

Attn: Bryan Martin  
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**Letter of Conformance – Qualification of Hanwha Q-Cells PV Modules**

Type of Equipment: PV Module Mounting System  
Model Designation: Rock-It System 4.0  
Serial Number: N/A  
Test Requirement: ANSI/UL 2703: First Edition

TÜV Rheinland Reference File: L1-ECF180119  
TÜV Rheinland Project Number: ECF180119

Dear Mr. Martin,

EcoFasten Solar's **Rock-It System 4.0** PV mounting system has successfully met Mechanical Load and Bonding requirements of UL 2703, when used with the **Hanwha Q-Cells Q.PEAK-G4.1 300** PV module.

Congratulations on this achievement.

Mechanical Load Modules		Applied Test Loads			
Module Manufacturer	Model Type	Downward Pressure Test Load (psf)	Upward Pressure Test Load (psf)	Down-slope Test Load (psf)	Maximum Clamp Spacing (in.)
Hanwha Q-Cells	Q.PRO BFR-G4 2XX	100	45	30	48
	Q.PLUS BFR-G4.1 2XX	100	45	30	48
	Q.PRO BFR-G4.1 2XX	100	45	30	48
	Q.PRO BFR-G4.3 2XX	100	45	30	48
	Q.PEAK-G4.1 2XX	100	45	30	48
	Q.PEAK-G4.1/MAX 2XX	100	45	30	48
	Q.PEAK BLK G4.1 2XX	100	45	30	48
	Q.PRO G4 2XX	100	45	30	48
	Q.PLUS G4 2XX	100	45	30	48
	Q.PEAK-G4.1/TAA 2XX	100	45	30	48
	Q.PEAK BLK G4.1/TAA 2XX	100	45	30	48
	Q.PLUS BFR G4.1/TAA 2XX	100	45	30	48
	Q.PLUS BFR G4.1/MAX 2XX	100	45	30	48
	B.LINE PLUS BFR G4.1 2XX	100	45	30	48
	B.LINE PRO BFR G4.1 2XX	100	45	30	48
	Q.PRO EC-G4.4 2XX	100	45	30	48
Q.PEAK DUO BLK-G5	100	45	30	48	
Q.PEAK DUO-G5	100	45	30	48	

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Note that the **Applied Test Load** exceeds the minimum test loading required for UL 2703 compliance. **Design Load Ratings** in each direction are determined by calculating a safety factor, where: **Design Load Rating = Applied Test Load / 1.5**. Thus the **Design Load Ratings** for the modules would be **66.7 psf, 30.0 psf and 20.0 psf** at 48 in. maximum clamp spacing.

This letter may be used as a letter of conformance (LOC) indicating these PV modules are qualified for use on the **Rock-It System 4.0 PV mounting system**. The installation manual for the Rock-It System 4.0 PV mounting system previously qualified to ANSI/UL 2703 under TÜV Rheinland certificate number US 82150026.01-.08, may be updated to include the Hanwha Q-Cells PV modules listed in the above table, as qualified for Bonding and the Design Load Ratings identified herein.

Sincerely,



Kamerine Kroner  
Solar Components Test Engineer  
TÜV Rheinland PTL

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