

PV-ezRack Trapezoidal Installation Guide V2.0



Clenergy's PV-ezRack Trapezoidal is the most simple and cost-effective flat roof mounting system suitable for trapezoid metal sheet roof. The whole system contains only 5 components and innovative Z-modules provide a quick installation and cost-effective solution to customers.

Please review this manual thoroughly before installing your Trapezoidal system. This manual provides supporting documentation for building permit applications relating to PV-ezRack Trapezoidal system.

PV-ezRack Trapezoidal system, when installed in accordance with this guide, will be structurally adequate and will meet the DIN 1055 standards. During installation, and especially when working on the roof please comply with the appropriate safety regulations and occupational health. Please also pay attention to other relevant regulations of your local region. Please check that you are using the latest version of the installation manual, which you can do by contacting Clenergy International via email on sales@clenergy.com, or contacting your local distributor.

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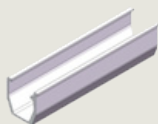
The installer is solely responsible for:

- Complying with all applicable local or national building codes, including any that may superseded this manual;
- Ensuring that PV-ezRack and other products are appropriate for the particular installation and the installation environment;
- Ensuring that the flat roof and other structural support members can support the array under building live load conditions (this total assembly is hereafter referred to as the roof rafter assembly);
- Using only PV-ezRack parts and installer-supplied parts as specified by PV-ezRack (substitution of parts may void the warranty and invalidate the letter of certification);
- Ensuring that lag screws have adequate pullout strength and shear capacities as installed;
- Maintaining the waterproof integrity of the roof, including selection of appropriate flashing;
- How to recycle: according to the local relative statute;
- How to disassemble: countermove with installation;
- Ensure that there are no less than two professional workers in panel installation;
- Ensure the installation of relative electrical equipment is performance by professional electrician;
- Ensuring safe installation of all electrical aspects of the PV array.

Tools and components

Components list

U-Support



Self-drilling screw
ST5.8*25



Rubber Pad



End Clamp



Inter Clamp



Tools and components

Installation tools

6mm Allen Key



Electrical Drill



5m Tape



8mm Socket Wrench



Nylon Wire



Mark Pen



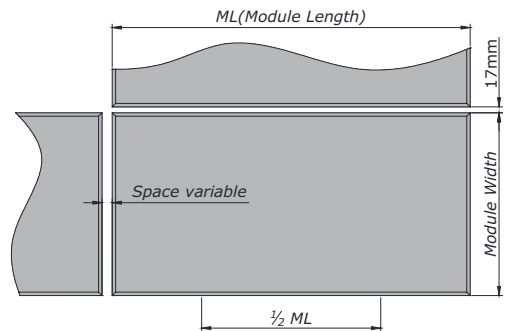
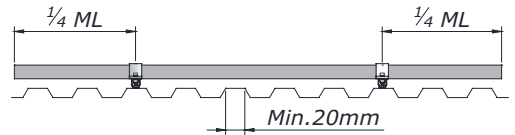
Note: These tools are only used for Racking system installation. For electrical mounting tools, please consult your system installer.

Installation

1.Preparation

Please check your local snow load and wind load if this product is suitable for your region before using Clenergy's PV-ezRack Trapezoidal system.

The fixing point of PV modules should be located in $\frac{1}{2}$ of the PV module length. However, final fixing point will be determined by on-sit engineer. The gap between PV module for the inter clamp is 18mm.

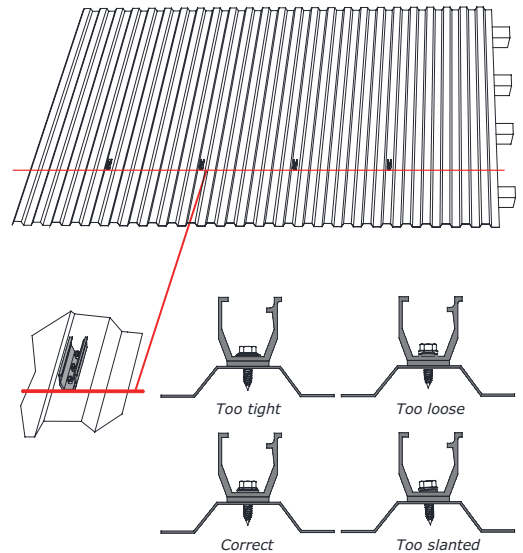


Installation

2. In general, install U support starting from lower edge of the roof. The orientation of U support is installed on the basis of the images shown on the right. Using a string to make sure all the supports are in a same line.

Two Hex flange tapping self-drilling screws will be generally used. However, 3 might be used for heavier load condition.

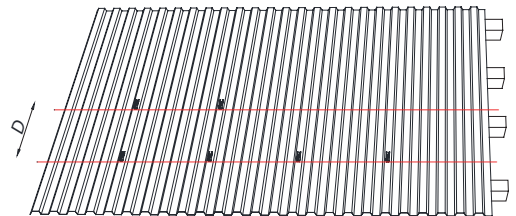
The proper installation of self-drill screws is shown on the right.



3. Measure up the vertical spacing between two rows

$D = \text{Module width} + 18 \text{ mm}$.

Install the rest of U supports with repeating the above steps.



Installation

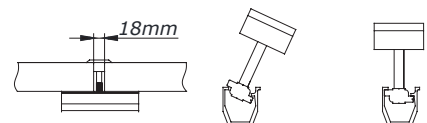
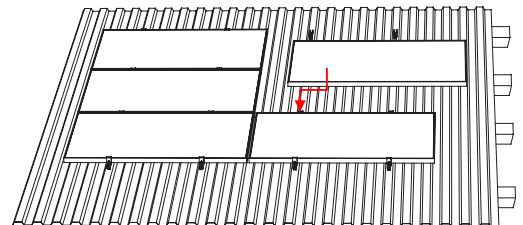
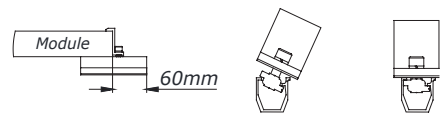
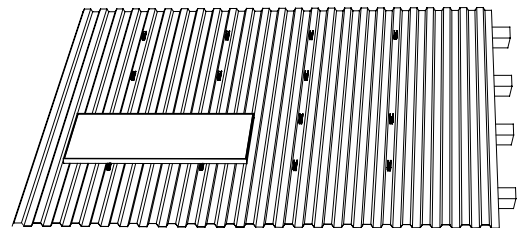
4. Mount the modules.

Install the panels by using the patented Clenergy End clamps and Inter clamps. The fixing position can be reviewed in step 1. Insert the pre-assembled end clamp into the U-support as shown as right image.

Slide another panel into one side of roof mounting system and place inter clamps firmly against the module and fasten.

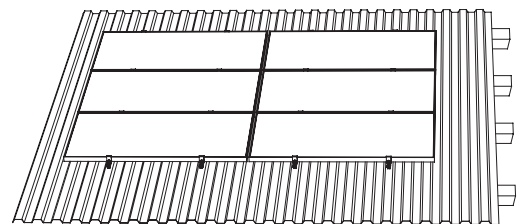
The PV modules are installed from lower side to upper side.

The recommended torque to the screws of the clamps is 20 Nm.



5. Installation is completed.

It would be great if you could email your installation images to sale@clenergy.com. We are going to select the best one to present on Clenergy homepage.



Notices and Safety Precautions

10 Years Standard Warranty Terms and Conditions, 20 Year Designed Service Life

Clenergy international co. Ltd warrants to the original purchaser ("Purchaser") of product(s) that it manufactures ("Product") at the original installation site that the Product shall be free from defects in material and workmanship for a period of ten (10) years, except for the anodised finish, which finish shall be free from visible peeling, or cracking or chalking under normal atmospheric conditions for a period of five (5) years, from the earlier of 1) the date the installation of the Product is completed, or 2) 30 days after the purchase of the Product by the original Purchaser ("Finish Warranty").

The Finish Warranty does not apply to any foreign residue deposited on the finish. All installations in corrosive atmospheric conditions are excluded. The Finish Warranty is VOID if the practices specified by AAMA 609 & 610-02 – "Cleaning and Maintenance for Architecturally Finished Aluminum" (www.aamanet.org) are not followed by Purchaser. This Warranty does not cover damage to the Product that occurs during its shipment, storage, or installation.

This Warranty shall be VOID if installation of the Product is not performed in accordance with Clenergy's written installation instructions, or if the Product has been modified, repaired, or reworked in a manner not previously authorized by Clenergy IN WRITING, or if the Product is installed in an environment for which it was not designed. Clenergy shall not be liable for consequential, contingent or incidental damages arising out of the use of the Product by Purchaser under any circumstances.

If within the specified Warranty periods the Product shall be reasonably proven to be defective, then Clenergy shall repair or replace the defective Product, or any part thereof, in Clenergy's sole discretion. Such repair or replacement shall completely satisfy and discharge all of Clenergy's liability with respect to this limited Warranty. Under no circumstances shall Clenergy be liable for special, indirect or consequential damages arising out of or related to use by Purchaser of the Product.

Manufacturers of related items, such as PV modules and flashings, may provide written warranties of their own. Clenergy's limited Warranty covers only its Product, and not any related items.