

# duplex roof

## data sheet



east/west orientated substructure  
for flat and inclined roofs  
up to an angle of 15°

### Mounting system with little to no ballast required

This aerodynamic system duplex roof is particularly suitable for rooftop installations dealing with a small reserve of distributed load. The design of duplex roof leads the wind through the lightweight system perfectly – hardly regarding any ballast weight at all. The substructure is made of very few and factory preconfigured components ensuring easy and ultra quick mounting.

### Most efficient roof coverage enable higher yields

This east/west oriented system makes optimum use of the available roof space as no shading intervals are needed. This leads to higher yields for the plant operator combined with significantly more even allocated yields. Moreover, duplex roof convinces by its outstanding price-performance ratio.



developed and aerodynamically optimised in a wind tunnel



quick installation saves time and money:  
no other mounting system can be installed faster



suitable for roofs with a limited load-bearing capacity



minimum shipping and storage costs due to small scale: 50 kWp measure 2.8 x 1 metre in packaging



fully optimised prefabrication



resistant to UV, wind and corrosion



roof impermeability assured

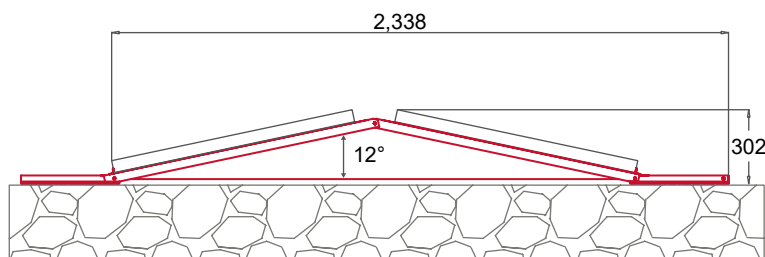


multi-directional water drainage guaranteed

# duplex roof



## Technical drawing



Module width	up to 1,000 mm*
Weight	3.5 kg/m <sup>2</sup>
Shading intervals	arbitrary
Distributed load	8 kg/m <sup>2</sup> **
Space requirement	Starting at 8 m <sup>2</sup> /kWp**

\* Custom solutions available for alternative module widths. System is suitable for all module dimensions.

\*\* Space requirement and distributed load may vary depending on module type, considered shading intervals, angle of inclination, allocation of generators as well as location and building data.

## Technical data

Application field	On flat roofs and roofs with a gentle incline of up to 15°
Roof orientation	east/west-facing
Roof covering	Foil, bitumen, gravel, green, sheet metal, including trapezoid sheeting
Modules	are placed and clamped on the short side
Fixation to roof	Placement with no penetration of the roof, rooftop impermeability is not affected by the mounting system in any case
Building protection	Specially designed protective underlay mats for the given surface, pre-fabricated and mechanically fixed
Static	Static testing according to DIN EN 1991-1-1 (load capacity) and DIN EN 1991-1-3 (snow load). DIN EN 1991-1-1 to 4 comply with EUROCODE 1
Proof of wind resistance	Stability tested by wind tunnel testing at the Institute of Industrial Aerodynamics according to DIN EN 1991-1-4 and the equivalent load figures measured
Lightening protection	Substructure can be connected suitable for lightening current
Material	Steel S255 G D AZ185 (Steel with 185 g/m <sup>2</sup> aluminium-zinc alloy), corrosion protection class III according to DIN 55928-8
Connection material	VA stainless steel screws and bolts
Assembly time	10 kWp per man hour (duplex roof including module)
Product guarantee	10 years