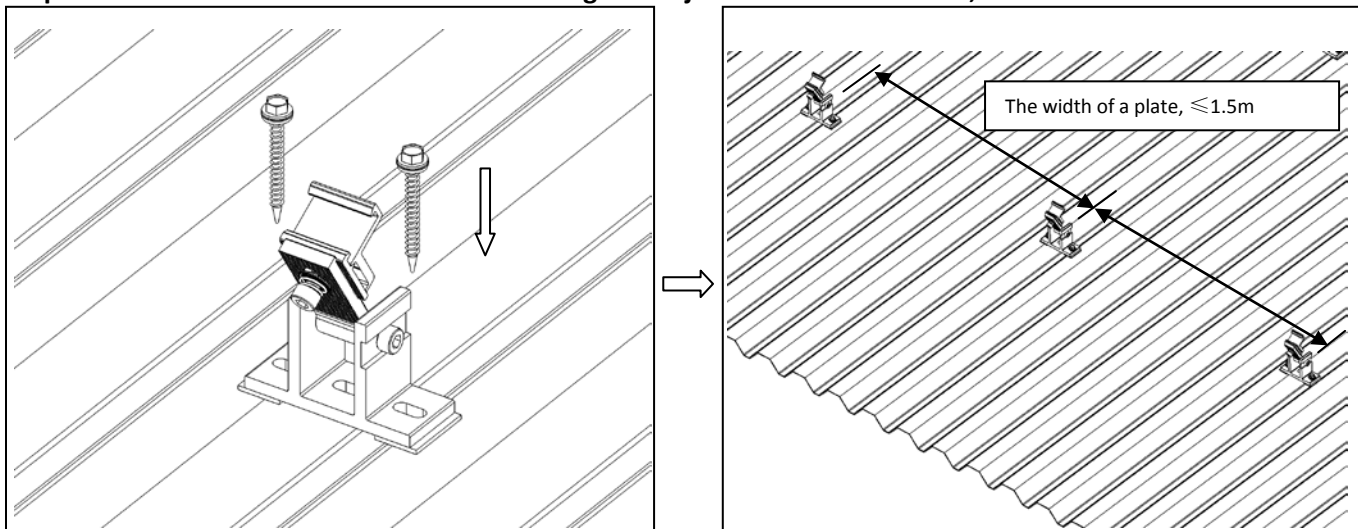
SOLAR PANELS LAYOUT



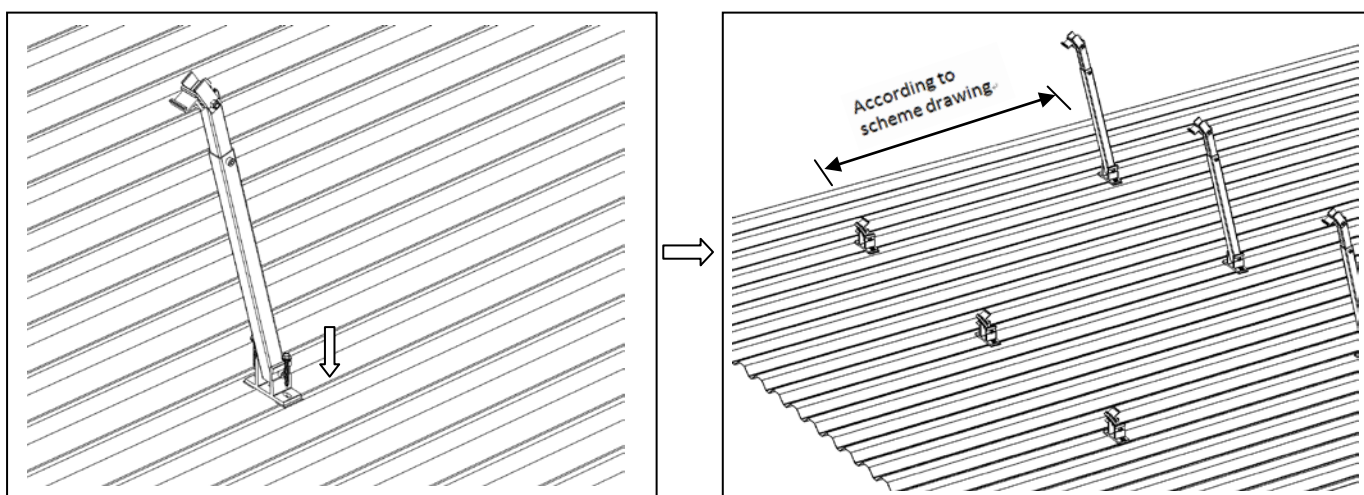
Solar panels layout

Installing Ultimate Tilt Kit

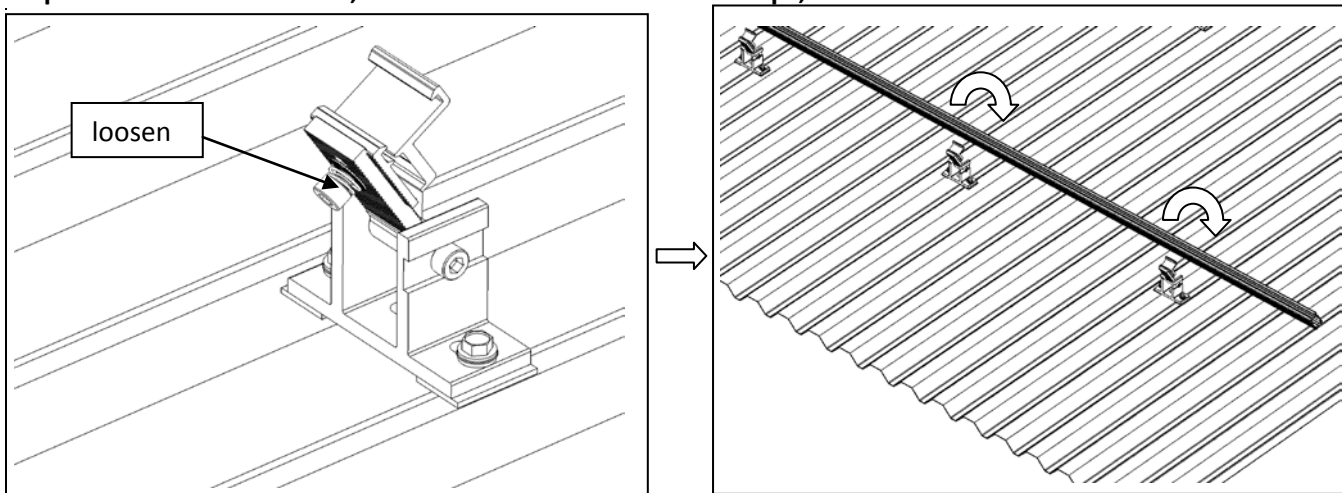
Step.1 Use ST6.3*80 Timber screws to installing the Adjustable Front feet Unit;



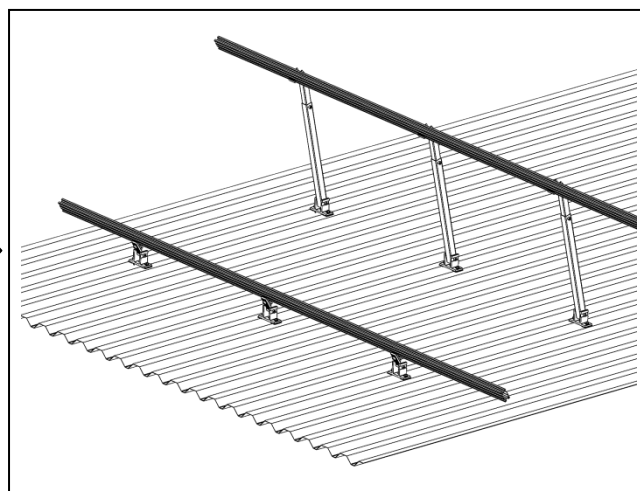
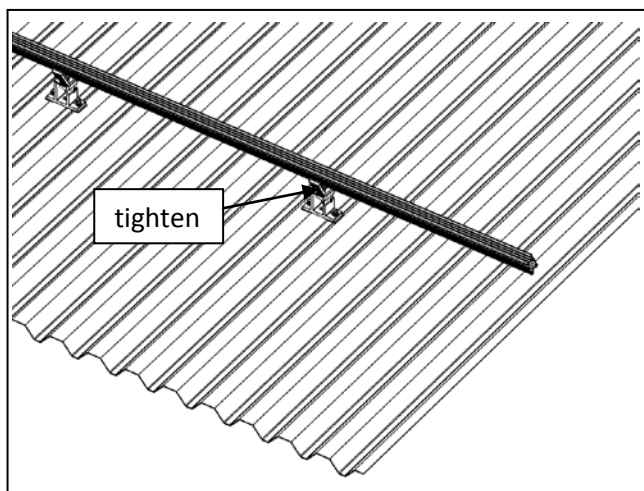
Step.2 Use ST6.3*80 Timber screws to installing the Adjustable rear feet Unit;



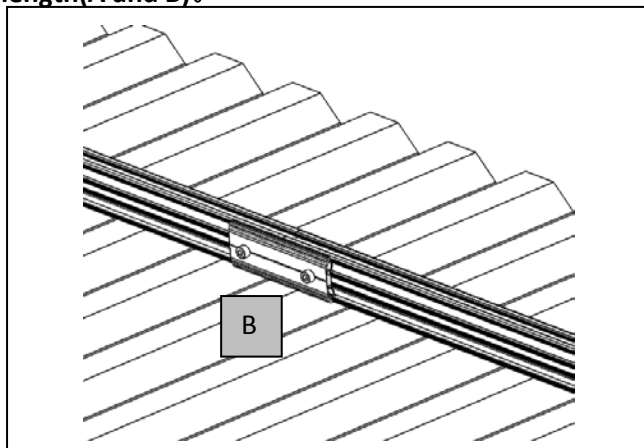
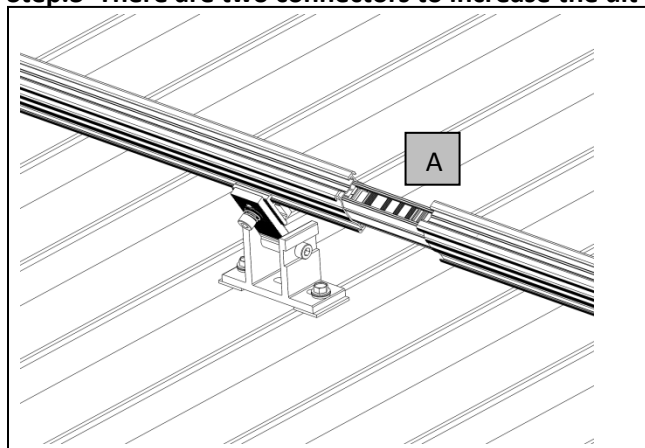
Step.2 Loosen the M8 scrow, then Push the rail onto the rail clips;



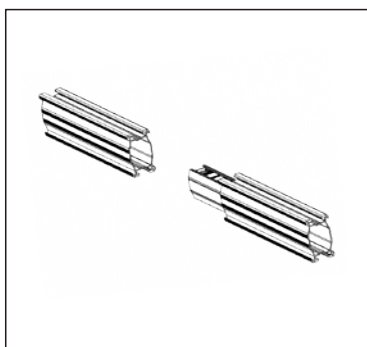
Installing Ultimate Tilt Kit



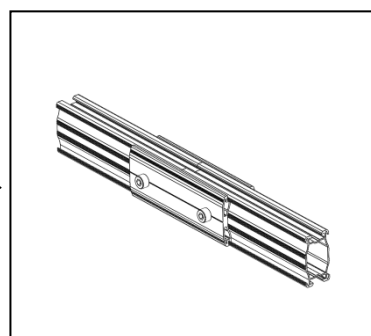
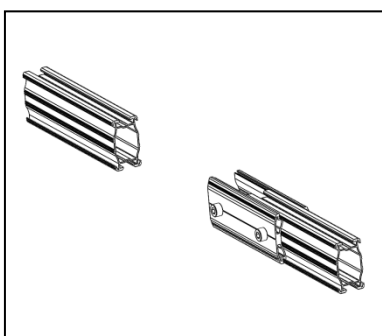
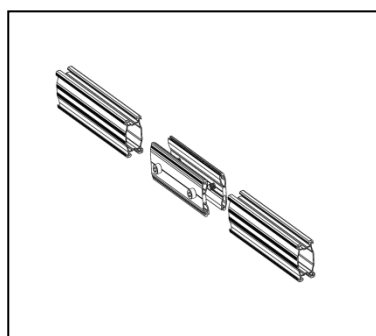
Step.3 There are two connectors to increase the ult rail's length(A and B).



A

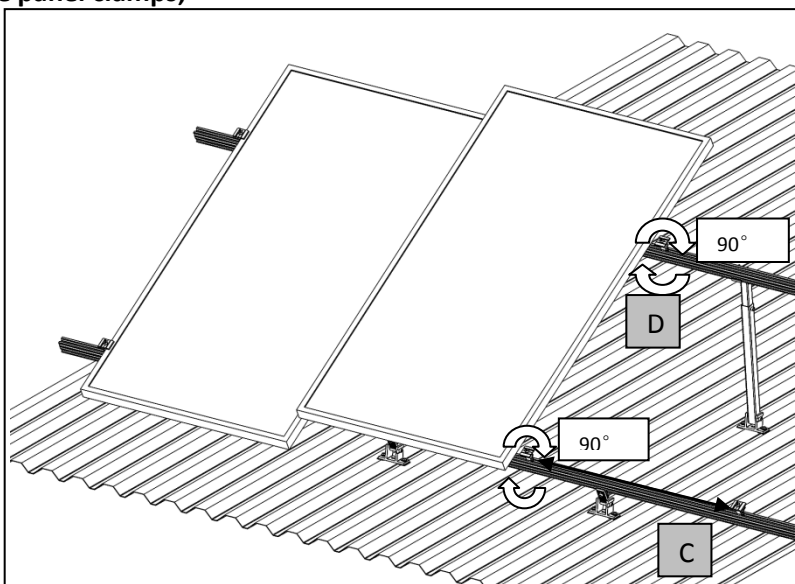


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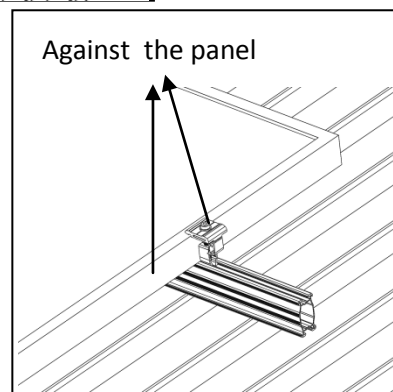
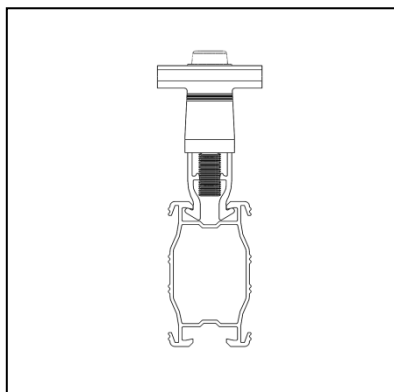
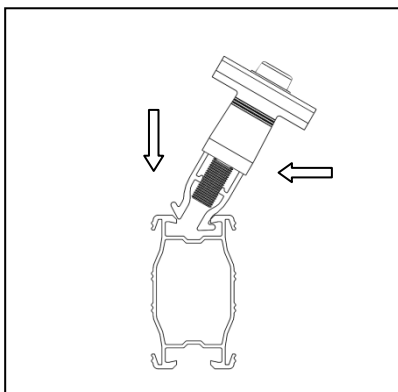


Installing Ultimate L Feet Kit

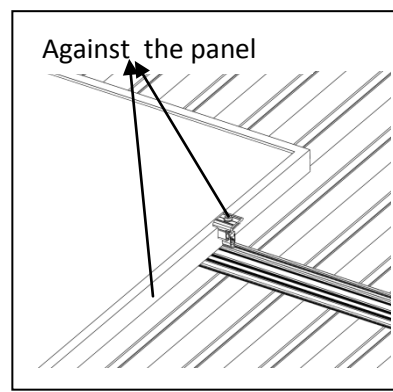
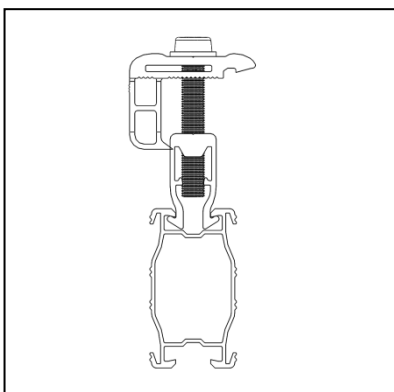
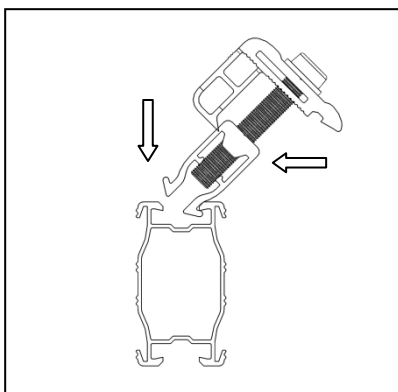
STEP.4 install ultimate panel clamps;



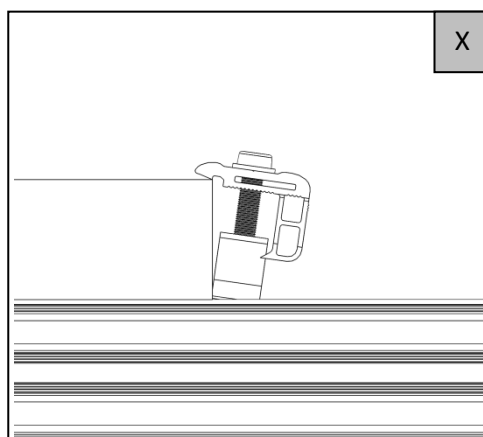
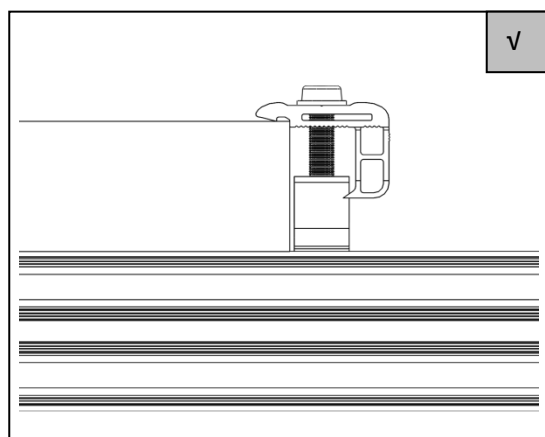
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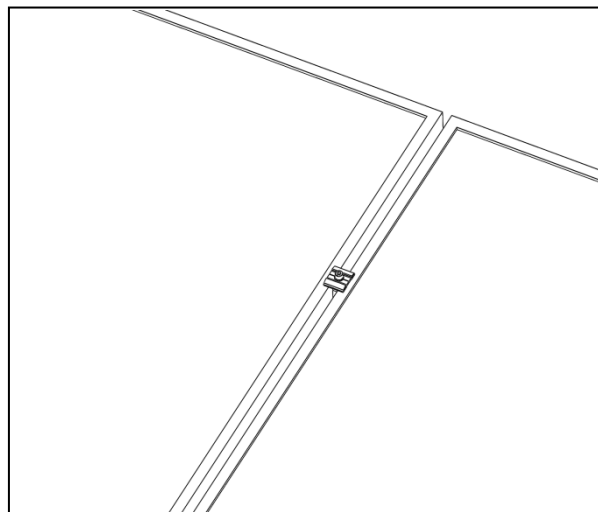
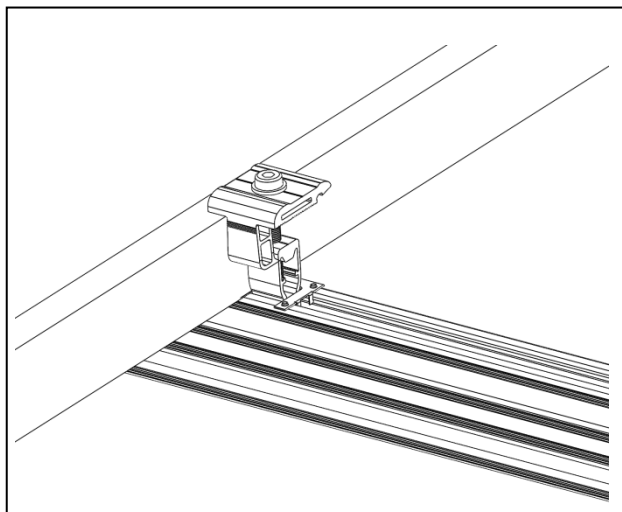
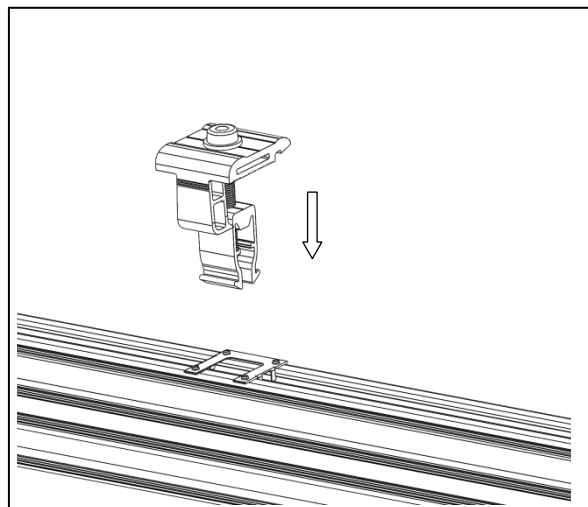
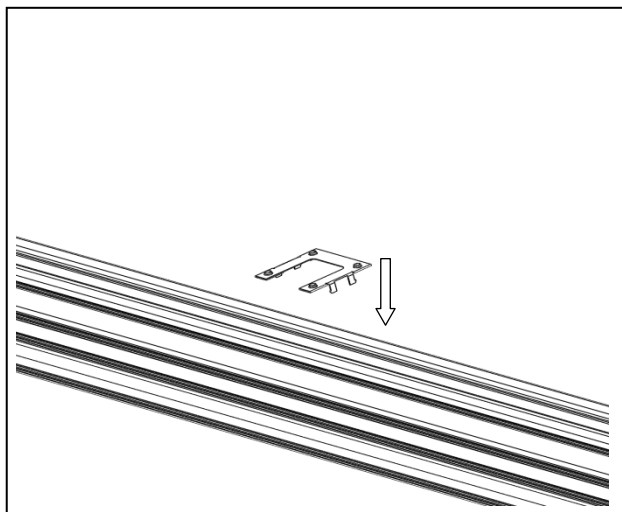
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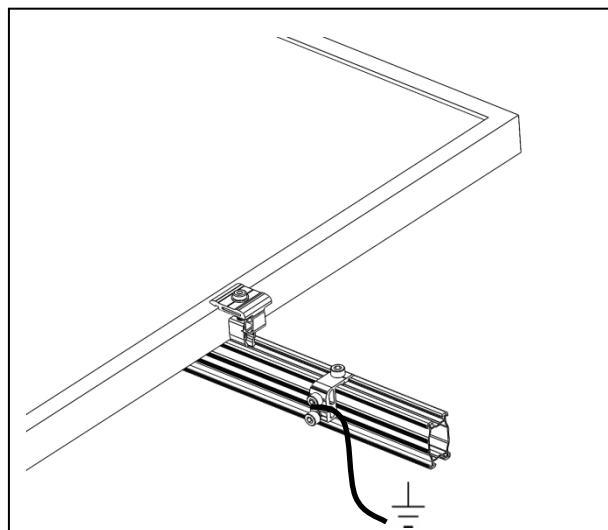
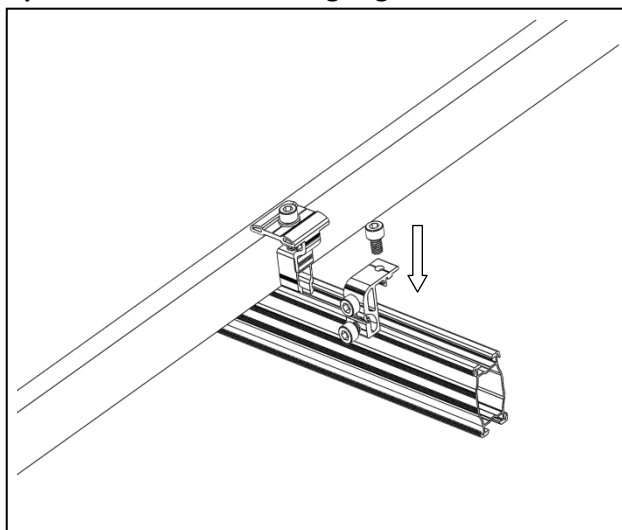
Attention: 1.The panel clamps close against the solar panel.
2.Tighten the bolt slowly, until the clamp is in holding position.
3.Then use 6-8N.M torque to tighten the bolt.



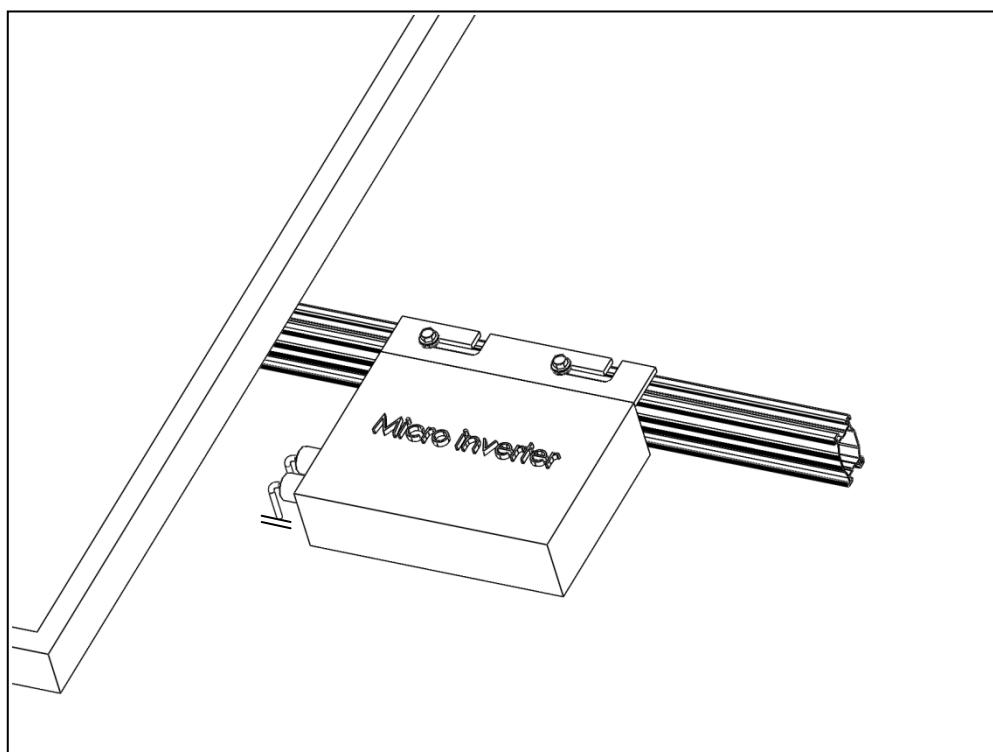
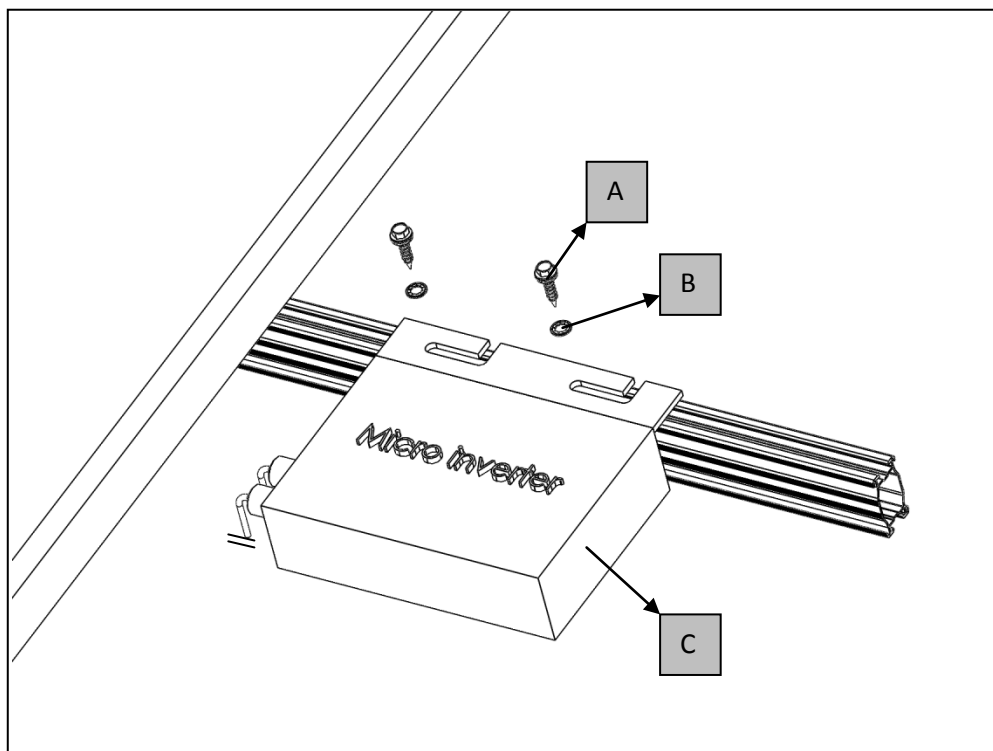
option 1. Ultimate Earthing Plate



option 2. Ultimate Earthing Lug



option 3. Micro inverters



Ⓐ ST6.3*25 Timber screws

Ⓑ M8 Earth washers

Ⓒ Micro inverter

Components

Part name	ULTIMATE Rails	Inter Rail Connector	Outer Rail Connector
Part No.	HOP-F26-0000	ULT-ISK	ULT-SSK
Figure	A long, thin, U-shaped metal rail with a series of small rectangular slots along its length.	A U-shaped metal connector with a series of small rectangular slots along its length, designed to fit between two rails.	A U-shaped metal connector with a series of small rectangular slots along its length, designed to fit between two rails.
Part name	end clamp	inner clamp	Ultimate Earthing Lug
Part No.	ULT-UCS	ULT-UCS	ULT-ELG
Figure	A metal clamp with a U-shaped body and a central screw for tightening.	A metal clamp with a U-shaped body and a central screw for tightening.	A metal lug with a U-shaped body and a central screw for tightening.
Part name	Ultimate Earthing Plate	Ultimate Adjustable Front feet Unit	Ultimate Adjustable rear feet Unit
Part No.	ULT-EPL	ULT-AFL	ULT-ARL
Figure	A metal plate with a U-shaped body and a central screw for tightening.	A metal unit with a U-shaped body and a central screw for tightening.	A metal unit with a U-shaped body and a central screw for tightening.



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