

# T..fix Product Data Sheet

Photovoltaic Short Rail System for Trapezoidal Metal Sheet Roofs



## T..fix - Assembly System

Innovative, cost-efficient, pre-mounted assembly system (two parts) for roof-parallel photovoltaic facilities mounted on trapezoidal metal sheet roofs.

Site 2

## Safety

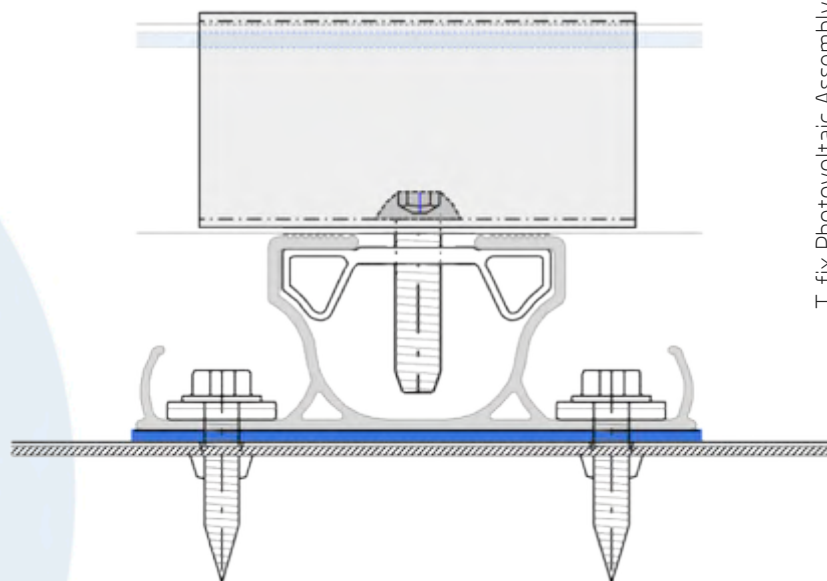
All components guarantee high corrosion resistance for maximum lifetime and operational safety.

Site 3

## Quick, Economic, Simply Brilliant

Due to intelligent and consequent pre-assembly, the T..fix system enables you to carry out assemblies at a record time.

Site 4



T..fix Photovoltaic Assembly System

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## Economic Benefit

By developing the T..fix Assembly System, we managed to design a subconstruction to be mounted simply and quickly.

As being pre-assembled as far as possible, merely **TWO system components** have to be installed on the roof enabling you to carry out assemblies at a **record time**.

## Planning Service

Our assembly system is based upon **verified system statics**. T..fix was not only empirically examined at a material laboratory, but also proved by considering present DIN and EU standards (without design deviations).

Under assistance of our verified **calculation tool** you may **safely, quickly and simply** determine the suitability and number of fasteners on a project-specific basis.

## T..fix Assembly System

Pre-mounted (two parts):

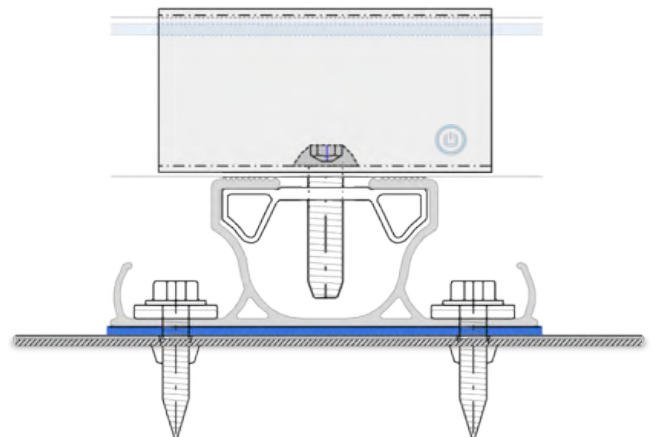
**Base Rail Part 1:**  
Immediately usable as any additional working procedures are not necessary (cut sections, drilling, affixing fleece, etc.)

**Modular Clamp Part 2:**  
Immediately usable as all modular clamps are already manufactured in the way that it is not possible that these may slip down, thus, avoiding that the clamp has to be laboriously lifted and re-adjusted when setting the modules. It is, therefore, not necessary either to attach t-nuts, threaded plates, locking rings and similar being, if required, rather time-consuming and weather-dependent.

**Quick, Economic,  
Simply Brilliant**



push innovation systems



## Maximum Operational Safety

### Expansion issue solved:

The special clamp shape and the load application points make sure that **thermal expansion is neutralized** by the T..fix system, there are **not any length limitations** and the trapezoidal metal sheets do not have any tensions.

### String Cable Concept:

Cable ties are not needed for stringing modular cables together (module to module), thus, protection against weather influences is guaranteed (snow, rain, wind, sun).

### Simple, system-secure, long-lasting and quick cable installation!<sup>1</sup>

Integrated click system  
Considered modular connector types (MC4, Tyco, Phönix, Radox, up to 21mm connectors)

### Fastening Concept:

The punched base rail of the T..fix system and the thin sheet-metal screws, approved by building inspection authorities, ensure that any drilling is not necessary (**no chippings**). Consequently, there is not any danger of rust perforation either.

### Protection Concept:

Protective and sealing **fleece** was already attached by the manufacturer **on all areas** (no sharp edges).

### Earthing Concept:

It is possible to earth a photovoltaic facility in an interconnected way merely with minor expenditure, there are only needed two functional earthing points per modular field.

### Planning safety:

Secured by **strict laboratory checking** and by **verified calculatory planning tool**.

## Areas of Application

### Possibilities of Use:

Due to the universal punch raster, the T..fix system allows a photovoltaic assembly on all usual kinds of trapezoidal metal sheets, from a strength of 0.5 mm, being usable throughout Germany and the EU (almost 95 %)

### Procedure at Construction Site:

In view of the **pre-assembly permanently provided by the manufacturer**, the T..fix system enables technicians to conduct the assembly safely, quickly and simply brilliantly, completely independent of prevailing weather conditions.

## 4-Step Assembly

### Step 1:

Measurement of the roof area to be covered.

### Step2:

Spreading and screwing of the pre-assembled T..fix base rail (no chippings, no leakages or similar)

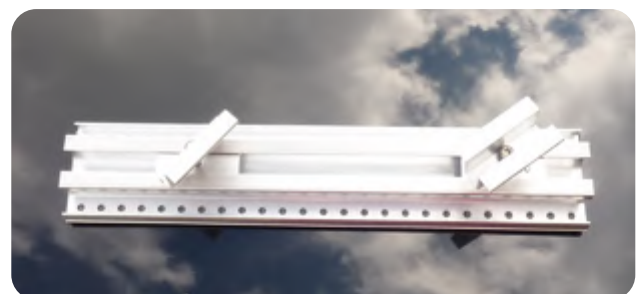
### Step 3:

Push-in of pre-assembled module brackets.

### Step 4:

Clipping of module cables and setting of modules without unnecessary delay in assembly time due to slipped down clamps.

Steps 2 and 4 enable you to carry out assemblies at a record time.



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## HIGHLIGHTS

Usable in case of all common trapezoidal metal sheets

Wide-ranging using spectrum due to system statics.

### **Maximum operational safety.**

Maximum pre-assembly (only two parts)

Minimum logistics at construction site, weather-independent assembly

Clamps cannot slip down, do not have to be re-adjusted and do not have to be lifted when setting modules.

### **Assemblies may be performed at a record time.**

Short rails, flexible clamps

### **Solution of expansion issue.**

Simple, long-lasting, system-integrated stringing concept.

Thin metal sheet screws approved by building inspection authorities.

Permanent punched pattern, protective and sealing fleece

### **Maximum tightness and corrosion protection**

Only two functional earthing points necessary.

### **Earthing concept.**

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