



Technical Data Sheet

INVISIBLE SOLAR Rooftile

Photovoltaic module shaped like architectural element made of a polymeric compound non-toxic and recyclable. Built-in the module body there are monocrystalline silicon cells.

4,5 Wp
INVISIBLE SOLAR ROOFTILE

15 Rooftiles
PER SQUARE METRE

67,5 Wp
PER SQUARE METRE

EXAMPLE OF DIMENSIONS FOR A INVISIBLE SOLAR ROOFTILE SYSTEM

1 kWp

223 Rooftiles

15 m²

MODULE DATA

Dimensions (cm)	45.5 x 18 x 14 x 7(height)
Weight (kg)	1.50
Working temperature	-40°C / +85°C
Maximum static load (kg)	500,00 per piece
Protection	IP68
Flammability (UL94)	HB
Connections	screw connector

MAIN FEATURES



Architectonic and aesthetic integration

Indistinguishable from terracotta can replace existing tiles.



Self-cleaning and de-polluting

The photocatalytic surface naturally activate itself endless.



Chemical and mechanical resistance

Not fear chemical solvents and atmospheric agents. Excellent resistance to compression and impact.



Non-toxic and recyclable materials

Are used non-toxic materials only, also from natural origins or resulting from the reuse. All recyclable.

DISPOSAL AND RECYCLING STEPS

1. Incineration

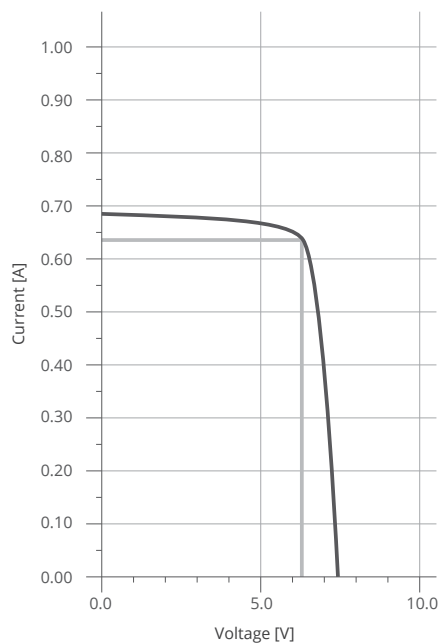
Compound will be reduced to non-toxic and reusable ashes (eg. making mixtures for building materials) when heated to a temperature of above 600°C. The reduction to ashes of polymers frees the built-in materials making them available individually.

2. Reuse

Powders of backed clay, stone and so return to their original state. Copper connections are melted and available for be used again. Even silicon can be reused .

ELECTRICITY PRODUCTION DATA

Isc (A)	Short-circuit current	0.76
Voc (V)	Open circuit voltage	7.48
Pp (W)	Peak power	4.5
Ipp (A)	Current at peak power	0.70
Vpp (V)	Voltage at peak power	6.39
Fill factor		79.48
Module η	Module efficiency	6.29
Celle η	Cell efficiency	9.77
Rser (Ohm)	Series resistance	0.805
Rsh (Ohm)	Series resistance	346.5



Measurement made at 25°C and 1.000W/m².

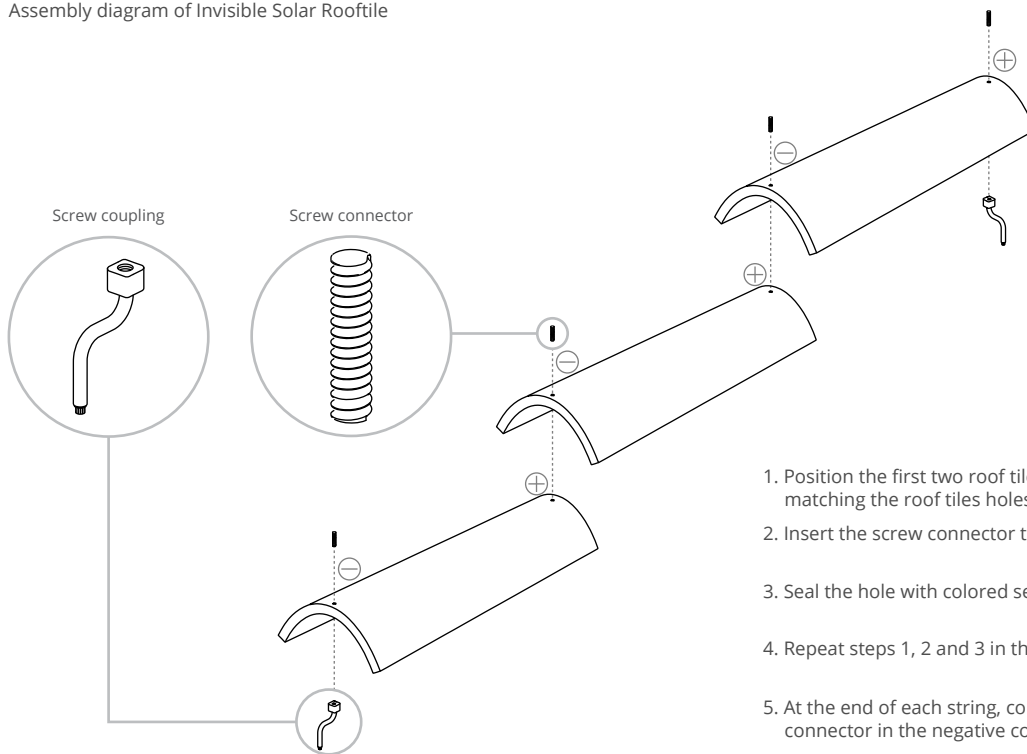
CERTIFICATIONS



28/10/2016

HOW TO INSTALL

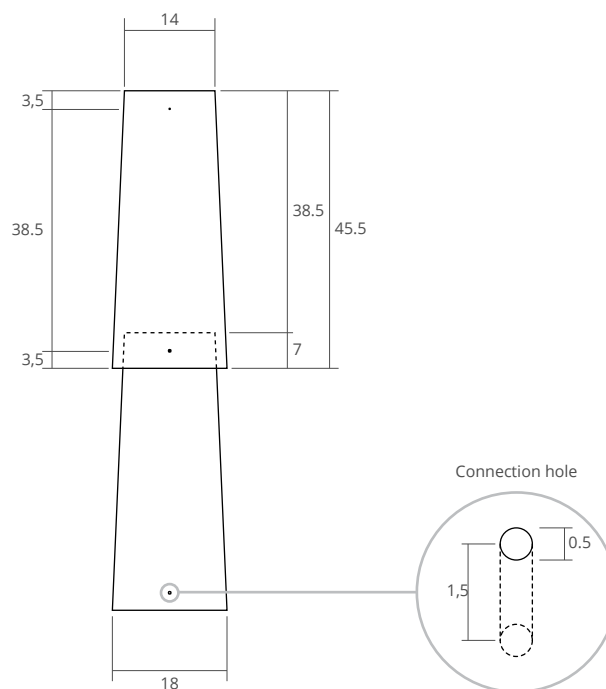
Assembly diagram of Invisible Solar Rooftile



1. Position the first two roof tiles starting from the bottom of the roof matching the roof tiles holes.
2. Insert the screw connector to connect them to each other.
3. Seal the hole with colored sealant.
4. Repeat steps 1, 2 and 3 in the whole system area.
5. At the end of each string, connect the black screw coupling with a screw connector in the negative connection hole remained free.
6. At the beginning of each string, connect the red screw coupling (with bypass) with a screw connector in positive connection hole remained free.
7. Plug the screw couplings to the cables that lead to the inverter.

DIMENSIONS

Scheme of measures of roof tile, overlapping and connection hole.



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