



# CROSSROADS SOLAR

## CROSSROADS 380-420

High quality bi-facial panel designed for commercial and residential installations.



Crossroads Solar manufactures solar panels in **South Bend, IN**



Our core mission is to provide **jobs and life training opportunities** for recently released felons



We make solar panels because it is **good for the planet**

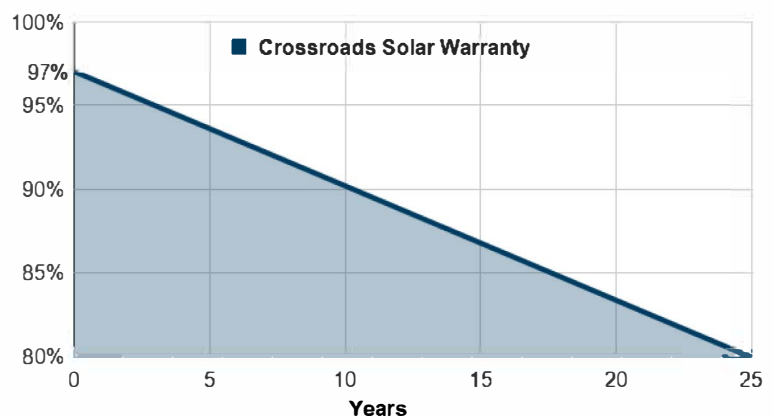


We help remake people because it is **good for our communities**

Our panels are American made with automated equipment, from top quality components, and certified to UL 61730 & IEC 61215 standards.

They come with a 10 year product and a 25 year performance warranty, consistent with industry standards.

### 25 YEAR PERFORMANCE WARRANTY



## PERC

5 BUSBAR CELLS

## 380-420

POWER OUTPUT

## 19%-22.0 %

MAXIMUM EFFICIENCY

## +/-3 %

POWER TOLERANCE

## 10/25 Year

PRODUCT/PERFORMANCE  
WARRANTY



CERTIFIED TO UL 61730 &  
IEC 61215 STANDARDS

# Electrical Performance

	Front Side Performance (CR380-420)	Bifacial performance @ 10% Irradiance (Rear Side)**	Bifacial performance @ 20% Irradiance Rear Side**
<b>Max Power*<math>P_{max}</math></b>	380	418	456
<b>Short Circuit Current <math>I_{sc}</math>*</b>	9.90	10.89	11.88
<b>Open Circuit Voltage <math>V_{oc}</math>*</b>	49.00	49.00	49.00
<b>atede Current<math>P_{max} I_{mp}</math></b>	9.35	10.28	11.22
<b>Rated Voltage at <math>P_{max} V_{mp}</math></b>	40.55	40.55	40.55
<b>Module Efficiency</b>	19%	20.40%	22%

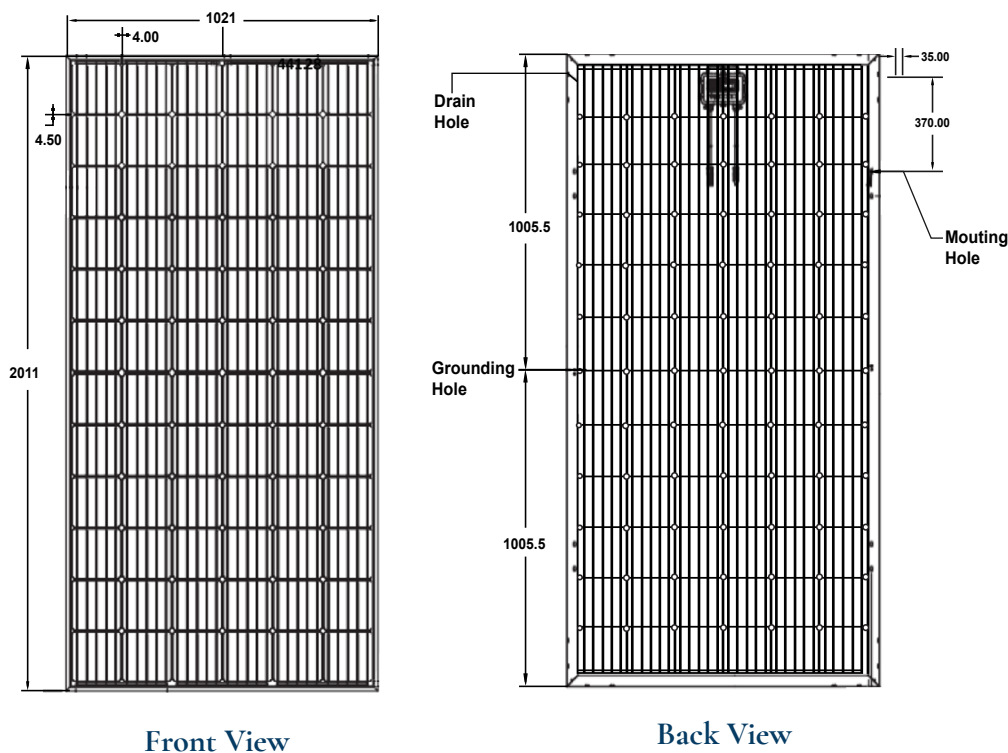
Front side Module Efficiency based on 1000w/m<sup>2</sup> irradiance      Rear side Module Efficiency based on 1000 w/m<sup>2</sup> irradiance and 200W/m<sup>2</sup> irriddiance

\* Measurement Tolerences:  $P_{max} +/3%$ ;  $I_{sc} +/-5%$ ;  $V_{oc} +/-5%$

\*\*Our assumptions based on a 10-20% gain from the rear side irradiance. This will vary with installation and orientation

## PANEL DRAWING

Units: mm



Thermal Characteristics			Operating Conditions		Construction Materials	
Normal Operating Cell			Maximum System Voltage	1500Vdc	Front Glass	3.2mm(tempered,low iron, ARC)
Temperature (NOCT)	45±2	oc	Operating Temp Range	-40°C(-40°F) to 85°C(185°F)	Frame	Anodized Aluminum
Temperature Coefficient of $P_{max}$	-0.38	%/K	Maximum Fuse Rating	20	Encapsulant	EVA
Temperature Coefficient of $V_{oc}$	-0.36	%/K	Fire Safety Classification	Type 1(US) Class C(Canada)	Junction Box	IP 67
Temperature Coefficient of $I_{sc}$	0.068	%/K	Hail Safety Impact Velocity	25mm at 23m/s	Cables	1 meter
			Fuse Rating	20 A	Connector	MC4

Packaging Information		General Characteristics		Qualification & Certification	
Number of Modules per Pallet	26	Solar Cells	G1, Mono Crystalline Silicon	UI/IEC	61730 & 61215
Pallet Dimensions	2058m x 1118mx1145mm (81in x 44in x 45in)		158.75mm x 158.75mm x ±0.25mm	Listed CEC	- CA Energy Commission
Pallet Weight	400 kg	Cell Orientation	72 Cells (6x12)		
Number of Palletes per Container	28	Module Dimensions	2011mm x 1021mm x 44mm		
		(LxWxH)	79.17in x 40.20in x 1.575in		
		Weight	22 kg (48.5lb)		