



**TRITEC**

ENERGY FOR A BETTER WORLD

# **MOUNTING SYSTEMS**

Main Catalogue

[www.tritec-energy.com](http://www.tritec-energy.com)

# YOUR PARTNER FOR YOUR FUTURE

As a wholesaler and partner for solar professionals, builders and investors, we are active worldwide with 300 employees in system wholesale as well as in large-scale plant construction. As an “driver of change”, we have been creating new synergies in the market with our mounting systems and products for over 30 years.

**Our own products, the PV mounting systems, are divided into insertion, clamping, in-roof and flat-roof mounting systems.**

These offer optimum solutions for the various requirements of different roof types and alignments. We attach great importance to the high-quality processing of the components as well as to the durability of the substructure.

Discover our smart PV mounting systems.

**TRITEC – ENERGY FOR A BETTER WORLD**

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# HIGH SPEED FOR MORE EFFICIENCY

Our **PV insertion systems** are designed for the most efficient work. With just a few components and the proven SafeClick assembly, you can realise your project in an unbeatably short time.

## Your advantages at a glance:

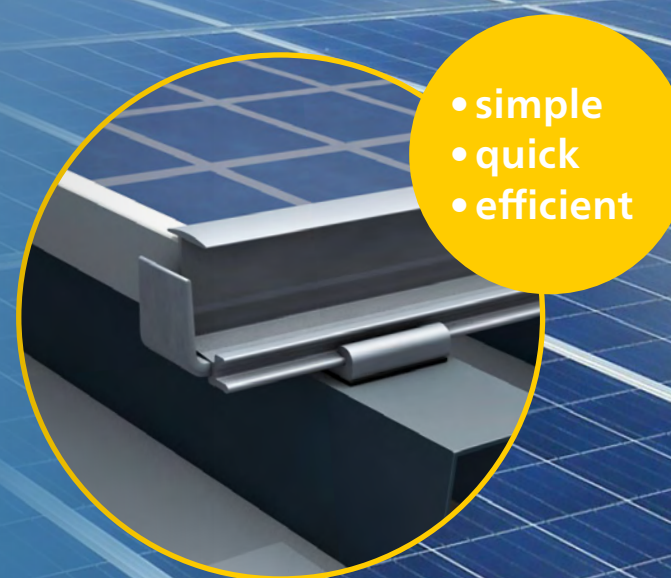
- **Up to 50 % faster assembly:** Our TRI-STAND insertion systems score with their enormous time advantage over several other systems.
- **Efficiently planned:** Use the free TRI-DESIGN planning software to plan your mounting system, inverter and string management.
- **Maximum flexibility:** TRI-STAND mounting systems use identical components for upright and transverse assembly.
- **Floating mounted:** The floating mounting gives no chance for damage due to thermal expansion to the roof, mounting system and module. Thermal separation of the system is not necessary.

# TRITEC

ENERGY FOR A BETTER WORLD

## TRI-STAND

The smart insertion system for  
PV systems on trapezoidal sheet metal.



## The main advantages:

- Floating rooftop system, therefore no thermal separation necessary
- Simple, quick and efficient installation
- Considerable time and thus cost saving
- Optimum load distribution and stability
- Suitable for all common framed solar modules



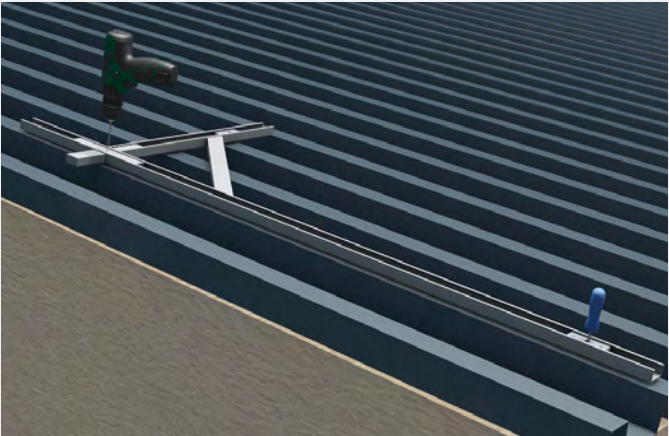


# TRI-STAND FOR TRAPEZOIDAL SHEET METAL

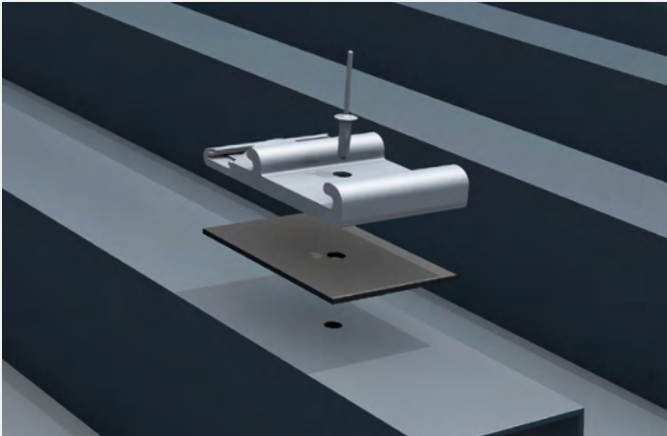
This way you easily increase your efficiency

Realize your projects in an unbeatably short time: The smart planning software, the few components and the patented SafeClick assembly enable an extremely quick, safe and simple installation of the PV insertion system TRI-STAND on the roof. The PV modules are easily inserted into the insertion profiles and are held in place by their own weight. Additional fastening of the modules is completely unnecessary.

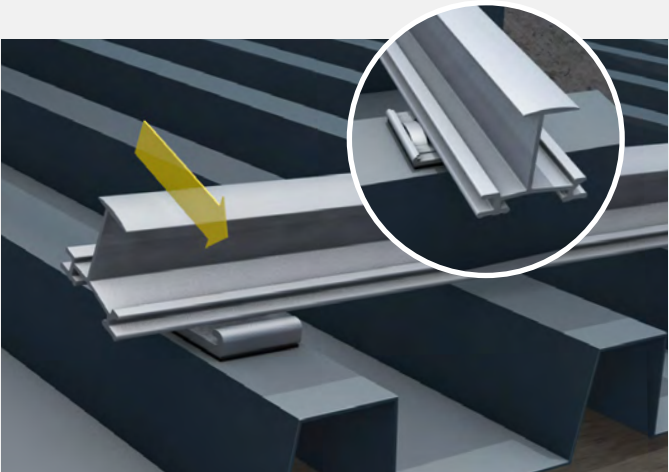
## TRI-STAND is installed in just a few steps



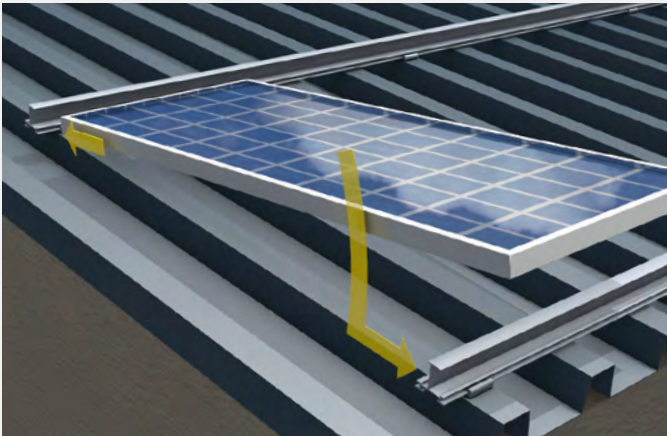
**1. Measuring and predrilling the module field**  
According to the design plan, the module field is measured on the roof. Then the trapezoidal sheet metal covering is pre-drilled using the TRITEC drilling jig.



**2. Riveting the SafeClick onto the trapezoidal sheet**  
The proven SafeClick is mounted directly onto the trapezoidal sheet metal by rivet<sup>1</sup>, whereby considerably fewer fastening points become necessary.



**3. Clicking the TS insert profiles into the SafeClick**  
The insertion profiles are clicked into the SafeClick and are floatingly connected to the roof. Damage to the roof and module caused by thermal expansion is thus avoided.



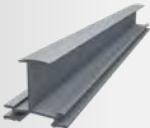



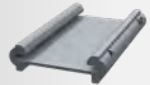



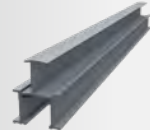




**4. Inserting the modules into the TS insertion profiles**  
The modules are inserted into the insertion profiles and are held in place by their own weight - there is no need for additional fastening.

<sup>1</sup> Also available as screw version with TRI-STAND thin sheet metal screw 6.0 x 25 DS.

# THE SYSTEM COMPONENTS

Extremely fast assembly with few components

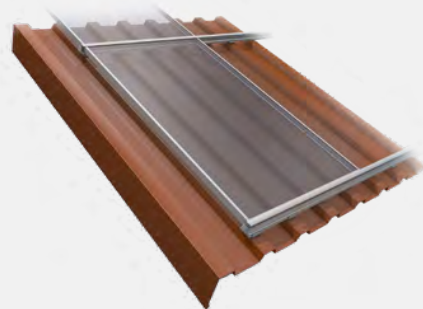
With TRITEC you have the choice: Many components of the PV insertion system TRI-STAND are available in the color selection „blank“ (aluminum silver) and „black“. Completely tailored to your needs: The profiles and variants marked with \* are available in different lengths on request.

 <b>TRI-STAND insertion profile, blank</b> Standard • Variants: TS-30/32/35/38/40 • available in different lengths*	 <b>TRI-STAND insertion profile, black</b> Standard • Variants: TS-30/32/35/38/40 • available in different lengths*	 <b>TRI-STAND Special SafeClick, blank</b> Standard • pre-assembled incl. rivet & seal • Item no.: 1502987	 <b>TRI-STAND Special SafeClick, black</b> Standard • pre-assembled incl. rivet & seal • Item no.: 1503075
 <b>TRI-STAND insertion profile connector TS-C, blank</b> Standard • Item no.: 1502216	 <b>TRI-STAND insertion profile connector TS-C, black</b> Standard • Item no.: 1502417	 <b>TRI-STAND end bracket TS-E, blank</b> Standard • Item no.: 1502214	 <b>TRI-STAND end bracket TS-E, black</b> Standard • Item no.: 1502307
 <b>TRI-STAND insertion profile Opti, blank</b> Optional • Variants: TS-30/35/40 • available in different lengths*	 <b>TRI-STAND insertion profile Opti, black</b> Optional • Variants: TS-30/35/40 • available in different lengths*	 <b>TRI-STAND end profile, blank</b> Optional • Variants: TS-30/32/35/40 • available in different lengths*	 <b>TRI-STAND end profile, black</b> Optional • Variants: TS-30/32/35/40 • available in different lengths*
 <b>TRI-STAND Edge Clip cable fixation</b> Accessories Item no.: 1502246			

\* Information on lengths and part numbers on request



**LEARN MORE**  
Videos, planning and contact



Simply scan the QR code or visit the following link to get more information about TRI-STAND for trapezoidal sheet metal, such as installation video, installation instructions and references.

[www.tritec-energy.com/en/pv-mounting-systems/trapezoidal-sheet-metal/](http://www.tritec-energy.com/en/pv-mounting-systems/trapezoidal-sheet-metal/)



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**The optimal mounting solution for every roof**  
TRITEC mounting systems combine over 30 years of photovoltaic experience. Our own products TRI-STAND, TRI-ROOF+, TRI-CLIP and TRI-FLAT Easyspeed offer optimum PV mounting solutions for the various requirements of different roof types and alignments. We attach great importance to the high-quality processing of the components as well as to the durability of the substructure.

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Or just talk to us directly. Our experts are at your disposal to answer all your questions.

**Contact**  
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[www.tritec-energy.com](http://www.tritec-energy.com)

# TRI-STAND

The smart insertion system for PV systems on tiled roof.



- simple
- aesthetic
- efficient

**The main advantages:**

- Floating rooftop system, therefore no thermal separation necessary
- Simple, quick and efficient installation
- Considerable time and thus cost saving
- Optimum load distribution and stability
- Suitable for all common framed solar modules

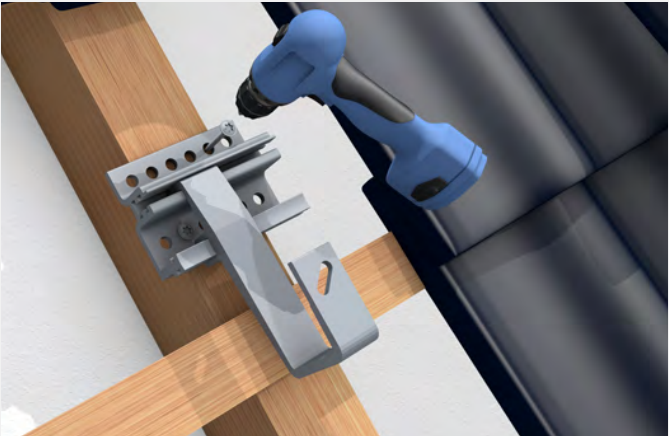


# TRI-STAND FOR TILED ROOF

This way you easily increase your efficiency

Realize your projects in an unbeatably short time: The smart planning software, the few components and the patented SafeClick assembly enable an extremely quick, safe and simple installation of the PV insertion system TRI-STAND on the roof. The PV modules are easily inserted into the insertion profiles and are held in place by their own weight. Additional fastening of the modules is completely unnecessary.

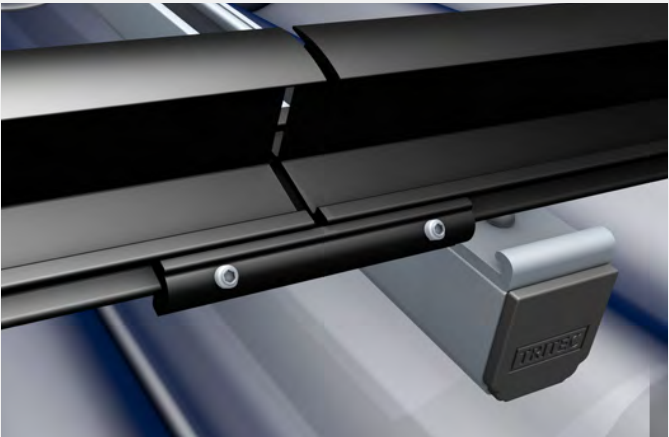
## TRI-STAND is installed in just a few steps



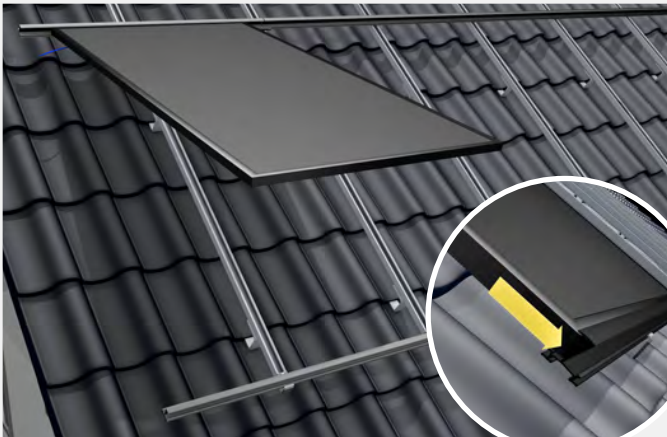
**1. Mounting the roof hook**  
After checking the substructure of the roof for its point load bearing capacity, the roof hooks are mounted according to the design plan.



**2. Mounting the vertical base profile (UP-L)**  
The pre-assembled profiles are then securely installed on the roof hooks with the M10 hammerhead screw.



**3. Clicking the TS insert profiles into the SafeClick**  
The insertion profiles are clicked into the SafeClick and are floatingly connected to the roof. Damage to the roof and module caused by thermal expansion is thus avoided.

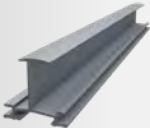




















**4. Inserting the modules into the TS insertion profiles**  
The modules are inserted into the insertion profiles and are held in place by their own weight - there is no need for additional fastening.

# THE SYSTEM COMPONENTS

Extremely fast assembly with few components

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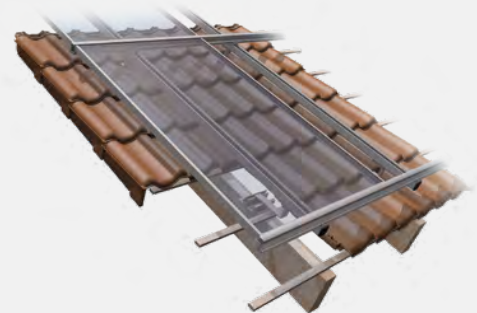
 <b>TRI-STAND insertion profile, blank</b> Standard • Variants: TS-30/32/35/38/40 • available in different lengths*	 <b>TRI-STAND insertion profile, black</b> Standard • Variants: TS-30/32/35/38/40 • available in different lengths*	 <b>TRI-STAND end profile, blank</b> Optional • Variants: TS-30/32/35/40 • available in different lengths*	 <b>TRI-STAND end profile, black</b> Optional • Variants: TS-30/32/35/40 • available in different lengths*
 <b>TRI-STAND universal profile UP-L 3,70 m, blank</b> Standard • Item no.: 1503168 • other lengths on request*	 <b>TRI-STAND universal profile UP-L 3,70 m, black</b> Standard • Item no.: 1503169 • other lengths on request*	 <b>TRI-STAND SafeClick-Torx, blank</b> Standard • Item no.: 1502870	 <b>TRI-STAND SafeClick-Torx, black</b> Standard • Item no.: 1502963
 <b>TRI-STAND insertion profile connector TS-C, blank</b> Standard • Item no.: 1502216	 <b>TRI-STAND insertion profile connector TS-C, black</b> Standard • Item no.: 1502417	 <b>TRI-STAND end bracket TS-E, blank</b> Standard • Item no.: 1502214	 <b>TRI-STAND end bracket TS-E, black</b> Standard • Item no.: 1502307
 <b>TRI-STAND universal profile connector UP-C</b> Standard • pre-assembled incl. screws • Item no.: 1502217	 <b>TRI-STAND roof hook BASIC</b> Standard • Item no.: 1503094	 <b>TRI-STAND roof hook BASIC adjustable</b> Standard • Item no.: 1503146	 <b>TRI-STAND roof hook PLUS</b> Standard • Bracket, Item no.: 1502982 • Plate 40/28, Item no.: 1502983 • Plate 49/37, Item no.: 1502984 • Plate 55/43, Item no.: 1502985
 <b>TRI-STAND Edge Clip cable fixation</b> Accessories Item no.: 1502246	 <b>TRI-STAND end cap for UP-L profile, black</b> Accessories • Item no.: 1502865	 <b>TRI-STAND hammer head bolt M10x30 A2, with locking nut</b> Accessories • Screw, Item no.: 1502255 • Locking nut, Item no.: 1502254	

\* Information on lengths and part numbers on request



## LEARN MORE

Videos, planning and contact



Simply scan the QR code or visit the following link to get more information about TRI-STAND for tiled roof, such as installation video, installation instructions and references.

[www.tritec-energy.com/en/pv-mounting-systems/tiled-roof/](http://www.tritec-energy.com/en/pv-mounting-systems/tiled-roof/)



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### The optimal mounting solution for every roof

TRITEC mounting systems combine over 30 years of photovoltaic experience. Our own products TRI-STAND, TRI-ROOF+, TRI-CLIP and TRI-FLAT Easyspeed offer optimum PV mounting solutions for the various requirements of different roof types and alignments. We attach great importance to the high-quality processing of the components as well as to the durability of the substructure.

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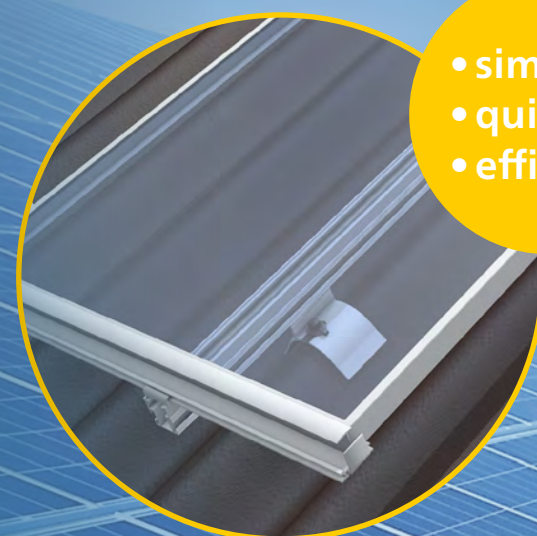
**Contact**  
[info@tritec-energy.com](mailto:info@tritec-energy.com)  
[www.tritec-energy.com](http://www.tritec-energy.com)

# TRITEC

ENERGY FOR A BETTER WORLD

## TRI-STAND

The smart insertion system for PV systems on corrugated fibre cement.



- simple
- quick
- efficient

### The main advantages:

- Floating rooftop system, therefore no thermal separation necessary
- No stresses on the module or rail system due to thermal expansion
- Simple, quick and efficient installation
- Optimum load distribution and stability
- Suitable for all common framed solar modules



# TRI-STAND FOR CORRUGATED FIBRE CEMENT

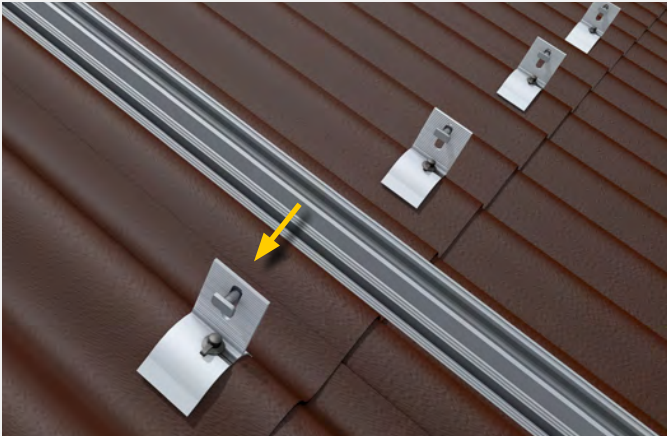
This way you easily increase your efficiency

Realize your projects in an unbeatably short time: The smart planning software, the few components and the patented SafeClick assembly enable an extremely quick, safe and simple installation of the PV insertion system TRI-STAND on the roof. The PV modules are easily inserted into the insertion profiles and are held in place by their own weight. Additional fastening of the modules is completely unnecessary.

## TRI-STAND is installed in just a few steps



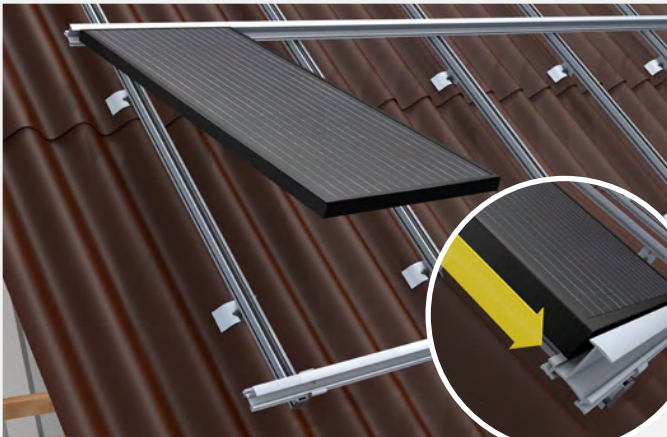
**1. Mounting the TS-COR**  
First, mount the TS-COR at the locations provided in the design plan using the existing roof screws<sup>1</sup>.



**2. Mounting the vertical universal profile (UP-X)**  
The pre-assembled universal profiles are then securely screwed onto the TS-COR using the M10 hammerhead screw.



**3. Clicking the TS insert profiles into the SafeClick**  
The insertion profiles are clicked into the SafeClick and are floatingly connected to the roof. Damage to the roof and module caused by thermal expansion is thus avoided.



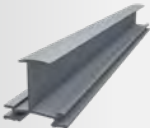







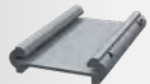





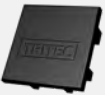

**4. Inserting the modules into the TS insertion profiles**  
The modules are inserted into the insertion profiles and are held in place by their own weight - there is no need for additional fastening.

<sup>1</sup> New roof bolts may need to be placed in additional positions.

# THE SYSTEM COMPONENTS

Extremely fast assembly with few components

With TRITEC you have the choice: Many components of the PV insertion system TRI-STAND are available in the color selection „blank“ (aluminum silver) and „black“. Completely tailored to your needs: The profiles and variants marked with \* are available in different lengths on request.

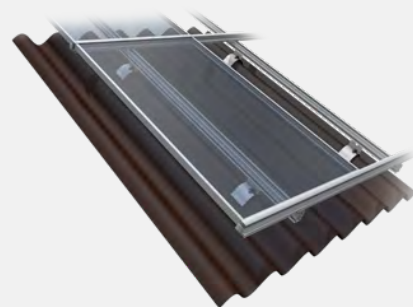
 <b>TRI-STAND insertion profile, blank</b> Standard • Variants: TS-30/32/35/38/40 • available in different lengths*	 <b>TRI-STAND insertion profile, black</b> Standard • Variants: TS-30/32/35/38/40 • available in different lengths*	 <b>TRI-STAND end profile, blank</b> Optional • Variants: TS-30/32/35/40 • available in different lengths*	 <b>TRI-STAND end profile, black</b> Optional • Variants: TS-30/32/35/40 • available in different lengths*
 <b>TRI-STAND TS-COR, mounting bracket for corrugated fibre cement roof</b> Standard • Item no.: 1503073	 <b>TRI-STAND universal profile UP-X 3,70 m</b> Standard • Item no.: 1503352 • other lengths on request*	 <b>TRI-STAND SafeClick-Torx, blank</b> Standard • Item no.: 1502870	 <b>TRI-STAND SafeClick-Torx, black</b> Standard • Item no.: 1502963
 <b>TRI-STAND insertion profile connector TS-C, blank</b> Standard • Item no.: 1502216	 <b>TRI-STAND insertion profile connector TS-C, black</b> Standard • Item no.: 1502417	 <b>TRI-STAND end bracket TS-E, blank</b> Standard • Item no.: 1502214	 <b>TRI-STAND end bracket TS-E, black</b> Standard • Item no.: 1502307
 <b>TRI-STAND universal profile connector UP-CX</b> Standard • pre-assembled incl. hammer head bolt • Item no.: 1502220	 <b>TRI-STAND Edge Clip cable fixation</b> Accessories Item no.: 1502246	 <b>TRI-STAND end cap for UP-X profile, black</b> Accessories • Item no.: 1503185	 <b>TRI-STAND hammer head bolt M10x30 A2, with locking nut</b> Accessories • Screw, Item no.: 1502255 • Locking nut, Item no.: 1502254

\* Information on lengths and part numbers on request



## LEARN MORE

Videos, planning and contact



Simply scan the QR code or visit the following link to get more information about TRI-STAND for corrugated fibre cement, such as installation video, installation instructions and references.

[www.tritec-energy.com/en/pv-mounting-systems/welleternit/](http://www.tritec-energy.com/en/pv-mounting-systems/welleternit/)



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### Contact

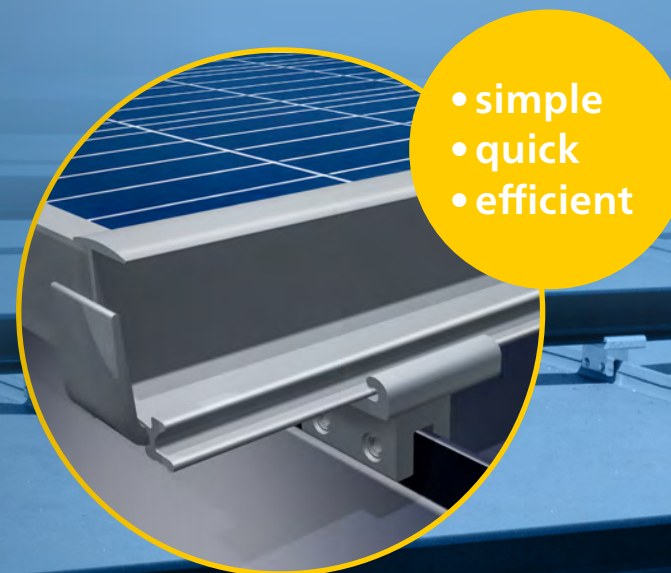
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[www.tritec-energy.com](http://www.tritec-energy.com)

# TRITEC

ENERGY FOR A BETTER WORLD

## TRI-STAND

The smart insertion system for PV systems on standing seam sheet metal.



### The main advantages:

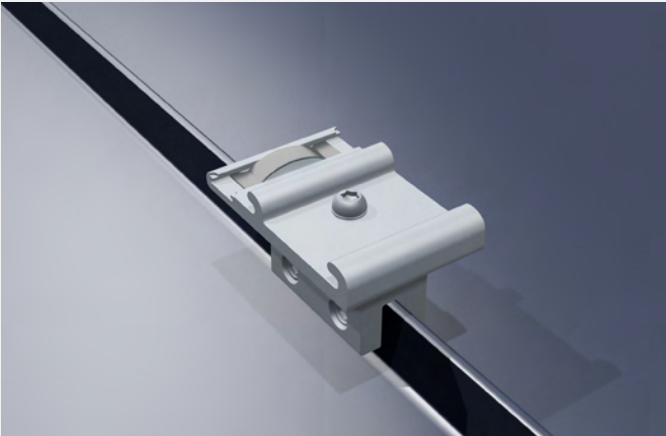
- Floating rooftop system, therefore no thermal separation necessary
- Low material requirements due to single-layer rail system
- Simple, quick and efficient installation
- Considerable time and thus cost saving
- Optimum load distribution and stability
- Suitable for all common framed solar modules

# TRI-STAND FOR STANDING SEAM SHEET METAL

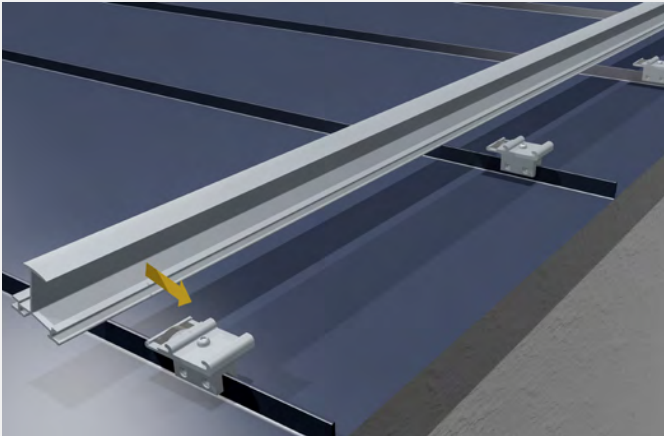
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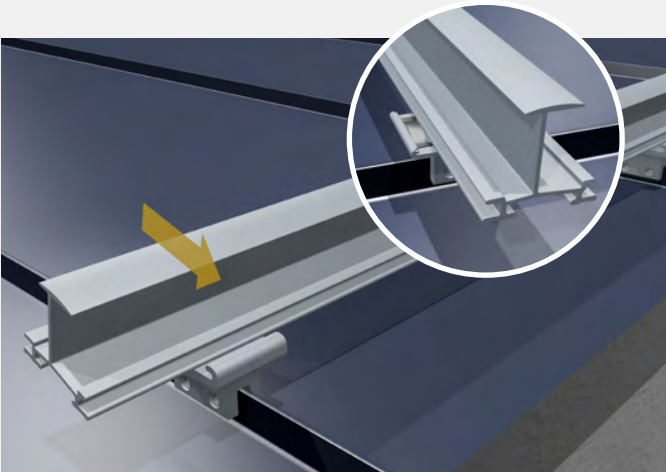
## TRI-STAND is installed in just a few steps



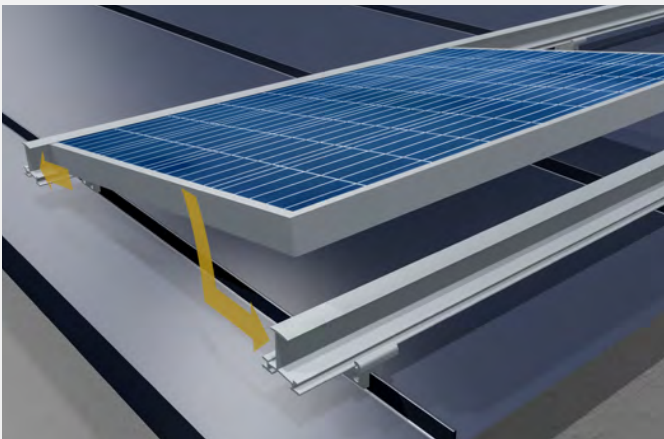
**1. Mounting SafeClick**  
The tried and tested SafeClick is mounted directly on the standing seam, including the M8 standing seam clamp.



**2. Place the SafeClicks in a row**  
Fit the SafeClicks including standing seam clamps in a row, complete assembly and fit the insert profile in place.



**3. Clicking the TS insert profiles into the SafeClick**  
The insertion profiles are clicked into the SafeClick and are floatingly connected to the roof. Damage to the roof and module caused by thermal expansion is thus avoided.

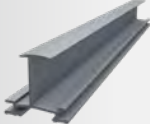



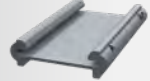







**4. Inserting the modules into the TS insertion profiles**  
The modules are inserted into the insertion profiles and are held in place by their own weight - there is no need for additional fastening.

# THE SYSTEM COMPONENTS

Extremely fast assembly with few components

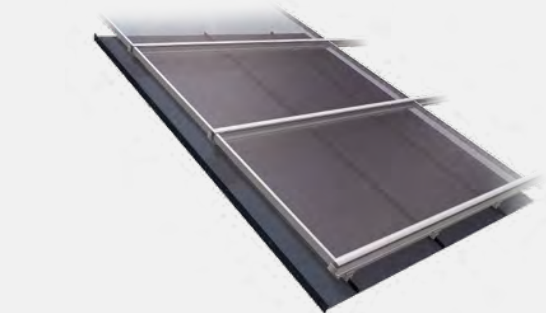
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 <b>TRI-STAND insertion profile connector TS-C, blank</b> Standard • Item no.: 1502216	 <b>TRI-STAND insertion profile connector TS-C, black</b> Standard • Item no.: 1502417	 <b>TRI-STAND end bracket TS-E, blank</b> Standard • Item no.: 1502214	 <b>TRI-STAND end bracket TS-E, black</b> Standard • Item no.: 1502307
 <b>TRI-STAND double standing seam clamp up to 7 mm, blank</b> Standard • pre-assembled incl. SafeClick • Item no.: 1503183	 <b>TRI-STAND Edge Clip cable fixation</b> Accessories Item no.: 1502246		

\* Information on lengths and part numbers on request

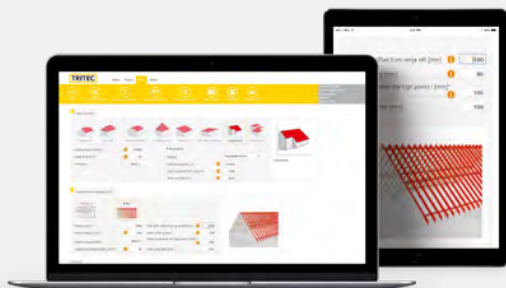


**LEARN MORE**  
Videos, planning and contact



Simply scan the QR code or visit the following link to get more information about TRI-STAND for standing seam sheet metal, such as installation video, installation instructions and references.

[www.tritec-energy.com/en/pv-mounting-systems/standing-seam-sheet-metal/](http://www.tritec-energy.com/en/pv-mounting-systems/standing-seam-sheet-metal/)



Just scan the QR code or visit the following link to watch the training video on our TRI-DESIGN planning software.

[www.tritec-energy.com/en/training/tri-design-basic/](http://www.tritec-energy.com/en/training/tri-design-basic/)

**The optimal mounting solution for every roof**  
TRITEC mounting systems combine over 30 years of photovoltaic experience. Our own products TRI-STAND, TRI-ROOF+, TRI-CLIP and TRI-FLAT Easyspeed offer optimum PV mounting solutions for the various requirements of different roof types and alignments. We attach great importance to the high-quality processing of the components as well as to the durability of the substructure.

Further information and the download of the assembly instructions you will find on our homepage [www.tritec-energy.com](http://www.tritec-energy.com).  
Or just talk to us directly. Our experts are at your disposal to answer all your questions.

**Contact**  
[info@tritec-energy.com](mailto:info@tritec-energy.com)  
[www.tritec-energy.com](http://www.tritec-energy.com)

# TRI-ROOF+

The perfect mounting solution for roof-integrated PV systems.



- The main advantages:**
- Floating in-roof system, thus no thermal separation necessary
  - Closed module surface for highest aesthetics
  - Special profiles for maximum water impermeability
  - Optimum load distribution and stability
  - Suitable for all common framed solar modules

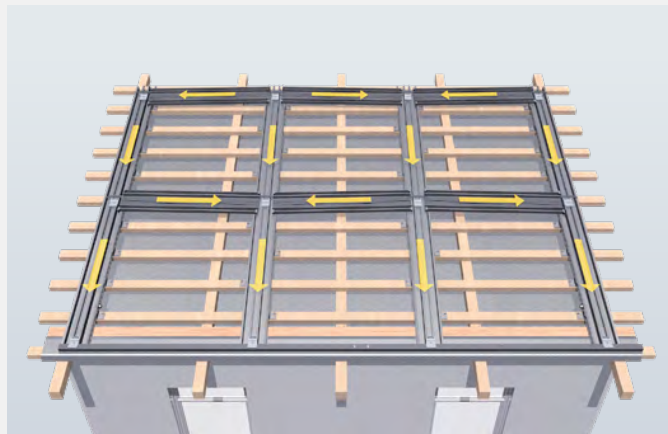


## TRI-ROOF+ FOR IN-ROOF

This way you easily increase your efficiency

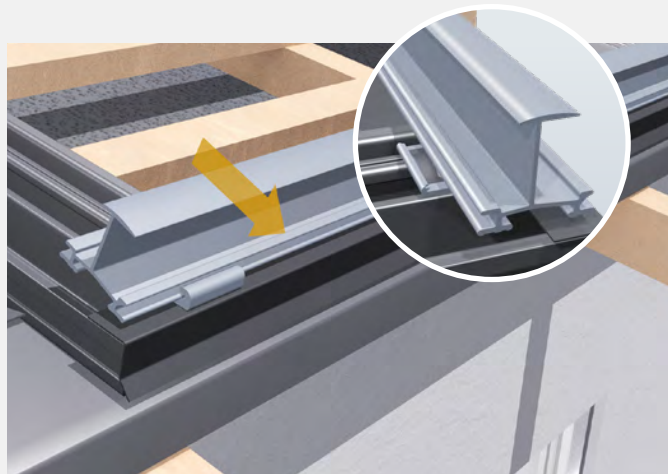
The TRI-ROOF+ in-roof mounting system replaces parts of the tile roof or the entire roof covering. Thanks to smart planning software and patented SafeClick mounting, the PV in-roof insertion system is extremely safe and easy to install on the roof. The innovative water drainage system ensures safe drainage of rainwater. The PV modules are easily inserted into the insertion profiles and are held in place by their own weight. Additional fastening of the modules is completely unnecessary.

This is how clever TRI-ROOF+ is installed



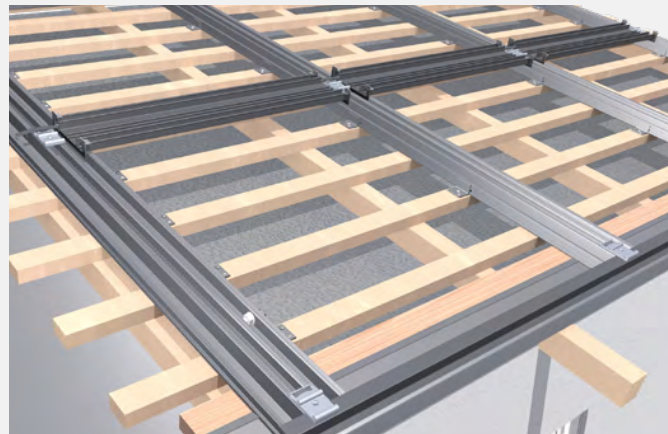
### 1. Attach the substructure

The substructure is mounted directly onto the roof battens. The rainwater is safely drained off via the innovative water drainage system.



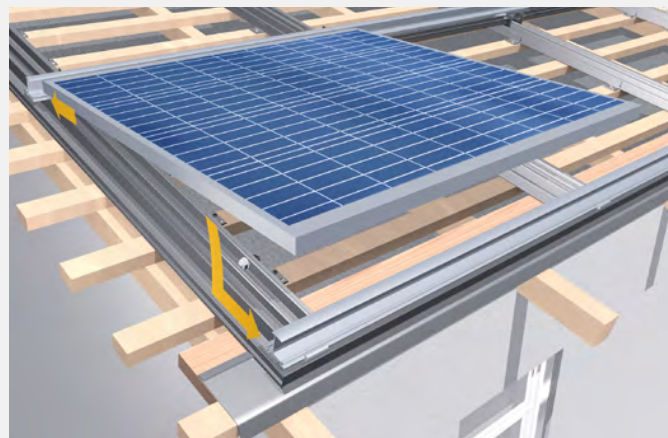
### 3. Clicking the TS insert profiles into the SafeClick

The insertion profiles are clicked into the SafeClick and are floatingly connected to the roof. Damage to the roof and module caused by thermal expansion is thus avoided.



### 2. Mounting the SafeClicks

The SafeClick elements are screwed onto the IP in-roof profiles at the specified distance on the entire substructure according to the instructions.



### 4. Inserting the modules into the TS insertion profiles

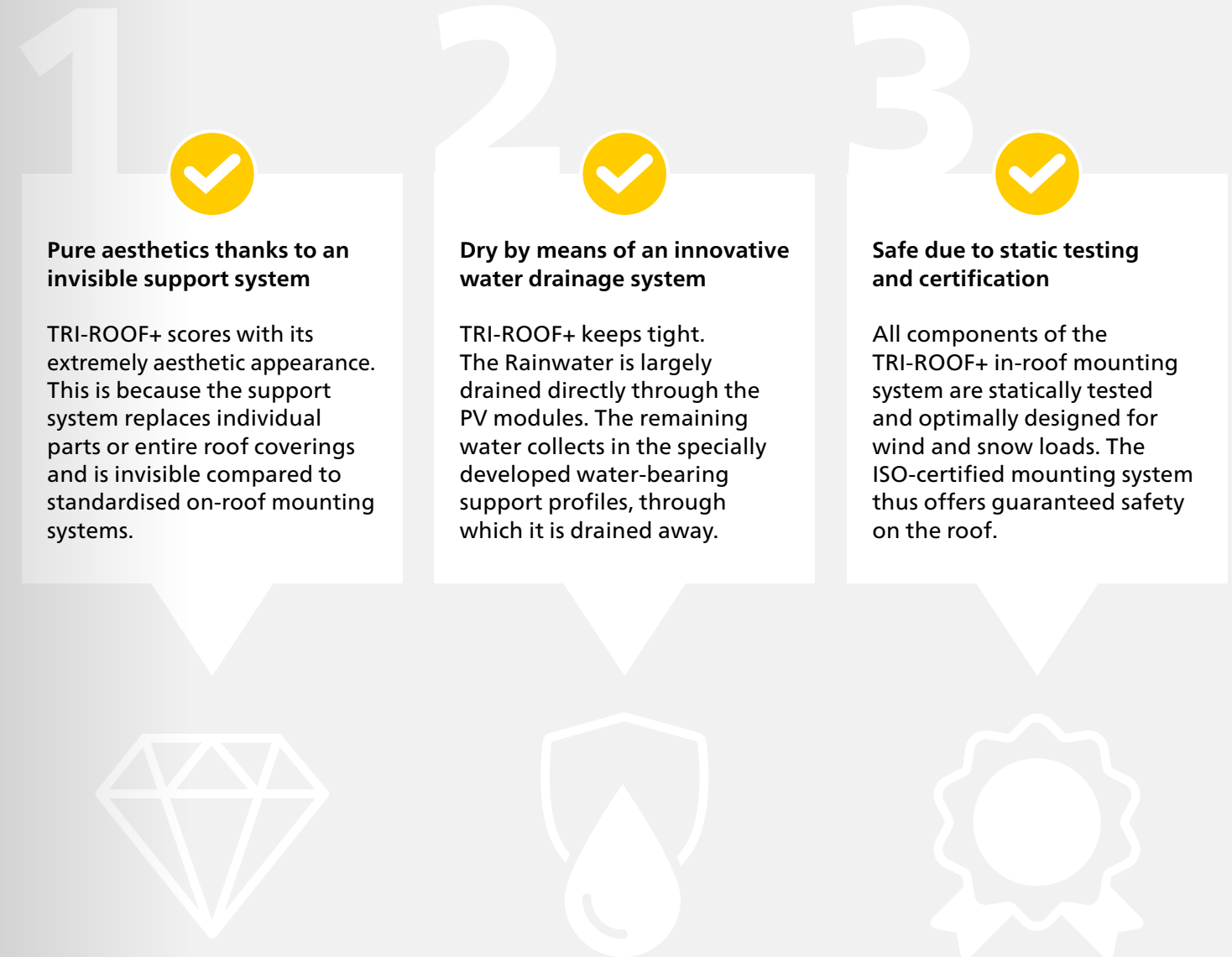
The modules are inserted into the insertion profiles and are held in place by their own weight - there is no need for additional fastening.

## THE ADVANTAGES OF TRI-ROOF+

The smartly thought-out and aesthetic insertion system

The TRI-ROOF+ in-roof mounting system offers an unbeatable appearance with its homogeneous surface. Especially when using black components of the insertion system and black modules, the highest aesthetics are achieved. TRI-ROOF+ allows the use of all common types of modules from different manufacturers. The components of the insert system are statically tested and optimally designed for wind and snow loads. This means that the solar roof remains stable even in extreme weather conditions.

What TRI-ROOF+ offers

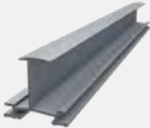
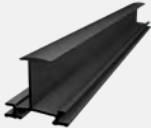


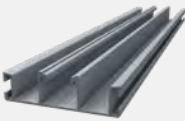


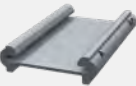



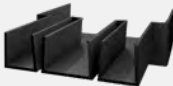











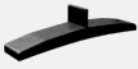
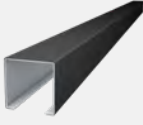




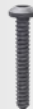




# SYSTEM COMPONENTS

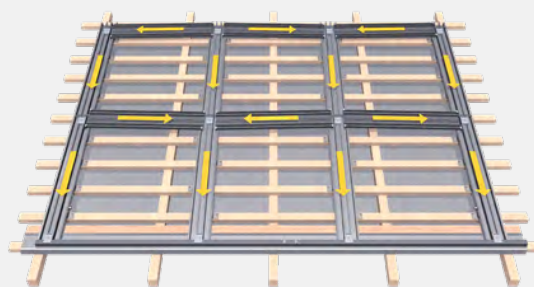
## All components at a glance

With TRITEC you have the choice: Some components for the PV in-roof system TRI-ROOF+ are available in the color selection „blank“ (aluminum silver) and „black“. Completely tailored to your needs: The profiles and variants marked with \* are available in different lengths on request.

			
<b>TRI-STAND insertion profile, blank</b> Standard	<b>TRI-STAND insertion profile, black</b> Standard	<b>TRI-STAND end profile, blank</b> Optional	<b>TRI-STAND end profile, black</b> Optional
• Variants: TS-30/32/35/38/40 • available in different lengths*	• Variants: TS-30/32/35/38/40 • available in different lengths*	• Variants: TS-30/32/35/40 • available in different lengths*	• Variants: TS-30/32/35/40 • available in different lengths*
			
<b>TRI-ROOF+ in-roof profile IP 3,80 m</b> Standard	<b>TRI-ROOF+ horizontal rail TR-H 3,50 m</b> Standard	<b>TRI-STAND SafeClick-Torx, blank</b> Standard	<b>TRI-STAND SafeClick-Torx, black</b> Standard
• Item no.: 1503174	• Item no.: 1503187	• Item no.: 1502870	• Item no.: 1502963
			
<b>TRI-STAND insertion profile connector TS-C, blank</b> Standard	<b>TRI-STAND insertion profile connector TS-C, black</b> Standard	<b>TRI-STAND end bracket TS-E, blank</b> Standard	<b>TRI-STAND end bracket TS-E, black</b> Standard
• Item no.: 1502216	• Item no.: 1502417	• Item no.: 1502214	• Item no.: 1502307
			
<b>TRI-ROOF+ IP profile connector IP-C</b> Standard	<b>TRI-ROOF+ end plate below AU</b> Standard	<b>TRI-ROOF+ mounting clip TR-C</b> Standard	<b>TRI-ROOF+ in-roof profile holder IP-U</b> Standard
• Item no.: 1502929	• Item no.: 1502931	• Item no.: 1502544	• Item no.: 1502930

			
<b>TRI-ROOF+ end support TR-E+</b> Standard	<b>TRI-ROOF+ centre support TR-M</b> Standard	<b>TRI-ROOF+ spacer TR-D</b> Standard	<b>TRI-ROOF+ flat connector</b> Standard
• Item no.: 1503031	• Item no.: 1502667	• Item no.: 1502668	• Item no.: 1502308
			
<b>TRI-ROOF+ drip tray TR-H</b> Standard	<b>TRI-STAND sliding nut M10</b> Standard	<b>TRI-STAND MS EPDM module backup</b> Standard	<b>TRI-ROOF+ filling piece, black 30/35/40 mm</b> Standard
• Item no.: 1502965	• Item no.: 1502219	• Item no.: 1502990	• 30 mm, item no.: 1502945 • 35 mm, item no.: 1502932 • 40 mm, item no.: 1502933
			
<b>TRI-STAND hexagon bolt M10x25 A2</b> Accessories	<b>TRI-STAND pan head screw</b> Accessories	<b>TRI-STAND hammer head bolt M10x30 A2, with locking nut</b> Accessories	<b>TRI-STAND thin sheet metal screw</b> Accessories
• Item no.: 1502256	• 8.0 x 80 TX40, item no.: 1502281 • 8.0 x 120 TX40, item no.: 1502282	• Screw, Item no.: 1502255 • Locking nut, Item no.: 1502254	• Item no.: 1502934
			
<b>TRI-ROOF+ round head screw</b> Accessories	<b>TRI-STAND Edge Clip cable fixation</b> Accessories	<b>TRI-STAND bending tool+</b> Accessories	
• Item no.: 1502547	• Item no.: 1502246	• Item no.: 1502935	

**LEARN MORE**  
Videos, planning and contact



Simply scan the QR code or visit the following link for more information about TRI-ROOF+, such as installation video, mounting instructions and references.

[www.tritec-energy.com/en/pv-mounting-systems/tri-roof/](http://www.tritec-energy.com/en/pv-mounting-systems/tri-roof/)



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Or just talk to us directly. Our experts are at your disposal to answer all your questions.

**Contact**  
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[www.tritec-energy.com](http://www.tritec-energy.com)



**SIMPLE AND  
ECONOMICAL**

Our PV clamp and flat-roof systems enable you to to implement your project extremely economically. With just a few components, you can realise your project efficiently.





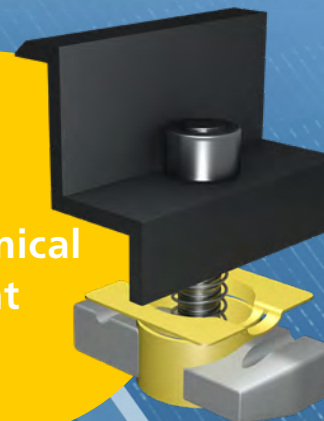
# THE COST-EFFICIENT CLASSIC

The TRI-CLIP clamping system is the perfect basis for a cost-effective, safe and solid installation of PV systems on tiled pitched roofs.

## TRI-CLIP

The economical clamping system for PV systems on tiled roofs.

- simple
- economical
- efficient



### The main advantages:

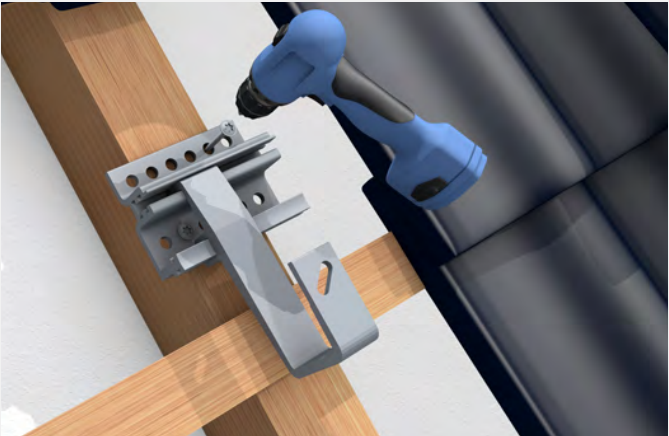
- Cost-effective, economical on-roof system
- Statically tested for wind and snow loads
- Suitable for all common framed solar modules

TRI-CLIP

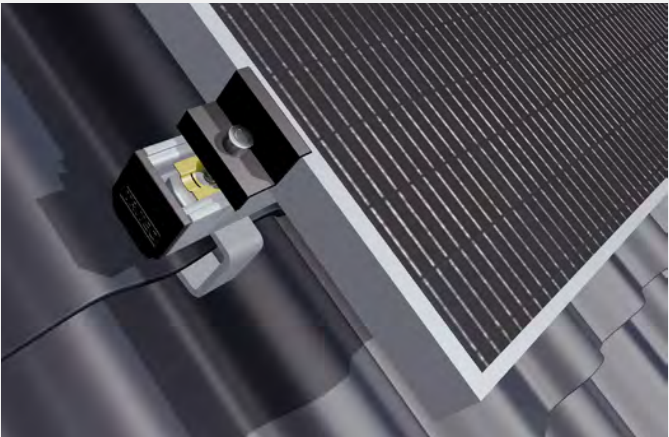
Classic mounting system at a low price

Realize your projects enormously cost-efficient: Thanks to smart planning software and reliable components, the on-roof clamping system TRI-CLIP is safely installed on the tiled roof. The PV clamping system is the economical and safe solution for many applications - from single-family homes to large commercial PV systems.

TRI-CLIP is installed so easily



**1. Mounting the roof hook**  
After checking the substructure of the roof for its point load bearing capacity, the roof hooks are mounted according to the design plan.













**2. Mounting the vertical base profile (UP-L)**  
The pre-assembled profiles are then securely installed on the roof hooks with the M10 hammerhead screw.

**3. Fix modules with TRI-CLIP**  
The end and middle clamps are attached and tightened to profiles and modules according to the design plan.

THE SYSTEM COMPONENTS

Easy assembly with high quality components

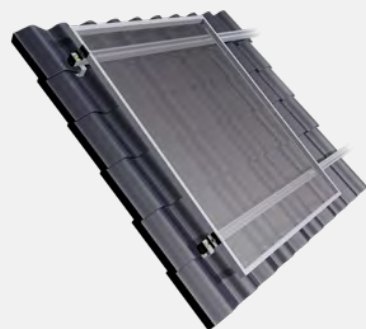
With TRITEC you have the choice: Some components for TRI-CLIP are available in the color selection „blank“ (aluminum silver) and „black“. Completely tailored to your needs: The profiles and variants marked with \* are available in different lengths on request.

 <b>TRI-CLIP middle clamp 30-40 mm, blank</b> Standard • Item no.: 1503081	 <b>TRI-CLIP middle clamp 30-40 mm, black</b> Standard • Item no.: 1503099	 <b>TRI-CLIP end clamp, blank</b> Standard • 30 mm, item no.: 1503142 • 35 mm, item no.: 1503082 • 40 mm, item no.: 1503083	 <b>TRI-CLIP end clamp, black</b> Standard 30 mm, item no.: 1503143 35 mm, item no.: 1503100 40 mm, item no.: 1503101
 <b>TRI-STAND roof hook PLUS</b> Standard • Bracket, Item no.: 1502982 • Plate 40/28, Item no.: 1502983 • Plate 49/37, Item no.: 1502984 • Plate 55/43, Item no.: 1502985	 <b>TRI-STAND roof hook BASIC</b> Standard • Item no.: 1503094	 <b>TRI-STAND roof hook BASIC adjustable</b> Standard • Item no.: 1503146	
 <b>TRI-STAND universal profile UP-L 3,70 m, blank</b> Standard • Item no.: 1503168 • other lengths on request*	 <b>TRI-STAND universal profile UP-L 3,70 m, black</b> Standard • Item no.: 1503169 • other lengths on request*	 <b>TRI-STAND universal profile connector UP-C</b> Standard • pre-assembled incl. screws • Item no.: 1502217	 <b>TRI-STAND end cap for UP-L profile, black</b> Accessories • Item no.: 1502865
 <b>TRI-STAND Edge Clip cable fixation</b> Accessories Item no.: 1502246	 <b>TRI-STAND hammer head bolt M10x30 A2, with locking nut</b> Accessories • Screw, Item no.: 1502255 • Locking nut, Item no.: 1502254		

\* Information on lengths and part numbers on request

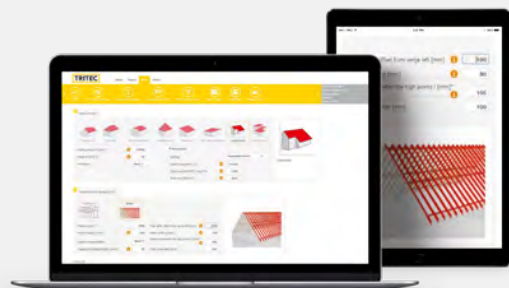


**LEARN MORE**  
Videos, planning and contact



Simply scan the QR code or visit the following link to get more information about TRI-CLIP clamping system.

[www.tritec-energy.com/en/pv-mounting-systems/tri-clip/](http://www.tritec-energy.com/en/pv-mounting-systems/tri-clip/)



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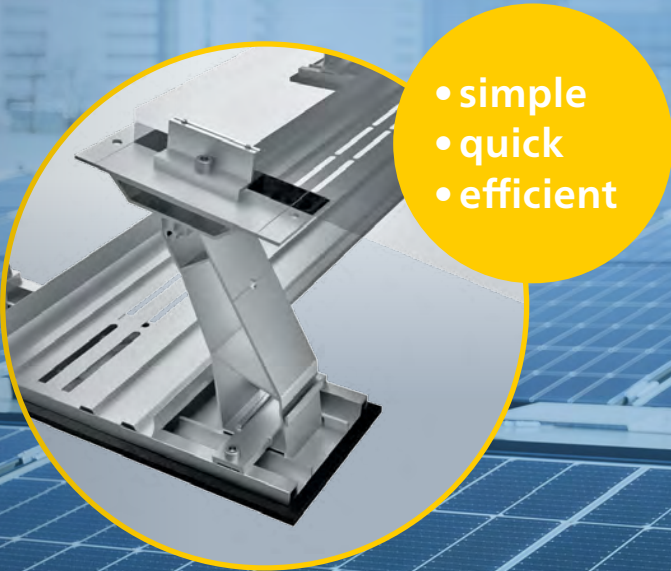
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# TRI-FLAT EASYSPEED

The innovative flat roof system.



**The main advantages:**

- Quick assembly due to preassembled components
- No time-consuming measuring work required
- Low concentrated loads on the roofing and insulation



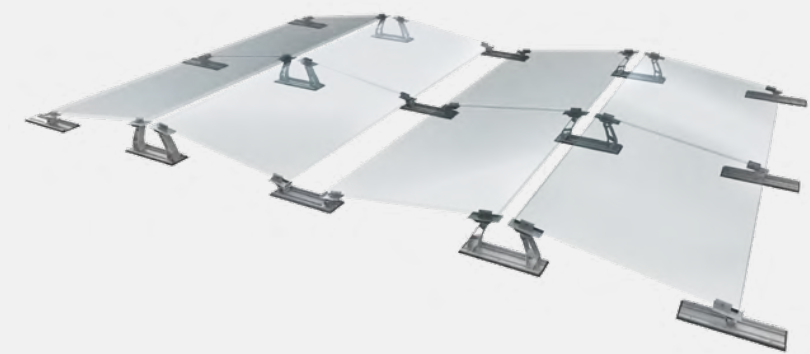
# TRI-FLAT EASYSPEED

Extrem fast assembly with few components

**Innovation that is well worth seeing.**

The TRI-FLAT Easyspeed is an innovative flat roof system that requires few components and can be installed quickly and easily.

With only a few components it is possible to install different systems in east/west and south variants on flat roofs.



- Outstanding advantages.**
- Large mounting plates ensure low concentrated loads
  - Modules are supported in a stress-free way thanks to the movable adapters
  - No long rails, low thermal expansion and optimum water drainage
  - Clamping possible on both the short and long sides of the module
  - Very easy to install thanks to pre-assembled components
  - Ballast-optimised (aerodynamic system)
  - No time-consuming surveying work
  - Quick and easy mounting
  - Perfect for storage and handling
  - Wind tunnel tested

Highest quality standards

Reliable business partner

Optimum availability

Flexible selection options

**Quality you can rely on.**

With the TRI-FLAT Easyspeed mounting system, you are relying on the highest quality standards. Recognised test centres confirm this with their seal of approval.

# THE SYSTEM COMPONENTS

All components at a glance

<p><b>TRI-FLAT Easyspeed small raiser</b> <span>Standard</span></p> <ul style="list-style-type: none"> <li>• Item no.: 1503301</li> </ul>	<p><b>TRI-FLAT Easyspeed large raiser</b> <span>Standard</span></p> <ul style="list-style-type: none"> <li>• Item no.: 1503302</li> </ul>	<p><b>TRI-FLAT Easyspeed end clamp</b> <span>Standard</span></p> <ul style="list-style-type: none"> <li>• 30 mm, item no.: 1503305</li> <li>• 32 mm, item no.: 1503318</li> <li>• 35 mm, item no.: 1503306</li> <li>• 40 mm, item no.: 1503335</li> </ul>	<p><b>TRI-FLAT Easyspeed wind deflector plate 1945 / 2145 / 2395</b> <span>Standard</span></p> <p><b>Wind deflector plate 1945</b></p> <ul style="list-style-type: none"> <li>• Modul length: 1.650 - 1.850 mm</li> <li>• Item no.: 1503315</li> </ul> <p><b>Wind deflector plate 2145</b></p> <ul style="list-style-type: none"> <li>• Modul length: 1.851 - 2.050 mm</li> <li>• Item no.: 1503316</li> </ul> <p><b>Wind deflector plate 2395</b></p> <ul style="list-style-type: none"> <li>• Modul length: 2.051 - 2.300 mm</li> <li>• Item no.: 1503317</li> </ul>
<p><b>TRI-FLAT Easyspeed small plate 140</b> <span>Standard</span></p> <ul style="list-style-type: none"> <li>• Dimensions: 480 x 140 mm</li> <li>• Item no.: 1503303</li> </ul>	<p><b>TRI-FLAT Easyspeed large plate 140</b> <span>Standard</span></p> <ul style="list-style-type: none"> <li>• Dimensions: 700 x 140 mm</li> <li>• Item no.: 1503312</li> </ul>	<p><b>TRI-FLAT Easyspeed middle clamp 30 - 40 mm</b> <span>Standard</span></p> <ul style="list-style-type: none"> <li>• Item no.: 1503304</li> </ul>	
<p><b>TRI-FLAT Easyspeed small plate 220</b> <span>Optional</span></p> <ul style="list-style-type: none"> <li>• Dimensions: 480 x 220 mm</li> <li>• Item no.: 1503313</li> </ul>	<p><b>TRI-FLAT Easyspeed large plate 220</b> <span>Optional</span></p> <ul style="list-style-type: none"> <li>• Dimensions: 700 x 220 mm</li> <li>• Item no.: 1503314</li> </ul>	<p><b>TRI-FLAT Easyspeed ballast tray 2025 / 2225 / 2475</b> <span>Optional</span></p> <p><b>Ballast tray 2025</b></p> <ul style="list-style-type: none"> <li>• Modul length: 1.650 - 1.850 mm</li> <li>• Item no.: 1503321</li> </ul> <p><b>Ballast tray 2225</b></p> <ul style="list-style-type: none"> <li>• Modul length: 1.851 - 2.050 mm</li> <li>• Item no.: 1503322</li> </ul> <p><b>Ballast tray 2475</b></p> <ul style="list-style-type: none"> <li>• Modul length: 2.051 - 2.300 mm</li> <li>• Item no.: 1503323</li> </ul>	<p><b>TRI-FLAT Easyspeed gravel ballast tray 2025 / 2225 / 2475</b> <span>Optional</span></p> <p><b>Gravel ballast tray 2025</b></p> <ul style="list-style-type: none"> <li>• Modul length: 1.650 - 1.850 mm</li> <li>• Item no.: 1503325</li> </ul> <p><b>Gravel ballast tray 2225</b></p> <ul style="list-style-type: none"> <li>• Modul length: 1.851 - 2.050 mm</li> <li>• Item no.: 1503326</li> </ul> <p><b>Gravel ballast tray 2475</b></p> <ul style="list-style-type: none"> <li>• Modul length: 2.051 - 2.300 mm</li> <li>• Item no.: 1503327</li> </ul>
<p><b>TRI-FLAT Easyspeed shim</b> <span>Optional</span></p> <ul style="list-style-type: none"> <li>• Item no.: 1503330</li> </ul>	<p><b>TRI-FLAT Easyspeed ballast brace</b> <span>Optional</span></p> <ul style="list-style-type: none"> <li>• Item no.: 1503307</li> </ul>		
<p><b>TRI-FLAT Easyspeed small cable cover</b> <span>Optional</span></p> <ul style="list-style-type: none"> <li>• Item no.: 1503308</li> </ul>	<p><b>TRI-FLAT Easyspeed large cable cover</b> <span>Optional</span></p> <ul style="list-style-type: none"> <li>• Item no.: 1503311</li> </ul>	<p><b>TRI-FLAT Easyspeed washer</b> <span>Optional</span></p> <ul style="list-style-type: none"> <li>• Item no.: 1503342</li> </ul>	<p><b>TRI-FLAT Easyspeed hexagon socket bolt</b> <span>Optional</span></p> <ul style="list-style-type: none"> <li>• Item no.: 1503341</li> </ul>
<p><b>TRI-FLAT Easyspeed wind deflector plate clip</b> <span>Accessories</span></p> <ul style="list-style-type: none"> <li>• Item no.: 1503340</li> </ul>	<p><b>TRI-FLAT Easyspeed Edge Clip Cable Tie TS-EC</b> <span>Accessories</span></p> <ul style="list-style-type: none"> <li>• Item no.: 1502246</li> </ul>		



# SYSTEM OVERVIEW

One system - many possibilities

Simply fast on the roof: The TRI-FLAT Easyspeed flat roof system in many variants.

■ South, 18° angle for shading clearance  
Modules are clamped on the short side

■ Alpine South, 18° angle for shading clearance  
Clamping on short as well as long side of the module

■ South, 25° angle for shading clearance  
Modules are clamped on the short side

■ Alpine South, 25° angle for shading clearance  
Clamping on short as well as long side of the module

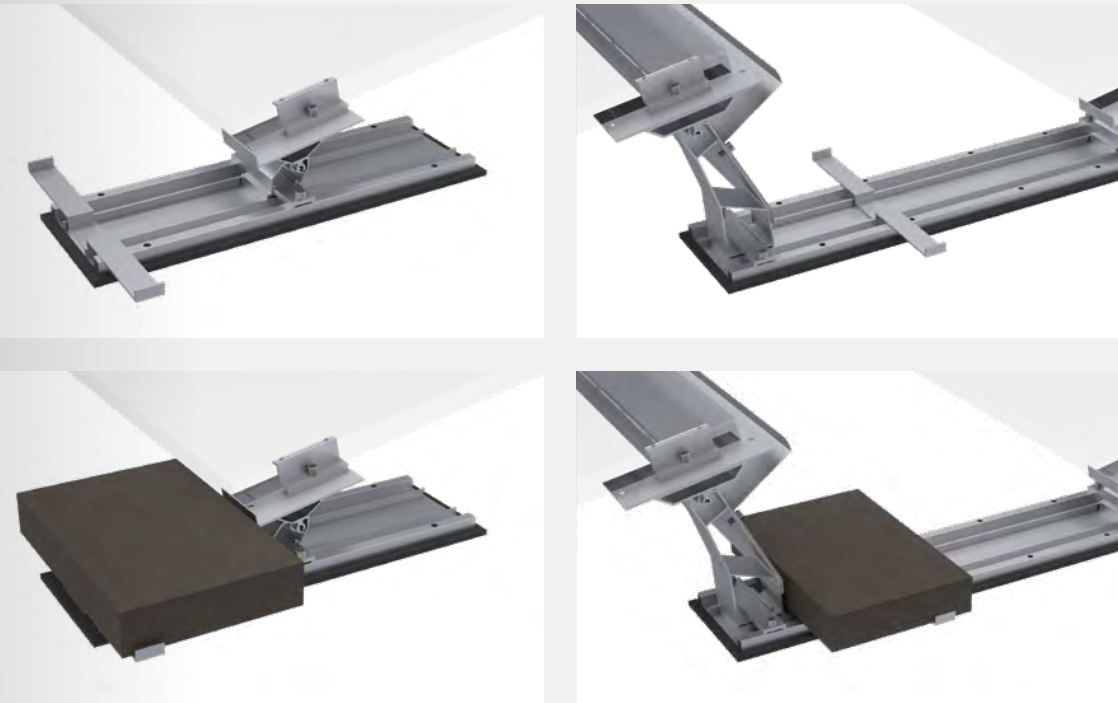
■ East/West  
Modules are clamped on the short side

■ Alpine East/West  
Clamping on short as well as long side of the module

# BALLAST VARIANTS

Ballast brace or ballast tray

Ballast brace



Ballast tray



LEARN MORE
General information

Use:	Flat roofs: foil, bitumen and gravel roofs
Roof pitch:	Up to 5° depending on roof conditions without roof connection
Max building height:	25 metres
Orientation:	East/west and south facing
System inclination:	Approx. 10°
Modules:	Framed modules
Module sizes:	Width: 950 - 1200 mm x Length: 1650 - 2300 mm
Module orientation:	Horizontal
Max. module field size:	21 x 21 metres
Row spacing:	South 18°: 563 mm South 25°: 396 mm East/West: 376 mm
Distance from roof surface:	Approx. 70 mm
Distance from roof edge:	Roof zones F and G can be occupied in accordance with EN 1991-1-4 (minimum edge distance 600 mm)
Wind load:	Up to 2,4 kN/m²
Snow load:	Up to 5,4 kN/m²
Proof of stability:	Software-assisted on the basis of wind tunnel investigations
Properties and condition of roof:	On-site checks must be carried out by the contractor to ensure that the roof construction and the building's supporting structure offer the necessary static load-bearing capacity and that the compressive strength of the thermal insulation is sufficient.
Materials:	Aluminium EN AW 6063/6005; sheet steel with an aluminium-zinc coating; small parts made from A2-70 stainless steel; building protection mat made from non-woven polyester
Screw mounting:	M8 (A2-70)
Torque:	15 Nm

The optimal mounting solution for every roof
TRITEC mounting systems combine over 30 years of photovoltaic experience. Our own products TRI-STAND, TRI-ROOF+, TRI-CLIP and TRI-FLAT Easyspeed offer optimum PV mounting solutions for the various requirements of different roof types and alignments. We attach great importance to the high-quality processing of the components as well as to the durability of the substructure.

Further information and the download of the assembly instructions you will find on our homepage www.tritec-energy.com.
Or just talk to us directly. Our experts are at your disposal to answer all your questions.



Contact
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MOUNTING SOLUTIONS

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Energy for a better future
As an owner-managed company, we take our responsibility for the environment and sustainable energy very seriously. Since the foundation of TRITEC, we have seen ourselves as pioneers and problem solvers out of conviction. We guarantee our partners sustainable quality and secure yields from the smallest to the largest solar power plant. Not least because of this, we can look back on solid and lasting relationships with our customers and our employees. TRITEC trains and certifies specialist partners within the framework of training courses and other events.

Always close to our customers - no matter where
TRITEC is represented in Europe, North and South America. This ensures that you always reach the right contact person.





ENERGY FOR A BETTER WORLD

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