

February 5, 2025

Unirac  
Attn: Engineering Services Department  
1411 Broadway Boulevard NE  
Albuquerque, NM 87102-1545  
TEL: (505) 242-6411

**RE: ENGINEERING CERTIFICATION LETTER FOR THE UNIRAC SOLARMOUNT (SM)  
ROOF PV PANEL SUPPORT SYSTEM  
STATE: NEVADA  
TECTONIC WORK ORDER #: 12557.53**

The Unirac SOLARMOUNT (SM) Photovoltaic Panel Support System is a proprietary framed photovoltaic panel support system that is installed on a roof. Tectonic Engineering & Surveying Consultants P.C. (Tectonic) has reviewed the SM design methodology along with the U-Builder tool: a Unirac online design tool. The review included the following SM products, SM Light, Heavy Duty, and Standard rail with both the standard and pro hardware.

Tectonic has determined that the design is a rational approach and follows the structural requirements of the following reference documents:

Codes/Standards:

- 2018 Nevada State Building Code
- 2018 International Building Code by International Code Council.
- ASCE/SEI 7-16 Minimum Design Loads for Buildings and Other Structures, by American Society of Civil Engineers with provision from SEAOC PV-2-2017.
- 2020 Aluminum Design Manual, by Aluminum Association.

Additionally, this letter is only valid if the following criteria are met:

- A building that is less than or equal to three stories in height or 45 feet when measured from the bottom of the lowest footing to the highest point of the roof or parapet wall.
- A building not designated as an essential facility and assigned the classification of Risk Category IV in accordance with the International Building Code.
- A building not requiring special expertise.

This letter certifies that the structural analysis of the racking members, connections, and components directly related to Unirac's system are in compliance with the above state codes, standards and requirements. The design methodology is acceptable under components and classing loads associated with the building roof structure when the system is installed in accordance with manufacturer specifications. If the loading criteria does not meet Unirac's specifications, owner shall contact Unirac for a site-specific certification.

## Project Contact Info

1279 Route 300 | Newburgh, NY 12550  
845.567.6656 Tel | 845.567.8703 Fax

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Attachments approved for the SM system to the structure include the following and is installed per Unirac's U-Builder report and installation guides:

- **Shingle Roof:** L-Foot Flashkit Pro, Standoffs, Flashloc Comp, Flash Loc Duo, and Flash Kit Pro SB
- **Metal Roof:** Standing Seam Attachments, PM-9000s, and PM Adjust Slotted
- **Tile Roof:** Solar hooks, Flashkit Tile Replacement (TR)

The U-Builder Tool should be used under the responsible charger of a registered professional engineer required by the authority having jurisdiction. The design tool and Unirac do not evaluate the existing roof structure, or the PV panels themselves. See the construction and installation drawings and manuals for additional information provided by Unirac.

Sincerely,

**Tectonic**



Calvin D. Gough, P.E.  
Manager of Engineering



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