

PRODUCT INFORMATION SHEET

ZOLAR

Zolar is a walkable pavement for rooftop terraces and is capable of generating solar energy with an efficiency similar to a regular solar module thanks to the photovoltaic cells integrated in the slab. Zolar is a BIPV (building integrated photovoltaic) solution, ideal to achieve nearly zero energy buildings by transforming any outdoor area of the building into a solar energy source.

OUTSTANDING FUNCTIONALITIES

Modular: Zolar slabs combined with fixplate lock system are designed to combine with other rooftop paving systems.

Space efficiency: Traditional solar panels often require dedicated space. Zolar is integrated into the rooftop pavement and utilizes existing infrastructure, such as rooftop terraces. It optimizes rooftop space and maximizes solar energy generation without consuming additional space.

Easy maintenance: Zolar does not require special maintenance due to its hydrophobic properties, requiring only the cleaning that is given to any other outdoor flooring.

OPERATING TEMPERATURE

Thanks to the microparticle technology incorporated into the surface layer, a thermal bridge is created on the pavement surface so that the surface does not exceed 60 degrees in temperature.



GENERAL SPECIFICATIONS

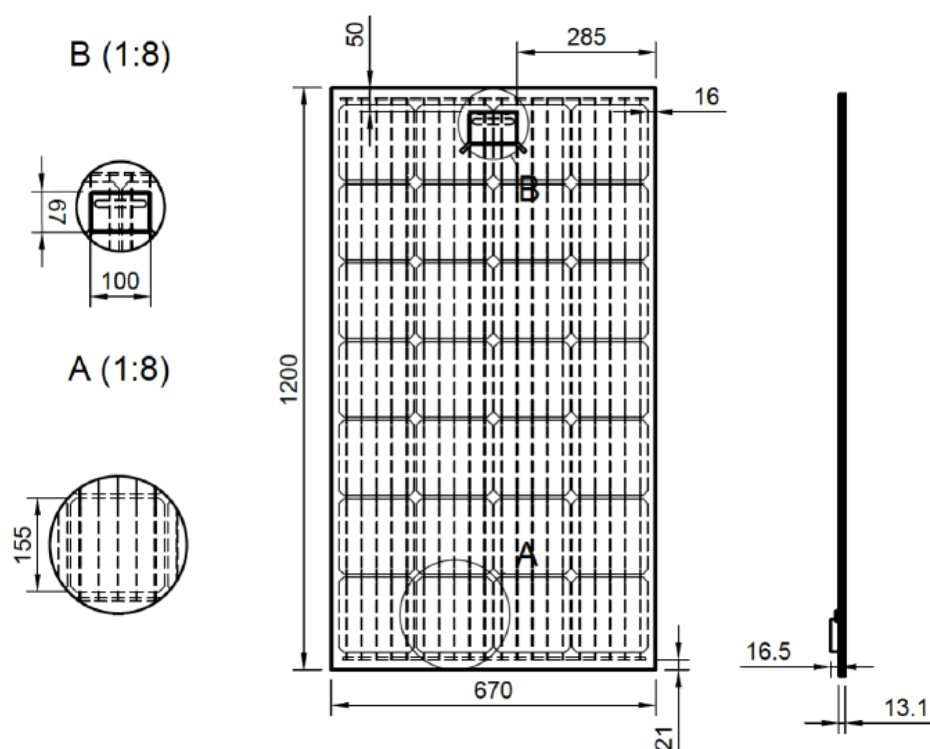
Model	Zolar
Area	0,804 sq. meters
Dimensions	1200 x 670 x 13 mm
Weight	24
Junction box protection	IP68
Connectors type	MC4 EV02
Cell colors	Black
Cell/pcs	28
Cell size	156 x 156 (5bb)
Cell's performance warranty (years)	20
Product warranty (years)	2

ELECTRICAL SPECIFICATIONS

Technology	Monocrystal silicon
Power (W/pcs)	144 Wp
Power (W/m2)	179 W
Nominal Voltage	16,28 V
Nominal current	8,86 A
Open circuit voltage	20,1 V
Short circuit current	9,2 A
Maximum stream voltage	1000 Vdc

MECHANICAL SPECIFICATIONS

Max load (kg/pcs)	1200
Material	Tempered glass
Reaction to fire	A1
Wearing course grade (anti slipping)	Class 3 (Rd> 45) DIN 51 130 - R12 (UNE 41901:2017)
Surface layer	Anti-slip polyurethane resin
Necessary support	Zoontjens fixplate lock



ZOLAR PAYBACK PERIOD

Europe vs United States
Sunshine duration in hours per year.



illustration 1: Hours of Sunlight in Europe and the USA.

	Annual production	kWh/kWp
Region	Blue (London)	870-966.7
	Green (Munich)	944-1049
	Light green (Toulouse)	1025-1139
	Yellow (Rome)	1257-1397
	Orange (Madrid)	1376-1529
	Red (San Francisco)	1432-1591
	Dark red (Los Angeles)	1516-1684

		Price €/MWh							
	Amortization in years	75	100	125	150	175	200	225	250
Region	Blue (London)	11.24	9.26	7.88	6.85	6.1	5.44	4.93	4.51
	Green (Munich)	10.54	8.63	7.12	6.34	5.6	5.22	4.53	4.14
	Light green (Toulouse)	9.55	7.75	6.53	5.63	4.96	4.42	4	3.64
	Yellow (Rome)	8.65	6.98	5.84	5	4.4	3.92	3.54	3.22
	Orange (Madrid)	8.16	6.55	5.47	4.7	4.11	3.66	3.3	3
	Red (San Francisco)	7.8	6.23	5.2	4.45	3.9	3.46	3.11	2.83
	Dark red (Los Angeles)	7.36	5.87	4.88	4.177	3.75	3.24	2.91	2.65