September 21, 2021

SunPower
77 Rio Robles
San Jose, CA 95134
TEL: (408) 514-4063

Attn: Sunpower – Engineering Department

Re: Engineering Certification for the SunPower Corporation Invisimount Mounting System Span Tables and Design Methodology

PZSE, Inc.-Structural Engineers has reviewed the SunPower Invisimount Mounting System Span Tables Revision F published September 21, 2021 and their design methodology. This certification covers the module clamp, rail analysis, and attachment Tile hook/L bracket components. All information, data and analysis contained within are based on, and comply with, the following building codes and typical specifications:

Building Codes:

1. Minimum Design Loads for Buildings and other Structures, ASCE/SEI 7-10 & 7-16
2. 2015 & 2018 International Building Code, by International Code Council, Inc.
3. 2015 Aluminum Design Manual, by The Aluminum Association
4. CPP Wind Tunnel report number 9790, dated 16 February 2017.
5. SEAOC PV-2, 2017
6. 2015 & 2018 NDS, by the American Wood Council
7. UL 2703 Testing report for PV solar panels.
8. AC428, Acceptance Criteria for Modular Framing Systems Used to Support Photovoltaic (PV) Panels, November 1, 2012 by ICC-ES

Component and Cladding Roof Zones:

The Components and Cladding Roof Zones shall be determined based on ASCE 7 Chapter 30, and CPP Wind Tunnel test number 9790, dated 16 February 2017.

Notes:

1) Racking system and panels shall be installed per manufacturer's specifications.
2) Design assumptions are specified in the Inputs pages of attached span tables.
3) Attachment design is based on 5/16" Dia. Lag Screw with 2.5" Embedment into SPF#2 or equivalent per NDS. Designer shall be responsible for verifying project specific site conditions.
4) Wind speeds are LRFD values.
5) Attachment spacing(s) apply to seismic design category E or less.

Design Responsibility:
These tables are intended to be used under the responsible charge of a registered design professional where required by the authority having jurisdiction. In all cases, these tables should be used under the direction of a design professional with sufficient structural engineering knowledge and experience to be able to:

- Evaluate whether these tables are applicable to the project, and
- Understand and determine the appropriate values for all input parameters of these tables.

This letter certifies that the loading criteria and design basis SunPower Invisimount Mounting System Span Tables are in compliance with the Codes above.

This certification excludes the capacity check of the building structure to support the loads imposed on the building by the array, such as bending strength of roof rafters spanning between supports. This requires additional knowledge of the building and is outside the scope of the design tool and our review.

If you have any questions on the above, do not hesitate to call.

Prepared By:
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