

This guide is specific to a typical roof mount installation. Please refer to the **Toledo Solar User Guide** and **Toledo Solar PV Module Mounting** documents for additional instructions.

The US manufactured Toledo Solar module differs from a typical silicon module due to its smaller form factor and lack of an aluminum frame.

The smaller size makes it easier to handle and more versatile for design and installation.

The Toledo Solar module utilizes a glass to glass construction that doesn't require an aluminum frame, which can collect dirt that decreases performance.

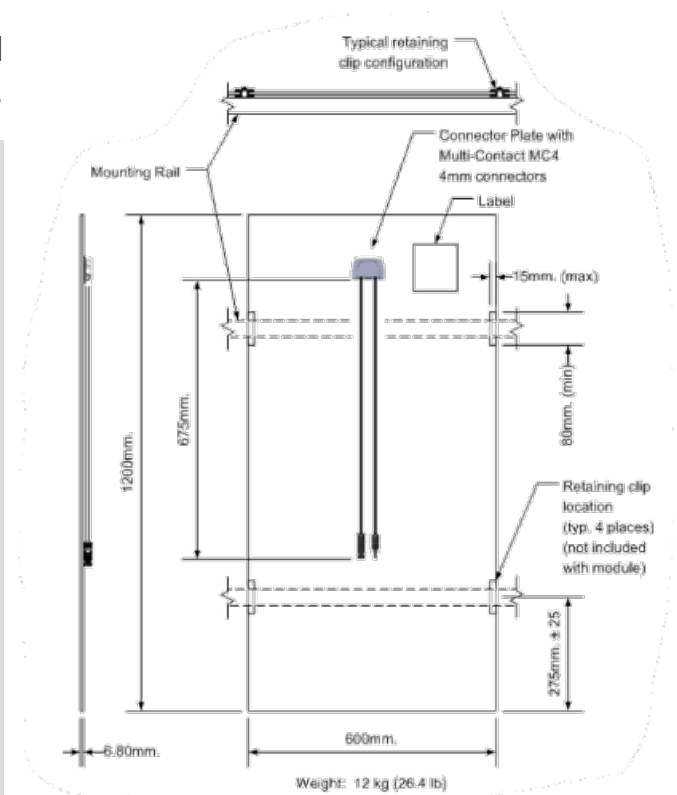
A Toledo Solar supplied clamp is used to fasten the module to the racking structure.

All other aspects of the installation are the same as a silicon module.

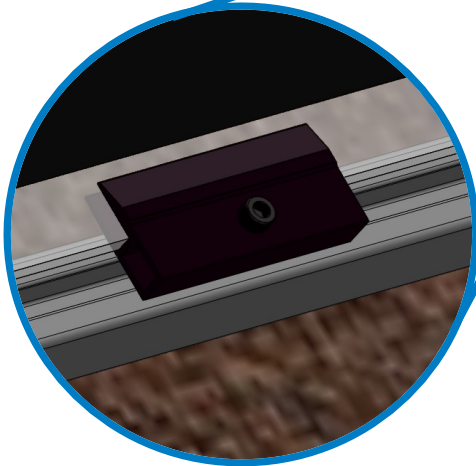
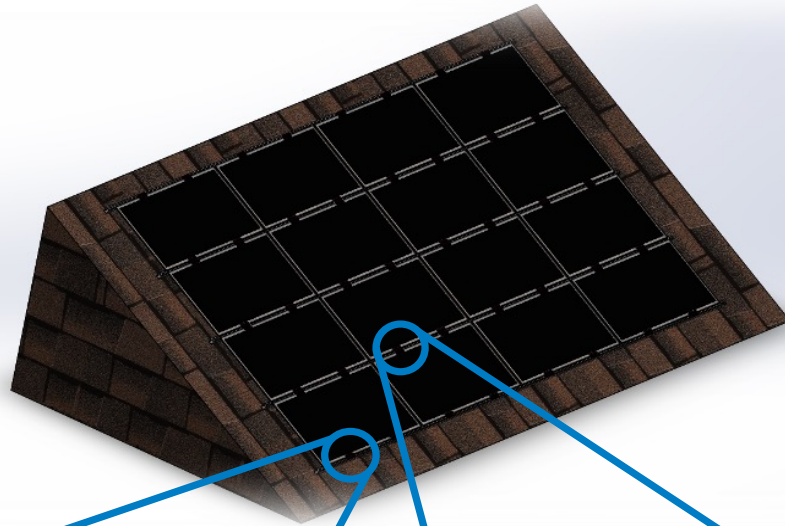


The recommended approach to a roof mounted solar array using **Toledo Solar modules**.

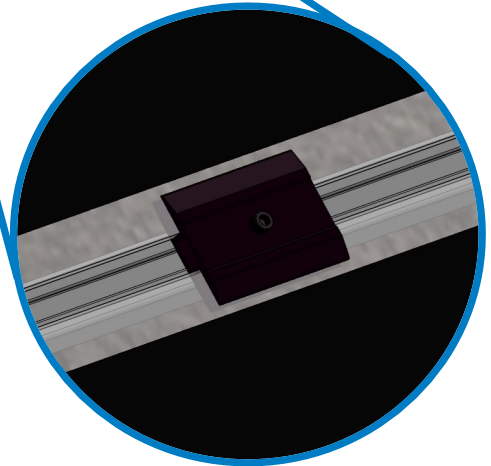
1. Consult a TSI certified installation contractor for best design and installation practices.
2. Contact your local AHJ and Utility for permit requirements.
3. Plan your roof layout, preferably keeping panels in landscape orientation for best shading response.
4. Attach horizontal rails using the appropriate fasteners/flashing for the roof type.
5. Attach panels to the rails using Toledo Solar provided end clamps and mid clamps.
6. Connect your solar panels per design, whether it be to a string inverter or using microinverters.
7. Maintain your roof-mounted solar panels.



# Sample 4 x 4 Roof Mount Toledo Solar Install

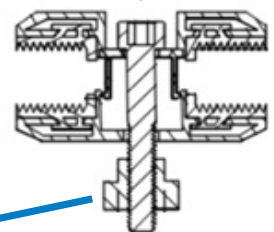
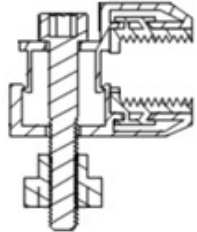
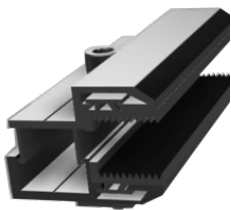


End Clamp



Mid Clamp

M6 or 1/4" socket cap



T-Nut

Form factor and size will depend on the racking system being used