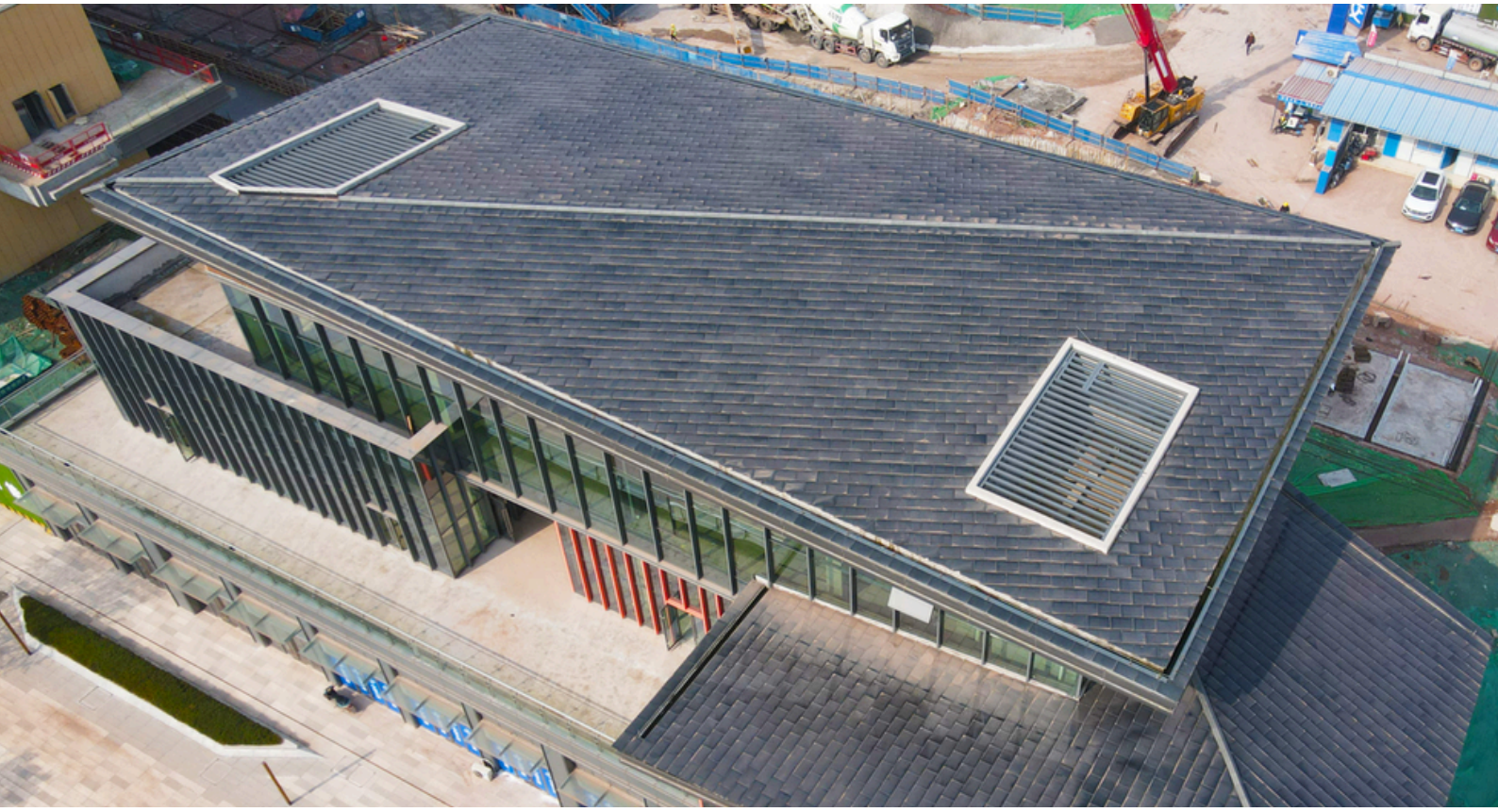
MODERNITE
BY CARBONFUTUREX GROUP

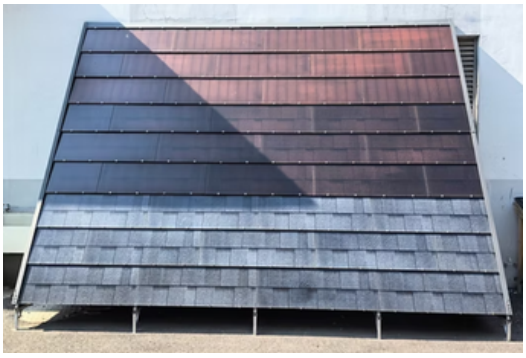
Modernité
By CarbonFutureX® Group

SolarInn® roof tile & Slate

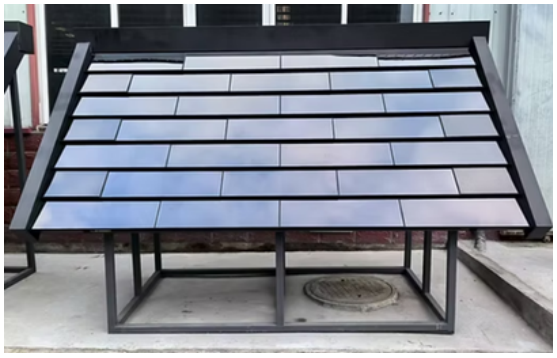


Our Luxury Photovoltaic Roof System redefines architectural roofing by seamlessly integrating premium design with high-efficiency solar power generation. Available in Photovoltaic Roof Slates and Photovoltaic Roof Tiles, this solution offers a sophisticated alternative to traditional solar systems — without compromising the aesthetics of your property.

Products



Solar Slate



Solar Tile

Specifications

	Solar Slate		Solar Tile
Structure (mm)	3.2+0.5EVA+3.2CdTe+0.5EVA+3.2	**Structure (mm)**	3.2CdTe+0.5EVA+3.2
Colour	Slate Grey (customized)	**Colour**	Marble black
Glass thickness (mm)	10.6	**Glass thickness (mm)**	6.9
Power generation glass Dimensions	400mm length × 300mm width	**Power generation glass Dimensions**	400mm length × 300mm width
Slate thickness (mm)	33.0	**Slate thickness (mm)**	33.0
Slate surface Dimensions	480mm length × 370mm width	**Slate surface Dimensions**	480mm length × 370mm width
Weight (kg)	4.5	**Weight (kg)**	3.5
Nominal Peak Power Output (Wp)	11	**Nominal Peak Power Output (Wp)**	20
Conversion efficiency under 1000W/m2 solar radiation (25°C, AM1.5)	9.2%	**Conversion efficiency under 1000W/m2 solar radiation (25°C, AM1.5)**	16.7%
Conversion efficiency under 200W/m2 solar radiation (25°C, AM1.5)	9.6%	**Conversion efficiency under 200W/m2 solar radiation (25°C, AM1.5)**	17.5%
Glass Type	Laminated Glass	**Glass Type**	Laminated Glass
Power generation performance guarantee	85% performance remaining after 25 years	**Power generation performance guarantee**	85% performance remaining after 25 years
Lifespan	25-30 years	**Lifespan**	25-30 years

Electrical Specifications
Standard test conditions (STC): 1000W/m², 25°C, AM1.5

Model Types (Specifications Standard test conditions(STC):1000W/m², 25°C, AM1.5)	SolarInn® Solar Slate	SolarInn® Solar Tile
Power Generation Glass Size (mm)	**300 × 400**	**300 × 400**
Maximum Power Pm(W)	11	20
Open Circuit Voltage Vdc(V)	43.1	45.7
Short Circuit Current Isc(A)	0.35	0.64
Peak Power Voltage Vmp(V)	34	36.52
Peak Power Current Imp(A)	0.32	0.55
Maximum Series Fuse Rating Icf(A)	0.82	1.27
Maximum System Voltage Vsys(V)	1000	1000
Temperature Coefficients of Isc Tkα(%/°C)	+0.061	+0.061
Temperature Coefficients of Voc Tkβ(%/°C)	-0.396	-0.396
Temperature Coefficients of Pm Tkγ(%/°C)	-0.189	-0.189
Operating Temperature Range(°C)	-40 to +85	-40 to +85

Regulations compliance

IEC 61215-1 / -1-2 / -2:2021
IEC 61730-1 / -2:2018
EN 12600:2002
ISO 12543-3 / -4 / -5 / -6 :2021
EN 410:2011
IEC 61730-1 / -2:2016
EN 14449:2005
EN 12150-1:2015+A1:2019
ISO 14067:2018
PAS 2050:2011

Other Features

- **Ultra-low Carbon Footprint (Embodied Carbon Intensity)**

Producing 1W of CdTe solar glass generates only 0.29 kg CO_2e – an ultra-low carbon footprint.

- **Ultra-low Carbon Intensity of Power Generation (Emission Factor)**

Generating 1 kWh of electricity with CdTe solar releases just 0.011 kg CO_2e – far cleaner than average UK power station (0.280kg CO_2e) and silicon PV(0.067kg CO_2e)

- **Thermal Durability**

Thermal cycling (-40°C to +85°C, 200 cycles, ≤5% power degradation)

- **Fire Safety**

Passed the A-level fire test, the highest fire rating in Europe and the USA

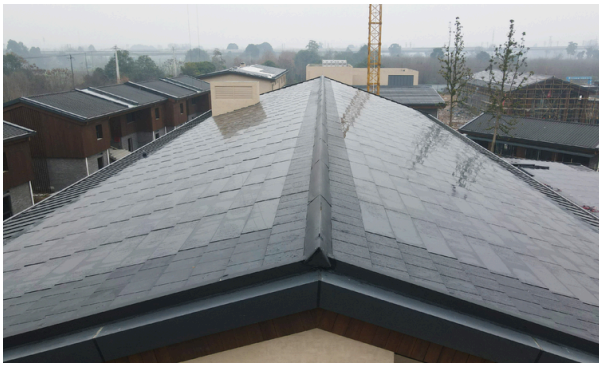
- **Outstanding Hail Impact Resistance**

Tested under 25 mm ice ball at 23 m/s, IEC 61215 compliant

- Excellent wind and snow load resistance

Fully compliant with IEC 2400 Pa wind load standards

Portfolio



Location: Naked Hotel Project
Installed capacity：452.4kW
Application: solar roof tile

Location: Chengdu Pengzhou Hospital Project
Installed capacity：300kW
Application: Solar roof tile

Location: Urban Education Practice Base in Chengdu Park
Installed capacity：130kW
Application: Solar roof slate

Location: Main Venue of CATL's World Energy Storage Conference
Installed capacity：97kW
Application:Solar roof slate

WHERE THERE IS LIGHT, THERE IS POWER

Contact

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