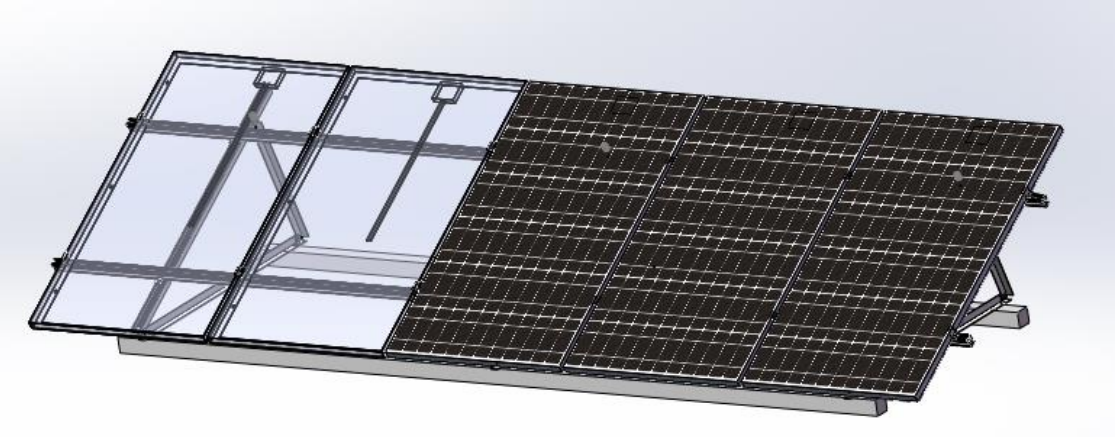
PV-ezRack
SolarTripod Lite
(AU Version)

Installation Guide **V1.1**

NO.: PZ35-IM02-10



Content

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1. Production Introduction

PV-ezRack SolarTripod Lite is a pre-assembled mounting system for residential and commercial flat roof. Manufactured from aluminium alloy ensures aesthetic appearance, lightweight and excellent corrosion resistance.

Please review this manual thoroughly prior to installing PV-ezRack SolarTripod Lite. This manual provides supporting documentation for building permit applications relating to PV-ezRack SolarTripod Lite.

When installed in accordance with this guide, the PV-ezRack SolarTripod Lite parts will be structurally adequate. During installation please comply with the appropriate occupational health and safety regulations. 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 by contacting Clenergy via email at sales@clenergy.com.au, or by contacting your local distributor.

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2. Tools

		
Allen Key 6&8 mm	Adjustable Spanner	Torque Wrench
		
5m Tape	Marker Pen	String

Note： the above tools are used for mounting system installation only and not included in Clenergy's supply scope. Any tools for electronic parts installation please consult system installer.

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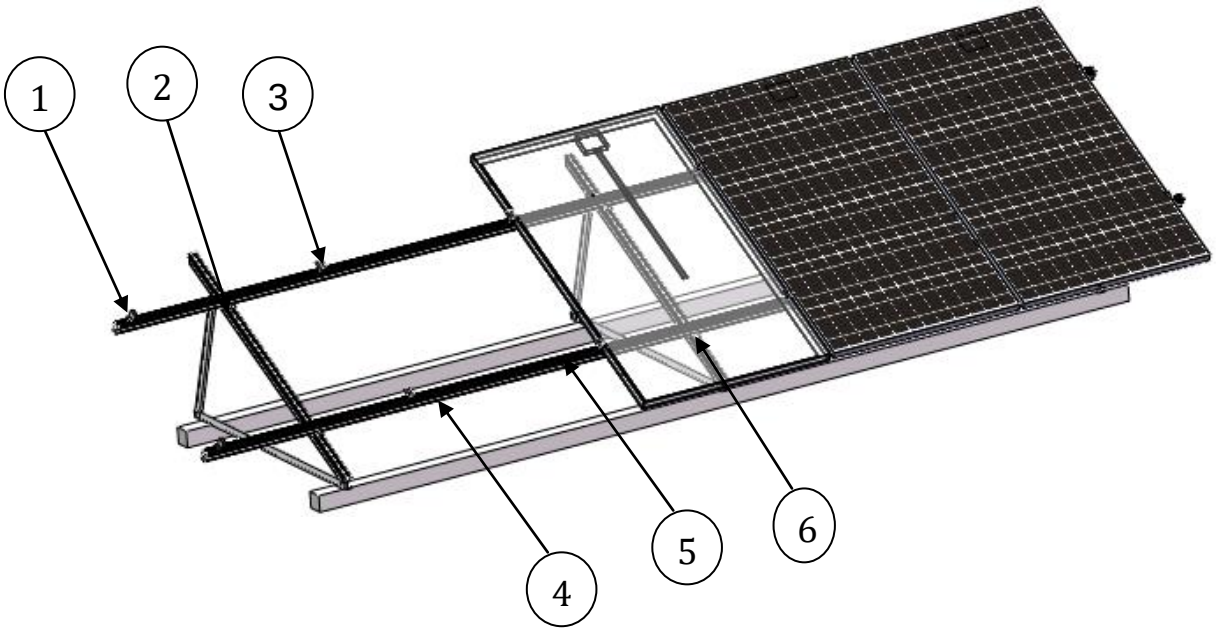
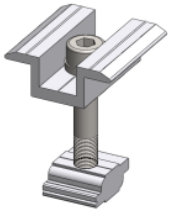
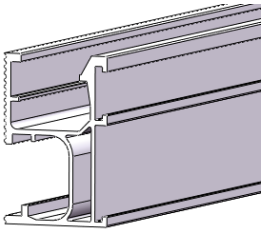
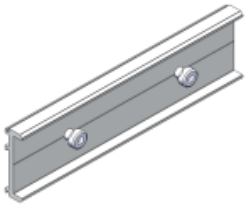
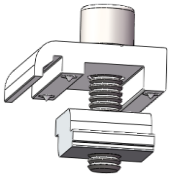
3. System Overview

3.1 Overview of SolarTripod Lite



		
1. End Clamp	2. Support for SolarTripod Lite	3. Inter Clamp
		
4. ECO-Rail	5. Splice for ECO-Rail	6. Rail Clamp for ECO-Rail with grounding/earthing pins

3.2 Stainless Steel Fastener Installation Precautions:

Improper operation may lead to bolt and nut deadlock. Follow the steps below to reduce this risk.

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1. Friction coefficient reduction

(1) Ensure the thread surface is clean and free of all dirt or contaminants.

(2) Apply lubricant (grease or #40 engine oil) to fasteners prior to tightening to avoid galling or seizing in the threads.

2. General installation instructions

(1) Apply force to fasteners in the direction of the axis of the thread.

(2) Apply force uniformly and maintain required torque.

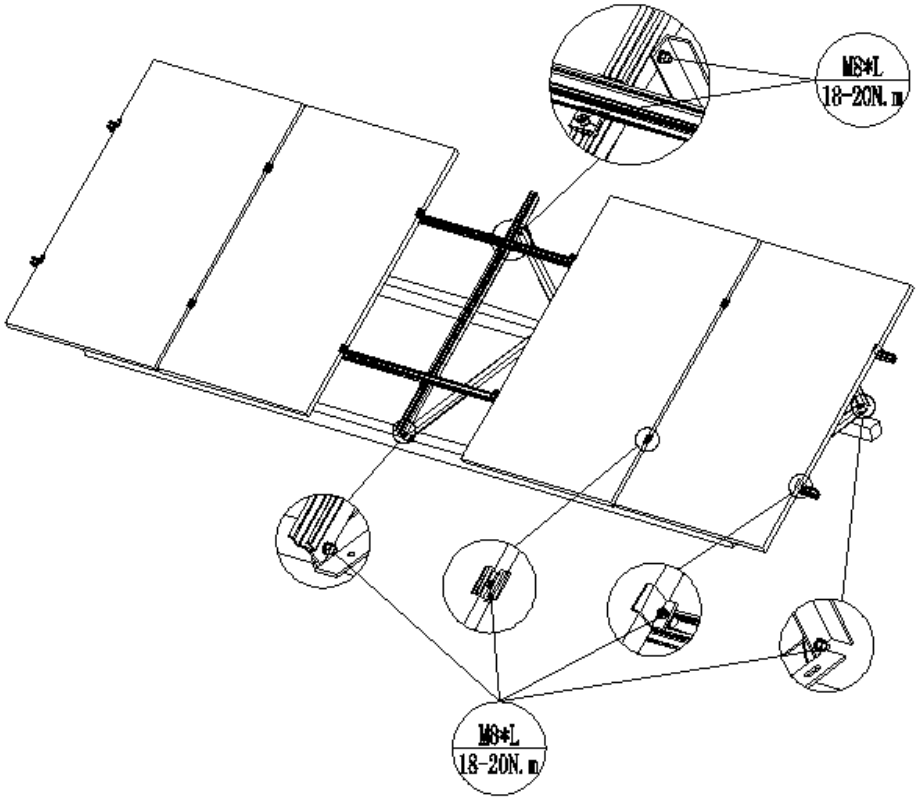
(3) Professional tools and tool belts are recommended.

(4) Avoid using electric tools for final tightening.

(5) Avoid working at high temperatures.

3. Safe Torques

Please refer to the safe torques defined in this guide as shown below. If power tools are required, Clenergy recommends only low-speed tools. High-speed and impact drivers increase the risk of bolt galling (deadlock). If deadlock occurs and you need to cut the fasteners, please ensure that there is no load on the fastener before cutting. Avoid damaging the anodized or galvanized surfaces.



4. These steps should be applied for every stainless steel nut and bolt assembly.

3.3 Installation Dimensions

All drawings and dimensions in this installation guide are for a generic reference. The PV-ezRack SolarTripod Lite is optimized to suit the specific conditions for each project and documented in a construction drawing. As a result, major

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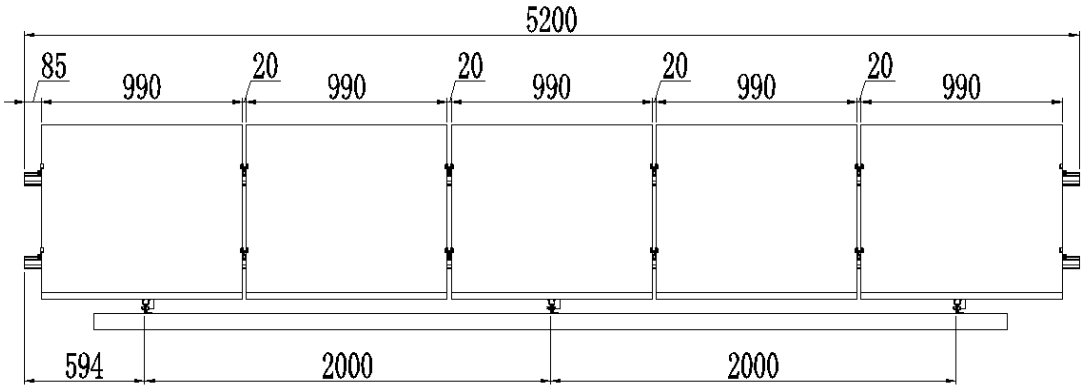
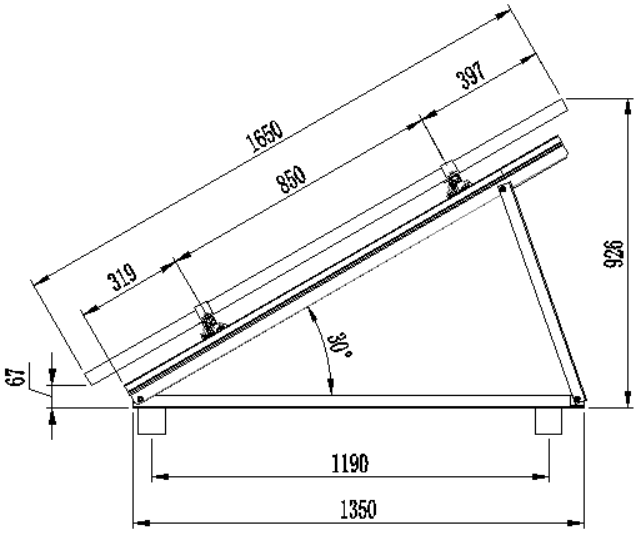
components of the Clenergy PV-ezRack SolarTripod Lite may be provided in section sizes and lengths that vary from those shown in this guide. The installation process detailed in this instruction guide remains the same regardless of the component size. If you need to perform any on-site modifications or alteration of the system in a way that differs from the construction drawing, please provide marked up drawings/sketches for Clenergy's review prior to modification for comment and approval.

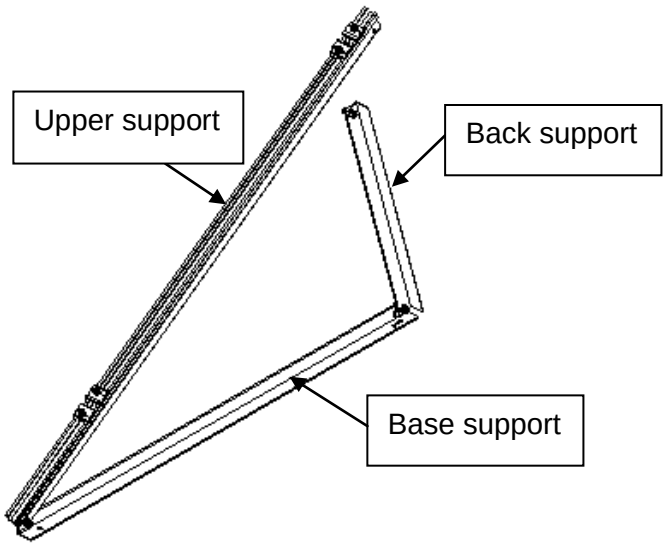
3.4 Installation Planning



Front View



Side View



Axial View

Use PV modules 1650x990x40 (1 row*5 arrays; installation angle is 30°) as example to illustrate how to install PV-ezRack SolarTripod Lite. All dimensions relating to engineering have to conform to technical drawings for specific project.

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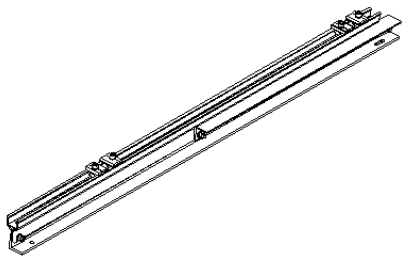
4. Installation Instruction

4.1 Install Support for SolarTripod Lite

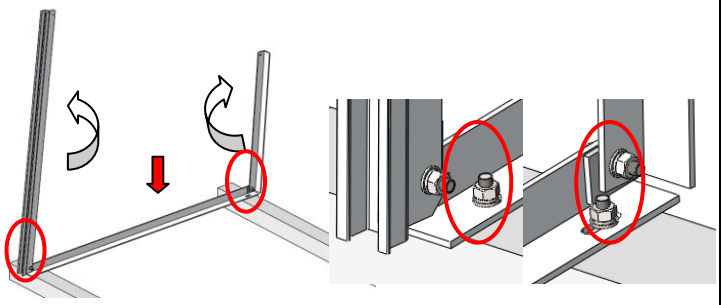
4.1.1 According to installation planning, unfold the Support for SolaTripod Lite, and use M8 washer, spring washer and nut to fix Base Support on position to be installed as shown in Figure 1 and 2. Do not fasten the bolts tightly for easy adjustment.

Remark：
1. In the fixation scheme of the tripod, bolts for fixing Base support can be embedded ones or expansion ones and its type and length shall be determined according to actual situation of project.
2. Other fixation methods of tripod are determined according to actual situation of project.

Recommended torque:
18-20 N·m for M8 bolt**.**



（Figure 1）

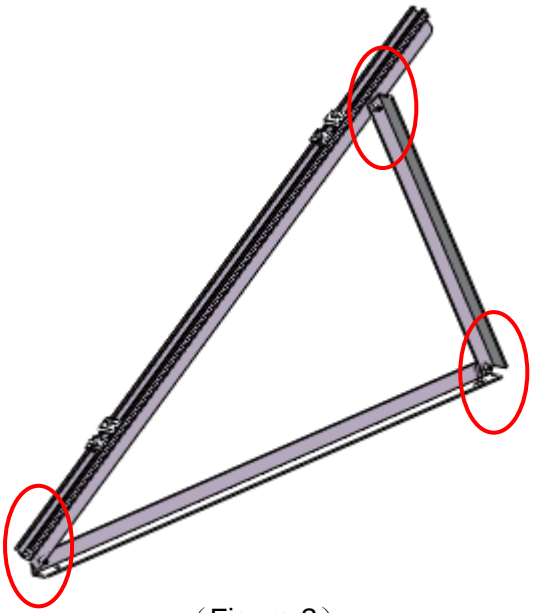


（Figure 2）

4.1.2 Use bolt M8*25, M8 plain washer, washer and nut to connect Back Support and Upper Support, and fasten tightly. And then fasten other bolts tightly as shown in Figure 3.

Recommended torque:
18-20 N·m. for M8 bolt

Note：The direction of all M8*25 bolt heads are as same as installed bolt heads on Base support of Support for Solar Tripod Lite.



（Figure 3）

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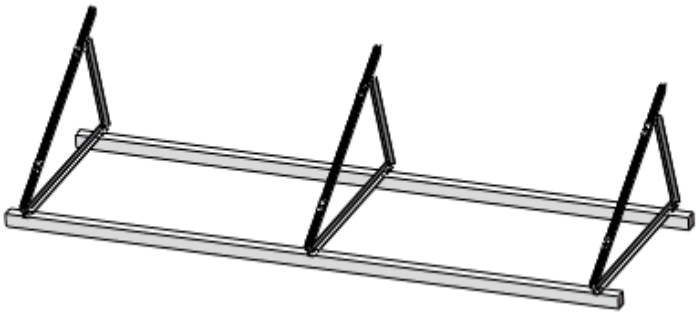
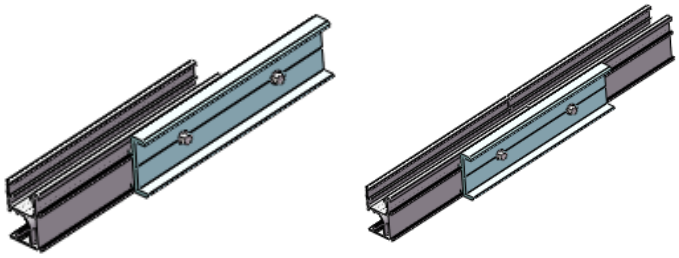
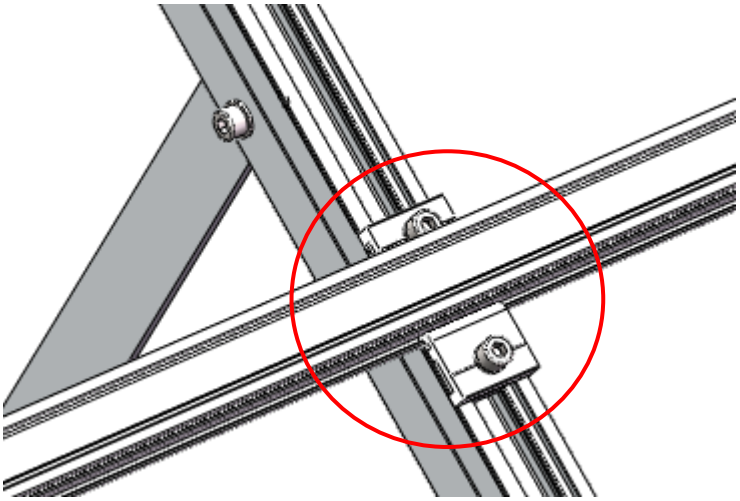
4.1.3 Repeat the above steps to fix other Supports for Tripod Lite of the same unit. Adjust installation position of all Supports to guarantee lower end faces of Upper Support are on the same line and installation faces of Upper Support are on the surface of same height. Fasten all bolts tightly as shown in Figure 4. Recommended torque : 18-20 N·m. for M8 bolt	 （Figure 4）
4.2 ECO-Rail Installation	
4.2.1 Use Splice for ECO-Rail to connect ECO-Rails and fasten with M8 bolt assemblies tightly as shown in Figure 5. Recommended torque : 18-20 N·m. for M8 bolt	 （Figure 5）
4.2.2 Use Rail Clamp for ECO-Rail or with grounding/earthing pins to fix the connected ECO-Rail on the Upper Support of Support and fasten bolts tightly as shown in Figure 6. Recommended torque: 18-20 N·m for M8 bolt	 （Figure 6）

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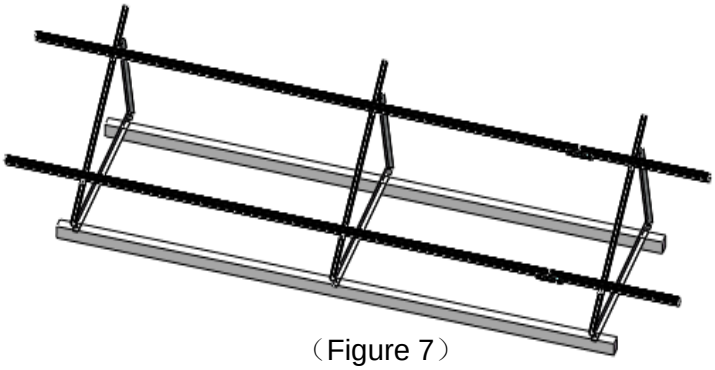
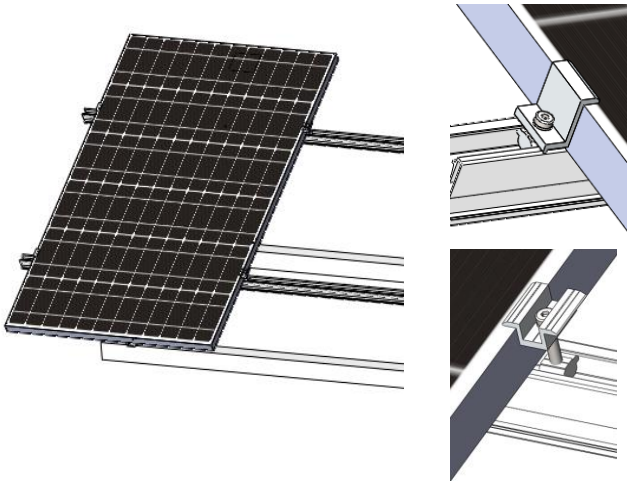
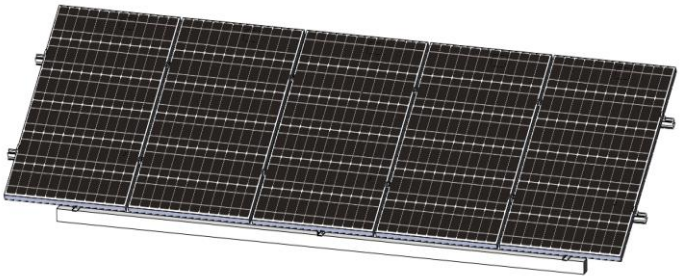
4.2.3 Repeat the above operations to install other ECO-Rails. The ECO-Rails installation are completed as shown in Figure 7.	 （Figure 7）
4.3 PV Module Installation	
4.3.1 According to engineering drawing, place the first PV module on appropriate position. Slide the End Clamp and Inter Clamp tightly against the PV module and fasten them as shown in Figure 8. Recommended torque for M8 bolts is 18 ~20 Nm.	 （Figure 8）
4.3.2 Repeat above operation to install other PV modules one by one. The whole system is completed as shown in Figure 9.	 （Figure 9）

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5. Warranty

10 year limited Product Warranty, 5 year limited Finish Warranty

Clenergy 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.

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