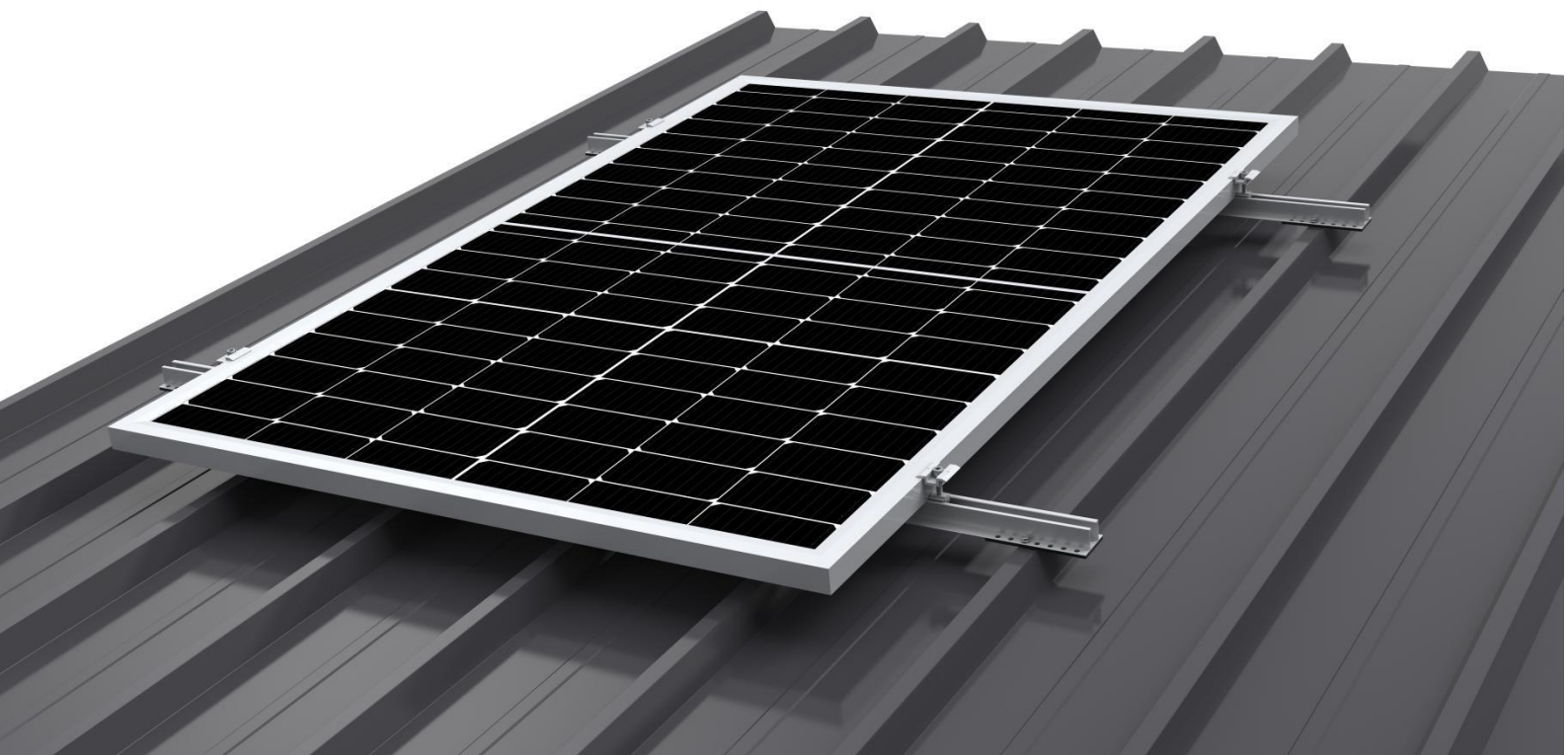


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Mounting procedure

AnyRoof Mini Rail (Portrait)

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Introduction

This manual provides important guidelines and safety information relating to the installation of solar modules using AnyRoof mounting products. Please read these guidelines carefully and strictly follow the instructions. Failure to follow these instructions may result in injury or property damage. The installation and handling of PV modules requires professional skills and should only be performed by qualified professionals. Please retain this manual for future reference.

The latest version can be downloaded from www.anyroof.co.za.

1.1 INSTALLATION MANUAL DISCLAIMER

The information contained in this manual is subject to change by AnyRoof without notice. AnyRoof gives no warranty of any kind whatsoever, either explicitly or implicitly, with respect to the information contained herein.

1.2 LIMITATION OF LIABILITY

AnyRoof shall not be held responsible for damages of any kind, including – without limitation – bodily harm, injury or damage to property, in connection with PV module installation or compliance or non-compliance with the instructions set forth in this manual.

1.3 GENERAL SAFETY

Installation work must only be carried out by adequately trained personnel or qualified installers. Ensure that each installation location is serviced by at least two installers for timely rescue in the event of an accident.

1.3.1 Training

Installation personnel should:

- Have the skills, knowledge and training in the installation of PV mounting systems
- Have the necessary literary skills to follow this installation manual in order to safely carry out the required installation procedures
- Have the required skills to operate the tools required to perform the installation
- Be physically and mentally fit for the task
- Never attempt installation work while under the influence of drugs or alcohol

1.3.2 Safety Equipment

The installation team must be equipped with safety harnesses, helmets, gloves, safety ropes and other equipment to adequately protect personnel from accidents. Each member of the team must be protected against direct contact with 30 V DC or greater. Protect hands from sharp edges.

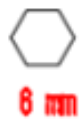
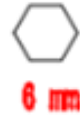
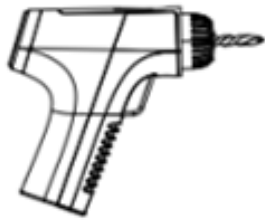
WARNING: Remove all metallic jewelry to prevent accidental exposure to live circuits.

1.3.3 Site Preparation

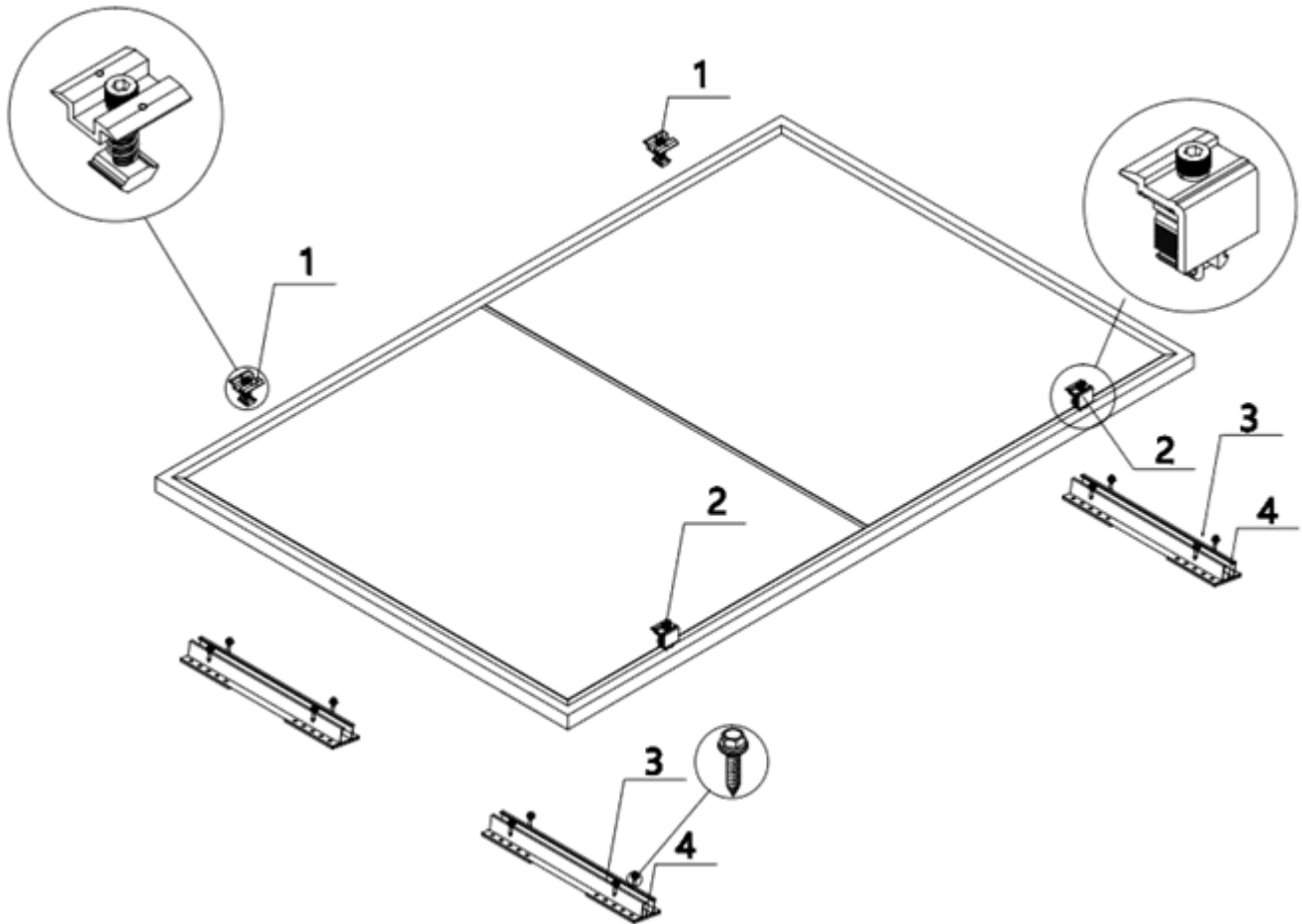
During installation, the site must be closed to the public. At least one copy of the installation instructions must be available at the installation site. Take the following extra precautions:

- When installing modules in light rain, morning dew, take appropriate measures to prevent water ingress into the connector.
- Do not allow children or unauthorized persons near the installation site or storage area of modules.
- Do not install modules in strong wind.
- Use electrically insulated tools to reduce the risk of electric shock.
- If the disconnects and Over Current Protection Device (OCPD)'s cannot be opened or the inverter cannot be powered down, cover the fronts of the modules in the PV array with an opaque material to stop the production of electricity when installing or working on a module or wiring.
- Do not use or install damaged modules.
- Contact with module surfaces or frames may cause electric shock if the front glass is broken or the back sheet is torn.
- Keep the junction box cover closed at all times

WHAT YOU NEED: Tools overview



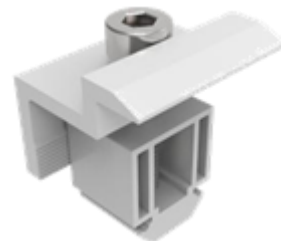
Component introduction



1 Mid clamp | 7817401



2 End clamp | 7817301



3 Mini rail | 7813501 & **4** Screws



5 Ground lug | 7830304

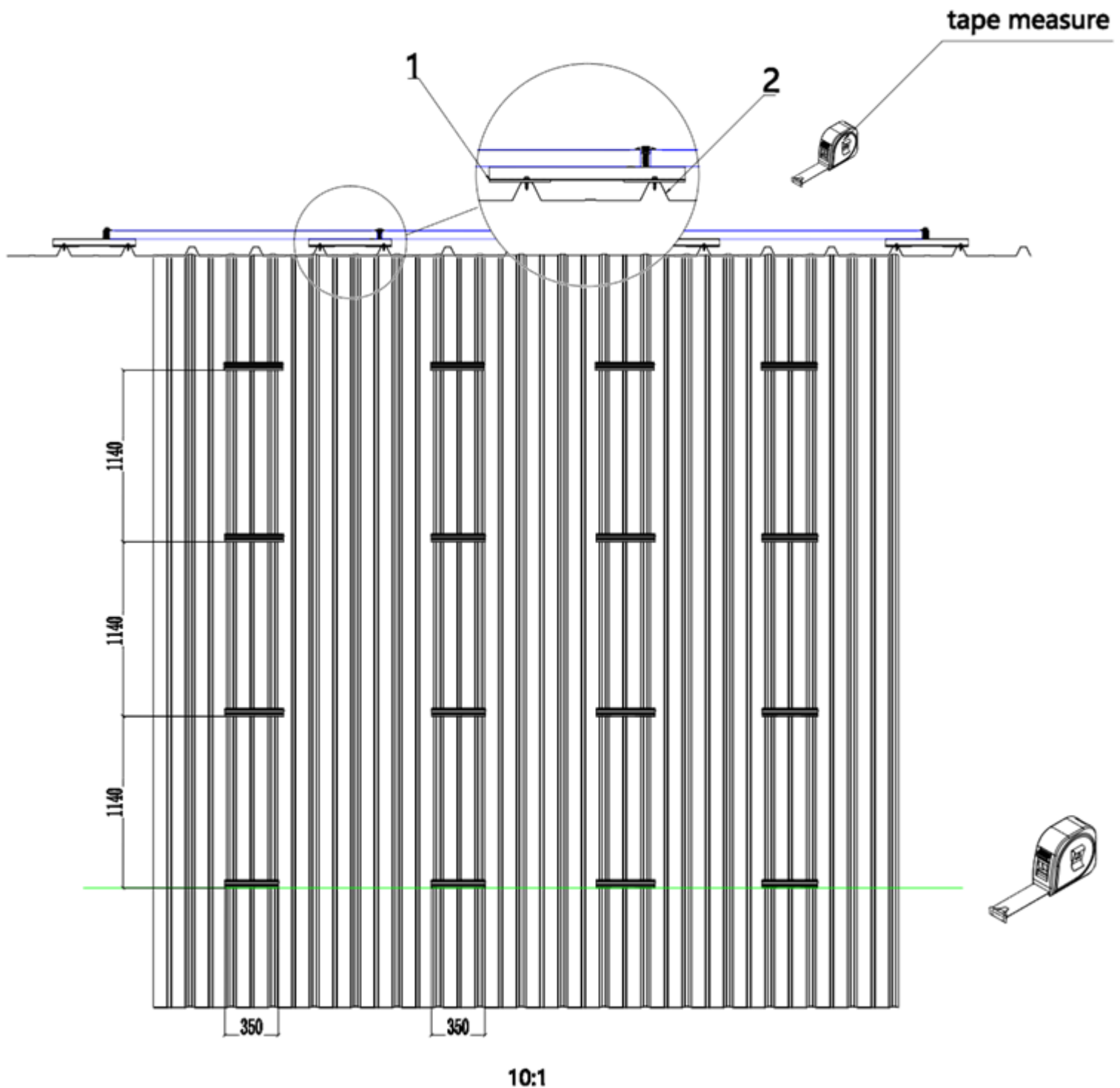


4. Installation Planning

4.1 Measure the roof dimensions

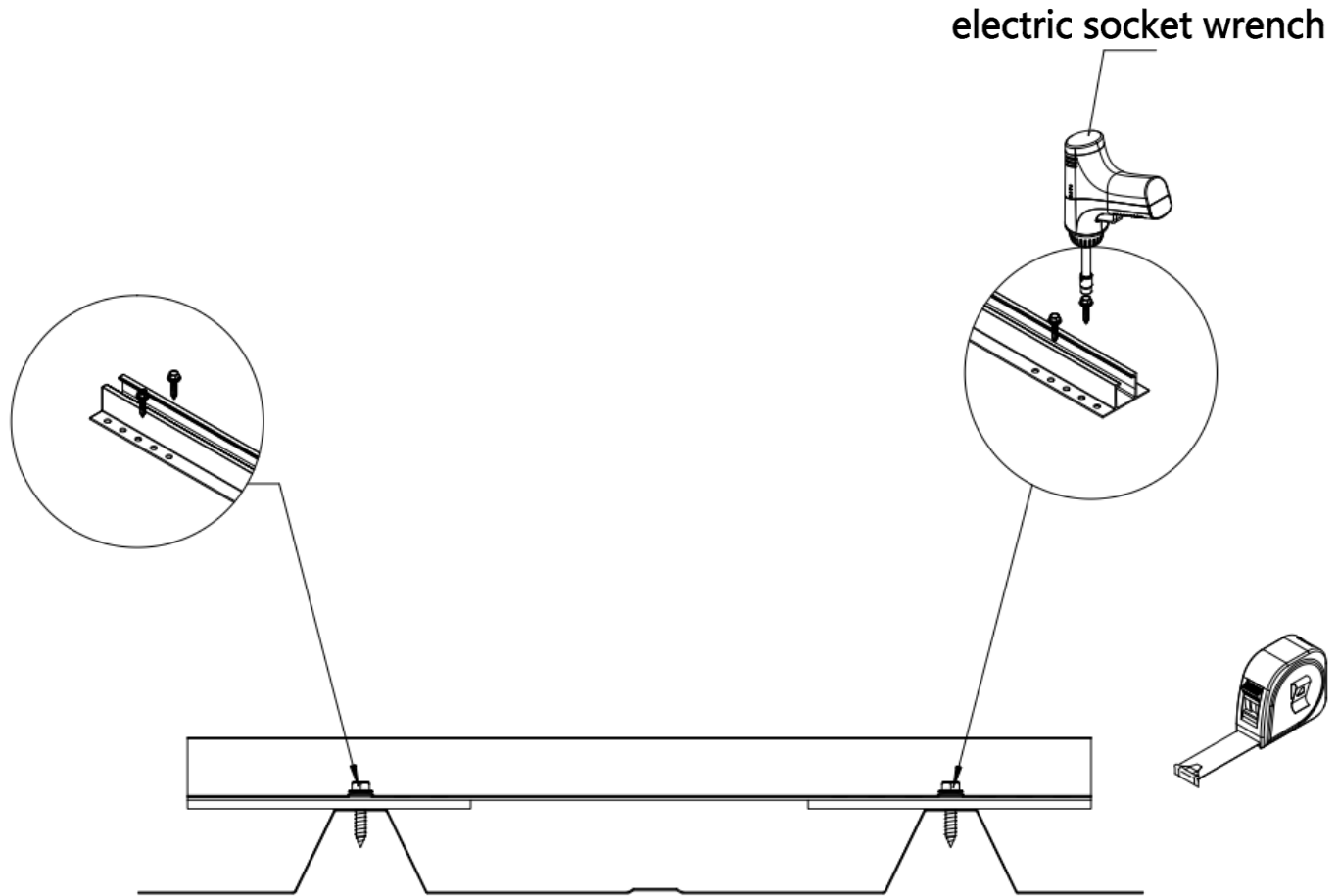
4.2 Measure the spacing between rafters.

4.3 Plan spacing between mounting points, make sure they are on the rafters.



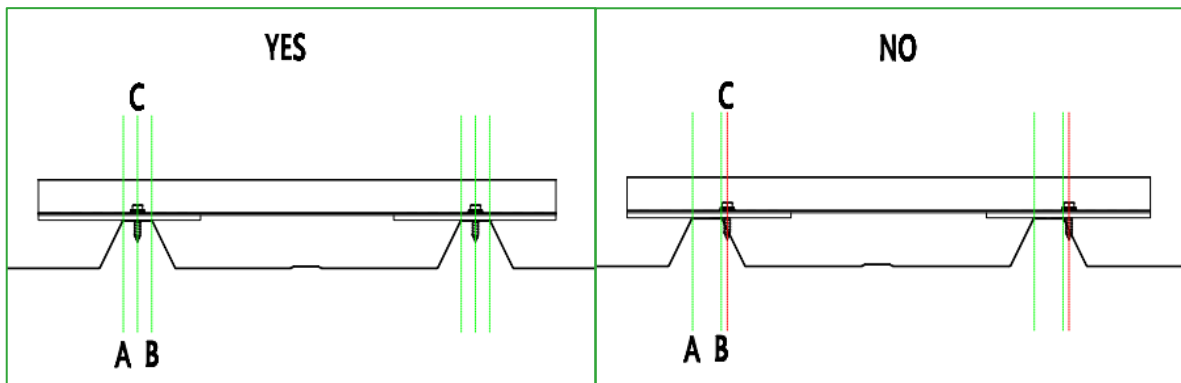
5. Installation steps

5.1 Install the mini rails

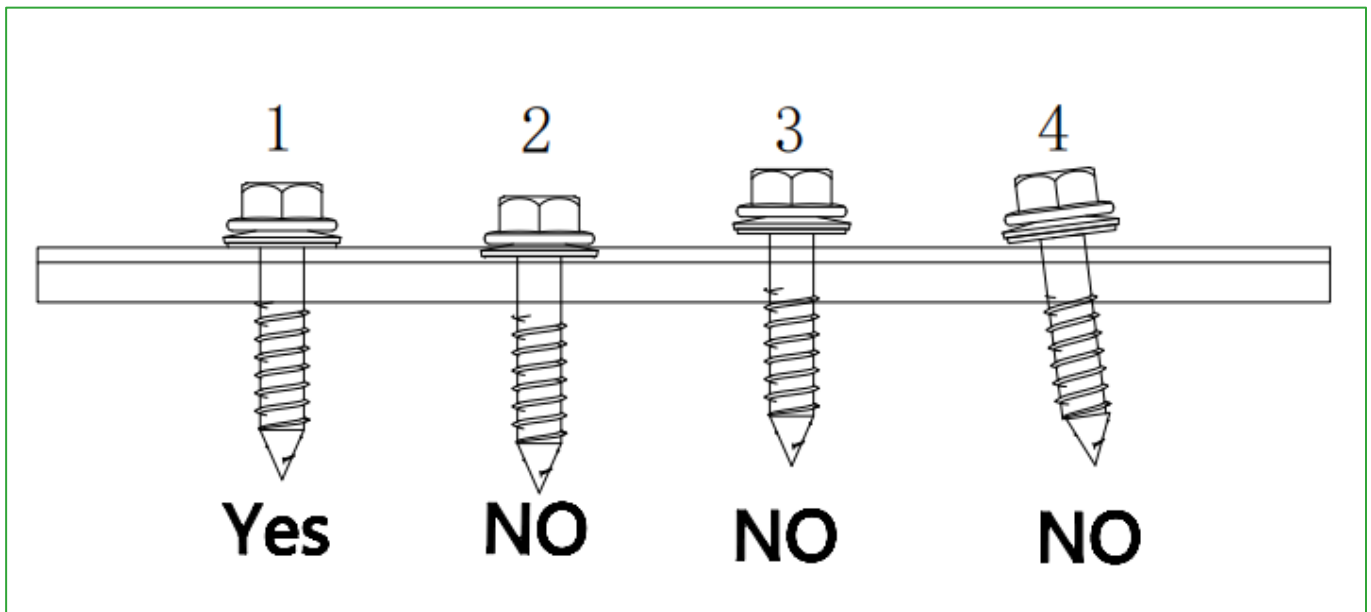


- ① Position the Mini rail according to the Layout diagram.
- ② Use the appropriate holes depending on the distance between the peaks.
- ③ Fasten each Mini rail with 4 sheet metal screws.
- ④ Tighten the screws until the gasket bends equally all around (see picture).

5.2 Fixing sheet screws



The screws must be fastened to the ridge of the trapezoidal metal roof. As shown in the figure below, C needs to be between A and B.

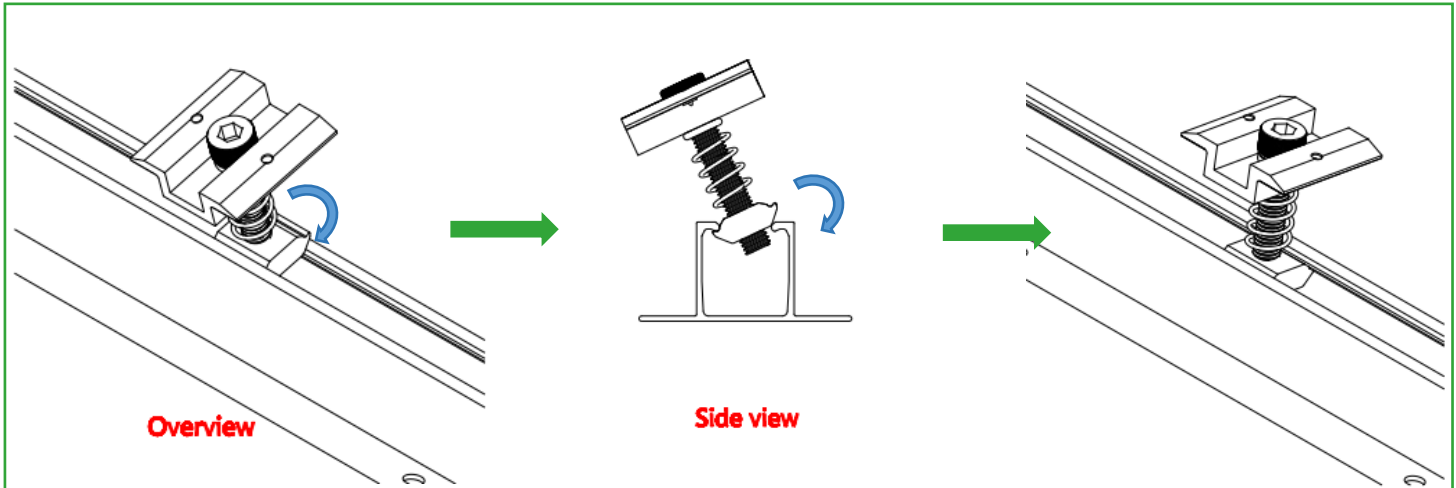


Tighten the screws until the gasket bends equally all around (see figure). Do not overtighten. The seal should be compressed by approx. 30 %.

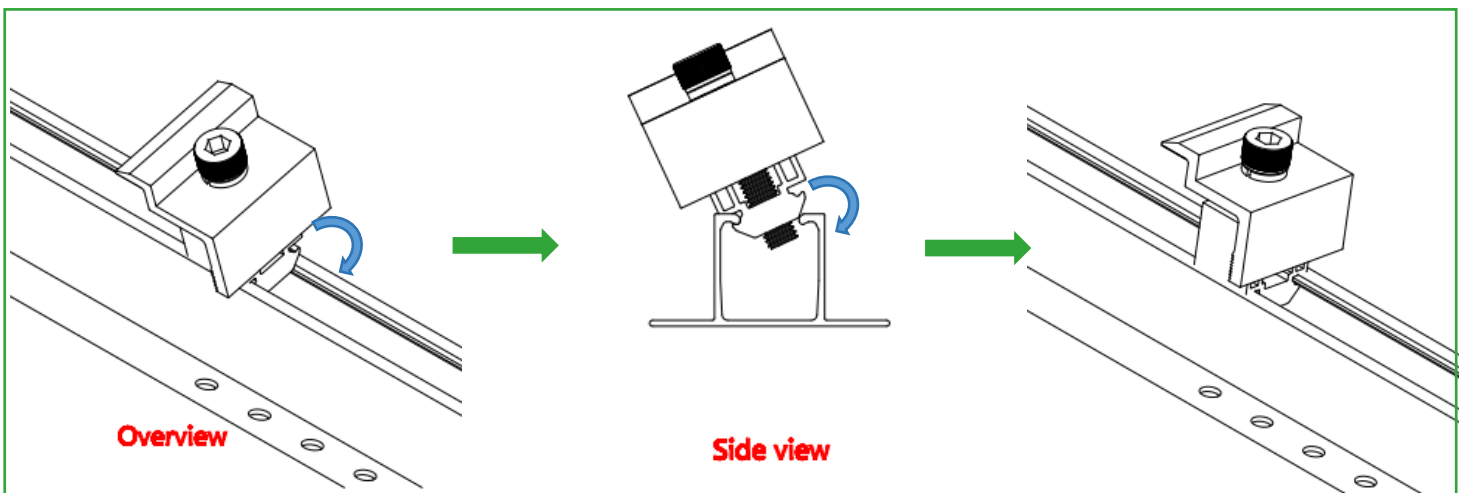
- ① correct
- ② screw is tightened too tight
- ③ screw is not tightened enough
- ④ screw is tightened unevenly

5.3 Install the module clamps

Mid clamp



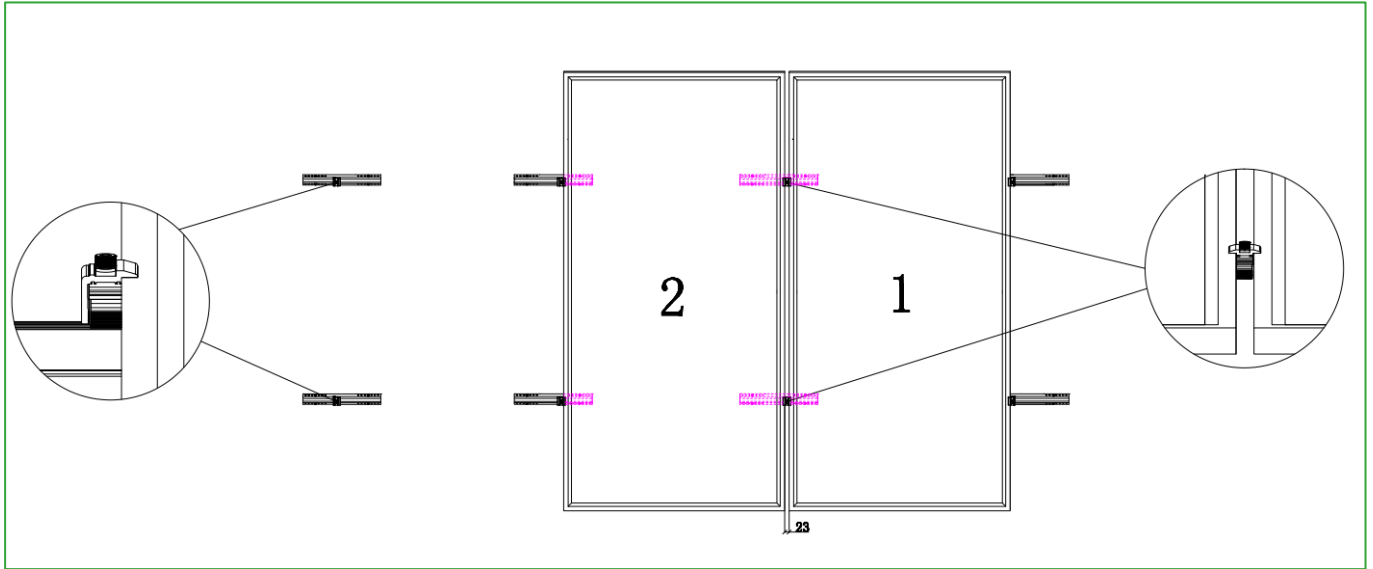
End clamp



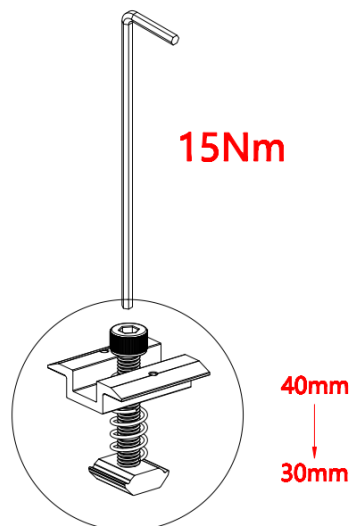
Tilt the solar panel clamps lightly so that one side of the nut snaps into the rail, then make another side of nut snaps in to the rail. Keep the bolts of the panel clamp loosening.

5.4 Installing modules

When installing the modules, make sure that the module clamps are placed as centrally as possible on the rail.

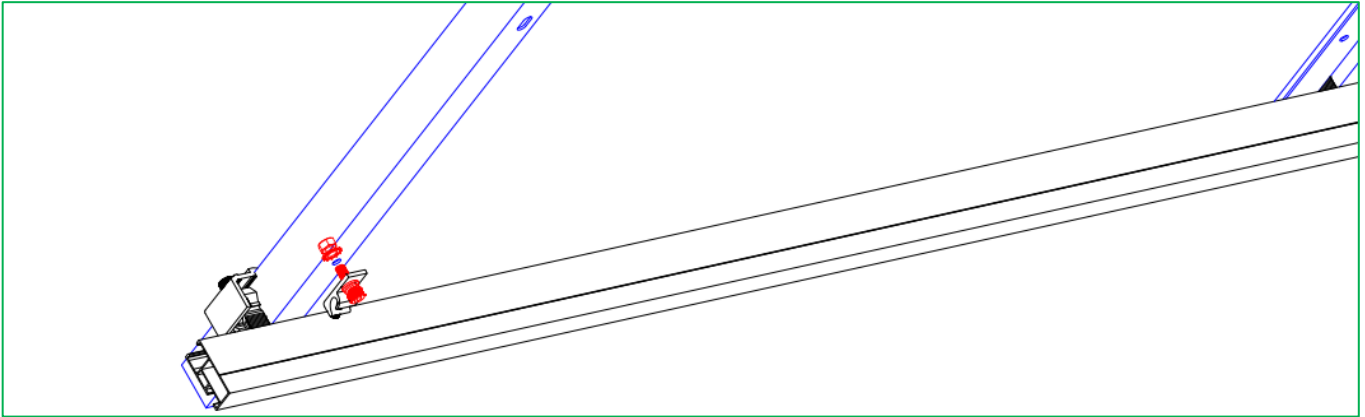


Place the panel assembly on the rail, moving the solar panel and panel clamps to make the aluminum frame of the solar panel is pressed by the mid clamp and end clamp. Adjust the solar panels to the right position, then Tighten the bolt of mid clamp and end clamp.

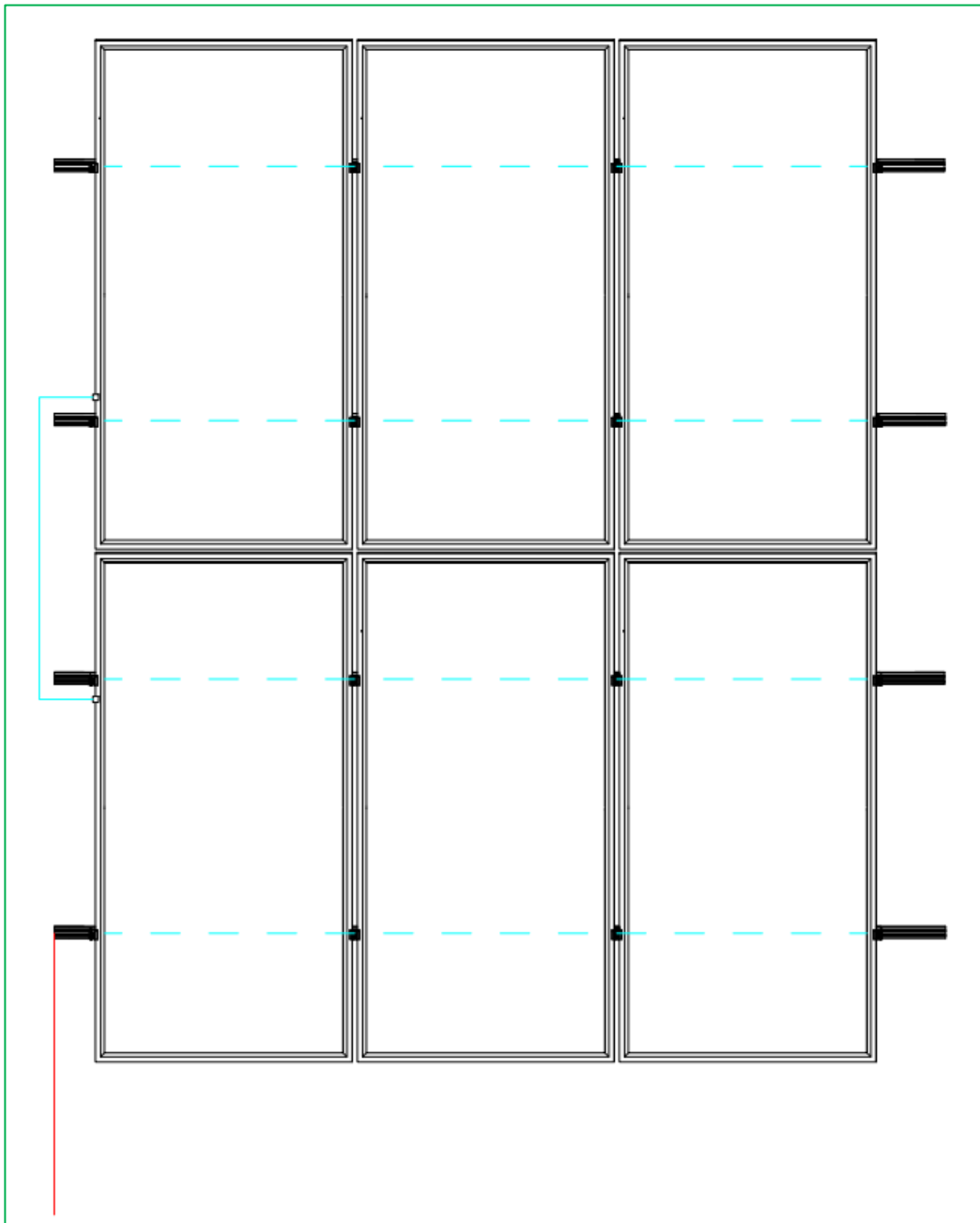


The module clamp can be universally used for 30/35/40mm solar panels. Tighten the screws of the end clamps with 15 Nm or 11ft lbs. The torque depends on the tightness of the clamp.




5.5 Grounding



Install the Ground lug to the panel frame and tighten the bolts



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-  Connection through ground lug & pin of module clamps
-  Connect module rows with a bonding jumper
-  Connection to the grounding system on site

Congratulations you have successfully completed the installation!

Thank you for choosing AnyRoof Products.

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