Pegasus Solar™ Inc. LightSpeed Rail-Less PV Panel Roof Mount System

for Composite Asphalt Roof Shingle Roofs

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<u>Table Notes – Tabulated values are based on the following criteria:</u>

- 1. ASCE 7-05 & 7-10: Building mean roof height = 30 ft maximum & Risk Category = II.
- 2. Solar panel maximum area = 21.9 square feet (79.75 in. x 39.5 in.) Landscape & 18.1 square feet (66 in. x 39.5 in.) Portrait.
- 3. Solar panel dead load = approximately 3.0 psf.
- 4. 2.5" minimum penetration of lag screw into 2x roof framing, excluding the tapered tip portion.
- 5. PV panel must comply with UL 1703.
- 6. In the portrait tables, several combinations have two numbers in the cell and the second number has an asterisk before it (e.g. *72) indicating that the 'Double Mount' may be used to increase the spacing to the number indicated, in inches. The 'Double Mount' shall only be used to increase the spacing as prescribed in the LightSpeed Mount Installation Manual.
- 7. In the portrait tables, several combinations have been highlighted with a bold outlined box around the span value. This bold outlined box indicates that the span may be increased to 4 foot maximum when a longer lag screw is used. Use 5/16" diameter x 5.5" long 18-8 stainless steel wood lag screws when only a bold outlined box is present and 5/16" diameter x 6.0" long 18-8 stainless steel wood lag screws when a solid box and (2) asterisks (**) are present. When the 6.0" long lag screws are used, they must be installed into 2x6 truss top chords or rafters min.
- 8. 'Edge Mounts' are mounts supporting only one panel and 'Interior Mounts' are mounts supporting two panels, see diagram RE1 for a visual example.
- 9. SPF #2 = Spruce-Pine-Fir #2 Grade.

Our analysis assumes that the connections and associated hardware are installed in a workmanlike manner in accordance with the LightSpeed Mount Installation Manual and generally accepted standards of construction practice. It is the responsibility of the contractor to verify that the strength of the roof framing meets the minimum properties used in the tests and can safely support the maximum imposed loads stated within this document. Starling Madison Lofquist, Inc. and Pegasus SolarTM assume no liability beyond what is specifically shown in this letter. Additional information is available at the Pegasus SolarTM web site, http://pegasussolar.com/

Please feel free to contact me at your convenience if you have any questions.

Respectfully yours,

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Tres J. Warner, P.E. Design Division Manager

Derek Hanson, P.E. Project Manager