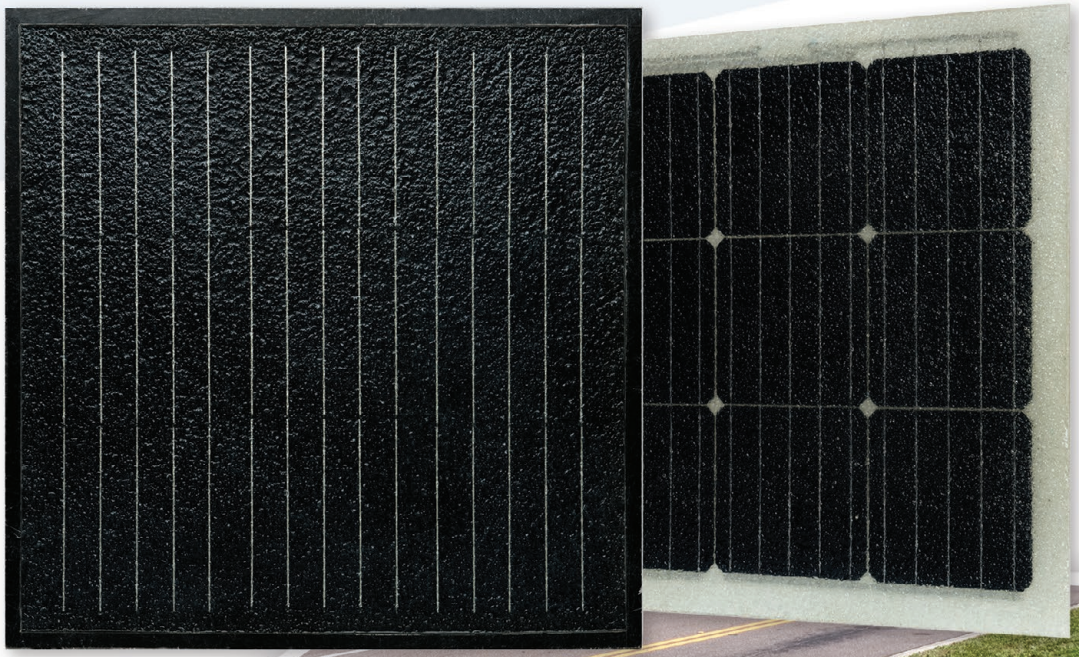
SOLAR EARTH

World's toughest solar



Clean Energy Innovation for Today's Infrastructure

SolarEarth.ca

Solar Intersection Project - City of Tampa Bay, 2019

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OUR TECHNOLOGY

Human beings have spent a long time paving over the Earth. Solar Earth now transforms those surfaces into the toughest, most versatile sources of solar energy yet made.

At Solar Earth, we are developing, manufacturing & implementing state-of-the-art solar power solutions that allow driveways, sidewalks, parking lots, bike paths, plazas (and more) to produce cheap clean energy.
Our flagship product is a hardened solar panel that can withstand pedestrian, bicycle or moderate–velocity vehicular traffic. The panels are impervious to extreme weather, and highly resistant to both vandalism and theft.
Sun-exposed infrastructure is adapted to generate renewable electricity while retaining its original purpose.

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Technical Data

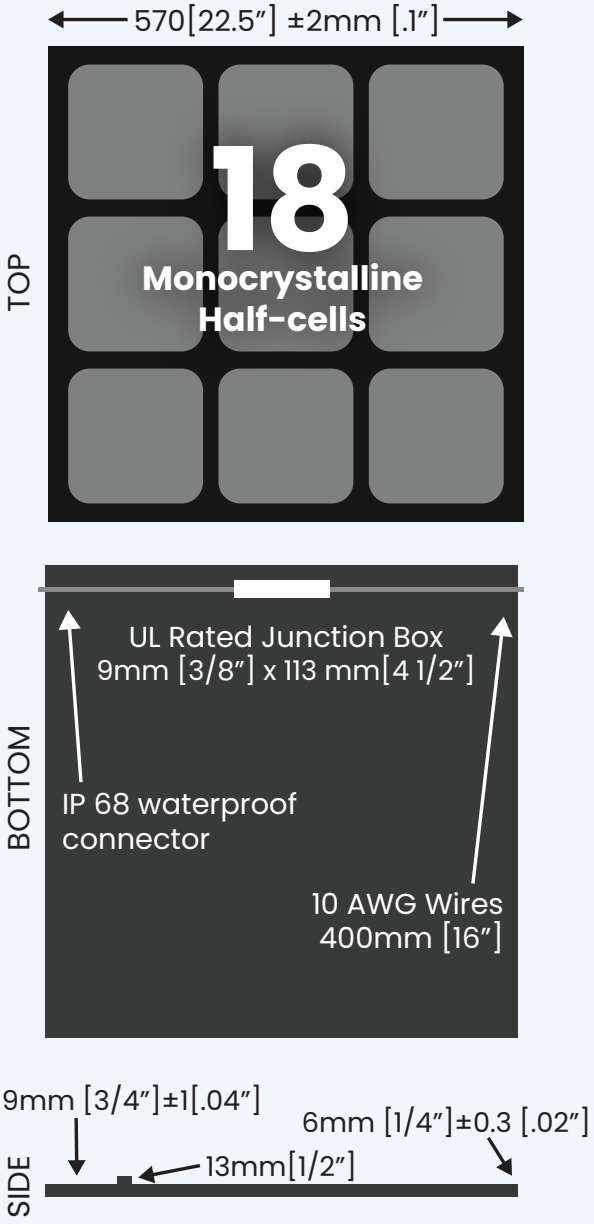
ENVIROMENTAL	
Rated Water Submersion	30 days
Max Oil Submersion	12 hr
Friction Index (f-60): Wet/Dry	0.8/1.02
Expected Lifetime	10 years
Fire/PV safety	Tested UL61703 IE61215

PHYSICAL	
Max Static Load	5,000 kg [11,000lbs]
Max Point Pressure	1.3 MPa [190psi]
Max Speed	40 kmph [25mph]
Max Deflection	5 mm [.2"]
Ambient Range	-20°C [-4F] to 50°C [122F]
Temperature Range	-20°C [-4F] to 90°C [194F]
Weight	2.6 kg [5.7lbs]

ELECTRICAL	
Power Per Area	143 W/sqm (13W/sqft)
Peak Power	~ 46 W
Power Tolerance	±3%
Temperature Coefficient	-0.38% / -0.21% F
Open Circuit Voltage	12.33 V
Short Circuit Current	4.72 A
MPP Voltage	10.26 V
MPP Current	4.52 A
Point Current Maximum System	1000V
Voltage Overload Protection	15 A
Current Bypass Diodes	1

CE PSE RoHS COMPLIANT

Proprietary anti-skid surface



Clean Energy Innovation for Today's Infrastructure

Solar Compass TRU, Kamloops BC, 2017

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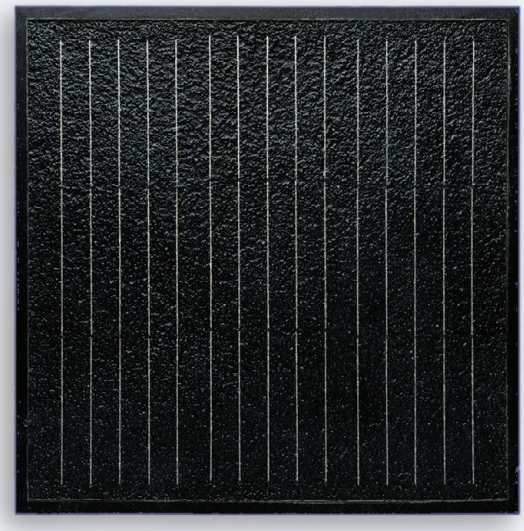
Construction Solutions

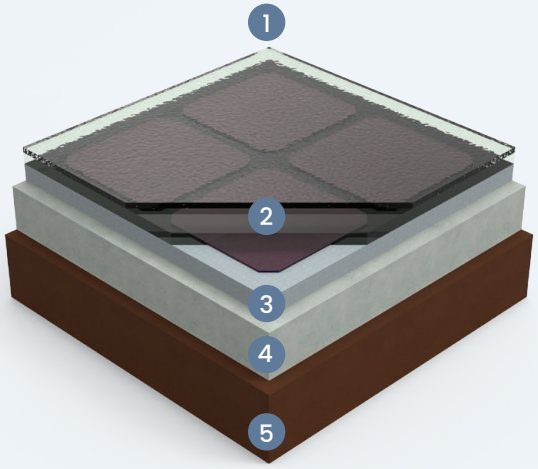


Enjoy Limitless and Free Clean Energy

Condition	Direct Mounting		Moulded Base	
	Adhesive	Clamps	Paver	Polymer
Compacted Gravel/Earth			✓	✓
Pavement/Asphalt & Solid Surfaces	✓	✓	✓	✓
Decking, Roofs & Uneven Surfaces			✓	✓
Low Profile	✓	✓	*	*
Heavy Loads	Static	Low-speed	Moderate speed	Low-speed

* For sites with appropriate pavement trenching

- Panels can be glued or clamped to concrete or asphalt substrates.
- Panels can be installed on top of existing infrastructure without modifications.
- Panel system can be integrated with electric vehicle charging technologies.
- Panels can complement and expand traditional PV roof top systems.
- Panels can be used for walkways or patios to turn infrastructure into value-producing assets.



1. Traction Top plane
2. PV Cells
3. Back plane
4. Substrate/Paver
5. Sub-grade (e.g., compacted dirt)

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Turn-key Solutions

Solar Earth's experts have been implementing pavement-integrated PV power generation solutions since 2015. Our experienced staff can advise you on Solar Earth turn-key solutions for infrastructure. This includes system design, material procurement, project management and its installation.

Green Village Phase 1 - Daxing, China 2018

Recent Solar Earth Projects

Solar Intersection Project
Tampa, USA

Solar Pavement
Stellenbosch University,
South Africa

Green Village Phase 1
Daxing, China

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SolarEarth embeds solar cells, those oh-so-delicate eggshells so easy to break, into a rock-hard surface. It allows us to "solarize" sidewalks, roads, parking lots, rooftops, docks and more by putting solar cells inside that infrastructure.

It's a breakthrough that captures the power of the sun to "solarize" infrastructure, to help us fight climate change and get us to a Net Zero future.

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