



SolarRoof B50 Rail Solution

Robust Solution for PV Installation on Pitched Roof

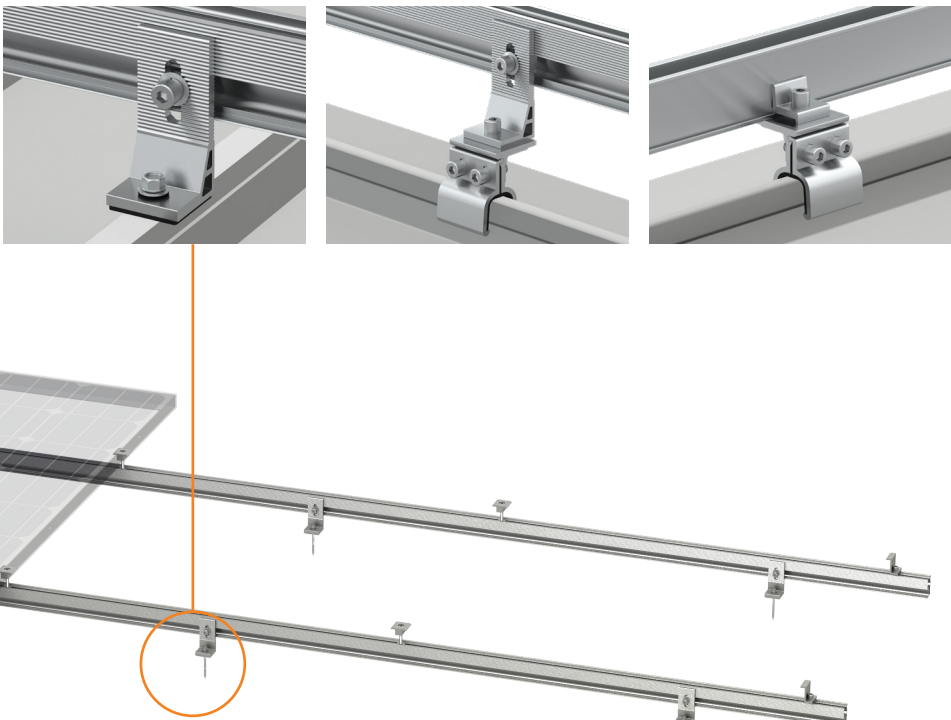


SolarRoof B50 Rail Solution

PV-ezRack® SolarRoof is a universal solution designed for PV-module installation on tin roof. Thanks to our Interfaces, Rails and Clamps with unique sectional property, PV-ezRack® SolarRoof System could offer robust structure and long lifecycle. Available with penetrative and non-penetrative solution on a large variety of roof types.







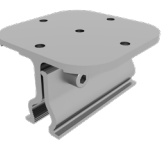







Main Benefits

Quick and Easy Installation
Versatile Klip-lok Interface



Technical Details

| Item | Part Number | Description | Torque (N·m.) |
|------|-------------------|--|----------------------------|
| 1 | ER-EC-ST35 | PV-ezRack End Clamp, Standard 35mm | M8: 16-20 N·m. |
| 2 | ER-IC-ST35/U18 | Module Inter Clamp, Standard, for Frame Height 32- 35mm M8: with 18mm U-shape profile | M8: 16-20 N·m. |
| 3 | ER-SP-B50 | PV-ezRack Splice for B50 Rail | M8: 4 N·m. |
| 4 | All Kliplok | PV-ezRack SolarRoof,Interface for Standing Seam 20 Klip- Lok Roofs(with threaded hole) | M8: 16-20 N·m. |
| 5 | L feet on kliplok | PV-ezRack SolarRoof, Tin Interface with M8x28 Bolt and for Threaded Holes | M8: 16-20 N·m. |
| 6 | EZ-GL-STII | PV-ezRack Grounding Lug II | M8: 16-20N·m. M6: 5-6 N·m. |

| | | | | |
|--|---|---|---|--|
|  ER-EC-ST35/L50 End Clamp, Length 50mm |  ER-IC-ST35/U18/L50 Inter Clamp, Length 50mm |  ER-R-B50 B50 Rail |  ER-SP-B50 Splice for B50 Rail |  ER-I-51/SM6.3/25 Tile Interface |
|  ER-I-02/SM6.3/35 Flat Tile Interface |  I-05A-6.3/85/CS-25 Tin Interface A with Carbon Steel Self-drilling Screw 6.3X85 for Metal Purlin |  I-05A-8/25/TH Tin Interface A with M8x25 Bolt |  ER-I-05A-8/25/HB/MP Tin Interface A with Hanger Bolt M8*150 for Metal Purlin |  ER-I-13-TH Klip-lok Interface for Hidden 26 |
|  ER-I-16-TH Klip lok interface for Standing seam 22 |  ER-I-17-C Klip lok interface for standing seam 8 |  ER-I-18-TH Interface for Standing Seam 20 |  ER-I-19 Klip-lok interface for Angularity 18 |  ER-I-20A-TH Klip-lok interface for Angularity 18A |
|  ER-I-31/45/M8 Klip-lok Interface 400- 700HS |  ER-I-32/45/M8 Klip-lok Interface 406 with U-opening |  ER-I-47 Klip lok Interface 326 |  ER-TL-10/15/6.3/85 Tilt legs, adjustable 10-15 degree |  TL-10/15/L/PS/6.3/85 Tilt Leg with L-feet, Adjustable, 10-15Degree, Pre-assembled |
|  EZ-GL-STII Grounding Lug II |  EZ-GC-ST Grounding Clip |  EZ-CC-PV/2 Universal Cable Clip for PV Panels for holding 2 cables |  ER-RC-AE/01 Rail Clamp for Aeri Rail without Bolt | |

MGE POWER

WAREHOUSE

Warehouses in Thailand have a stock of more than 50 MW and we also have a delivery service for lifting the product to the job site as well.





CERTIFICATE

ROOF MOUNT SOLUTIONS

RELIABLE, ROBUST ROOF MOUNTING SYSTEM WITH HIGH QUALITY COMPONENTS DESIGNED FOR THE HARSHTEST CONDITIONS.

WE STRICT QUALITY CONTROL.
SOLAR MOUNTING SYSTEM

[illegible]

|  <h1 style="text-align: center;">AUTHORIZATION TO MARK</h1> | |
|--|---|
| <p>This authorizes the application of the Certification Marks (CM) shown below to the models described in the Product's Certificate section when made in accordance with the conditions set forth in the Certification Agreement and Labeling Report. This authorization also applies to multiple later model(s) identified on the continuation page of the Labeling Report.</p> <p>This document is the property of Intertek Testing Services and is not transferable. The certification mark(s) may not be applied only at the location of the Party Authorized To Apply Mark.</p> | |
| Applicant: | Clematis (Xi'an) Technology Co., Ltd. |
| Manufacturer: | Clematis (Xi'an) Technology Co., Ltd. |
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| Party Authorized To Apply Mark: | Sense as Manufacturer |
| Report Issuing Office: | Intertek Testing Services Shanghai |
| Control Number: | 4005634 |
| Authorized by: | Thomas J. Patterson, Certification Manager |
|  | |
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| Intertek Testing Services Inc. N/A 345 East Higgins Road, Arlington Heights, IL 60005 Telephone 800-543-5887 or 847-438-5887 Fax 815-253-1672 | |
| Standard(s) | Grounding and Bonding Equipment(ULA), 487-2013, Tenth Edition, Dated March 22(2013) Grounding and Bonding Equipment(CSA C22.2 No.41-13, Sixth Edition, Dated March 22(2013)) |
| Product: | PV-silicon Mounting clip |
| (Brand Name: | Shengyu (Jiangsu) |
| Mark(s): | CSA ETL |

| | | | |
|--|--|--|--|
|  | | <h1 style="text-align: center;">AUTHORIZATION TO MARK</h1> | |
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| <p>This document is the property of Intertek Testing Services and is not transferable. The certification mark(s) may be applied only at the location of the Party Authorized To Apply Mark.</p> | | | |
| Applicant: Cienery (Xiamen) Technology Co. Ltd. | | Manufacturer: Cienery (Xiamen) Technology Co. Ltd. | |
| Address: No. 999-1009 Moran Avenue, Xiang'an District Xiamen 351101 | | Address: No. 999-1009 Moran Avenue, Xiang'an District Xiamen 351101 | |
| Country: China | | Country: China | |
| City: Qianxi | | City: Qianxi | |
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| Email: garic_guo@cienery.com.cn | | Email: garic_guo@cienery.com.cn | |
| Party Authorized To Apply Mark: Same as Manufacturer | | Party Authorized To Apply Mark: Same as Manufacturer | |
| Report Issuing Office: | | Report Issuing Office: | |
| Control Number: 4005634 | | Authorized by: Thomas J. Fanning, Certification Manager | |
|  | | | |
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| <p>545 East Algonquin Road, Arlington Heights, IL 60005 Telephone 800-345-3881 or 847-439-9867 Fax 812-263-1672</p> | | | |
| <p>Intertek Testing Service Inc. No. 145</p> | | | |
| <p>Grounding and Bonding Equipment/USA, 487-2011, Tenth Edition, dated March 22, 2013)</p> | | | |
| <p>Standard(s): Grounding and Bonding Equipment/CSA C22.2 No. 41-13, Sixth Edition, dated March 22, 2013)</p> | | | |
| <p>Product: PivotBall Grounding Log</p> | | | |
| <p>Brand Name: Cienery (Xiamen)</p> | | | |
| <p>Model(s): PZ-C-01</p> | | | |

The image displays a collage of ISO 9001:2015 certification certificates. At the top, a large certificate from SGS is visible, issued to Cienergy (Xiamen) Technology Co., Ltd. for its design, manufacture, and sale of photovoltaic recycling products. Below this, several other certificates are shown, including one from BUREAU VERITAS for a power supply system, and another from UKAS for a mechanical engineering company. The certificates are arranged in a way that shows their common structure and the ISO 9001:2015 standard they all adhere to. The background is a light blue gradient with a faint world map.

 **gamcorp**
— innovation in design and construction —
Gamcorp (Melbourne Pty Ltd) A/C 141 074 941 A/B N 71 980 240
1/19 Anthony Drive, South Yarra VIC 3147, Australia info@gamcorp.com.au
Tel: 03 9861 0333 Fax: 03 9861 9325



Our Ref: 23716
8 February 2013

Clenergy Australia
18/20 Strand Street
Clynton North VIC 3168

Clenergy-Kip-Lok Type Clamp PV Mounting System for use within Australia

Gamcorp (Melbourne) Pty Ltd, being Structural Engineers within the meaning of Australian Building Regulations, have carried out a structural design check of Clenergy-Kip-Lok Type Clamp PV Mounting System for use in Australia. The design check has been based on the information by Gamcorp (Melbourne), and Uplift Load Testing Report (NPT-11/022) by Melbourne Testing Services and PV-estack SolarRoof_Kip_Lok_Coat Compliance Installation and Spacing Guide Nr. 2/3.

We find the Clenergy-Kip-Lok Type Clamp PV Mounting System to be structurally sufficient for use at this location based on the following conditions:

- Wind Loads to AS/NZS1170:2011 ambs 2-2012
- Wind Terrain Category 2,3
- Wind average recurrence interval of 50 years
- Wind Region A, B, C
- Building height up to 20m
- Max. Solar Panel length 1.58 m (for larger panel, refer to the notes on the bottom of the table)

Refer to attachment summary table for interface Spacing.

Construction is to be carried out strictly in accordance with the manufacturers instructions. This work was designed in accordance with the provisions of Australian Building Regulations and in accordance with sound, widely accepted engineering principles.

Yours faithfully,
Gamcorp (Melbourne) Pty Ltd




Martin Gamble
Managing Director
MACO

Michael Bantock
NIEA/ASB, CEng, MBE
Rugby, NSW 2122994,
R16-22090, RBP EC-38461, MY BP 1396735

Page 1 of 1
ISO 9001:2008 Registered firm
Certificate No. AU1222

bre

Certificate of Approval
 Certificate Number: MCS 100237

Issued to: 01

Clenergy Europe Limited
 Clenergy Court
 Blisworth Mill Farm, Stoke Road
 Blisworth
 Northamptonshire
 NN17 3DB

Issued in compliance with the requirements of the following:

MCS 010-Issue 1.5
 Factory Production Control Requirements

MCS 012: Issue 2.1
 Product Certification Scheme Requirements: Pitched Roof
 Installation Kits

This facility is authorised to use the BRE Global Certification Mark and the MCS Certification Mark in association with the following products:

Products

Please see Appendix for details

This certificate and appendix is maintained and held in force through periodic review and verification.

| Issued to | Licence Category | 20 May 2016 | 20 May 2019 |
|-----------------|-------------------------|---------------|--------------------|
| Issued to | Issued to | Date of Issue | Date of Next Issue |
| Glen Energy Ltd | Domestic Sewerage, MCS1 | 20 May 2016 | 20 May 2019 |





BRE Global Inc. 2016
 Page 1 of 4



12 Year Warranty

Material AL6005 T5 anodised 10-12 micron.

A full standard pallet for parts is 1200*1100*1800mm

A full standard pallet for 4.2m rails is 4200*1100*1000mm

A full standard pallet for 5.2m rails is 5200*1100*1000mm

Check out our SolarRoof ECO-Rail installation video:

Residential Solar Project: <https://youtu.be/8YnbLzo7Mtk>

Commercial Solar Project: <https://youtu.be/6FFYZJwNBDw>



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A Clenergy Technologies Company

