

CLIENT: Pegasus Solar Inc.

911 Bern Court, Suite 110 San Jose, CA 95112

Report No: RJ4362-1 Date: November 18, 2015

**SUBJECT:** Rain Test on Solar Panel Mounting System.

SAMPLE ID: Two each, PEGASUS SOLAR™ LightSpeed Mount Residential rail-less mounting

system.

SAMPLING DETAIL: Test samples were submitted to the laboratory directly by the client. No special

sampling conditions or sample preparation were observed by QAI.

**DATE OF RECEIPT:** The samples were received at QAI Laboratories on November 3, 2015.

**TESTING PERIOD:** November 11, 2015.

AUTHORIZATION: QAI Test Proposal DM-2015-100501-R1 dated October 19, 2015 signed by Kai

Stephan of Pegasus Solar Inc. on October 21, 2015.

**TEST REQUESTED:** Rain Test per Section 4.1 of ICC ES Acceptance Criteria for Roof Flashing for Pipe

Penetrations, AC286, Approved October 2012.

**TEST RESULTS:** Test results are provided on page 2 of this report.

**CONCLUSION:** The PEGASUS SOLAR™ LightSpeed Mount Residential rail-less mounting system

Passed the test and demonstrated compliance with Section 4.1 of ICC-ES Acceptance

Criteria for Roof Flashing for Pipe Penetrations, AC286, Approved October 2012.

Prepared By

Larry Burmer

Project Leader-Physical Testing

Signed for and on behalf of QAI Laboratories Inc.

Drew Mersereau Laboratory Supervisor

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### **RAIN TEST PER SECTION 4.1 OF ICC ES AC286**

#### **Test Deck Assembly**

Testing was performed in accordance with Section 27 of UL 441, Gas Vents, modified in accordance with Section 4.1 of ICC ES AC 286. Two simulated roof decks measuring 40" wide by 56" long were constructed for the test. Each roof deck consisted of nominal 2 x 4 wood framing,  $^{15}/_{32}$ " thick, Exposure 1, OSB Sheathing, #30 roofing felt and asphalt shingles. One LightSpeed Mount was installed in the center of each simulated roof deck in accordance with the manufacture's installation instructions, one with sealant applied to the bottom of the flashing and one without sealant applied to the bottom of the flashing.

### **Test Procedure**

The simulated roof deck was placed at a 2:12 slope and water spray applied to the LightSpeed Mount Residential rail-less mounting system through a water spray system as shown in figure 27.1 of UL 441. The water spray was applied to the mounting system for a period of one hour at an average water delivery rate of 6 inches per hour. At the end of the one hour period, the mounting system was disassembled and the mounting system examined for evidence of water penetration at the mounting base, at the lag bolt screw and underneath the flashing. The roof deck was also examined for evidence of water penetration to the underside of the roof deck. Photographs of the test set-up are provided in the appendix of this report.

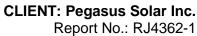
### **Test Requirements**

There shall be no evidence of water penetration through or around the roof flashing assembly or to the underside of the test roof deck.

#### **Test Results**

Test Assembly No.	Observations
1 (Sealed)	No evidence of water penetration was observed through or around the roof flashing assembly or to the underside of the test roof deck.
2 (Un-sealed)	No evidence of water penetration was observed through or around the roof flashing assembly or to the underside of the test roof deck.

Photographs showing the results of this test are provided in the appendix of this report.



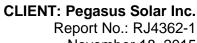
**QAI**LABORATORIES

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## **APPENDIX**



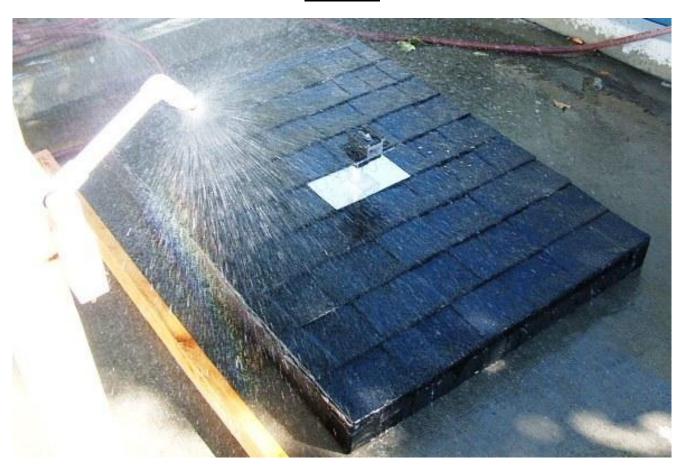
Photograph No.1 Rain Test Set-up No.1



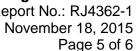


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# **APPENDIX**



Photograph No.2 Rain Test Set-up No.2





## **APPENDIX**



Photograph No.3
Rain Test Results
No Water Penetration through or Around Roof Flashing



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# **APPENDIX**



Photograph No.4
Rain Test Results
No Water Penetration to the Underside of the Roof Deck.

### \*\*\* END OF REPORT\*\*\*