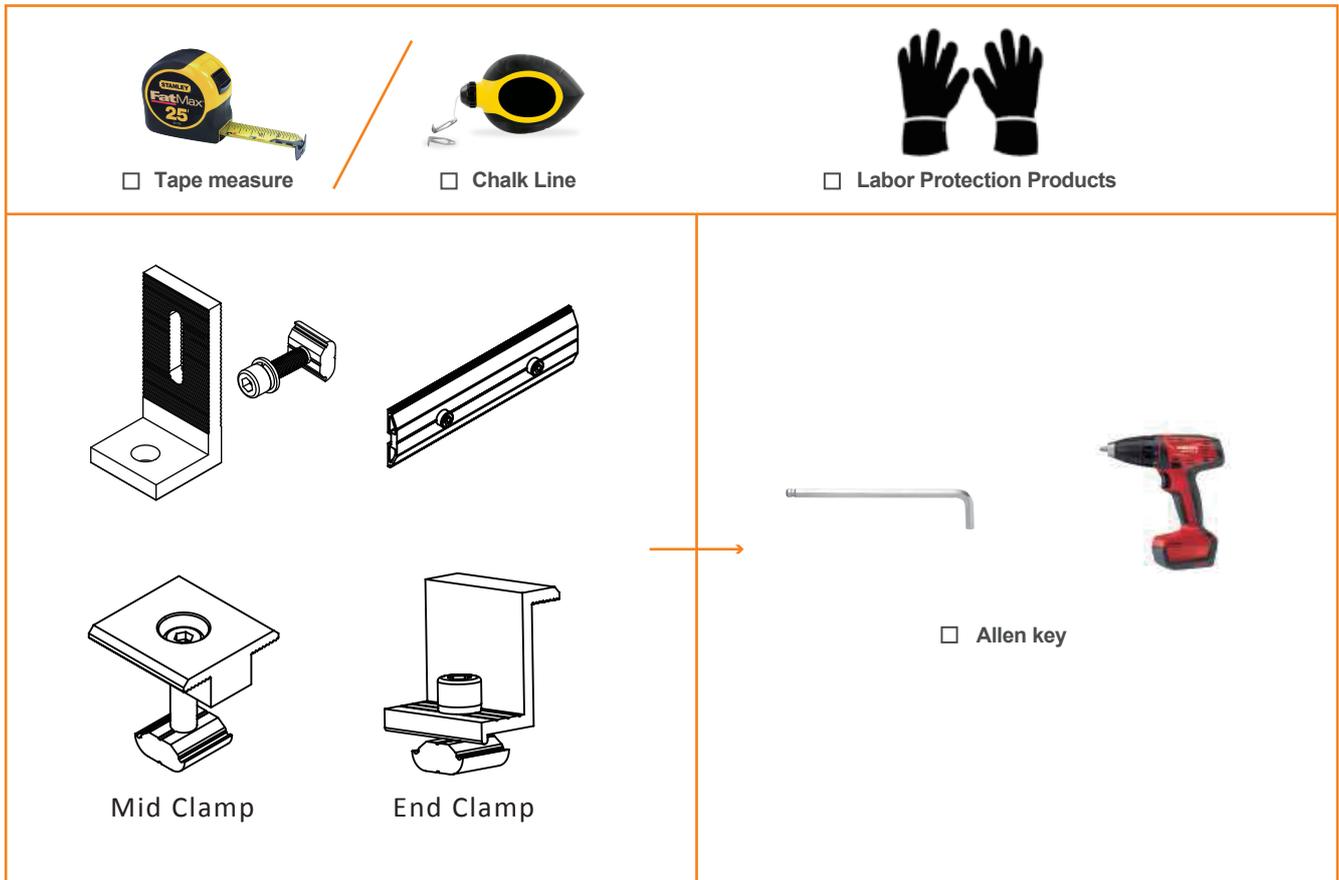


Roof Mount Installation Manual

Installation Tools

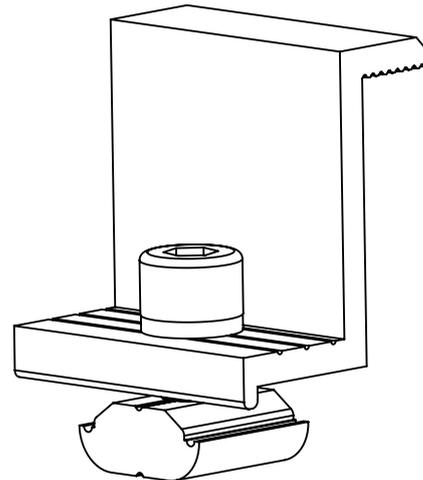
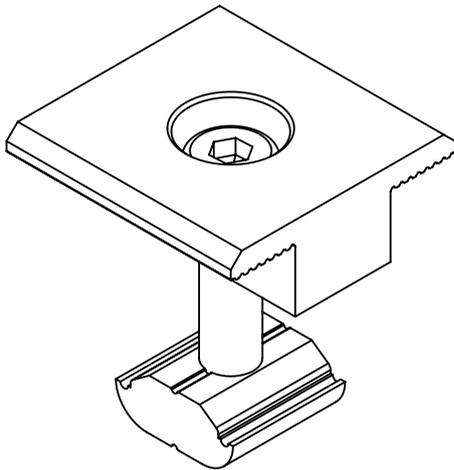
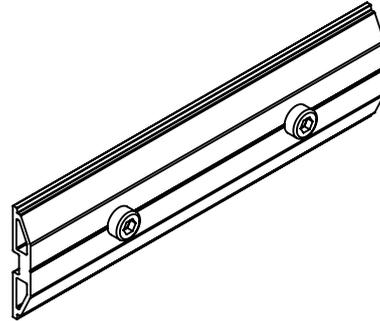
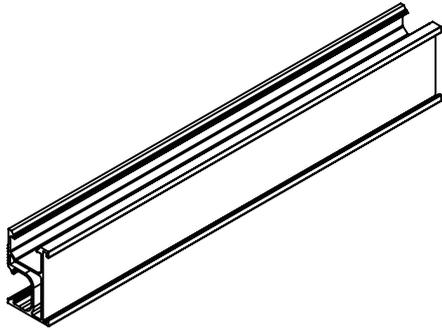


Installation Rule

Installation of the framing shall conform to relevant local government standards, manufacturer's specifications and good building practice. The roof to which the panels are to be installed shall conform to the relevant local government standards.

- Follow the risk management process prior to commencing work – that is, identify all the hazards, assess their risks and eliminate or control them.
- Consult with those involved in the work.
- Develop safe work procedures for installing solar panels, using information from the risk management process, which would include reviewing the following information:
 - Provide appropriate information and training to anyone involved in performing the work.
 - Provide appropriate tools and personal protective equipment (PPE).
 - Ensure that a system is in place to prevent or arrest falls.
 - Ensure there are adequate first aid facilities.
 - Ensure all employees are aware of the emergency procedures.

Rail 7 / Rail Splice Kit / Mid Clamp / End Clamp



INSTALLATION GUIDE -- Rail

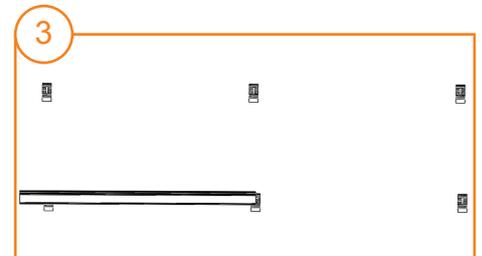


1 Install all the needed L feet onto the roof.



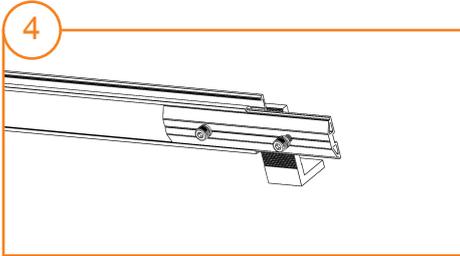
2 Install a M8*25 inner hex bolt and a rail nut loosely onto the L foot, then tilt the nut into the rail groove. Fasten the bolt to secure the rail.

M8: tighten torque is 15N.m; safe torque is 20N.m;

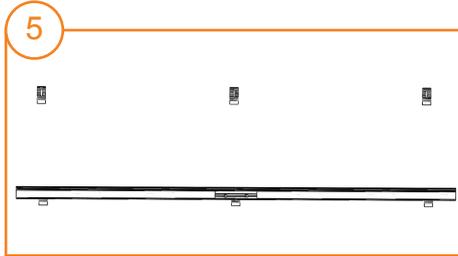


3 Secure the other end of the rail to L foot according to Step 2.

INSTALLATION GUIDE -- Rail Splice Kit

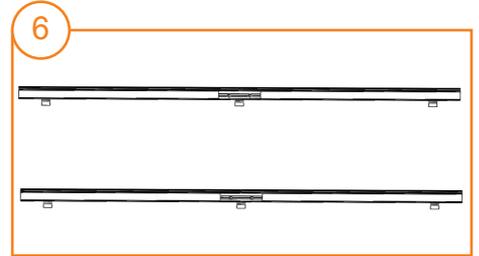


Put half of a rail splice kit into one end of the rail.



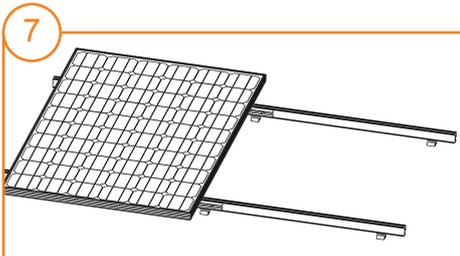
Put the other half of the splice kit into another rail which is going to connect, then fasten the two M8*14 inner hex bolts to secure the joint.

M8: tighten torque is 15N.m; safe torque is 20N.m;

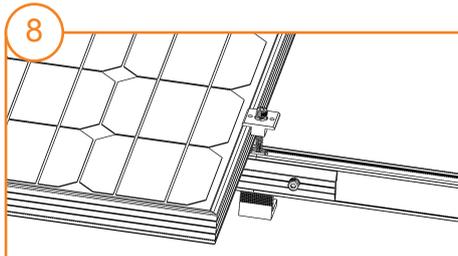


Install all the rails to L feet and use rail splice kit to connect two rails.

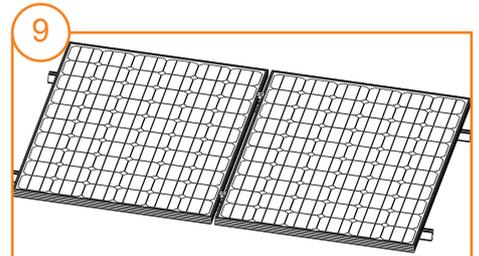
INSTALLATION GUIDE -- Mid Clamp



Put a panel onto parallel rails.



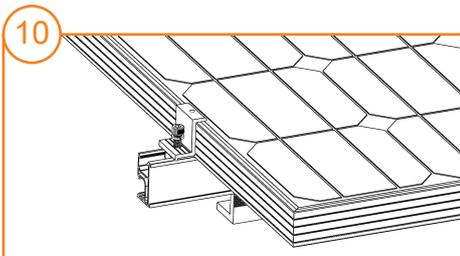
Install without tightening two mid clamps next to the panel by tilting rail nuts into the two parallel rails.



Put the second panel onto rails, then secure the 2 panels by fastening mid-clamps between them.

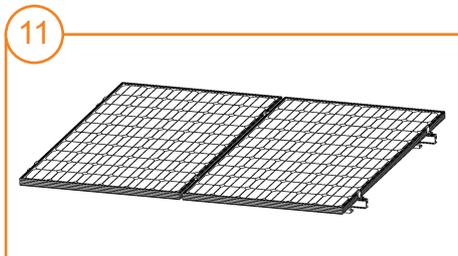
M8: tighten torque is 15N.m; safe torque is 20N.m;

INSTALLATION GUIDE -- End Clamp



Install two end clamps to secure the panel on the left side by tilting rail nuts into rails, then fasten the two M8*25 inner hex bolts of end clamps.

M8: tighten torque is 15N.m; safe torque is 20N.m;



Secure the panel on the right side of an array by two end clamps installed in the same way.