



11-MAY-2022

Unirac  
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Attn.: Engineering Department

Subject: Engineering Certification for the Unirac RM10 EVO a Roof Mounted Ballasted System to Support Photovoltaic Panels

The Unirac RM10 EVO is a ballasted photovoltaic panel support system which consists of three major components - a fully assembled ballasted bay, a tucked north row and a module clamp holding the bay and PV modules together. The ballasted bays are the main dead weight to resist against any uplift due to wind loads. Lateral forces, both wind and seismic, are resisted by friction between the ballast and the roof surface.

Unirac online design assistant tool U-Builder 2.0 is used to determine the required ballast quantity. The U-Builder 2.0 covers a wide range of system configurations and loading and allows the user to customize the input to match the specific project conditions.

The RM10 EVO PV module system satisfies the RWDI wind tunnel test results and the ballasted system design methodology, which makes "U-Builder 2.0" a rational and easy method of designing a RM10 EVO ballasted PV module design tool in compliance with the structural requirements of the following reference documents:

Codes: ASCE/SEI 7-10 and ASCE/SEI 7-16 Minimum Design Loads for Buildings and other Structures  
International Building Code 2012, 2015 & 2018 with City of Houston amendments and 2018 Editions  
Other: Aluminum Design Manual, 2010 & 2015 Edition  
RWDI Wind Pressure Study Report #1600097  
SEAOC PV2-2017 Report - Wind Design for Solar Arrays

This letter certifies that the Unirac "RM10 Evo" Roof Mounted Ballasted Photovoltaic Panel Support System and online design tool "U-Builder 2.0" are in compliance with the reference documents mentioned above.

Please feel free to call for any questions or clarifications.

Prepared By:  
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