

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

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.

APPENDIX



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

THIS REPORT IS THE CONFIDENTIAL PROPERTY OF THE CLIENT ADDRESSED. THE REPORT MAY ONLY BE REPRODUCED IN FULL. PUBLICATION OF EXTRACTS FROM THIS REPORT IS NOT PERMITTED WITHOUT WRITTEN APPROVAL FROM QAI. ANY LIABILITY ATTACHED THERETO IS LIMITED TO THE FEE CHARGED FOR THE INDIVIDUAL PROJECT FILE REFERENCED. THE RESULTS OF THIS REPORT PERTAIN ONLY TO THE SPECIFIC SAMPLE(S) EVALUATED.

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

APPENDIX



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

***** END OF REPORT*****