

TRITEC

ENERGY FOR A BETTER WORLD

PV

MOUNTING SYSTEMS

for pitched roof

www.tritec-energy.com

YOUR PARTNER FOR THE FUTURE

As a wholesaler and reliable partner for PV specialists, construction companies and investors, we are active worldwide with over 400 employees in system wholesale and large-scale plant construction. For more than 30 years, we have acted as a 'motor for change' and generate significant synergies in the market with our mounting systems and products.

Our own products, the PV mounting systems, are divided into insertion and clamping systems designed for on-roof, in-roof, flat-roof and green-roof applications.

These systems offer optimum solutions that meet the different requirements of various roof types and orientations. We attach particular importance to the use of high-quality materials, the precise workmanship of the components and the durability of the substructures.

Discover our innovative PV mounting systems.
TRITEC – ENERGY FOR A BETTER WORLD

CONTENT

Mounting systems for pitched roof

PV insertion systems

TRI-STAND for tiles _____ p. 7 - 10

TRI-STAND for trapezoidal sheet metal _____ p. 11 - 14

TRI-STAND for corrugated fibre cement _____ p. 15 - 18

TRI-STAND for standing seam sheet metal _____ p. 19 - 22

PV in-roof systems

TRI-ROOF+ for in-roof _____ p. 23 - 26

PV inlay profiles

TRI-STAND insertion profile _____ p. 27 - 30

PV clamping systems

TRI-CLIP for tiles _____ p. 31 - 34

Roof hooks

TRI-STAND roof hooks _____ p. 35 - 38

PV earthing systems

TRITEC earthing components _____ p. 39 - 42

THE B2B WEBSHOP FOR COMPLETE PV SYSTEMS

shop.tritec-energy.com

Solar modules

Substructures

Inverters

PV storage

Accessories

New products

Sale

Downloads

Media centre

Guide & FAQ

Dates & Events

Newsletter

TRI-DESIGN planning software

Glossary



Discover our B2B online shop for photovoltaic experts. In addition to an extensive product portfolio, valuable resources such as installation videos, technical data sheets and installation instructions are available to you at any time. Keep up to date with the latest products and exciting customer discount campaigns and optimise your orders.

Find out more and visit us in the TRITEC online shop.

shop.tritec-energy.com





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 tiled roof.



- simple
- aesthetic
- efficient

The main advantages:

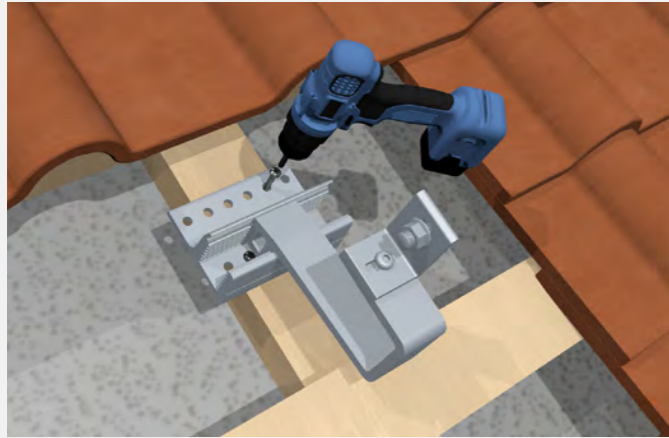
- Floating rooftop system, therefore no thermal separation necessary
- Simple, quick and efficient installation
- Considerable time and thus cost saving
- Optimum load distribution and stability
- Suitable for all common framed solar modules

TRI-STAND FOR TILED ROOF

This way you easily increase your efficiency

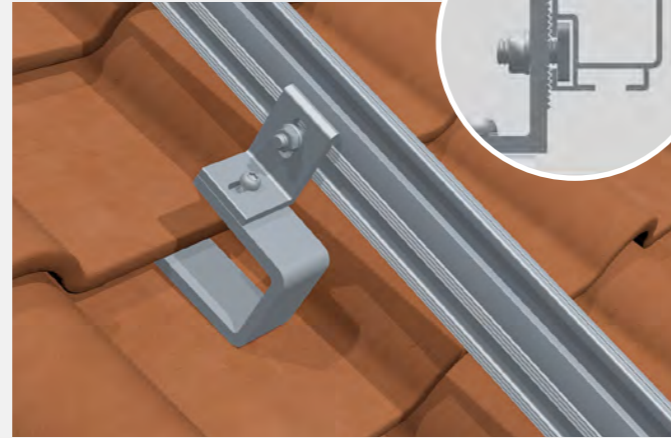
Realize your projects in an unbeatably short time: The smart planning software, the few components and the patented SafeClick assembly enable an extremely quick, safe and simple installation of the PV insertion system TRI-STAND on the roof. The PV modules are easily inserted into the insertion profiles 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



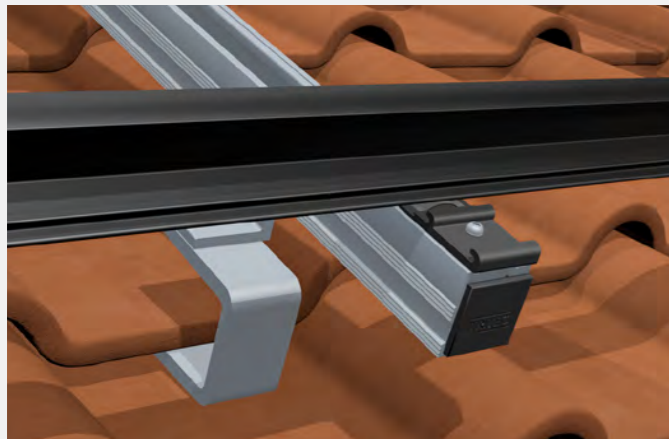
1. Mounting the roof hook

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



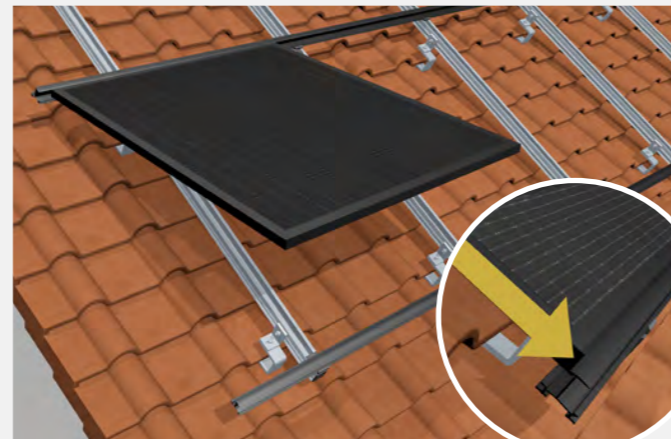
2. Mounting the base profile (UP-X)

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

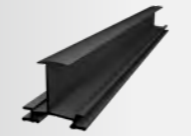










The modules are inserted into the insertion profiles and are held in place by their own weight - there is no need for additional fastening.

THE SYSTEM COMPONENTS

Extremely fast assembly with few components

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

Colour key: ● black | ● blank

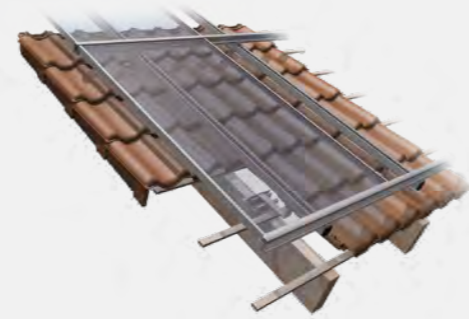
 <p>TRI-STAND insertion profile ● Standard</p> <ul style="list-style-type: none"> • variants: TS-30/32/35/38/40 • colour selection black / blank • available in different lengths* 	 <p>TRI-STAND end profile ● Optional</p> <ul style="list-style-type: none"> • variants: TS-30/32/35/40 • colour selection black / blank • available in different lengths* 	 <p>TRI-STAND universal profile UP-X 3,70 m ● Standard</p> <ul style="list-style-type: none"> • black, item no.: 1503404 • blank, item no.: 1503352 • other lengths on request* 	 <p>TRI-STAND universal profile connector UP-CX ● Standard</p> <ul style="list-style-type: none"> • pre-assembled incl. hammer head bolt • black, item no.: 1503404 • blank, item no.: 1503406
 <p>TRI-STAND SafeClick-Torx ● Standard</p> <ul style="list-style-type: none"> • black, item no.: 1502963 • blank, item no.: 1502870 	 <p>TRI-STAND insertion profile connector TS-C ● Standard</p> <ul style="list-style-type: none"> • black, item no.: 1502417 • blank, item no.: 1502216 	 <p>TRI-STAND anti-slip device AS, for increased loads** ● Standard</p> <ul style="list-style-type: none"> • substructure part for existing SafeClick, pre-assembled • item no.: 1503408 	 <p>TRI-STAND end bracket TS-E ● Standard</p> <ul style="list-style-type: none"> • black, item no.: 1502307 • blank, item no.: 1502214
 <p>TRI-STAND roof hook PRO ● Standard</p> <ul style="list-style-type: none"> • item no.: 1503402 	 <p>TRI-STAND roof hook PRO PLUS ● Standard</p> <ul style="list-style-type: none"> • item no.: 1503403 	 <p>TRI-STAND end cap for UP-X profile ● Accessories</p> <ul style="list-style-type: none"> • item no.: 1503185 	

* Information on lengths and part numbers on request.

** Point overloads on SafeClicks due to increased snow loads are effectively prevented by the use of TRI-STAND anti-slip protection.

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/



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

<https://www.youtube.com/watch?v=S9WGviC8x2I>

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.

For further information on our products and services, please visit our website at www.tritec-energy.com or our online shop at shop.tritec-energy.com.

You can also contact our experts directly at any time, who will be happy to answer any questions you may have.

Contact us at
info@tritec-energy.com

Website & online shop
www.tritec-energy.com
shop.tritec-energy.com

TRITEC

ENERGY FOR A BETTER WORLD

TRI-STAND

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

- simple
- quick
- efficient

The main advantages:

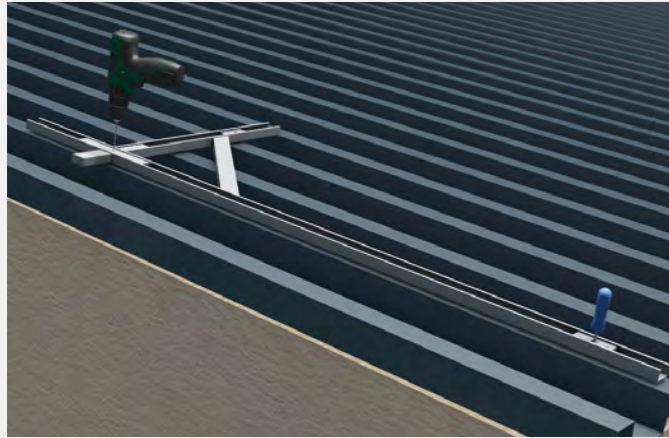
- Floating rooftop system, therefore no thermal separation necessary
- Simple, quick and efficient installation
- Considerable time and thus cost saving
- Optimum load distribution and stability
- Suitable for all common framed solar modules

TRI-STAND FOR TRAPEZOIDAL SHEET METAL

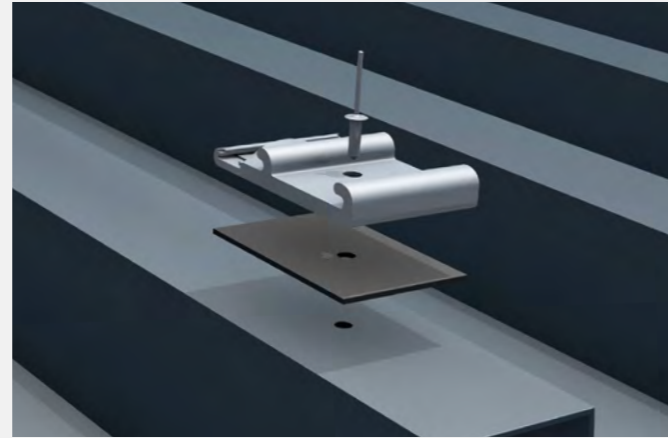
This way you easily increase your efficiency

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.

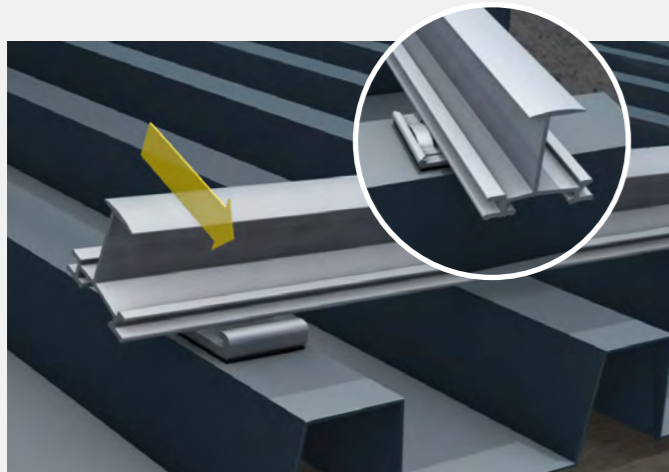
TRI-STAND is installed in just a few steps



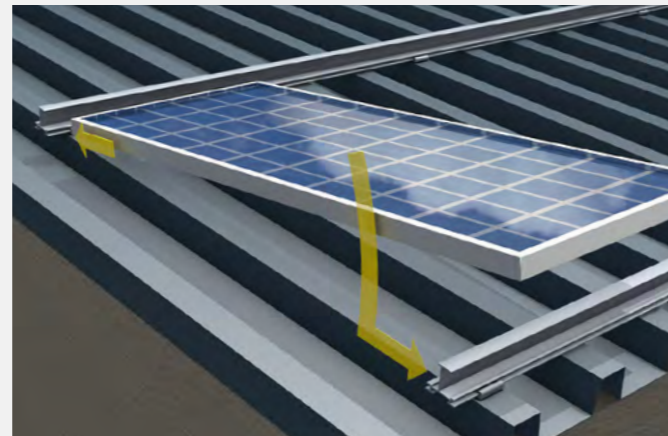
1. Measuring and predrilling the module field
According to the design plan, the module field is measured on the roof. Then the trapezoidal sheet metal covering is pre-drilled using the TRITEC drilling jig.



2. Riveting the SafeClick onto the trapezoidal sheet
The proven SafeClick is mounted directly onto the trapezoidal sheet metal by rivet¹, 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.

¹ 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 colour selection „black“ and „blank“ (aluminum silver). Completely tailored to your needs: The profiles and variants marked with * are available in different lengths on request.

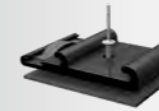
Colour key: ● black | ○ blank



TRI-STAND insertion profile
● ○ Standard
• variants: TS-30/32/35/38/40
• colour selection black / blank
• available in different lengths*



TRI-STAND end profile
● ○ Optional
• variants: TS-30/32/35/40
• colour selection black / blank
• available in different lengths*



TRI-STAND Special SafeClick
● ○ Standard
• pre-assembled incl. rivet & seal
• black, item no.: 1503075
• blank, item no.: 1502987



TRI-STAND insertion profile connector TS-C
● ○ Standard
• black, item no.: 1502417
• blank, item no.: 1502216

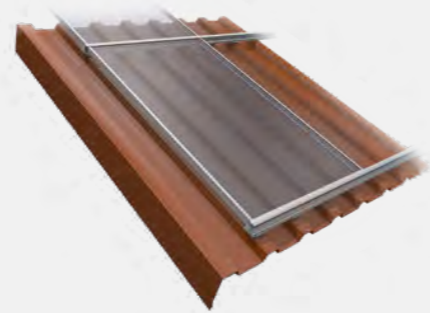


TRI-STAND end bracket TS-E
● ○ Standard
• black, item no.: 1502307
• blank, item no.: 1502214

* 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/



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

<https://www.youtube.com/watch?v=S9WGviC8x2I>

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.

For further information on our products and services, please visit our website at www.tritec-energy.com or our online shop at shop.tritec-energy.com.

You can also contact our experts directly at any time, who will be happy to answer any questions you may have.

Contact us at
info@tritec-energy.com

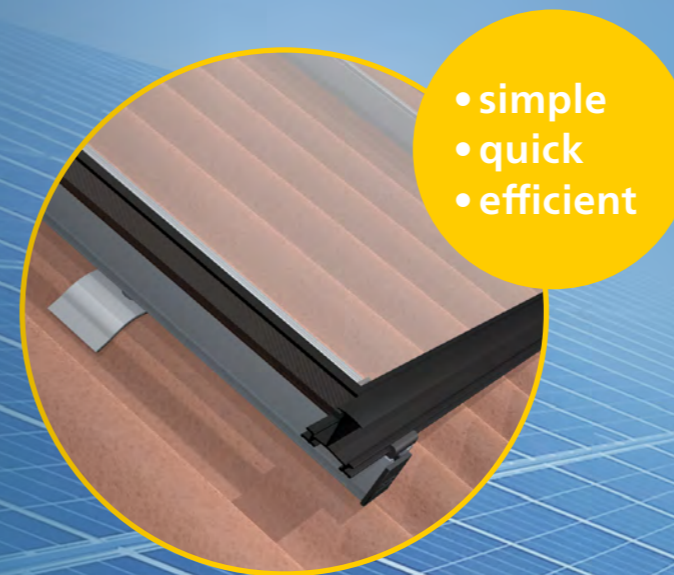
Website & online shop
www.tritec-energy.com
shop.tritec-energy.com

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

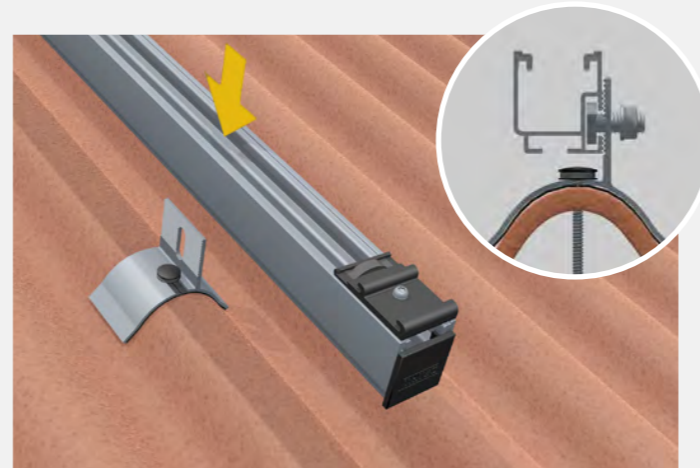
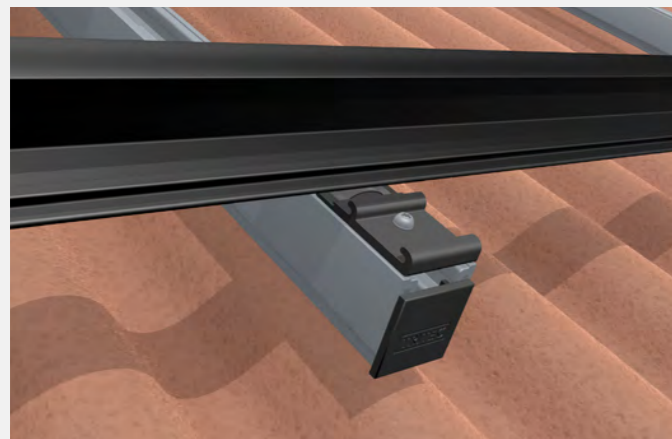
Realize your projects in an unbeatably short time: The smart planning software, the few components and the patented SafeClick assembly enable an extremely quick, safe and simple installation of the PV insertion system TRI-STAND on the roof. The PV modules are easily inserted into the insertion profiles 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



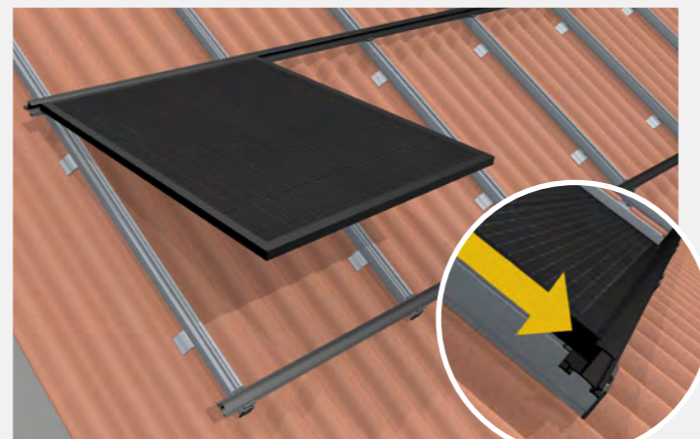
1. Mounting the TS-COR

First, mount the TS-COR at the locations provided in the design plan using the existing roof screws¹.



2. Mounting the base profile (UP-X)

The pre-assembled profiles are then securely installed on the TS-COR 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.






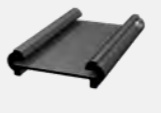
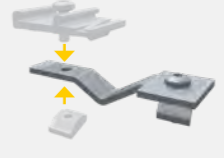



¹ New roof bolts may need to be placed in additional positions.

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 colour selection „black“ and „blank“ (aluminum silver). Completely tailored to your needs: The profiles and variants marked with * are available in different lengths on request.

Colour key: ● black | ● blank

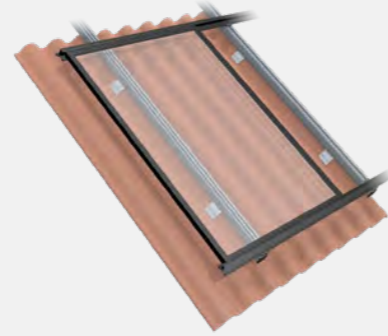
 <p>TRI-STAND insertion profile ● Standard</p> <ul style="list-style-type: none"> • variants: TS-30/32/35/38/40 • colour selection black / blank • available in different lengths* 	 <p>TRI-STAND end profile ● Optional</p> <ul style="list-style-type: none"> • variants: TS-30/32/35/40 • colour selection black / blank • available in different lengths* 	 <p>TRI-STAND universal profile UP-X 3,70 m ● Standard</p> <ul style="list-style-type: none"> • black, item no.: 1503404 • blank, item no.: 1503352 • other lengths on request* 	 <p>TRI-STAND universal profile connector UP-CX ● Standard</p> <ul style="list-style-type: none"> • pre-assembled incl. hammer head bolt • black, item no.: 1503404 • blank, item no.: 1503406
 <p>TRI-STAND SafeClick-Torx ● Standard</p> <ul style="list-style-type: none"> • black, item no.: 1502963 • blank, item no.: 1502870 	 <p>TRI-STAND insertion profile connector TS-C ● Standard</p> <ul style="list-style-type: none"> • black, item no.: 1502417 • blank, item no.: 1502216 	 <p>TRI-STAND anti-slip device AS, for increased loads** ● Standard</p> <ul style="list-style-type: none"> • substructure part for existing SafeClick, pre-assembled • item no.: 1503408 	 <p>TRI-STAND end bracket TS-E ● Standard</p> <ul style="list-style-type: none"> • black, item no.: 1502307 • blank, item no.: 1502214
 <p>TRI-STAND TS-COR, mounting bracket for corrugated fibre cement roof ● Standard</p> <ul style="list-style-type: none"> • item no.: 1503073 	 <p>TRI-STAND end cap for UP-X profile ● Accessories</p> <ul style="list-style-type: none"> • item no.: 1503185 		

* Information on lengths and part numbers on request.

** Point overloads on SafeClicks due to increased snow loads are effectively prevented by the use of TRI-STAND anti-slip protection.

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/



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

<https://www.youtube.com/watch?v=S9WGviC8x2I>

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.

For further information on our products and services, please visit our website at www.tritec-energy.com or our online shop at shop.tritec-energy.com.

You can also contact our experts directly at any time, who will be happy to answer any questions you may have.

Contact us at
info@tritec-energy.com

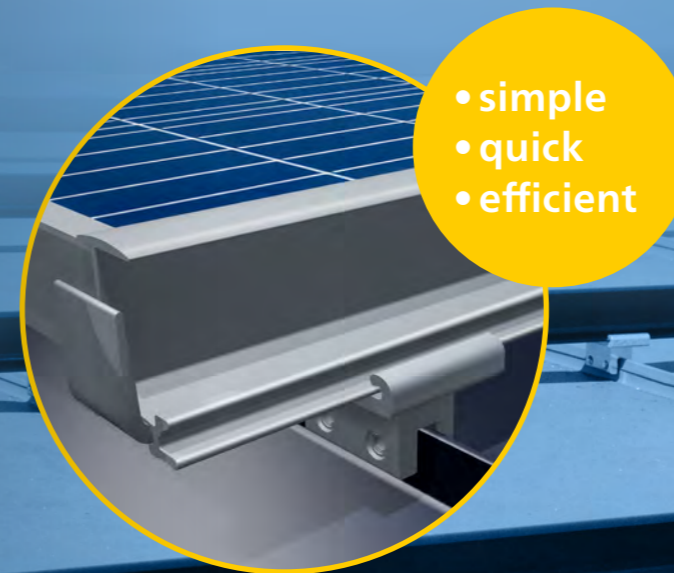
Website & online shop
www.tritec-energy.com
shop.tritec-energy.com

TRITEC

ENERGY FOR A BETTER WORLD

TRI-STAND

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



- simple
- quick
- efficient

The main advantages:

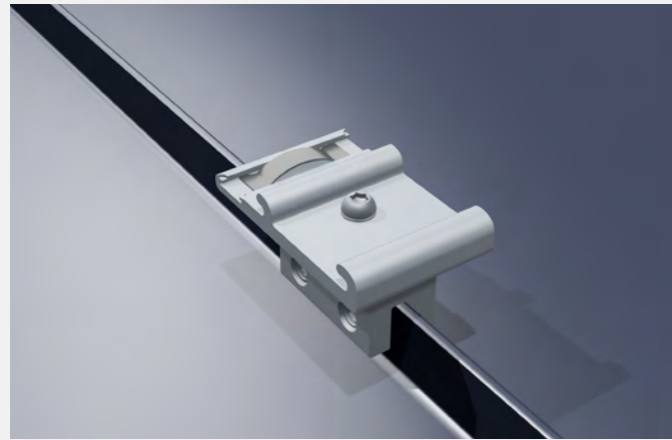
- Floating rooftop system, therefore no thermal separation necessary
- Low material requirements due to single-layer rail system
- Simple, quick and efficient installation
- Considerable time and thus cost saving
- Optimum load distribution and stability
- Suitable for all common framed solar modules

TRI-STAND FOR STANDING SEAM SHEET METAL

This way you easily increase your efficiency

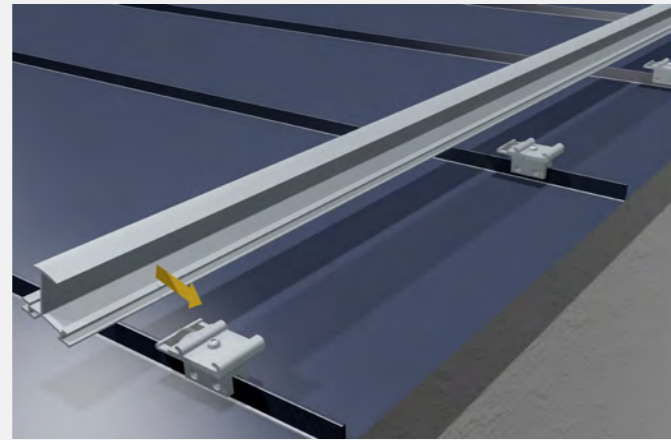
Realize your projects in an unbeatably short time: The smart planning software, the few components and the patented SafeClick assembly enable an extremely quick, safe and simple installation of the PV insertion system TRI-STAND on the roof. The PV modules are easily inserted into the insertion profiles 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



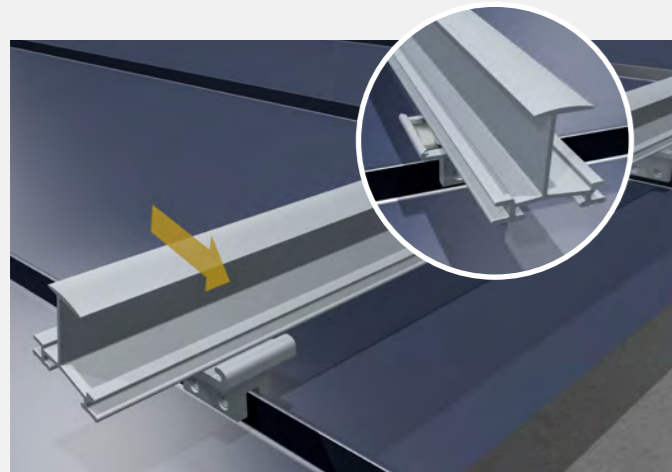
1. Mounting SafeClick

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



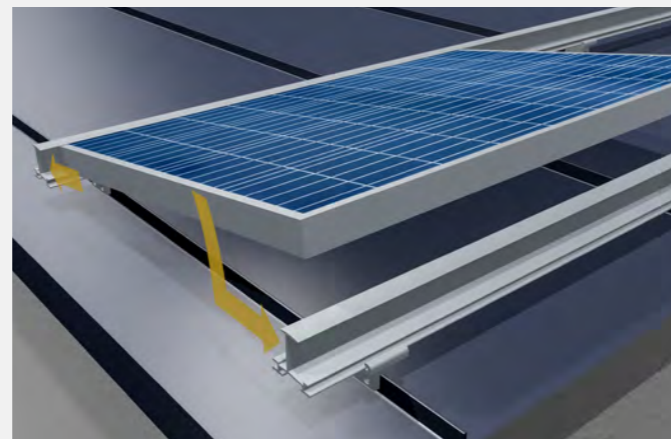
2. Place the SafeClicks in a row

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

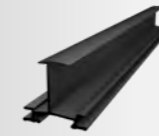
The modules are inserted into the insertion profiles and are held in place by their own weight - there is no need for additional fastening.

THE SYSTEM COMPONENTS

Extremely fast assembly with few components

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

Colour key: ● black | ● blank



TRI-STAND insertion profile

● Standard

- variants: TS-30/32/35/38/40
- colour selection black / blank
- available in different lengths*



TRI-STAND end profile

● Optional

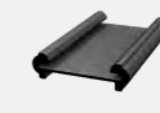
- variants: TS-30/32/35/40
- colour selection black / blank
- available in different lengths*



TRI-STAND double standing seam clamp up to 7 mm

● Standard

- pre-assembled incl. SafeClick
- item no.: 1503183



TRI-STAND insertion profile connector TS-C

● Standard

- black, item no.: 1502417
- blank, item no.: 1502216



TRI-STAND end bracket TS-E

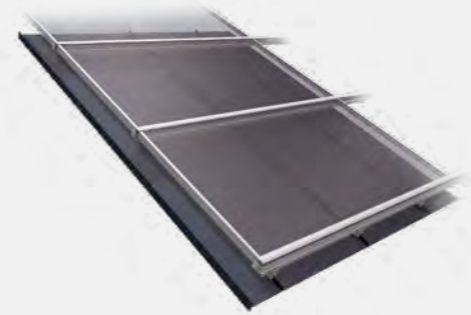
● Standard

- black, item no.: 1502307
- blank, item no.: 1502214

* 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/



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

<https://www.youtube.com/watch?v=S9WGviC8x2I>

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.

For further information on our products and services, please visit our website at www.tritec-energy.com or our online shop at shop.tritec-energy.com.

You can also contact our experts directly at any time, who will be happy to answer any questions you may have.

Contact us at
info@tritec-energy.com

Website & online shop
www.tritec-energy.com
shop.tritec-energy.com

TRITEC

ENERGY FOR A BETTER WORLD

TRI-ROOF+

The perfect mounting solution for roof-integrated PV systems.



- secure
- aesthetic
- efficient

The main advantages:

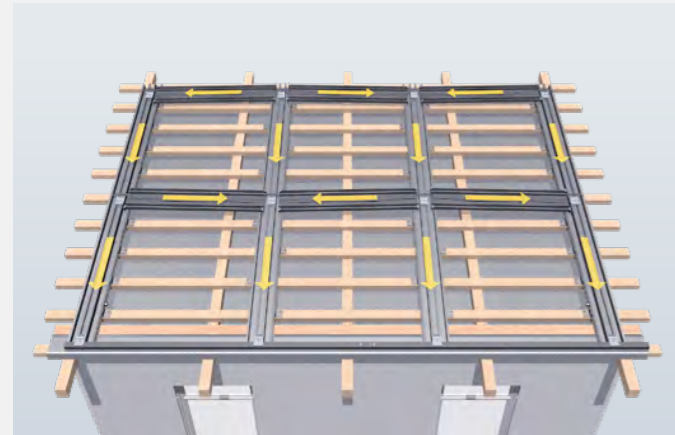
- Floating in-roof system, thus no thermal separation necessary
- Closed module surface for highest aesthetics
- Special profiles for maximum water impermeability
- Optimum load distribution and stability
- Suitable for all common framed solar modules

TRI-ROOF+ FOR IN-ROOF

This way you easily increase your efficiency

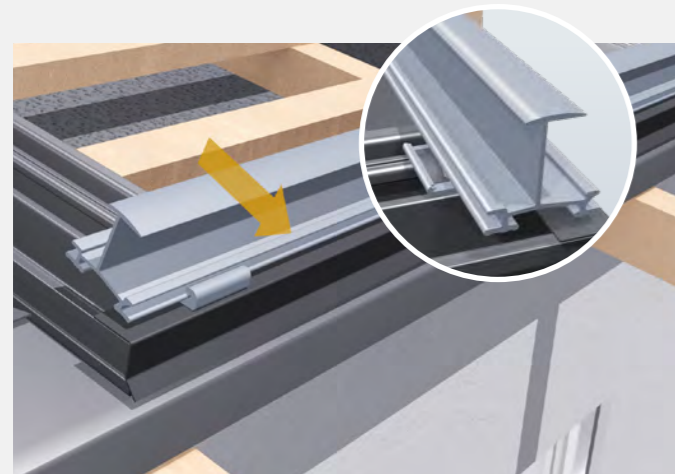
The TRI-ROOF+ in-roof mounting system replaces parts of the roof or the entire roof covering. Thanks to smart planning software and patented SafeClick mounting, the PV in-roof insertion system is extremely safe and easy to install on the roof. The innovative water drainage system ensures safe drainage 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.



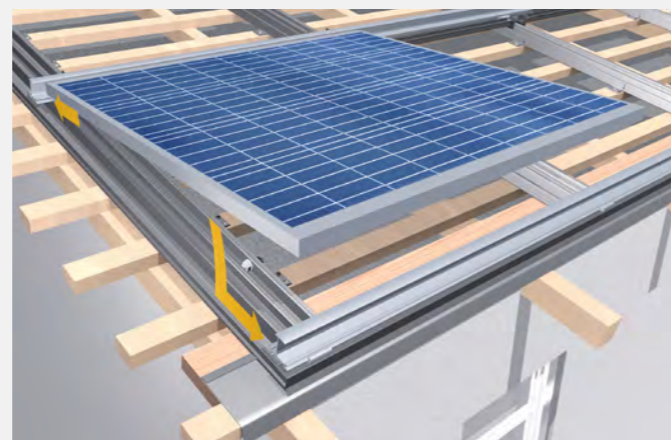
3. Clicking the TS insert profiles into the SafeClick

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.

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 „black“ and „blank“ (aluminum silver). Completely tailored to your needs: The profiles and variants marked with * are available in different lengths on request.

 <p>TRI-STAND insertion profile Standard</p> <ul style="list-style-type: none"> variants: TS-30/32/35/38/40 colour selection black / blank available in different lengths* 	 <p>TRI-STAND end profile Optional</p> <ul style="list-style-type: none"> variants: TS-30/32/35/40 colour selection black / blank available in different lengths* 	 <p>TRI-ROOF+ in-roof profile IP 3,80 m Standard</p> <ul style="list-style-type: none"> item no.: 1503174 	 <p>TRI-ROOF+ horizontal rail TR-H 3,50 m Standard</p> <ul style="list-style-type: none"> item no.: 1503187
 <p>TRI-STAND SafeClick-Torx Standard</p> <ul style="list-style-type: none"> black, item no.: 1502963 blank, item no.: 1502870 	 <p>TRI-STAND insertion profile connector TS-C Standard</p> <ul style="list-style-type: none"> black, item no.: 1502417 blank, item no.: 1502216 	 <p>TRI-STAND end bracket TS-E Standard</p> <ul style="list-style-type: none"> black, item no.: 1502307 blank, item no.: 1502214 	 <p>TRI-STAND anti-slip device AS, for increased loads** Standard</p> <ul style="list-style-type: none"> substructure part for existing SafeClick, pre-assembled item no.: 1503408
 <p>TRI-ROOF+ end plate below AU Standard</p> <ul style="list-style-type: none"> item no.: 1502931 	 <p>TRI-ROOF+ mounting clip TR-C Standard</p> <ul style="list-style-type: none"> item no.: 1502544 	 <p>TRI-ROOF+ IP profile connector IP-C Standard</p> <ul style="list-style-type: none"> item no.: 1502929 	 <p>TRI-ROOF+ end support TR-E+ Standard</p> <ul style="list-style-type: none"> item no.: 1503031
 <p>TRI-ROOF+ centre support TR-M Standard</p> <ul style="list-style-type: none"> item no.: 1502667 	 <p>TRI-ROOF+ spacer TR-D Standard</p> <ul style="list-style-type: none"> item no.: 1502668 	 <p>TRI-ROOF+ flat connector Standard</p> <ul style="list-style-type: none"> item no.: 1502308 	 <p>TRI-ROOF+ drip tray TR-H Standard</p> <ul style="list-style-type: none"> item no.: 1502965
 <p>TRI-ROOF+ in-roof profile holder IP-U Standard</p> <ul style="list-style-type: none"> item no.: 1502930 			

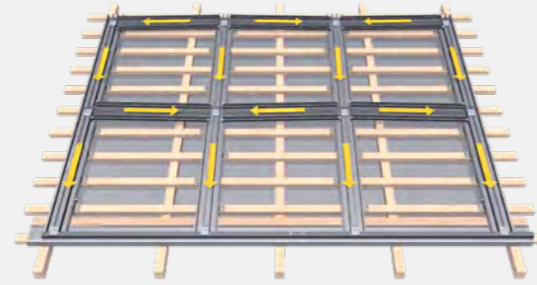
Colour key: ● black | ● blank

* Information on lengths and part numbers on request.

** Point overloads on SafeClicks due to increased snow loads are effectively prevented by the use of TRI-STAND anti-slip protection.

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/



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

<https://www.youtube.com/watch?v=S9WGviC8x2I>

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.

For further information on our products and services, please visit our website at www.tritec-energy.com or our online shop at shop.tritec-energy.com.

You can also contact our experts directly at any time, who will be happy to answer any questions you may have.

Contact us at
info@tritec-energy.com

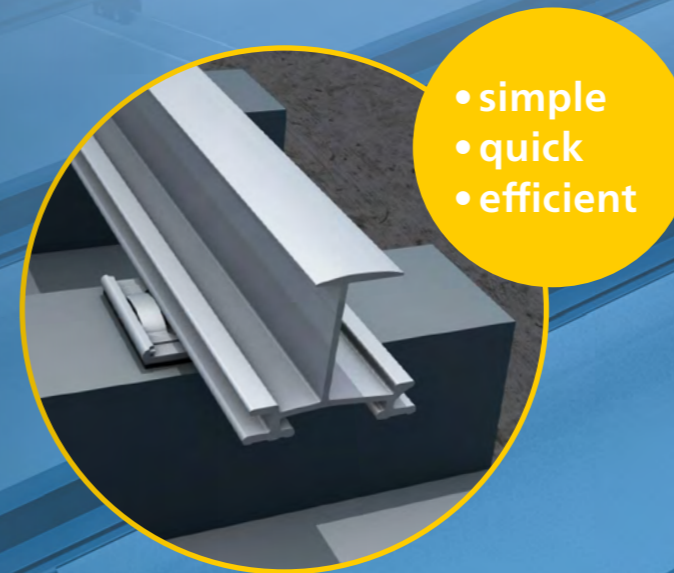
Website & online shop
www.tritec-energy.com
shop.tritec-energy.com

TRITEC

ENERGY FOR A BETTER WORLD

TRI-STAND INSERTION PROFILES

Versatile solutions for PV projects.



- simple
- quick
- efficient

The main advantages:

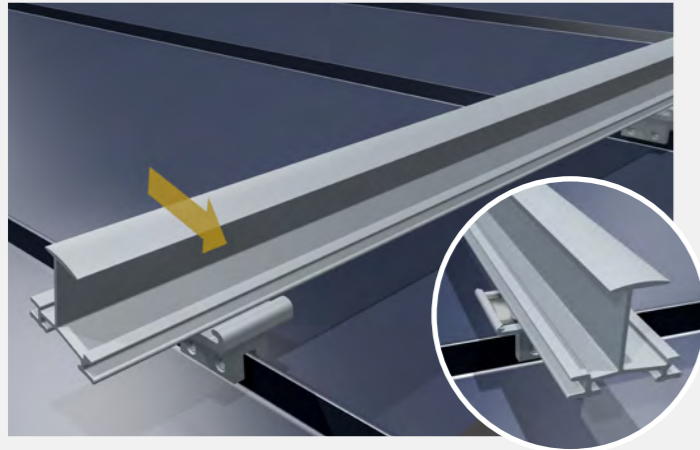
- Profiles are floating, therefore no thermal separation necessary
- No stresses on the module or rail system due to thermal expansion
- Simple, quick and efficient installation
- Optimum load distribution and stability
- Suitable for all common framed solar modules

TRI-STAND INSERTION PROFILES

Versatile solutions and technical excellence for PV projects

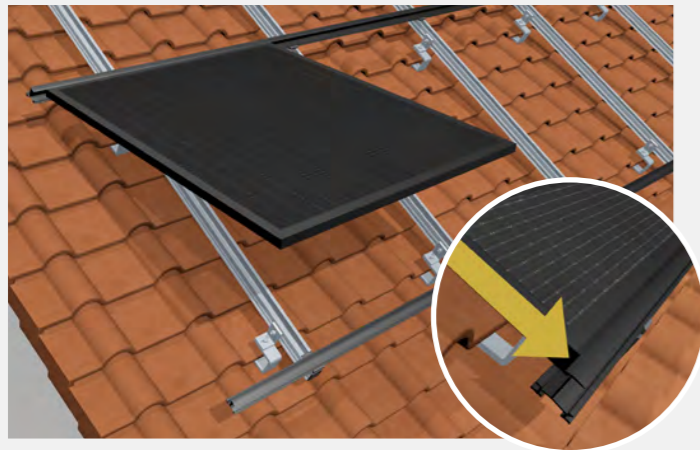
TRI-STAND insert profiles are specially designed to meet the highest requirements of your photovoltaic projects. They are characterized by excellent corrosion resistance and remarkable durability. High-quality material properties ensure long-term investment security and reliable performance over the entire service life of the application.

Advantages of TRI-STAND insertion profiles



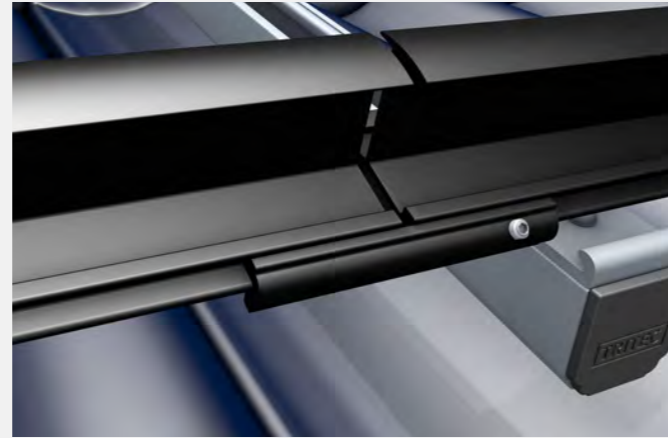
Quick installation

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 are thus avoided.



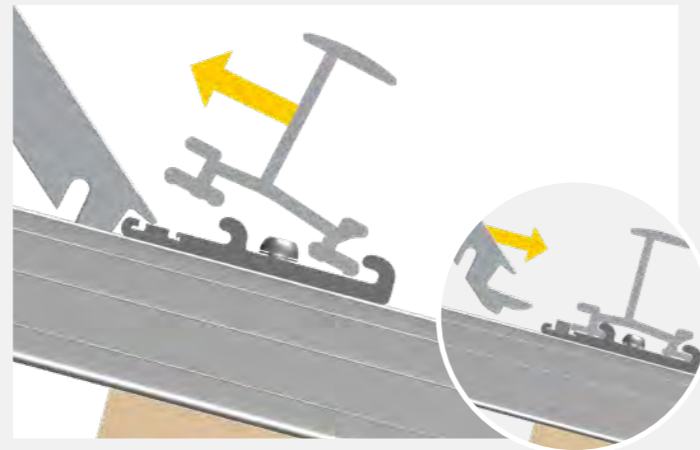
Secure installation

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



Simple connection

The insertion profiles are connected in the centre using the TS-C connectors and fixed in place with a grub screw to allow thermal expansion of the TS profiles.



Simple removal

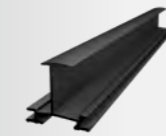
If necessary, the TRI-STAND insert profiles can be easily removed by pressing down the spring on the SafeClick using the TS bending tool+.

THE PROFIL VARIANTS

Flexibility for a wide range of requirements

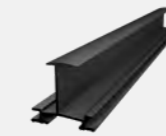
Optimally tailored to your requirements: With TRITEC, you benefit from a comprehensive product range that has been specially developed for different snow and wind load zones**. The profiles and variants marked with * are available in different lengths on request. The TRI-STAND insert profiles are also available in the colours 'black' and 'blank' (aluminium silver).

➔ **TRI-STAND insertion profile**
The insertion profile for standardised snow and wind power zones.



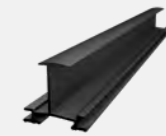
TRI-STAND insertion profile, black
Standard
• variants: TS-30/32/35/38/40
• available in different lengths*

➔ **TRI-STAND insertion profile light**
The insertion profile for low snow and wind force zones.

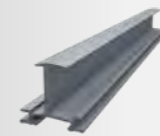


TRI-STAND insertion profile light, black
Standard
• variants: TS-30/32/35/38/40
• available in different lengths*

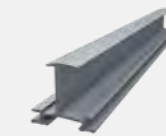
➔ **TRI-STAND insertion profile alpine**
The insertion profile for elevated snow and wind force zones.



TRI-STAND insertion profile alpine, black
Standard
• variants: TS-30/32/35/38/40
• available in different lengths*



TRI-STAND insertion profile, blank
Standard
• variants: TS-30/32/35/38/40
• available in different lengths*



TRI-STAND insertion profile light, blank
Standard
• variants: TS-30/32/35/38/40
• available in different lengths*

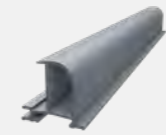


TRI-STAND insertion profile alpine, blank
Standard
• variants: TS-30/32/35/38/40
• available in different lengths*

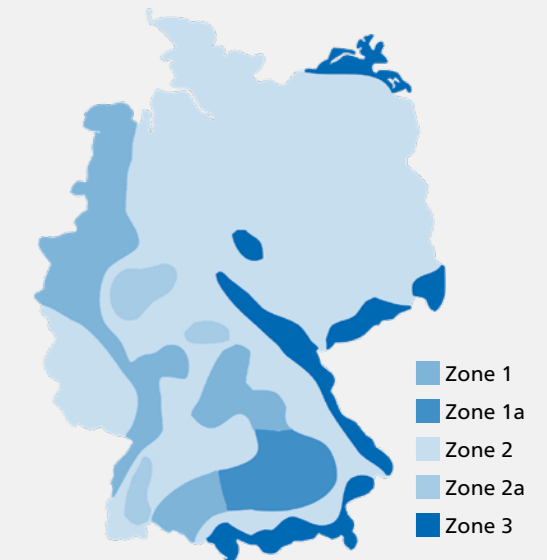
➔ **TRI-STAND end profile**
The insertion profile provides an aesthetic finish.



TRI-STAND end profile, black
Optional
• variants: TS-30/32/35/40
• available in different lengths*



TRI-STAND end profile, blank
Optional
• variants: TS-30/32/35/40
• available in different lengths*

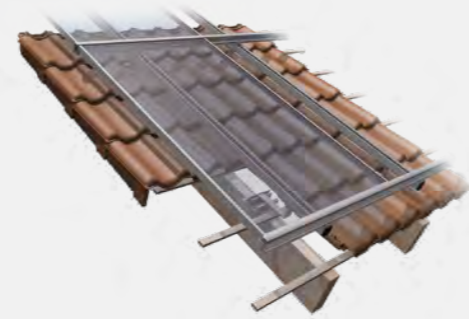


* Information on lengths and article numbers on request.

** The wind and snow load zone according to which the system is designed can be determined for each location.

LEARN MORE

Videos, planning and contact



Simply scan the QR code or visit the following link for more information about our PV mounting systems.

<https://www.tritec-energy.com/en/pv-mounting-systems/>



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

<https://www.youtube.com/watch?v=S9WGviC8x2I>

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.

For further information on our products and services, please visit our website at www.tritec-energy.com or our online shop at shop.tritec-energy.com.

You can also contact our experts directly at any time, who will be happy to answer any questions you may have.

Contact us at
info@tritec-energy.com

Website & online shop
www.tritec-energy.com
shop.tritec-energy.com

TRITEC

ENERGY FOR A BETTER WORLD

TRI-CLIP

The economical clamping system for PV systems on tiled roofs.

- simple
- economical
- efficient



The main advantages:

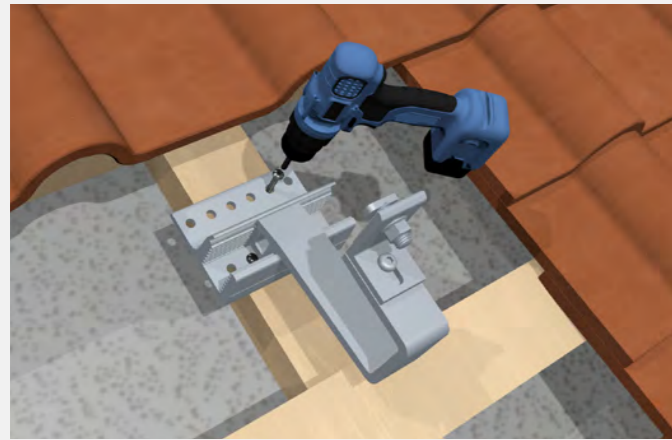
- Cost-effective, economical on-roof system
- Statically tested for wind and snow loads
- Suitable for all common framed solar modules

TRI-CLIP

Classic mounting system at a low price

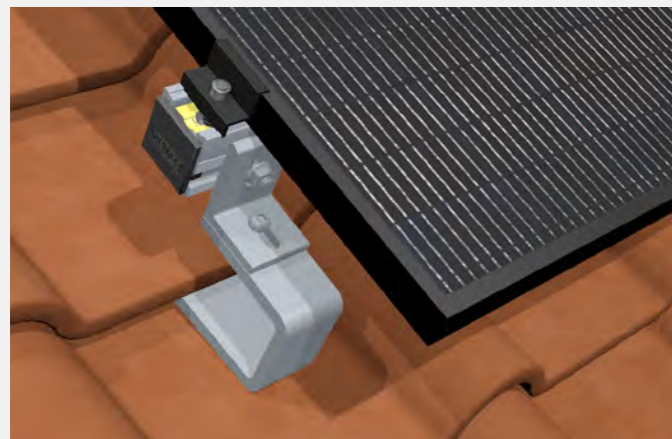
Realize your projects enormously cost-efficient: Thanks to smart planning software and reliable components, the on-roof clamping system TRI-CLIP is safely installed on the tiled roof. The PV clamping system is the economical and safe solution for many applications - from single-family homes to large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

TRI-CLIP is installed so easily



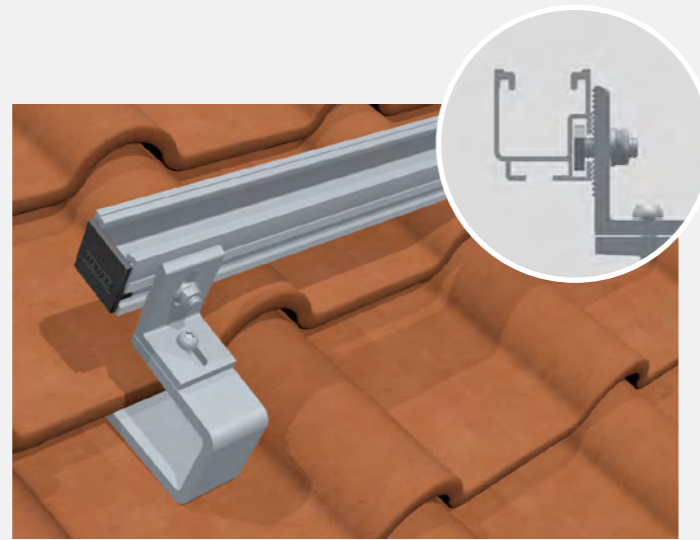
1. Mounting the roof hook

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



3. Fix modules with TRI-CLIP

The end and middle clamps are attached and tightened to profiles and modules according to the design plan.



2. Mounting the base profile (UP-X)

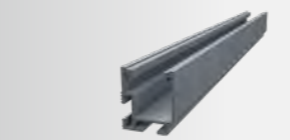
The pre-assembled profiles are then securely installed on the roof hooks with the M10 hammerhead screw.

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 „black“ and „blank“ (aluminum silver). Completely tailored to your needs: The profiles and variants marked with * are available in different lengths on request.

Colour key: ● black | ● blank



TRI-STAND universal profile UP-X 3,70 m Standard

- black, item no.: 1503404
- blank, item no.: 1503352
- other lengths on request*



TRI-STAND universal profile connector UP-CX Standard

- pre-assembled incl. hammer head bolt
- black, item no.: 1503404
- blank, item no.: 1503406



TRI-STAND end cap for UP-X profile Accessories

- item no.: 1503185



TRI-STAND roof hook PRO Standard

- item no.: 1503402



TRI-STAND roof hook PRO PLUS Standard

- item no.: 1503403



TRI-CLIP middle clamp 30-40 mm Standard

- black, item no.: 1503099
- blank, item no.: 1503081



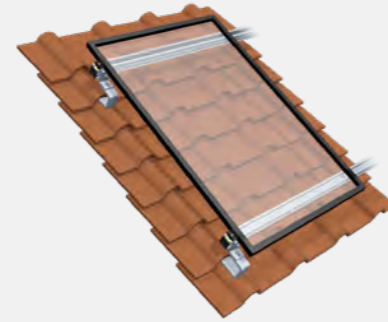
TRI-CLIP end clamp Standard

- black 30 mm, item no.: 1503143
- black 35 mm, item no.: 1503100
- black 40 mm, item no.: 1503101
- blank 30 mm, item no.: 1503142
- blank 35 mm, item no.: 1503082
- blank 40 mm, item no.: 1503083

* 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/



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

<https://www.youtube.com/watch?v=S9WGviC8x2I>

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.

For further information on our products and services, please visit our website at www.tritec-energy.com or our online shop at shop.tritec-energy.com.

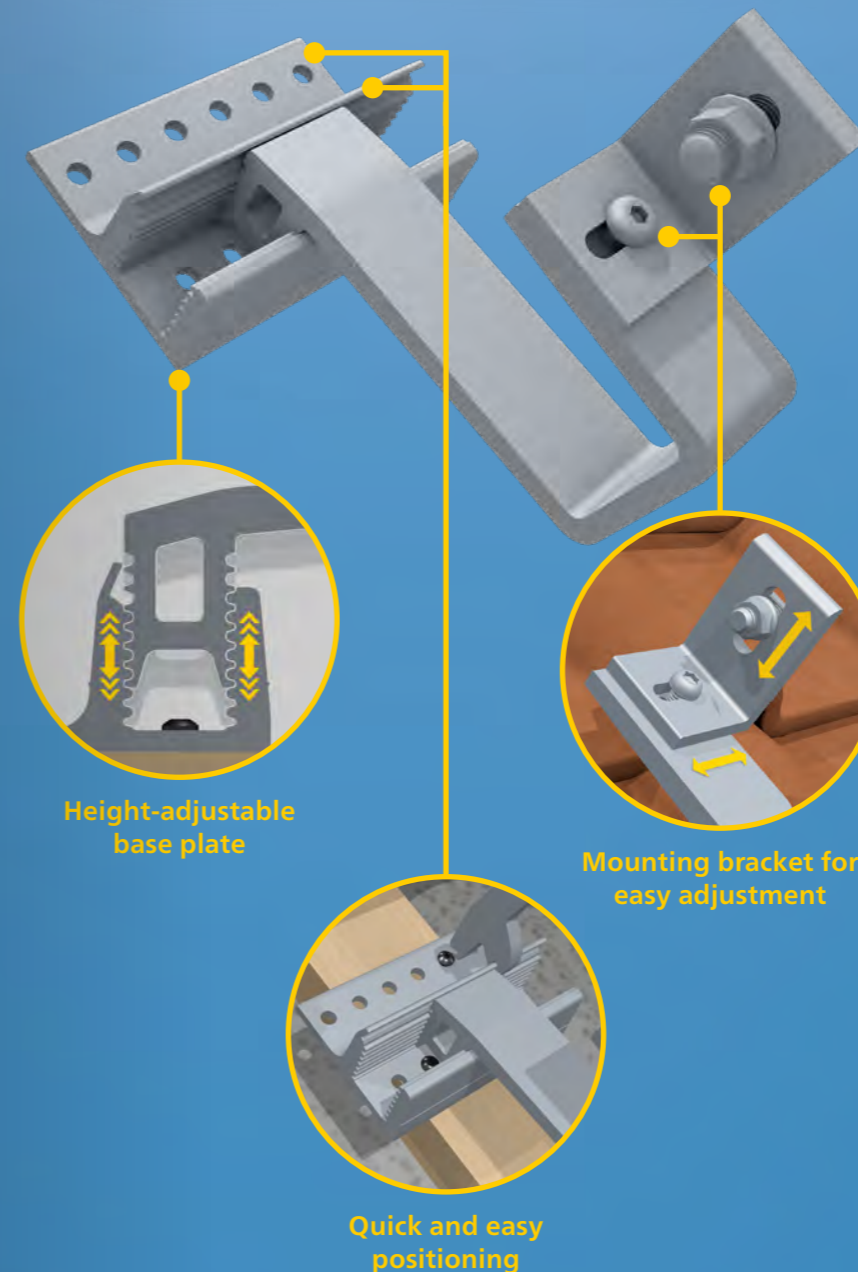
You can also contact our experts directly at any time, who will be happy to answer any questions you may have.

Contact us at
info@tritec-energy.com

Website & online shop
www.tritec-energy.com
shop.tritec-energy.com

TRI-STAND ROOF HOOK PRO

The versatile, robust and convenient component for PV mounting systems.



TRITEC

ENERGY FOR A BETTER WORLD

The main advantages:

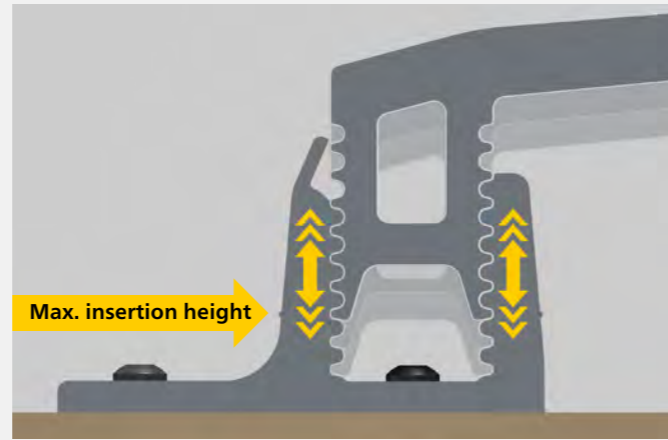
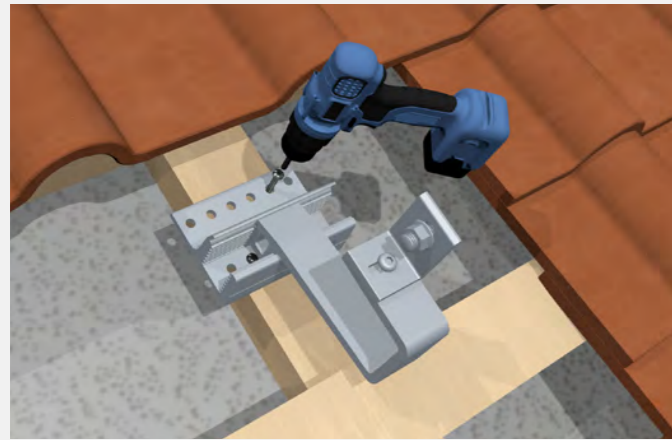
- Mounting bracket with two slotted holes for easy adjustment
- Height-adjustable base plate can be adjusted in 5 mm steps
- 120 mm wide base plate with several connection options
- Quick positioning and fixing of the bracket
- Load capacity of up to 140 kg and 200 kg for maximum snow loads
- Horizontal and vertical rail connection possible

ROOF HOOKS FOR PITCHED ROOFS

How to increase your efficiency with ease

The PRO roof hook impresses with its sophisticated design and versatile application options, making it the ideal solution for demanding installation situations. The wide and height-adjustable base plate offers variable connection options, while the integrated mounting bracket enables precise vertical and horizontal rail connections. This makes the PRO roof hook a flexible tool for both TRITEC insertion systems and clamping systems.

Roof hook PRO - the ideal solution for PV systems

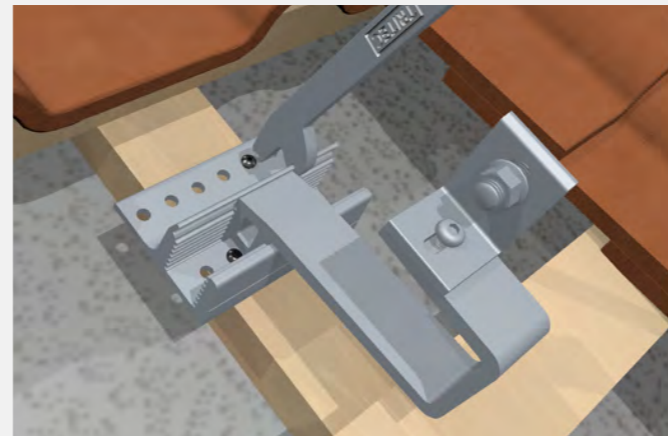


Variable connection options

With a 120 mm wide base plate and variable connection options, the roof hook offers maximum flexibility when positioning on the rafter.

Height-adjustable and adaptable

The height-adjustable base plate enables precise adjustment in 5 mm increments to batten thicknesses of 30, 35 and to a maximum of 40 mm and ensures optimum integration.



Simple adjustment

The mounting bracket has two slotted holes that enable precise and uncomplicated adjustment in horizontal and vertical directions on the profile surface. This ensures exact alignment and improves installation accuracy.

Quick and easy fixing

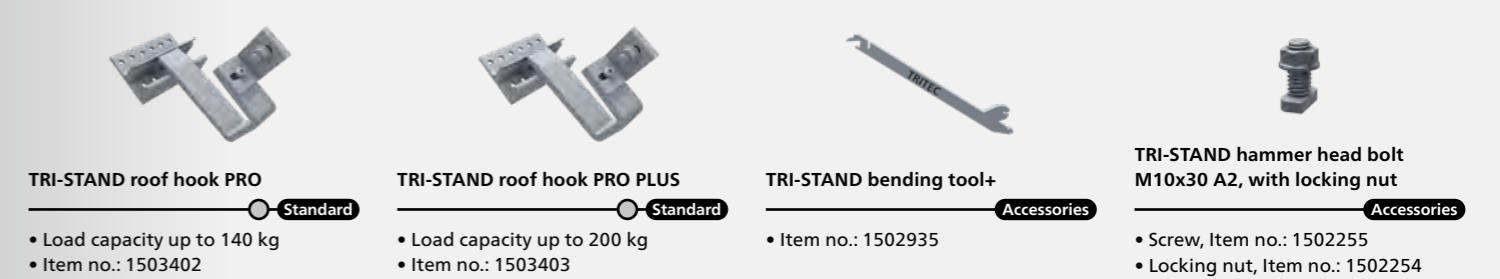
The bracket is attached to the panel simply and efficiently by bending it with the bending tool+. This method enables time-saving and precise installation.

THE SYSTEM COMPONENTS

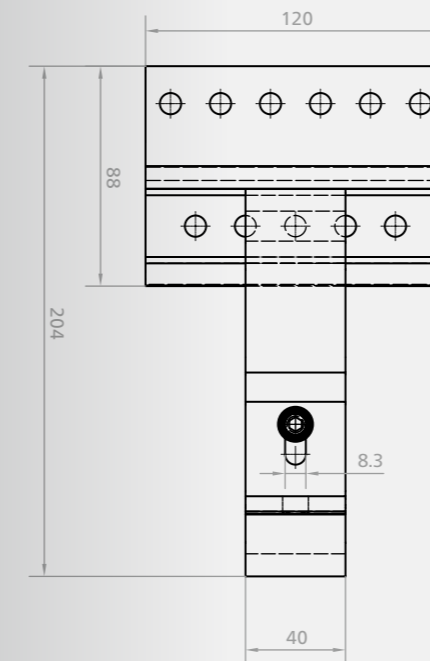
Easy assembly with high quality components

The TRI-STAND roof hook PRO is supplied pre-assembled with a mounting bracket and enables flexible horizontal and vertical rail connection. It can be used in both the TRI-STAND insertion system and the TRI-CLIP clamping system. With a load capacity of up to 140 kg, this roof hook is specially designed for high snow loads. The PRO PLUS roof hook variant, which supports loads of up to 200 kg, is available for applications requiring the highest loads.

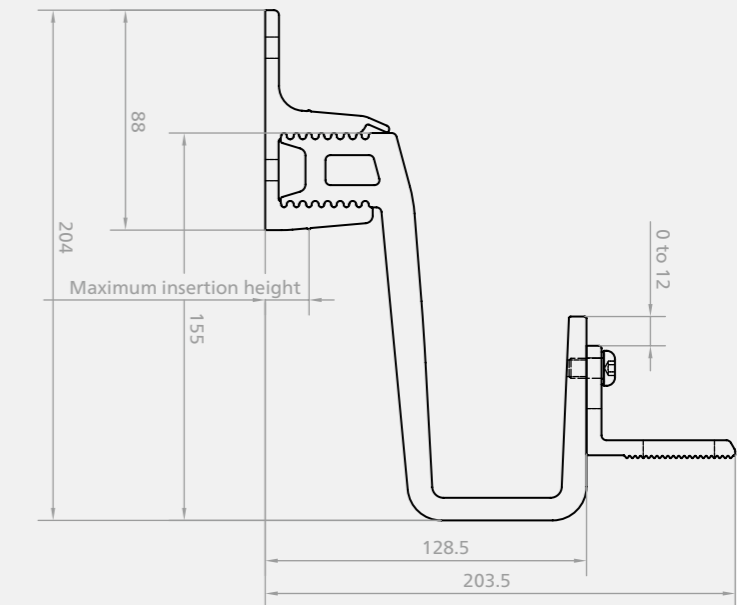
Colour key: ● black | ● blank



Roof hook PRO supervision



Roof hook PRO side view



LEARN MORE

Videos, planning and contact



Simply scan the QR code or visit the following link for more information about the PRO roof hook.

<https://www.tritec-energy.com/en/pv-mounting-systems/roof-hooks-photovoltaics/>



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

<https://www.youtube.com/watch?v=S9WGviC8x2I>

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.

For further information on our products and services, please visit our website at www.tritec-energy.com or our online shop at shop.tritec-energy.com.

You can also contact our experts directly at any time, who will be happy to answer any questions you may have.

Contact us at
info@tritec-energy.com

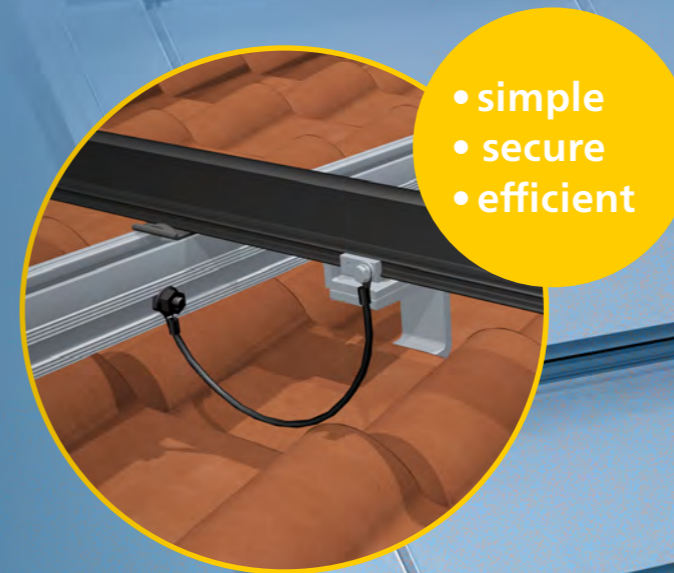
Website & online shop
www.tritec-energy.com
shop.tritec-energy.com

TRITEC

ENERGY FOR A BETTER WORLD

TRI-STAND EARTHING SYSTEMS

TRITEC earthing components for pitched roof PV systems.



- simple
- secure
- efficient

The main advantages:

- Effective earthing systems for optimum safety of PV systems on pitched roofs
- High-quality materials and robust construction for efficient protection
- Simple, quick and efficient installation
- Optimum design for different systems
- Suitable for all common TRITEC rooftop systems

VARIANTS OF EARTHING SYSTEMS

How to ensure efficient safety

An effective earthing system is essential for the safety of photovoltaic systems on pitched roofs. Our TRI-STAND earthing components offer a reliable solution that has been specially developed for the requirements of mounting solar modules. Thanks to high-quality materials and robust construction, they guarantee the necessary safety and durability under various conditions.

Earthing systems for different variants



Earthing of UP/IP base rails

The TS earthing terminals are installed in series on the base rails, close to the lowest insertion profile. The round wire is inserted securely into the TS earthing terminals and then screwed in place. The UNI earthing terminal is mounted directly on the earthing wire to ensure a reliable connection.



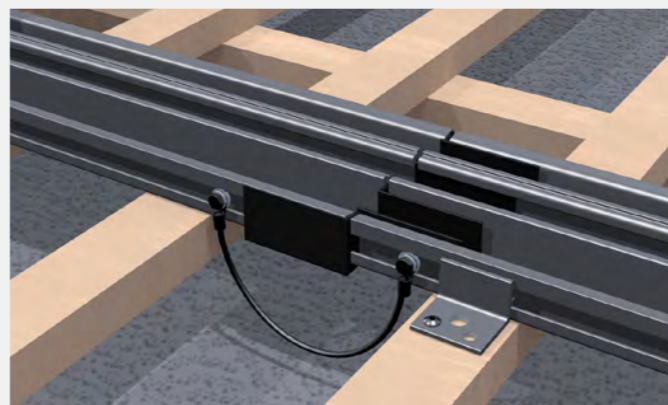
Earthing single-layer systems

The TS earthing clamps or TS earthing sets 4 are mounted in series at the end of each profile section. The round wire is inserted into the TS earthing clamps or TS earthing sets and then screwed in place. The UNI earthing terminal is mounted directly on the earthing wire to ensure a reliable connection.



Earthing of TS rail joints and vertical profiles

The TS earthing set 1 is used to connect all rail joints of the TS insertion profiles to ensure reliable earthing. In addition, TS earthing set 3 is used to create a secure connection between the TS rail sections and the vertical profiles.



Earthing of IP rail joints of the in-roof system

The base profiles of the TRI-ROOF+ in-roof system are securely connected at each joint connection with the TS earthing set 2 at each joint connection. This ensures a connection between the IP rail strands and ensures both effective earthing and increased protection.

THE EARTHING COMPONENTS





Safe and quick installation with few components

TRITEC earthing systems for single-layer and double-layer PV systems are suitable for various roof types and ensure reliable earthing with just a few components. The use of high-quality materials and a well thought-out design ensure compliance with current safety standards and minimise the risk of electrical faults.




Earthing components for 2-layer PV insertion systems

 <p>Aluminium round wire*</p> <p>Standard</p> <ul style="list-style-type: none"> Item no.: 1350051 1x per PV surface horizontally installed 	 <p>TS earthing terminal for UP- and IP base rail*</p> <p>Standard</p> <ul style="list-style-type: none"> Item no.: 1350052 1x per vertical profile strand 	 <p>Earthing terminal UNI</p> <p>Standard</p> <ul style="list-style-type: none"> Item no.: 1350062 1x per PV area
 <p>TS earthing set 1 (TS rail joint connection)</p> <p>Standard</p> <ul style="list-style-type: none"> Item no.: 1350020 1x per horizontal rail step 	 <p>TS earthing set 2 (connection IP rail joint for in-roof)**</p> <p>Standard</p> <ul style="list-style-type: none"> Item no.: 1350021 1x per vertical rail step 	 <p>TS earthing set 3 (connection TS rail track with vertical profile)**</p> <p>Standard</p> <ul style="list-style-type: none"> Item no.: 1350022 1x per horizontal track section

Earthing components for 1-layer PV insertion systems

 <p>Aluminium round wire*</p> <p>Standard</p> <ul style="list-style-type: none"> Item no.: 1350051 1x per PV surface installed vertically 	 <p>Earthing terminal UNI</p> <p>Standard</p> <ul style="list-style-type: none"> Item no.: 1350062 1x per PV area 	 <p>TS earthing set 1 (TS rail joint connection)</p> <p>Standard</p> <ul style="list-style-type: none"> Item no.: 1350020 1x per horizontal rail step 	 <p>TS earthing set 4 (connection TS rail strands to each other)</p> <p>Standard</p> <ul style="list-style-type: none"> Item no.: 1350053 1x per TS track
---	---	---	---

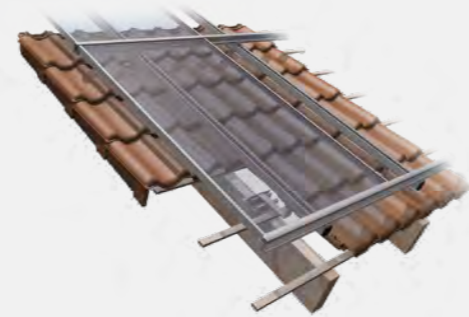
Earthing components for 1-layer PV clamping systems

 <p>Aluminium round wire*</p> <p>Standard</p> <ul style="list-style-type: none"> Item no.: 1350051 1x per PV surface installed vertically 	 <p>TS earthing terminal for UP- and IP base rail*</p> <p>Standard</p> <ul style="list-style-type: none"> Item no.: 1350052 1x per vertical profile strand 	 <p>Earthing terminal UNI</p> <p>Standard</p> <ul style="list-style-type: none"> Item no.: 1350062 1x per PV area
---	--	---

* For anodised profiles, it may be necessary to remove the anodised layer at the contact points to ensure electrical conductivity.
 ** The following accessories from the regular range are required for fastening: Hammer head screws and lock nuts.

LEARN MORE

Videos, planning and contact



Simply scan the QR code or visit the following link for more information about our PV mounting systems.

<https://www.tritec-energy.com/en/pv-mounting-systems/>



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

<https://www.youtube.com/watch?v=S9WGviC8x2I>

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.

For further information on our products and services, please visit our website at www.tritec-energy.com or our online shop at shop.tritec-energy.com.

You can also contact our experts directly at any time, who will be happy to answer any questions you may have.

Contact us at
info@tritec-energy.com

Website & online shop
www.tritec-energy.com
shop.tritec-energy.com

MOUNTING SOLUTIONS

Trust in our experience

TRITEC mounting systems combine over 30 years of photovoltaic experience. Our own products TRI-STAND, TRI-ROOF+, TRI-CLIP and TRI-FLAT Easyspeed offer optimal PV mounting solutions for every roof.

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

For further information on our products and services, please visit our website at www.tritec-energy.com or our online shop at shop.tritec-energy.com.

You can also contact our experts directly at any time, who will be happy to answer any questions you may have.

Contact us at
info@tritec-energy.com

Website & online shop
www.tritec-energy.com
shop.tritec-energy.com