

## PHOENIX TECTOFLAT

The innovative system for all standard flat roofs



### The cost-effective multi-talent.

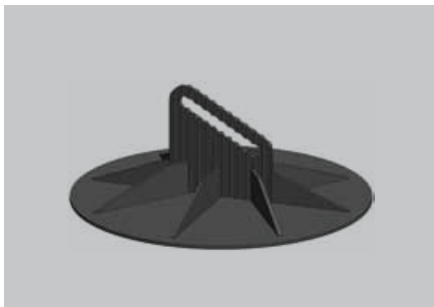
Professional PV-installations on flat roofs require exact construction and demand a lot of the mounting system. With TectoFlat, Phoenix Solar is expanding its range of mounting systems with an innovative product for all standard flat roofs. The system developed by Phoenix Solar combines functionality with weight-optimised aerodynamics and thus provides the perfect solution for all common flat roofs. TectoFlat can be constructed with both laminates and framed modules and, thanks to its inherently low weight, is particularly suited for roofs with minimum load reserves. In addition, by optimising the material used it has been possible to achieve a significant reduction in price relative to comparable solutions.



### Special features at a glance:

- **Variability:**
  - Suited for framed modules and laminates
  - Can be deployed on all standard flat roof types: concrete, membranes, bituminous sheeting, gravel, trapezoidal sheet and even inverted roofs
  - Module tilt angle gradually adjustable between 12° and 29°
- **Weight optimisation:**
  - Low point loads due to evenly spread load distribution on the roof and aerodynamic design
  - Particularly suited for roofs with low load reserves
- **Mounting:**
  - Rapid installation thanks to preassembly and low number of individual parts
  - No roof penetrations (except with profiled metal sheet roofs)
- **Quality and price:**
  - Low costs thanks to the use of innovative and proven materials
  - Wind tunnel and structural tests by independent institutes confirm secure stability
  - Material warranty: 10 years

## PHOENIX TECTOFLAT: VARIABLE, INDIVIDUAL, COST-EFFECTIVE.



### Standard roof connection:

- Ground joint for installation without roof penetration
- Large contact surface:  $\varnothing$  210 mm
- Adjustable height to balance out uneven roof surfaces
- Compatible with all common roof membranes
- Material: UV-resistant plastic without softeners

Alternative fixing system for trapezoidal sheet also available



### Triangular set for framed modules:

- Consists of ① ground joint, ② bottom rail, ③ inner and outer cross beams as well as ④ elevation rail
- Permissible module width: 800 – 1,050 mm
- Module orientation landscape, fixed on installation holes
- Elevation rail available in two different lengths, enabling tilt angles between 15° and 29°
- Innovative, ergonomic installation concept
- Material (not including the screw foot): Magnesium-aluminium-zinc coated steel



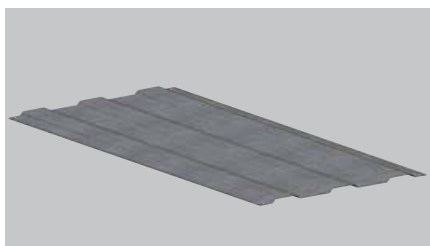
### Triangular set for laminates:

- Consists of ① ground joint, ② bottom rail, ③ cross beam as well as ④ elevation rail
- Suitable for First Solar and MiaSolé
- Thread for module clamps already included in the cross beam
- Module clamps enable double-row module installation in landscape orientation
- Elevation rail available in two different lengths, enabling tilt angles between 12° and 25°
- Ergonomic installation concept
- Material (not including the screw foot): Magnesium-aluminium-zinc coated steel



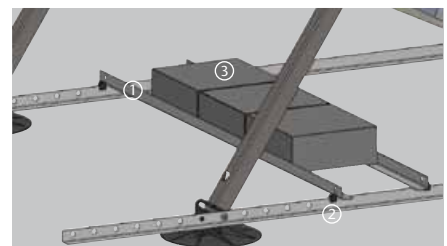
### Connectors:

- For connecting the rows to one another
- Available in three different lengths, enabling it to be adjusted for different shading angles
- Material: Magnesium-aluminium-zinc coated steel



### Wind deflector:

- Connects the modules in a west-east direction
- Available in 306 mm or 466 mm widths in accordance with the mounting (length: 2,075 mm)
- Can be overlapped to optimally complete rows
- Material: Magnesium-aluminium-zinc coated steel



### Ballast:

- Consists of:
  - ① Connectors
  - ② Edge-Clips
  - ③ Concrete paving stone (not included in delivery)
- Quantity depends on the wind load



Located in Sulzemoos near Munich, Germany, Phoenix Solar AG is an international leading photovoltaic systems company. Many years of experience in planning, constructing and operating its own largescale photovoltaic power plants as well as a strict quality management system make the company's products a secure capital investment.