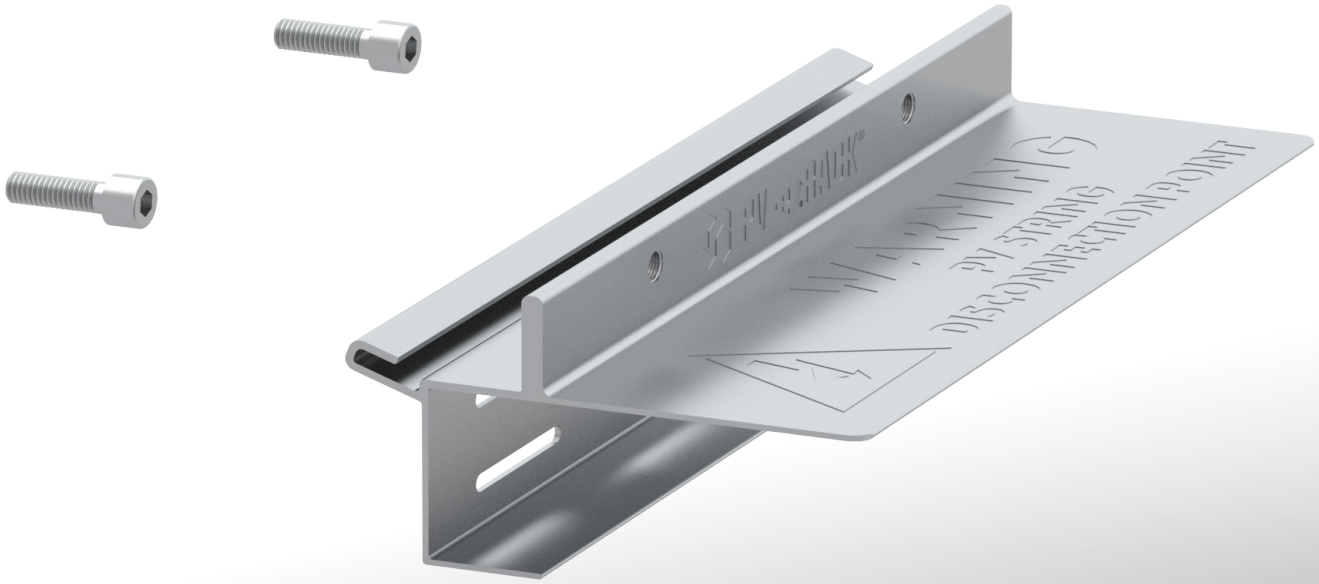
PV-ezRACK®

Solar DC Connectors Shroud

Installation Guide V1.0



SOLAR ROOF

Last Updated - Oct. 2022

Introduction

Clenergy PVezRack® SolarRoof DC Connectors Shroud is an accessory in the PVezRack® rooftop PV mounting system, designed for PV String Disconnection Point defined in AS/NZS 5033-2021 to protect DC connectors against weather and water. With Clenergy innovation design, the DC Connectors Shroud is readily fixed to the PV module frame.

Please review this installation guide thoroughly before installing PVezRack® SolarRoof DC Connectors Shroud.

List of contents

During installation, especially when working on the roof, please comply with the Occupational Health and Safety regulations. Please also pay attention to any other relevant State or Federal regulations. Please check that you are using the latest version of the Installation Guide by contacting Clenergy Australia via email at tech@clenergy.com.au or contacting your local distributor in Australia.

The installer is solely responsible for:

- Complying with all applicable local or national building codes, including any updates that may supersede this manual;
- Ensuring that PVezRack® and other products are appropriate for the particular installation and the installation environment;
- Using only PVezRack® parts and installer-supplied parts as specified by the PVezRack® project plan (substitution of parts may void the warranty and invalidate the letter of certification);
- Recycling: Recycle according to relative local statutes;
- Removal: Reverse installation process;
- Ensuring the installation of related electrical equipment is performed by licensed electricians;
- Ensuring safe installation of all electrical aspects of the PV array, including adequate earth bonding of the
- PV array and PVezRack® SolarRoof components as required in AS/NZS 5033-2021;
- Ensuring to meet all installation requirements of PV String Disconnection Point as defined in AS/NZS 5033-2021;
- Verifying the compatibility of the installation and considering preventing electrochemical corrosion between dissimilar metals. It may occur between structures and the building and also between structures, fasteners and PV modules, as detailed in AS/NZS 5033-2021.

Product Warranty:

Please refer PV-ezRack® Product Warranty on our website.

Tools and Components

Tools

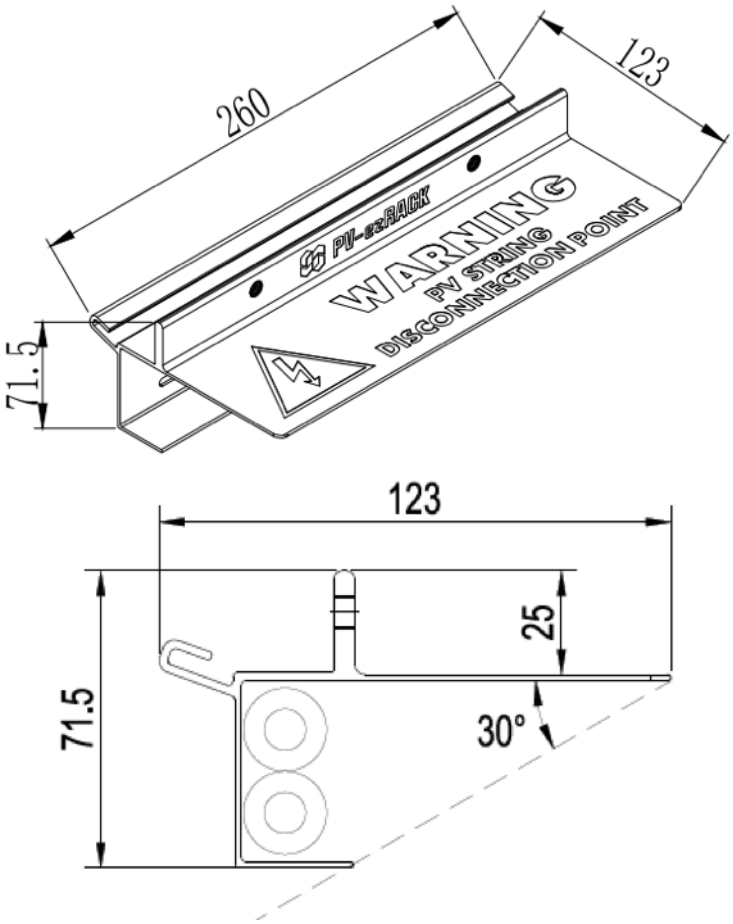
		
Screw Driver (For M8Hexagon Socket Screw)	**Torque Spanner**	**Marker Pen**

Components

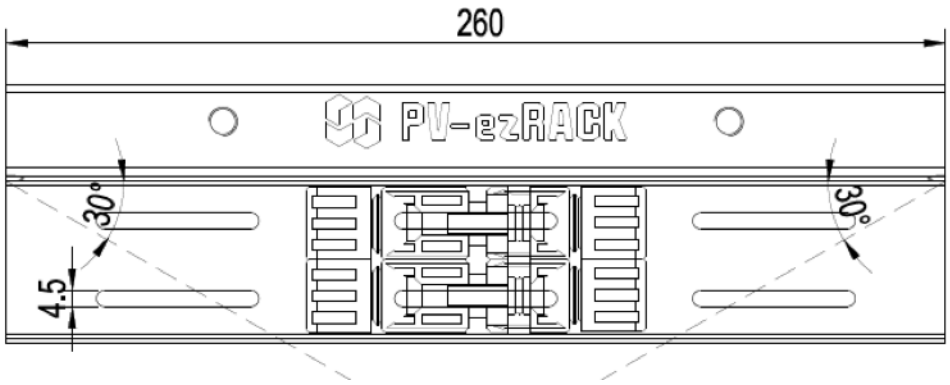
	
DCS-SR260/123 Solar DC Connectors Shroud	**DCS-SR260/123/BA** Solar DC Connectors Shroud, Black Anodised

System Overview

Overview of SolarRoof Solar DC Connectors Shroud

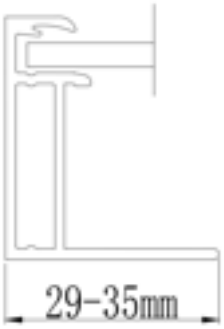


Side View



Front View

Note:
Solar DC Connectors Shroud is suitable for PV module frame (underside) with width range of 29-35 mm (as shown in the below image).



Precautions during Stainless Steel Fastener Installation

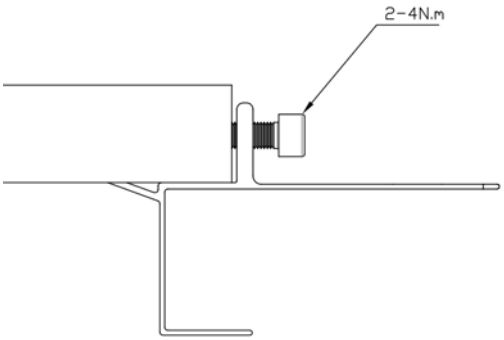
Improper operation may lead to a deadlock of nuts and bolts. The steps below should be applied for stainless steel nut and bolt assembly to reduce the risk.

General installation instructions:

(1) Apply force to fasteners in the direction of the thread.
(2) Apply force uniformly to maintain the required torque.
(3) Professional tools and tool belts are recommended.
(4) In some cases, fasteners can seize over time. As an option, apply lubricant to fasteners before tightening to prevent galling or seizing of thread.

Safe Torques

Please refer to safe torques defined in this guide, as shown in the figure below. Fasteners with defined torques have two functions: to provide sufficient structural fixing of the shroud to the PV module frame and to provide earthing continuity between the PV module frame and the shroud. In case power tools are required, Clenergy recommends using low speed only. High speed and impact increase the risk of bolt galling (deadlock). If a deadlock occurs and you need to cut the fasteners, ensure there is no load before cutting them. Avoid damaging the anodised or galvanised surfaces.

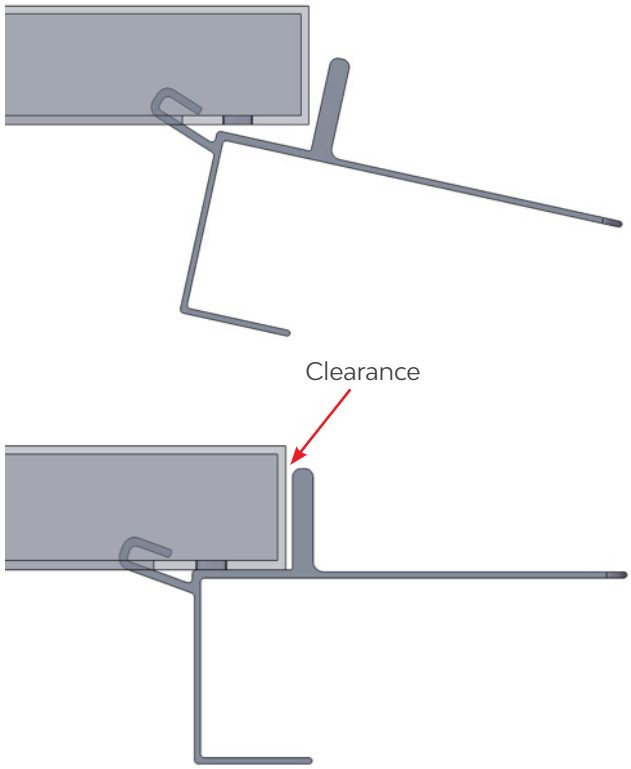


Installation Instructions

Determine the position of the Solar DC Connectors Shroud according to PV String cabling design.

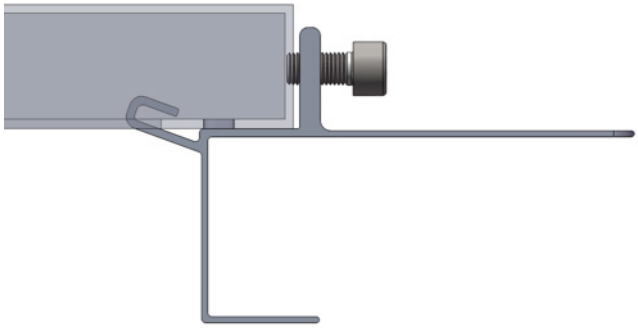
Incline the shroud and hook it into the underside frame of the PV module.

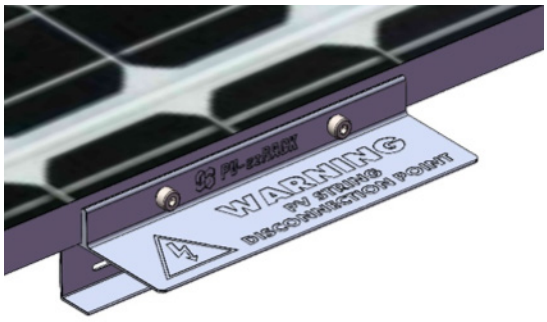
Note: It is acceptable to have some clearance between the module frame and the side face of the Connectors Shroud.



Fix the Solar DC Connectors Shroud to the module frame with two M8x16 Hexagon bolts.

The recommended fasten torque of the bolt M8*16 is 2~4 N•m





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