

ADVANTAGES

- › **Performance:** High performance of electrical energy over a period of 50 years and thermal energy for a lifetime
Results of measurements by TH Köln over 1 year:
 - › Compared to conventional BiPV systems: 16% better system utilization (Performance Ratio)
 - › In combination with a heat pump: up to 20% electricity savings per year*
- › **Mechanics:** Certified products in terms of hail impact, storm suction and walkability of the roof
- › **Quality and durability:** Waterproofing of the roof for 200 years and longevity of the PV module thanks to glass-glass construction with butyl sealing
- › **Installation:** Easy to install, connect and individually replace
- › **Environment:** Sustainability due to long service life and very good recyclability

- › BiPV in different design variants
- › Hybrid system (PV and solar thermal)
- › Integrated rear ventilation for high performance and durability
- › Easy installation and removal
- › High hail and storm suction resistance
- › Rain-, lightning- and fire-proof roof

* Prerequisites: System with large heat storage and consumption of the total amount of heat



We support you in your projects in the areas of energy technology, automotive and industry from the initial product idea through prototype construction to the start of series production or from the greenfield to the finished factory and production start. In our innovation division, we also develop highly efficient and forward-looking solutions in the field of renewable energies and electromobility. We look forward to getting in touch with you!



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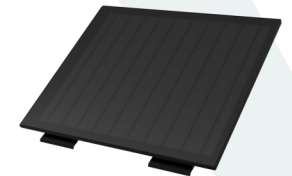
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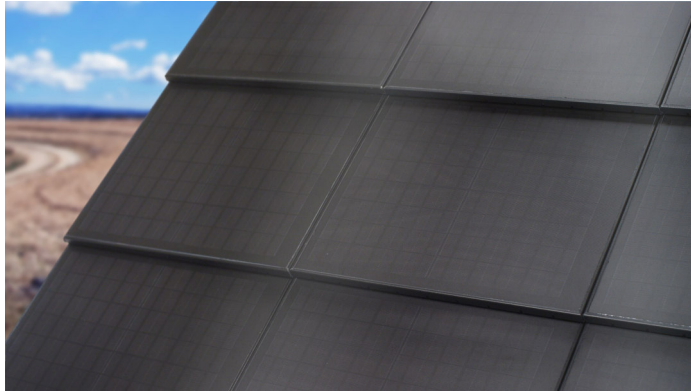
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MULTI ENERGY ROOF



SOLAR PLAIN TILE



The Solar Plain Tile offers the aesthetics of a modern roof shingle. It is installed horizontally or vertically via integrated hooks on the profile frame, which enable quick installation as well as removal of individual tiles and also act as a metallic conductor for potential equalization. Optionally, the entire roof or only optimal partial areas can be covered. The PV module is a glass-glass module with a butyl edge bonding, which is extremely robust against storm and hail as well as safely protects the solar cells against moisture.

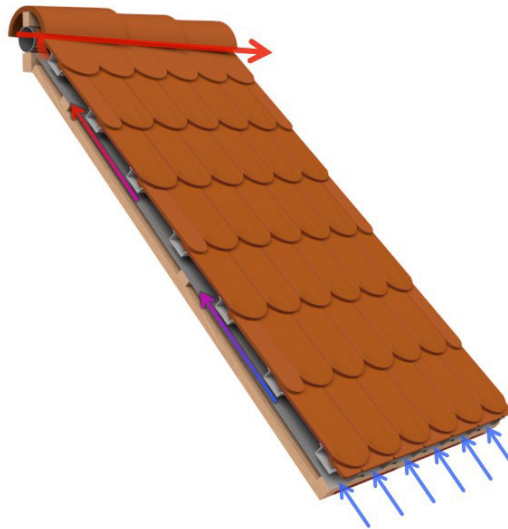
Parameter	SPT Horizontal / Vertical	
Dimensions (L x W x H) [mm]	378 x 544 x 8.7 543 x 374 x 8.7	
Mass [kg]	4.5 / 4.4	
Wafer	Monocrystalline, PERC	
Variant	All-Black	High-Performance Black*
Rated Output (P_{mpp}) [W]	30.8 / 29.4	36.0 / 34.1
Power Density [W/m ²]	159.4 / 155.6	186.6 / 175.2

* Black design with visible busbars and solar glass with anti-reflective coating

MULTI ENERGY ROOF

With the Multi Energy Roof developed by paXos, simultaneous use of photovoltaics and solar thermal energy in combination with an attractive and inconspicuous appearance becomes possible. A conventional trapezoidal sheet metal serves as the substructure, on which solar roof tiles of different designs can be easily and quickly installed. The Solar Plain Tile and the Solar Beaver Tail represent two possible design variants.

The trapezoidal sheet forms defined air channels that allow rear ventilation and thus cooling of the solar cells. This significantly increases the service life of the entire system. At the same time, the warm exhaust air can be used as thermal energy by means of a heat pump. The Multi Energy Roof also provides a rain-, lightning- and fire-proof sub-roof.



You can find more information about our products here:



SOLAR BEAVER TAIL



The Solar Beaver Tail module has the same appearance as conventional beaver tail tiles and thus enables roof surfaces of listed buildings to be used for energy generation (PV and solar thermal). The module is easy to install and can be removed individually from the composite. The storm suction protection is already integrated in each Solar Beaver Tail. The roofing can be done as single roofing, classic double or crown roofing. With the single roofing, the highest power density can be achieved at the lowest system costs.

Parameter	SBT 200 / SBT 180*		
Dimensions (L x W x H) [mm]	400 x 200 x 14 380 x 180 x 12		
Mass [kg]	1.5 / 1.2		
Wafer	Monocrystalline, PERC		
Color	Black	Brown	Terracotta
Rated Output (P_{mpp}) [W]	8.7 / 5.4	7.5 / 4.7	5.4 / 3.5
Power Density [W/m ²]	131.4 / 110.4	113 / 97.1	81.3 / 72.3

* Specifications with single covering and lath spacing of 330mm (SBT 200) or 270mm (SBT 180)