

## Evaluation Report

### L-Mount Series Solar Support System

**Manufacturer:**  
**Quick Mount PV**

*for*

**Florida Product Approval**

**# FL 29846.1**

**Florida Building Code 6th Edition (2017)**

**Per Rule 61G20-3**

**Method: 2 - B**

**Category: Structural Components**

**Sub - Category: Anchors**

**Product:** *Quick Mount PV L-Mount Series*

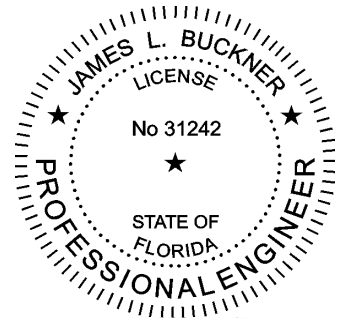
**Type:** **PV Anchor System**

**Prepared by:**

James L. Buckner, P.E., SECB  
Florida Professional Engineer # 31242  
Florida Evaluation ANE ID: 1916  
Report No. 19-139-01-L-ER  
Date: 6 / 20 / 19

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Facsimile of digital copy signed by  
James L. Buckner, P.E.  
Electronically signed and sealed documents shall  
comply with the provisions of FAC Rule 61G15-23.



A handwritten signature in blue ink, appearing to read "James L. Buckner".

<b>Manufacturer:</b>	<b>Quick Mount PV</b>  <b>2700 Mitchell Drive</b> <b>Walnut Creek, CA 94598</b>
<b>Product Name:</b>	<b>L- Mount Series</b>
<b>Product Category:</b>	Structural Components
<b>Product Sub-Category</b>	Anchors
<b>Compliance Method:</b>	State Product Approval Rule 61G20-3.005 (1) (d)
<b>Product Description:</b>	<p>The L-Mount Series are designed for cost-effective, one-bolt installation onto existing composition/asphalt shingle roofs. Quick Mount PV engineered its patented Elevated Water Seal Technology® into an integrated L-foot and flashing for super-fast, single-lag bolt installation. The L-Mount Series comes with lag bolt or structural screw attachment options for maximum versatility and works with all leading racks. The L-foot can be rotated 360 degrees for optimal adjustability and positioning of the rail.</p> <p>The L-Mount features a 9 x 12-inch aluminum flashing with alignment guides and rounded corners to easily slide under shingles and speed installation on the roof.</p>
<b>Product Assembly as Evaluated:</b>	<p>General Assembly Description: Refer to Page 4 of this report for product assembly components/material &amp; standards:</p> <ul style="list-style-type: none"><li>- Solar Panel System (Not part of evaluation)</li><li>- PV mount system</li><li>- Screws connecting</li><li>- 9"x12" Aluminum Flashing</li><li>- Roof Sheathing (Designed by others)</li></ul>
<b>Support Type:</b>	<p><b>Type: 2X Wood Support</b> 2X Wood Support</p> <p>(Design of wood supporting and its attachment to support wall/framing is outside the scope of this evaluation.)</p> <p><b>Description:</b> Minimum Dimensions: 2x4 Material: Southern Yellow Pine (G=0.55 Minimum) Wood: Wood members with which the connectors are used shall be either sawn lumber or engineered lumber having a minimum specific gravity of 0.55 (minimum equivalent specific gravity of 0.55 for engineered lumber).</p>

**Performance:**

**Wind Uplift Resistance - Anchor Bracket Assembly to Dimensional Lumber**

\* **F1=1,437 LBS** Allowable Uplift Load (2:1 Factor of Safety)

**Wind Shear Resistance - Anchor Bracket Assembly to Dimensional Lumber**

\* **F2=800 LBS** Allowable Shear Load (2:1 Factor of Safety)

\* **F3=1,025 LBS** Allowable Shear Load (2:1 Factor of Safety)

**Performance Standards:**

The following test protocol was performed to demonstrate compliance with the intent of the code as this product does not specifically address the performance standard in the code.

- **Modified TAS 105 (2011)** – Test Procedure for Field Withdrawal Resistance Testing

**Code Compliance:**

The product described herein has demonstrated compliance with the Florida Building Code 6th Edition (2017), Section 1708.2

**Evaluation Report Scope:**

This product evaluation is limited to compliance with the structural requirements of the Florida Building Code, as related to the scope section to Florida Product Approval Rule 61G20-3.001.

**Limitations and Conditions of Use:**

- Scope of “Limitations and Conditions of Use” for this evaluation:  
This evaluation report for “Optional Statewide Approval” contains technical documentation, specifications and installation method(s) which include “Limitations and Conditions of Use” throughout the report in accordance with Rule 61G20-3.005. Per Rule 61G20-3.004, the Florida Building Commission is the authority to approve products under “Optional Statewide Approval”.
- Option for application outside “Limitations and Conditions of Use”  
Rule 61G20-3.005(1)(e) allows engineering analysis for “project specific approval by the local authorities having jurisdiction in accordance with the alternate methods and materials authorized in the Code”. Any modification of the product as evaluated in this report and approved by the Florida Building Commission is outside the scope of this evaluation and will be the responsibility of others.
- Design of support system is outside the scope of this report.
- Fire Classification is outside the scope of Rule 61G20-3, and is therefore not included in this evaluation.
- This evaluation report does not evaluate the use of this product for use in the High Velocity Hurricane Zone code section. (Dade & Broward Counties)

**Quality Assurance:** The manufacturer has demonstrated compliance of roof panel products in accordance with the Florida Building Code and Rule 61G20-3.005 (3) for manufacturing under a quality assurance program audited by an approved quality assurance entity through **Keystone Certifications, Inc** (FBC Organization #: QUA 1824).

**Components/Materials (As Evaluated):**

**L-Mount Bracket:**

Material: 6061-T6 or 6005A-T61 Aluminum  
 Material Properties: In compliance with FBC Section 2002.1  
 Dimension:  
 Bracket Thickness: 0.3"  
 Bracket Width(s): 2"  
 Bracket Depth: 2"  
 Bracket Height: 3.30"

**Fasteners:**

Bracket to Supporting Member:

Type: Lag Bolt w/ Sealing Washer Hex Head  
 Material: Stainless Steel  
 Corrosion: EPDM Bonded SS  
 Size: 5/16" Ø x 4"

**Installation:**

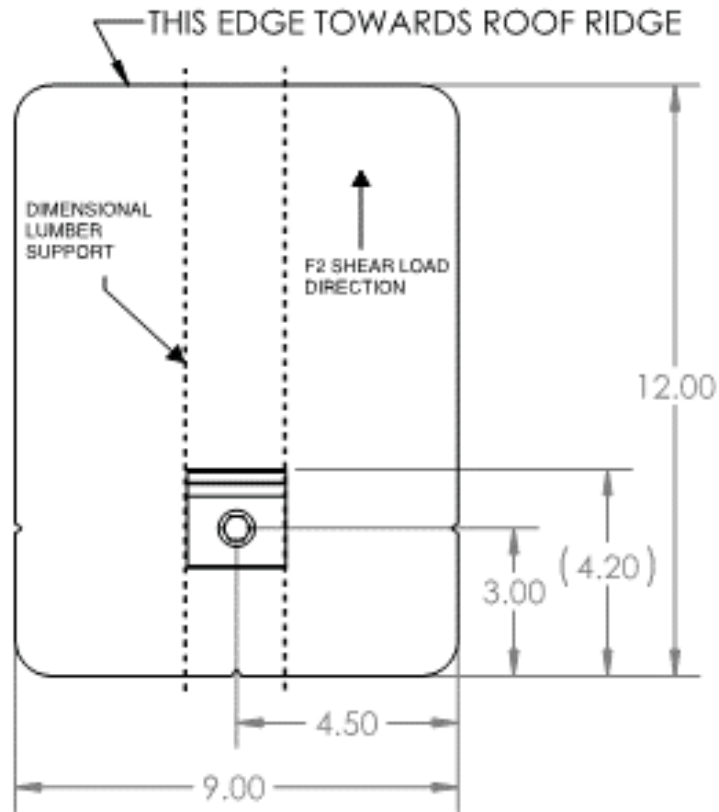
<b>2x Supporting Member Bracket Attachment</b>	
<b># Screws to 2x</b>	<b>(1) 5/16" Ø x 4" Hex Head Lag Bolt with Sealing Washer</b>

Fasteners, where used, shall be minimum length listed above.

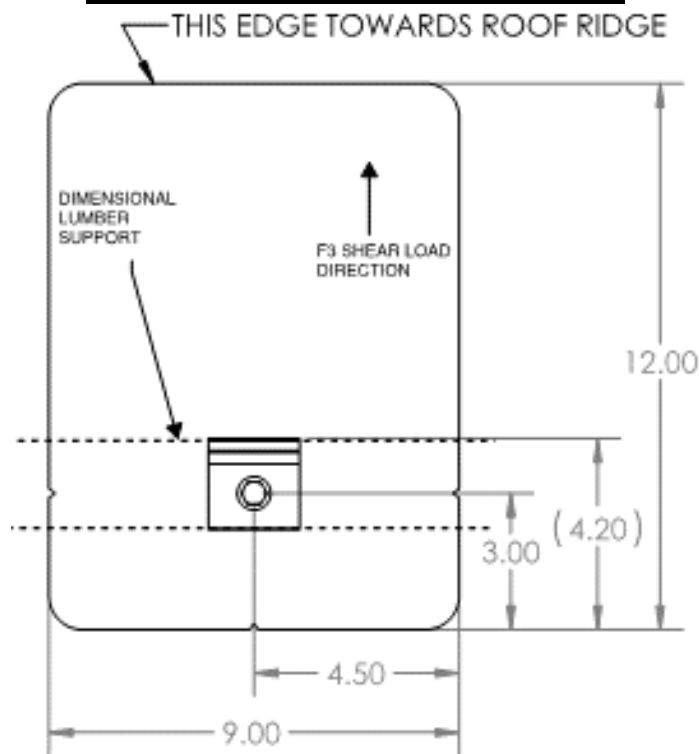
Install the L-Mount Series assembly in compliance with the installation method listed in this report and applicable code sections of FBC 6th Edition (2017). The installation method described herein is in accordance with the scope of this evaluation report. Refer to manufacturer's installation instructions as a supplemental guide for attachment.

**Referenced Data:**

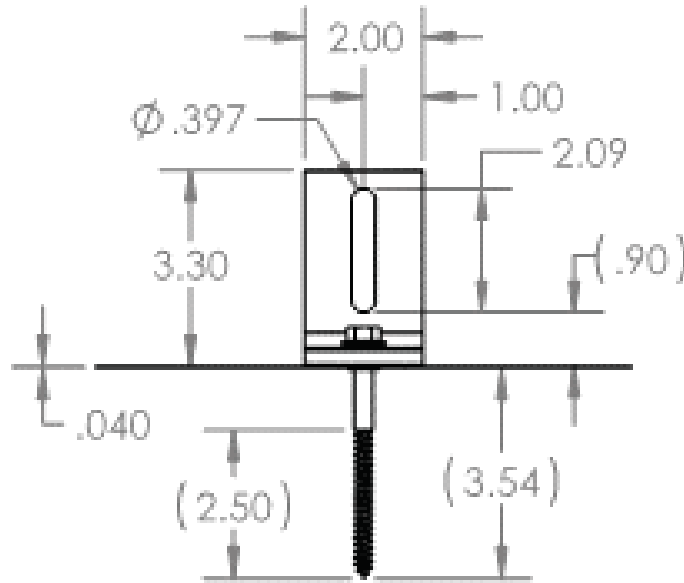
1. TAS 105-11 – Test Procedure for Field Withdrawal Resistance Testing  
 By Atlantic & Caribbean Roof Consulting (FBC Organization #TST ID: 4671)  
 File No. ACRC 19-0207 Date: 5/02/19
2. Quality Assurance  
 By Keystone Certifications, Inc (FBC Organization #QUA ID:1824)
3. Certification of Independence  
 By James L. Buckner, P.E. @ CBUCK Engineering  
 (FBC Organization # ANE 1916)



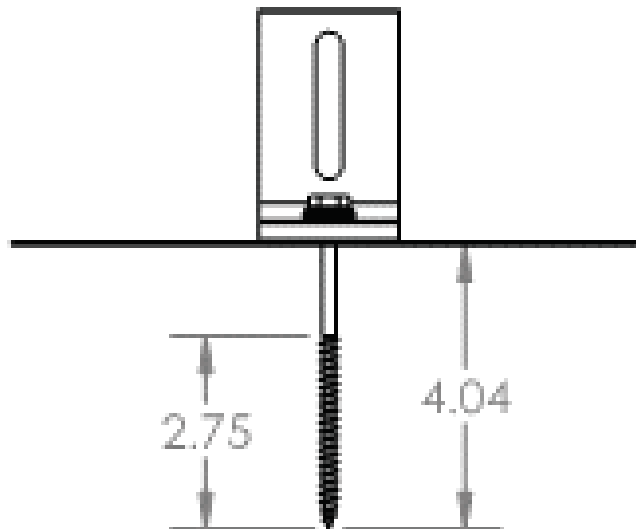
**F2 LOAD CONDITION**



**F3 LOAD CONDITION**



FRONT VIEW



FRONT SCREW VIEW