

Solar roof tiles MSD-75B.A39



- ROBUST** - roof-integrated photovoltaics
- SIMPLE** - to be installed
- SAFE** - No connections in the roof interior
- CLEAN** - uniform appearance

The MSD-55B.AX solar roof panel was developed by SIGMA Energy Systems GmbH as a roof covering for power generation in Germany and is manufactured in Europe.

The roof panel is made of a tried and tested polymer mineral material. It is characterized by its resistance to environmental influences, is highly resilient, temperature-stable and recyclable.

Further advantages of the solar roof panel

- 100% rated power through plus values (0~5%)
- Homogeneous, dark glass surface (All Black)
- Innovative ventilation system
- Variable deck length and deck width
- Non-sticky and flexible
- Installation by roofers, connection by electrical contractors
- Connecting tiles: see current list



3 solar roof panels cover an area of approx. 1 m², weight approx. 24 kg. Nominal output of 14 solar roof panels approx. 1.05 kW.

No penetration of the roof cladding and insulation e.g. through the screw connections of roof hooks

Certifications and tests



PV MODULE: IEC 61215, EN 61730

Solar roof panel: General building authority test certificate

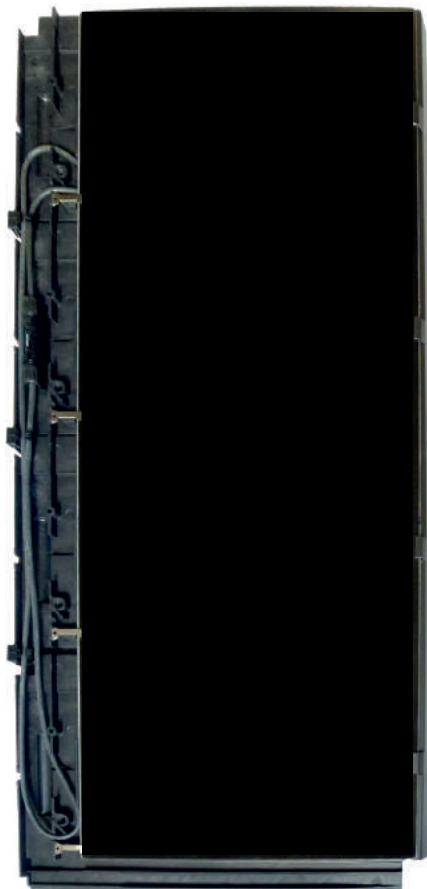
Otto-Graf Institute

MPA University of Stuttgart

Further tests by the

Research and Testing Institute Steine und Erden Karlsruhe e.V.

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Solardachplatte	MADE IN GERMANY
Deck length (approx.)	36 - 38,0 cm
Recommended deck length	36,5 cm
Average deck length (approx.)	37 cm
Deck width pressed (approx.)	98,2 cm
Deck width drawn (approx.)	99,6 cm
Weight incl. module (approx.)	11,5 kg / Stück
Weight / m ² (approx.)	34,5 kg
Standard roof pitch	25° ⁽¹⁾
Minimum roof pitch	15° ⁽²⁾

PV-Modul	MADE IN GERMANY
Module size	982 x 390 x 5,2 mm
Number of cells per module	20 Stück monokristallin, 210x105 mm
Weight approx.	5,7 kg
Cable length	⊕ 1680 mm ⊖ 600 mm
Connections	Ø 4 mm MC4-Anschlüsse, Original
Connection box	TÜV zertifiziert, Ip68

Electrical data of the PV module under standard test conditions (STC) ⁽⁴⁾

Max. Power P _{max}	75,0 Wp
Performance tolerance	0/+5% auf P _{mpp} , P _{flash} > P _{mpp}
Voltage MPP at STC (V _{mpp})	20,95 V
Current MPP at STC (I _{mpp})	3,60 A
Short-circuit current (I _{sc})	3,76 A
Open circuit voltage (V _{oc})	24,6 V
Maximum system voltage	1000 Vdc
Operating temperature range	-40°C bis +85°C
Output / m ² laid area	approx. 210 Wp/m ² , with deck length (batten spacing) 36 cm
Thermal properties: STC 25°, NOCT 45°	Current (I _{sc}) + 0,05 %/K
	Voltage (V _{oc}) - 0,304 %/K
	Power (P _{mpp}) - 0,36 %/K
Performance guarantee ⁽³⁾	Linear, 80% after 25 years
Product warranty ⁽³⁾	25 years

(1) Local conditions must be taken into account

(2) Observe allocation of additional measures, observe increased requirements if necessary

(3) in accordance with our warranty conditions

(4) Irradiation 1000W/m², cell temperature 25°C, spectrum AM 1.5 (EN 60904-3)

This data sheet fulfills the requirements of EN 50380. Flasher AAA, tolerance of power measurement +/- 5%

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