

SOLARIS™ VDIAMOND TERRACOTTA-M1/A1

Suitable for heritage terracotta roofs.

Freesuns Solar Roof tiles are powerful, beautiful and sustainable. Every Freesuns roof generates carbon-emission-free solar power creating a return on investment for building owners and a stunning roof for their building.

Powerful

Freesuns Solar Roof tiles contain photovoltaic cells that convert sunlight into clean energy. Our solar tiles provide maximum photovoltaic coverage for optimal energy production on all types of roofs.

Beautiful

Freesuns Solar Roof tiles are available in a wide range of colours and finishes, suitable for both modern and traditional architecture. This allows the production of solar energy without compromising the aesthetics of the building.

Flexible

Our small format tiles, pre-cut in different shapes, allow you to accommodate roof obstacles such as windows and chimneys, adapt to complex roof shapes and thus guarantee maximum coverage of photovoltaic cells.

Safe

The design of our tiles significantly reduces the risk of fire thanks to a diode present in each tile, a high thermal mass, and monitoring by power optimizers.

Easy to install

The tiles are installed by traditional roofers on existing roof structures with existing fixtures.

Return on Investment

By generating a portion of your energy needs for free, the Freesuns Solar Roof has a positive return on investment and will pay for itself over its lifetime - unlike a traditional roof.

Detailed Engineering

With its state-of-the-art software, Freesuns provides a detailed layout of each roof, showing how to install each tile with precision.

Designed in Switzerland

Freesuns Solar Roof tiles are designed and developed in Switzerland.



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Physical specifications

Dimension of the tile (L x H mm)	730 x 400 mm
Surface of the visible area (L x H mm)	730 x 140 mm
Thickness of the tile	7 mm
Number of cells per tile	3
Number of tiles per m2	9.65
Power per m2	96.9 Wp (M1) / 89.6 Wp (A1)
Unit weight	4.2 kg
Weight per m2	40.53 kg
Cell Type	Monocrystallin PERC 5BB
	156.75 x 156.75 mm
Connector type	MC4 type IP65
Material	Tempered Solar Glass
Structure	Glass/glass
Hail resistance	HW5 (ø 50 mm at 30.8 m/s)
Max. test load (positive pressure)	5400 Pa (heavy snow load)

Electrical specifications

	M1	A1
Power per tile (Pmpp)	10.04 Wp	9.28 Wp
MPP Voltage	1.62 V	1.59 V
MPP Current (Impp)	6.20 A	5.84 A
Open Circuit Voltage Voc	2.02 V	2.01 V
Short Circuit Current Isc	6.77 A	6.19 A
Module efficiency	9.69 %	8.96 %
Power Tolerance	+/- 5 %	
Max. system voltage	TBC	
Max. reverse current	TBC	
Temperature coefficient Voc*	-0.36 %/K	
Temperature coefficient Isc*	+0.06 %/K	
Temperature coefficient Pmpp*	-0.36 %/K	

* Measured coefficients for the cells.

Electrical performance characteristics under STC conditions (1000 W/m2 , 25° C, AM 1.5).

Appearance

Earth tone color - terracotta, brown, red
Anti-reflection coating (AR)

Warranty

10 years on the tiles
Minimum power guarantee:
90% after 10 years

Contact

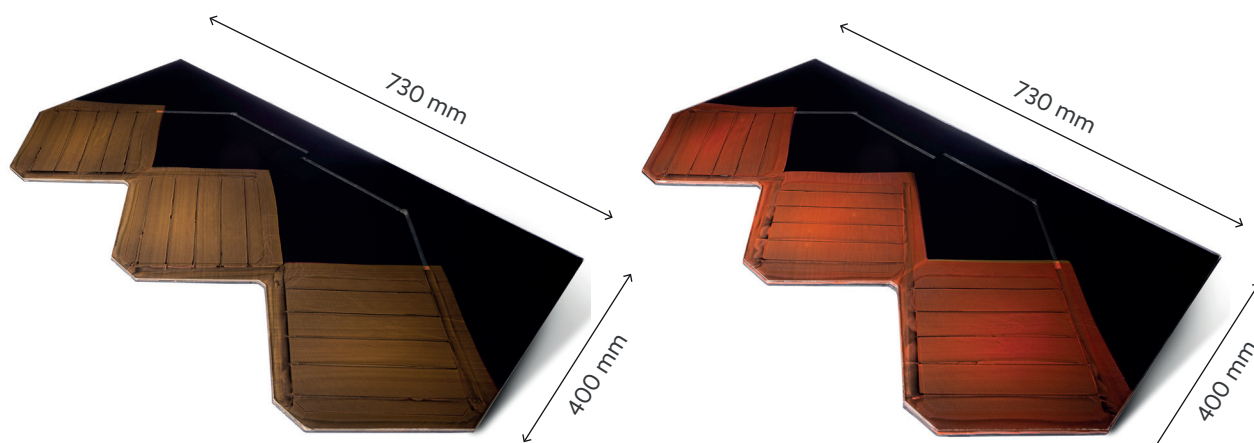
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M1

Standard tile

A1



Each project includes finishing tiles in different sizes to suit the design of each roof.