

Attn: Rob D'Anastasio
Validation Engineer
Unirac, Inc.
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Unirac, Inc.
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Letter of Conformance

Qualification of Various PV Modules

Type of Equipment:	PV Mounting System(s)
Model Designation:	EcoFoot2+, EcoFoot5D, RM10, RM10 EVO, GridFlex5, MetalX
Serial Number:	N/A
Test Requirement:	ANSI/UL 2703:2021
SolarPTL File Number:	URC230601.01
SolarPTL Project Number:	L1-URC230601.01
Date of Issuance:	June 27 th , 2023

Dear Rob D'Anastasio,

This letter is confirmation that the PV module series listed in Appendix A have been evaluated for use with the identified PV Mounting Systems from Unirac, Inc. according to the bonding and mechanical load requirements of ANSI / UL 2703:2021. This letter overwrites the contents of L1-URC230601.01.

The EcoFoot PV Mounting System(s) have been qualified under certificate number TU 722090005.01 issued by SolarPTL, the RM10 PV Mounting System(s) have been previously certified under SolarPTL certificate TU 721990012.01, the GridFlex PV Mounting System has been previously certified under SolarPTL certificate TU 7221990001.01, and the MetalX PV Mounting System has been previously certified under SolarPTL.

This letter may be used to indicate conformance to UL 2703 of the PV module series listed in Appendix A regarding the identified PV mounting systems. These PV modules should be added to the corresponding Installation Manuals as "qualified for use" with respect to the ratings achieved. This list of qualified modules also supplements any other LOCs previously provided by SolarPTL regarding qualified PV modules for the target PV Mounting Systems.

Best Regards,



Bryce Conner
Project Engineer
SolarPTL, LLC

Appendix A: Module Additions under URC230601.01

Mounting System	Module Manufacturer	Model Type	Bonding Torque [ft-lb]	Evaluated OCPD Rating [A]	Downward Pressure Design Load (psf) ²		Upward Pressure Design Load (psf) ²		Down-Slope Pressure Design Load (psf) ²	
RM10 - RM10 Evo ³	Jinko	JKMxxxM-72-HL-V	5	30	-	-	-	-	-	-
		JKMxxxM-72-HBL-V	5	30	-	-	-	-	-	-
	Meyer Burger	Meyer Burger White ³	5	30	43.13	-	21.00	-	7.80	-
		Meyer Burger Glass ³	5	30	37.93	-	20.63	-	-	-
	Philadelphia Solar	PS-M144(HCBF)-xxxW	5	30	33.53	19.97	22.33	12.67	6.50	6.27
	Goldi Solar	GS10-B144-GF ³	5	30	48.30	20.37	30.00	20.16	8.00	5.47
		ZXM7-SHLDD144 ³	5	30	43.44	18.20	27.33	17.87	7.16	6.93
	ZnShine	ZXM7-SHDB144	5	30	-	-	-	-	-	-
		DEG15MC.20(II)	5	30	-	-	-	-	-	-
	Trina	VSUNxxx-144BMH	5	30	-	-	-	-	-	-
		VSUNxxx-144BMH-DG	5	30	-	-	-	-	-	-
	Freevolt	PVGraf	5	30	-	-	-	-	-	-
	Aptos	DNA-120-MF26	5	30	-	-	-	-	-	-
		DNA-120-BF26	5	30	-	-	-	-	-	-
	Hyperion	HY-DH108P8B	5	30	-	-	-	-	-	-
		HY-DH108N8B	5	30	-	-	-	-	-	-
HY-DH144P8		5	30	-	-	-	-	-	-	
Yotta	YSM-Bxxx-06-72-1	5	30	-	-	-	-	-	-	
	YSM-Bxxx-10-72-1	5	30	-	-	-	-	-	-	
GridFlex5	NE Solar	NESE xxx-72MHB-M10	8	30	35.13	10.63	29.47	14.00	-	-
	Philadelphia Solar	PS-M144(HCBF)	8	30	30.57	10.35	13.17	-	5.4	5.27
	ZnShine	ZXM7-SHLDD144	8	30	38.55	13.67	15.10	-	5.73	5.0
		ZXM7-SHDB144	8	30	-	-	-	-	-	-
	Freevolt	PVGraf	8	30	-	-	-	-	-	-
	Q Cell	Q.PEAK DUO XL-G10.3/BFG	8	30	-	-	-	-	-	-
		Q.PEAK DUO XL-G10.2	8	30	-	-	-	-	-	-
		Q.PEAK DUO XL-G10.3	8	30	-	-	-	-	-	-
	Aptos	DNA-120-MF26	8	30	-	-	-	-	-	-
		DNA-120-BF26	8	30	-	-	-	-	-	-
EcoFoot2+ - EcoFoot5D	ZnShine	ZXM7-SHLDD144 (EcoFoot2+)	14	30	37.08	12.6	16.57	-	5.47	5.47
		ZXM7-SHLDD144 (EcoFoot5D)	14	30	23.67	-	16.57	-	6.47	-
	Canadian Solar	CS3W-MS	14	30	-	-	-	-	-	-
	Trina	DE09.05	14	30	-	-	-	-	-	-
	JA Solar	JAM78D10 /MB	14	30	-	-	-	-	-	-
		JAM72D30 /MB	14	30	-	-	-	-	-	-
	Freevolt	PVGraf	14	30	-	-	-	-	-	-
	Silfab	SIL-xxx HN	14	30	-	-	-	-	-	-
		VSUNxxx-144BMH	14	30	-	-	-	-	-	-
	VSUN	VSUNxxx-144BMH-DG	14	30	-	-	-	-	-	-
		DNA-120-MF26	14	30	-	-	-	-	-	-
	Aptos	DNA-120-BF26	14	30	-	-	-	-	-	-
Philadelphia Solar		PS-M144(HCBF)	14	30	-	-	-	-	-	
REC	RECxxxAA	14	30	-	-	-	-	-	-	
MetalX	Jinko	JKMxxxM-72HL4-V	14	30	40.90	-	45.75	-	20.47	-
		Q.PEAK DUO XL-G11.3/BFG	14	30	-	-	-	-	-	-
	Q Cell	Q.PEAK DUO XL-G10.3/BFG	14	30	-	-	-	-	-	-

Note(s):

1. The Design Load ratings shown have a 1.5 factor of safety when compared to tested loads.
2. If two values are present in the Design Load column, the higher load ratings refer to the loading achieved with the appropriate mid-span or other system specific components intended for additional mechanical support.
3. Modules with this note have received mechanical load ratings for only the RM10 Evo.