

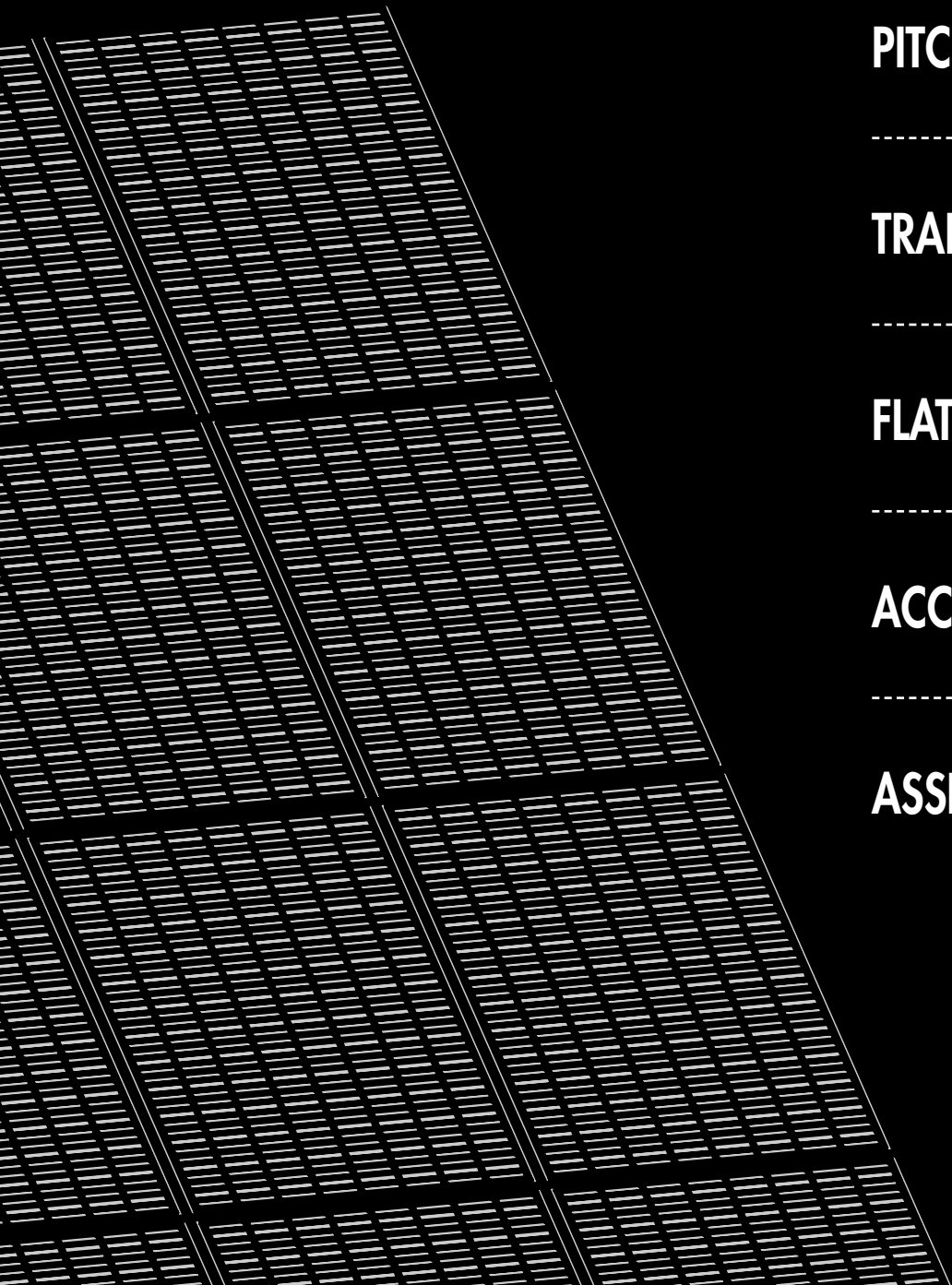


The specialist for fastening technology

OUR RANGE

SOLAR MODULE

INSTALLATION SYSTEMS



PITCHED ROOF

TRAPEZOIDAL SHEET

FLAT ROOF

ACCESSORIES

ASSEMBLY INSTRUCTIONS

www.eurotec.team



CONTENTS

ABOUT EUROTEC	4 – 7
FASTENING SYSTEMS FOR PITCHED ROOFS	8 – 29
FASTENERS FOR ROOF HOOKS	30 – 35
FASTENING SYSTEMS FOR TRAPEZOIDAL SHEETS	36 – 55
FASTENING SYSTEMS FOR FLAT ROOFS	56 – 71

ABOUT EUROTEC

We are a mid-sized company that specialises in the development, production and sale of products for the building sector.

We deliver products for timber construction, terrace construction and concrete fasteners to specialised retailers which undertake distribution to professionals across Europe.

THE COMPANY'S MILESTONES

1999

On 1 May 1999, the two managing directors Gregor Mamys and Markus Rensburg establish the company Eurotec GmbH. The company starts in a small cellar with an adjoining garage, which has 5 storage spaces that are used as a warehouse.

2003

After relocating several times within Hagen, in 2003 a decision is made to move into a company building in Werkzeugstraße. This warehouse has room for roughly 300 storage spaces. But even this warehouse quickly becomes too small. After numerous extensions, the capacity is exhausted and a new company building is needed! The managing directors are able to find a suitable location in Hagen.

2007

In 2007 the Eurotec team move into the new building 'Unter dem Hofe 5' with 30 employees. The building consists of an office wing and an adjacent warehouse with roughly 3,500 storage spaces.

2010

Only 3 years later, the new building has become out of date. The building is extended with a new warehouse building providing 7,500 more storage spaces and office space located above them.

2012

In 2012, we begin planning the next important step. We lay the foundations for the production building, which is the starting point for in-house production.

2013

As of 7 January 2013, a selected portion of in-house products is produced in our own production building in Hagen.

2014

In 2014 we intensively work towards further expanding our in-house production.

2015

Production capacity is expanded in 2015 enabling us to offer a wide range of solutions from our very own production facilities.

2016

2016 sees the company start actively building a new hall to relocate its machinery. Additional office space is created in Hagen, since the company is enjoying steady growth. The next step is to expand the storage capacities in what was formerly the machinery hall.

2018

Completion of the new production building in early 2018 means that all of the machinery can be relocated. Furthermore, an additional warehouse building is constructed, providing even more storage spaces.

2019

Our plastics production operations are expanded in February to include two additional injection moulding machines, bringing our total number of machines to four. Screw production activities are also expanded to include another multi-stage press. So we now have five machines for screw production in total.

2021

Our fleet of machinery continues to grow. Two more plastics machines are added to our company's stock this year. We also expand our online presence with Eurotec Coach and the Eurotec BIM Portal.

THERE IS NO END IN SIGHT ...



IN-HOUSE PRODUCTION AT OUR HAGEN SITE

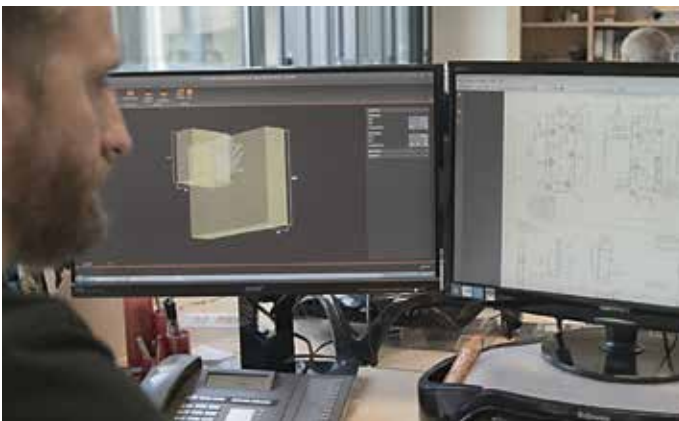
With production launch in 2013, we took an important step in our company's history. Our success and ever-growing production facilities are proof that we have established ourselves on the market with our products. The advantages of in-house production are clear: the high quality requirements of our customers can be achieved more effectively and continuously monitored. Short delivery channels and swift responses to the needs of the market are additional advantages.



QUALITY MANAGEMENT

Quality is at the heart of all Eurotec activities. Our ultimate goal is to provide our customers with flawless products and services. We also guarantee 100% adherence to delivery dates. We expect every one of our employees to commit to quality unwaveringly. Training and further development of customer- and quality-oriented ways of thinking and acting are always in focus. We feel duty-bound to comply with legal and regulatory requirements and within a given economic framework, while at the same time promoting environmentally conscious action.

QUALITY FROM EUROPE – SOMETHING WE TAKE PRIDE IN!



CALCULATIONS AND PLANNING

We would be delighted to advise you on your construction projects. Contact our Technical department or use the free calculation software in the Service section of our website:

www.eurotec.team/en

Look no further for design calculations and planning for terrace construction, timber construction, concrete or façades.



BECAUSE QUALITY IS OUR GREATEST ASSET

Our ultimate goal is to provide our customers with flawless products and services. We also guarantee 100% adherence to delivery dates.

We expect every one of our employees to commit to quality unwaveringly. Training and further development of customer- and quality-oriented ways of thinking and acting are always in focus. We feel duty-bound to comply with legal and regulatory requirements and within a given economic framework, while at the same time promoting environmentally conscious action. We are proud that almost all of our products in the timber, façade and concrete segments are ETA-certified.

It goes without saying that our quality assurance does daily checks on the batches produced for standards such as conformity to drawings, functionality, appearance, and compliance with customer-specific specifications. That is the only way we can be sure to deliver consistently high quality, which our customers have come to expect from us.

As of June 2019 we are also DEKRA-certified!

DIN EN ISO 9001 – quality management at Eurotec

Introducing and maintaining a quality management system was a strategic decision on the part of the company and it serves to analyse and improve company processes.

The quality management system in accordance with ISO 9001 helps with quality assurance by optimising processes. Eurotec's quality management system is aimed at all levels of the company, from the suppliers through to the customers.

Planning, implementing, monitoring and checking all company processes makes it possible to ensure an efficient workflow. Eurotec's suppliers are exclusively selected in accordance with set criteria in order to provide our customers with flawless products and services and to guarantee 100% adherence to delivery dates.

This is made up of a combination of the following principles:

- Customer-orientation
- Management
- Personal commitment
- Process-oriented approach
- Improvement
- Fact-based decision-making
- Relationship management

Ultimately, these principles benefit the suppliers at the start and the customers at the end of Eurotec's value-creation chain.

You will find more information about our certifications and approvals on our website.



QUALITY ASSURANCE AND CERTIFICATIONS



Our ultimate goal is to provide our customers with flawless products and services. We also guarantee 100% adherence to delivery dates. We expect every one of our employees to commit to quality unwaveringly. Training and further development of customer- and quality-oriented ways of thinking and acting are always in focus. We feel duty-bound to comply with legal and regulatory requirements and within a given economic framework, while at the same time promoting environmentally conscious action. We are proud of the fact that almost all of our products in the wood, façade

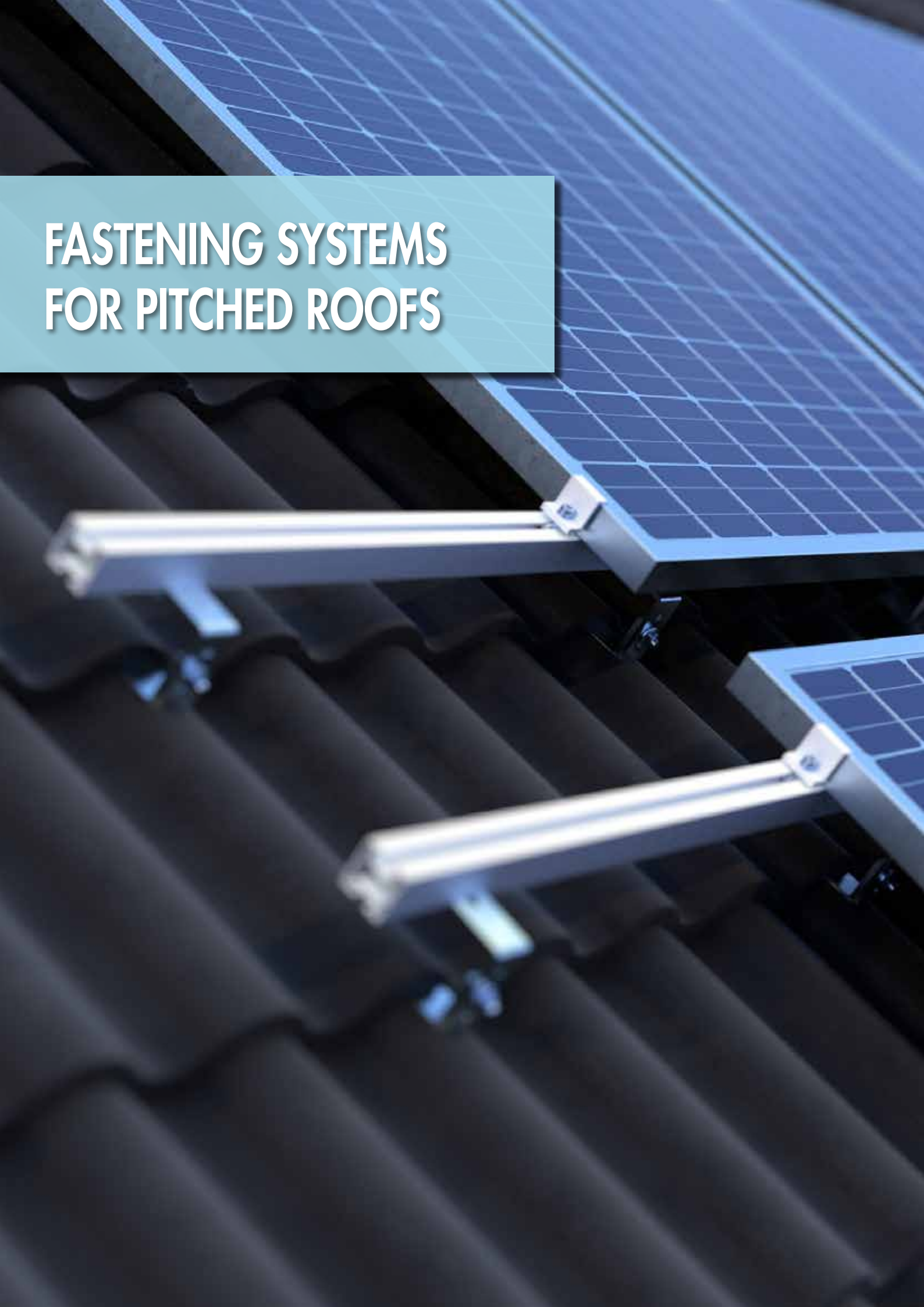
and concrete segments are ETA-certified. It goes without saying that our quality assurance does daily checks on the batches produced for standards such as conformity to drawings, functionality, appearance, and compliance with customer-specific specifications. That is the only way we can be sure to deliver the consistently high quality our customers have come to expect from us.



QUALITY IS AT THE HEART OF
ALL OUR ACTIVITIES.



FASTENING SYSTEMS FOR PITCHED ROOFS





FASTENING SYSTEM

for pitched roofs

The Eurotec fastening system for pitched roofs is an all-in-one solution for the installation of solar modules on the pitched roof. The Eurotec roof hooks are easy to install and save both time and labour costs.

The process for using the fastening system for pitched roofs to install solar modules on the roof in only a few steps is explained below.

WHAT YOU NEED:

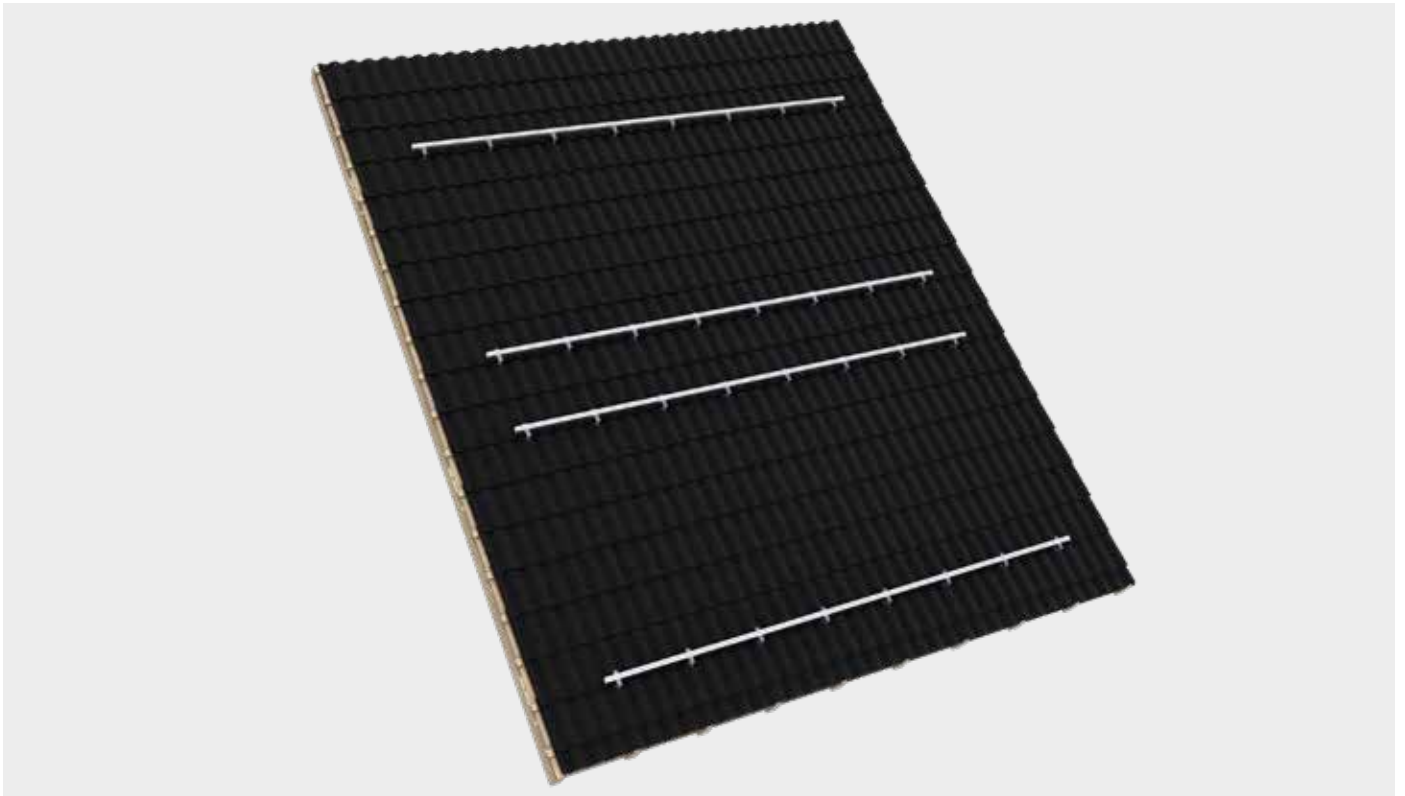
- Roof hooks
- Screws: Paneltwistec or Topduo
- Pitched roof installation profile
- Hammer head screw
- Locking nut
- Module clamps



INSTALLATION EXAMPLE



STEP 1: The first step is to screw the roof hook onto the counter-batten with the Topduo or Paneltwistec screws, depending on the roof structure.



STEP 2: The roof tiles are re-closed and the installation profiles are fastened to the hook by means of the hammer head screws and the locking nuts.



STEP 3: In the final step, the solar panels are placed on the Eurotec installation profiles and fastened with the module clamps.

ROOF HOOKS FLEX

Triple-adjustable, A2 stainless steel

The roof hook FLEX is used to install solar panels in combination with the pitched roof installation profiles. The product is height-adjustable because of the slotted holes and has 3 lateral adjustment options to level out uneven roofs. To fasten the installation profile on the roof hook, you can use Eurotec hammer head screws in conjunction with the locking nuts.

Roof hook FLEX



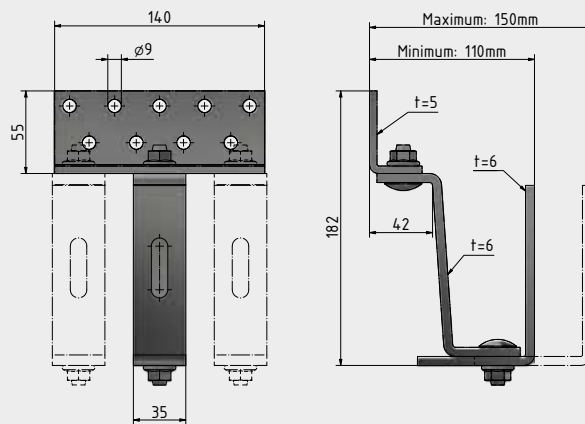
Art. no.	Base plate		Hook		Installation height [mm]	Slotted hole [mm] ^{c)}	PU
	Dimensions [mm] ^{a)}	Material	Dimensions [mm] ^{b)}	Material			
945517	140 x 55 x 5	1.4301	35 x 6; 35 x 6	1.4301	110 - 150	Ø 11 x 40	30

a) Length x width x sheet thickness; b) Width x sheet thickness (sheet thickness, top hook = 6 mm, bottom hook = 6 mm); c) Bore width x hole length

ADVANTAGES/SPECIFICATIONS

- Double height-adjustable roof hook with adjustment range from 110 to 150 mm
- Laterally adjustable with 3 adjustment options
- Height adjustment secured by DIN 603 A2-70 carriage bolt M10 and DIN 6923 A2-70 locking nut M10
- Stainless steel according to national technical certification Z-30.3-6

TECHNICAL DRAWING



APPLICATION IMAGE



Roof hook FLEX installed on the counter-batten, guided through the released roof tile, with pitched roof installation profile installed.

DETERMINING QUANTITIES – ROOF HOOKS FLEX

MEASUREMENT EXAMPLE: WITHOUT SNOW GUARD

Number of roof hooks FLEX/m ²															
Height above sea level [m] for snow load zone:					Snow load s_k^* kN/m ²	Roof/module inclination									
1	1a	2	2a	3		20°	25°	30°	35°	40°	45°	50°	55°	60°	
≤ 444	–	–	–	–	0.65	2.93	3.07	3.18	2.79	2.40	2.03	1.70	1.41	1.18	
488	–	–	–	–	0.75	3.24	3.38	3.49	3.03	2.58	2.16	1.78	1.45	1.18	
528	≤ 458	≤ 337	–	–	0.85	3.55	3.70	3.79	3.28	2.77	2.29	1.85	1.48	1.18	
566	492	364	–	–	0.95	3.87	4.01	4.09	3.52	2.95	2.41	1.93	1.51	1.18	
603	524	390	–	–	1.05	4.18	4.32	4.40	3.76	3.13	2.54	2.00	1.55	1.18	
637	555	415	≤ 356	≤ 314	1.15	4.49	4.63	4.70	4.00	3.31	2.66	2.08	1.58	1.18	
670	585	438	377	334	1.25	4.81	4.94	5.00	4.24	3.50	2.79	2.15	1.61	1.18	
702	613	461	397	352	1.35	5.12	5.25	5.31	4.49	3.68	2.91	2.23	1.65	1.18	
733	640	483	417	370	1.45	5.44	5.56	5.61	4.73	3.86	3.04	2.30	1.68	1.18	

* s_k = characteristic value of snow load on the ground according to DIN 1055-5:2005

MEASUREMENT EXAMPLE: WITH SNOW GUARD

Number of roof hooks FLEX/m ²															
Height above sea level [m] for snow load zone:					Snow load s_k^* kN/m ²	Roof/module inclination									
1	1a	2	2a	3		20°	25°	30°	35°	40°	45°	50°	55°	60°	
≤ 444	–	–	–	–	0.65	2.93	3.07	3.18	3.11	2.99	2.85	2.68	2.49	2.28	
488	–	–	–	–	0.75	3.24	3.38	3.49	3.40	3.27	3.10	2.91	2.69	2.45	
528	≤ 458	≤ 337	–	–	0.85	3.55	3.70	3.79	3.69	3.54	3.35	3.13	2.88	2.61	
566	492	364	–	–	0.95	3.87	4.01	4.09	3.98	3.81	3.61	3.36	3.08	2.78	
603	524	390	–	–	1.05	4.18	4.32	4.40	4.27	4.09	3.86	3.59	3.28	2.95	
637	555	415	≤ 356	≤ 314	1.15	4.49	4.63	4.70	4.56	4.36	4.11	3.81	3.48	3.12	
670	585	438	377	334	1.25	4.81	4.94	5.00	4.85	4.63	4.36	4.04	3.68	3.29	
702	613	461	397	352	1.35	5.12	5.25	5.31	5.14	4.91	4.61	4.26	3.88	3.46	
733	640	483	417	370	1.45	5.44	5.56	5.61	5.43	5.18	4.86	4.49	4.07	3.62	

* s_k = characteristic value of snow load on the ground according to DIN 1055-5:2005

Conversion example for roof hooks/m² → max. roof hook spacing along rafter axis = 1 : (2.03 x 0.7) = 0.70 m

Whereby 2.03 = number of roof hooks/m²; 0.7 = rafter spacing in m. Conversion example applies with each rafter as fastening point for the roof hooks. Measurement according to DIN 1055-4:2005, EC 1-4 and DIN 1055-5:2005. All values provided should be viewed as subject to the assumptions that have been made. They represent example calculations and apply subject to typographical errors and printing errors.

FURTHER ASSUMPTIONS:

gable roof; ridge height max. 18 m; wind load zone 1; suction coefficient of roof inclination $c_{pe,H,1} = -1.3$; pressure coefficient in accordance with the roof inclination with the least favourable value taken into account (F, G, H); net load of PV module 0.15 kN/m². Roof hook not supported on roof covering. Pitched roof installation profile 40/40. Load is applied by the installation profile centrally in the top connection area of the roof hooks. Max. span width of the installation profile 1.40 m.

ROOF HOOKS FLEX SLIM

Continuously adjustable, aluminium

The roof hook FLEX SLIM is used to install solar panels on pitched roofs in combination with the pitched roof installation profile SLIM. Thanks to the slotted hole, the installation height can be varied to adapt to the roof tiles and the main batten. The continuously adjustable lateral adjustment gives you the flexibility to easily align the hook to the counter batten and screw it in place. The slotted hole on the base plate makes it possible to further increase the installation height. To fasten the installation profile to the roof hook, Eurotec hammer head screws and locking nuts can be used.

Roof hooks FLEX SLIM



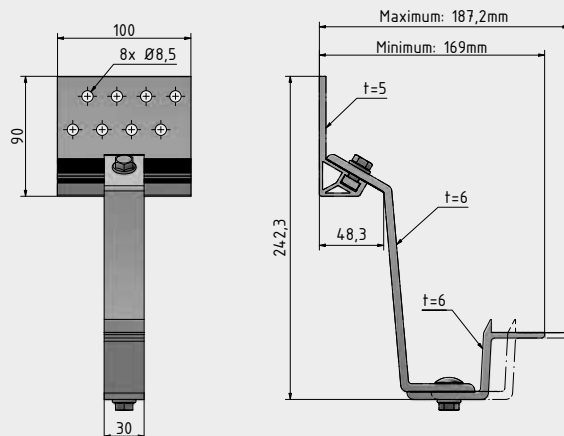
Art. no.	Base plate		Hook		Installation height [mm]	Slotted hole [mm] ^{c)}	PU
	Dimensions [mm] ^{a)}	Material	Dimensions [mm] ^{b)}	Material			
100671	100 x 90 x 5	Aluminium	30 x 6	Aluminium	169-187	Ø 8.5 x 20	16

a) Length x width x sheet thickness; b) Width x sheet thickness; c) Bore width x hole length

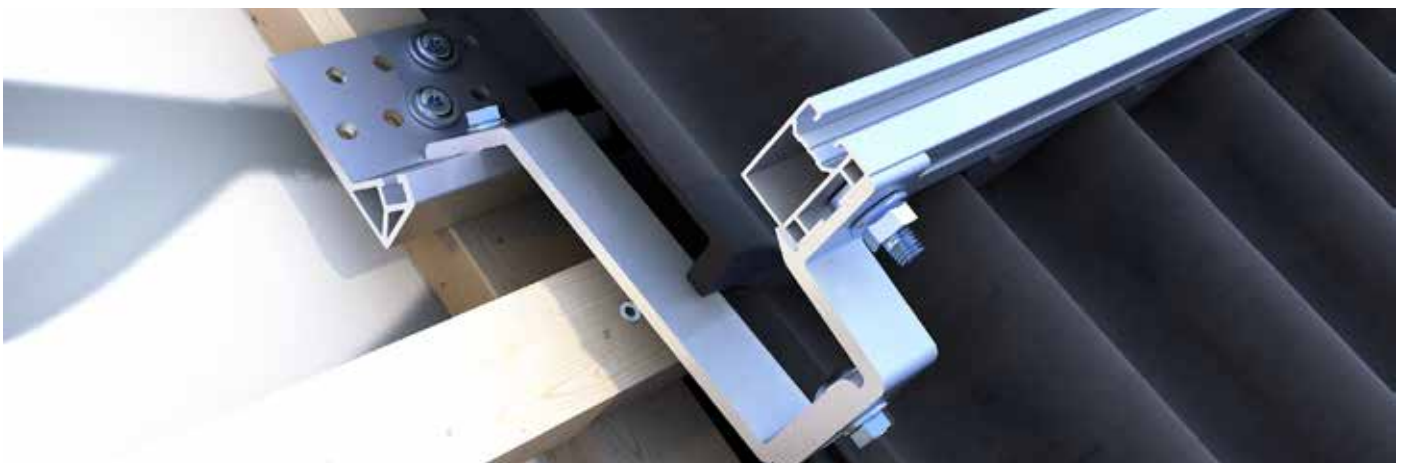
ADVANTAGES/SPECIFICATIONS

- Double height-adjustable roof hook with installation height from 169 to 187 mm
- Continuous lateral adjustment
- Height adjustment secured by DIN 603 A2 carriage bolt M8x20 and DIN 6923 A2-70 locking nut M8

TECHNICAL DRAWING



APPLICATION IMAGE



Roof hook FLEX SLIM installed on the counter-batten, guided through the released roof tile, with pitched roof installation profile SLIM installed.

DETERMINING QUANTITIES – ROOF HOOKS FLEX SLIM

MEASUREMENT EXAMPLE: WITHOUT SNOW GUARD

Height above sea level [m] for snow load zone:					Snow load s_k^* kN/m ²	Number of roof hooks FLEX SLIM/m ²									
1	1a	2	2a	3		Roof/module inclination									
						20°	25°	30°	35°	40°	45°	50°	55°	60°	
≤ 444	–	–	–	–	0.65	2.93	3.07	3.18	2.79	2.40	2.03	1.70	1.41	1.18	
488	–	–	–	–	0.75	3.24	3.38	3.49	3.03	2.58	2.16	1.78	1.45	1.18	
528	≤ 458	≤ 337	–	–	0.85	3.55	3.70	3.79	3.28	2.77	2.29	1.85	1.48	1.18	
566	492	364	–	–	0.95	3.87	4.01	4.09	3.52	2.95	2.41	1.93	1.51	1.18	
603	524	390	–	–	1.05	4.18	4.32	4.40	3.76	3.13	2.54	2.00	1.55	1.18	
637	555	415	≤ 356	≤ 314	1.15	4.49	4.63	4.70	4.00	3.31	2.66	2.08	1.58	1.18	
670	585	438	377	334	1.25	4.81	4.94	5.00	4.24	3.50	2.79	2.15	1.61	1.18	
702	613	461	397	352	1.35	5.12	5.25	5.31	4.49	3.68	2.91	2.23	1.65	1.18	
733	640	483	417	370	1.45	5.44	5.56	5.61	4.73	3.86	3.04	2.30	1.68	1.18	

* s_k = characteristic value of snow load on the ground according to DIN 1055-5:2005

MEASUREMENT EXAMPLE: WITH SNOW GUARD

Height above sea level [m] for snow load zone:					Snow load s_k^* kN/m ²	Number of roof hooks FLEX SLIM/m ²									
1	1a	2	2a	3		Roof/module inclination									
						20°	25°	30°	35°	40°	45°	50°	55°	60°	
≤ 444	–	–	–	–	0.65	2.93	3.07	3.18	3.11	2.99	2.85	2.68	2.49	2.28	
488	–	–	–	–	0.75	3.24	3.38	3.49	3.40	3.27	3.10	2.91	2.69	2.45	
528	≤ 458	≤ 337	–	–	0.85	3.55	3.70	3.79	3.69	3.54	3.35	3.13	2.88	2.61	
566	492	364	–	–	0.95	3.87	4.01	4.09	3.98	3.81	3.61	3.36	3.08	2.78	
603	524	390	–	–	1.05	4.18	4.32	4.40	4.27	4.09	3.86	3.59	3.28	2.95	
637	555	415	≤ 356	≤ 314	1.15	4.49	4.63	4.70	4.56	4.36	4.11	3.81	3.48	3.12	
670	585	438	377	334	1.25	4.81	4.94	5.00	4.85	4.63	4.36	4.04	3.68	3.29	
702	613	461	397	352	1.35	5.12	5.25	5.31	5.14	4.91	4.61	4.26	3.88	3.46	
733	640	483	417	370	1.45	5.44	5.56	5.61	5.43	5.18	4.86	4.49	4.07	3.62	

* s_k = characteristic value of snow load on the ground according to DIN 1055-5:2005

Conversion example for roof hooks/m² → max. roof hook spacing along rafter axis = 1 : (2.03 x 0.7) = 0.70 m

Whereby 2.03 = number of roof hooks/m²; 0.7 = rafter spacing in m. Conversion example applies with each rafter as fastening point for the roof hooks. Measurement according to DIN 1055-4:2005, EC 1-4 and DIN 1055-5:2005. All values provided should be viewed as subject to the assumptions that have been made. They represent example calculations and apply subject to typographical errors and printing errors.

FURTHER ASSUMPTIONS:

gable roof; ridge height max. 18 m; wind load zone 1; suction coefficient of roof inclination $c_{pe,H,1} = -1.3$; pressure coefficient in accordance with the roof inclination with the least favourable value taken into account (F, G, H); net load of PV module 0.15 kN/m². Roof hook not supported on roof covering. Pitched roof installation profile 40/40. Load is applied by the installation profile centrally in the top connection area of the roof hooks. Max. span width of the installation profile 1.40 m.

ROOF HOOK BASIC

A2 stainless steel

The roof hook BASIC is used to install solar panels in combination with the pitched roof installation profiles. To fasten the installation profile on the roof hook, you can use Eurotec hammer head screws in conjunction with the locking nuts.

Roof hook BASIC



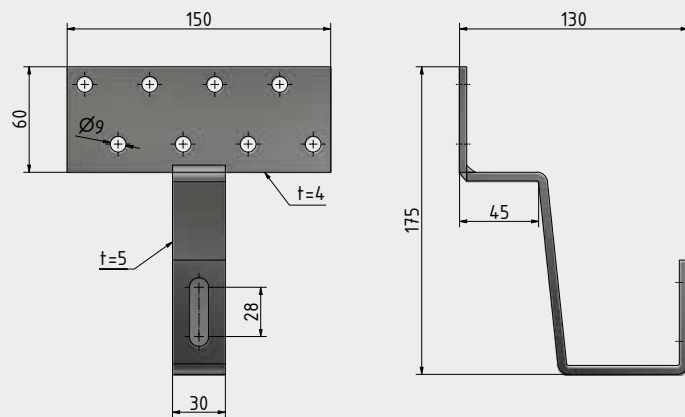
Art. no.	Base plate		Hook		Installation height [mm]	Slotted hole [mm] ^d	PU
	Dimensions [mm] ^{a)}	Material	Dimensions [mm] ^{b)}	Material			
945513	150 x 60 x 4	1.4301	30 x 5	1.4301	130	Ø 11 x 39	20

a) Length x width x sheet thickness; b) Width x sheet thickness; c) Bore width x slotted hole length

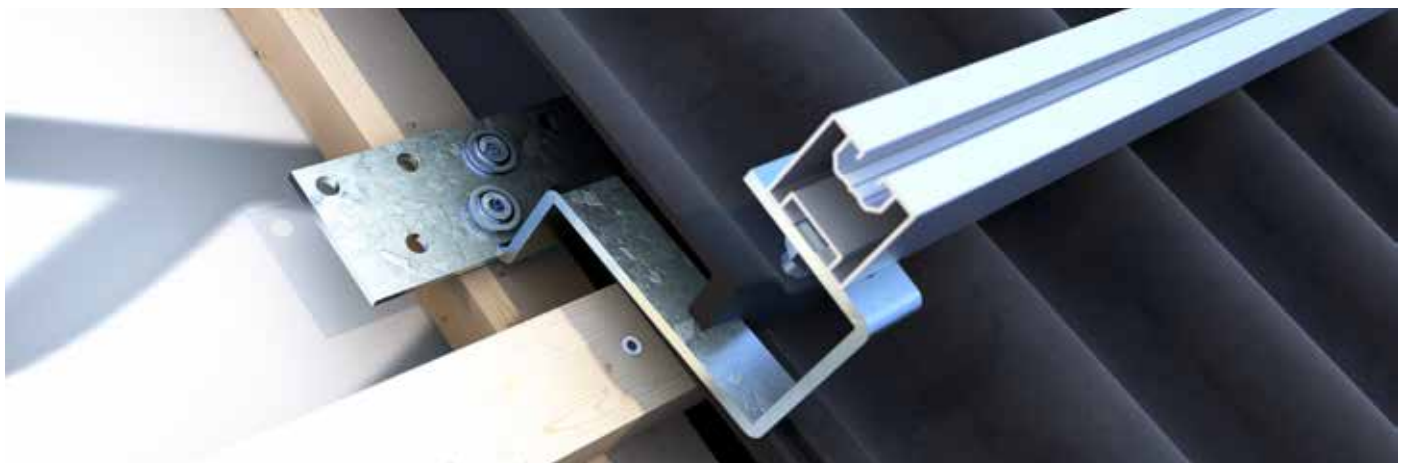
ADVANTAGES/SPECIFICATIONS

- Compatible with all roof tiles
- Corrosion-resistant stainless steel
- Adapted drilling pattern for maximum efficiency
- Stainless steel according to national technical certification Z-30.3-6
- Easy to handle

TECHNICAL DRAWING



APPLICATION IMAGE



Roof hook BASIC installed on the counter-batten, guided through the released roof tile, with pitched roof installation profile installed.

DETERMINING QUANTITIES – ROOF HOOKS BASIC

MEASUREMENT EXAMPLE: WITHOUT SNOW GUARD

Number of roof hooks BASIC/m ²															
Height above sea level [m] for snow load zone:					Snow load s_k^* kN/m ²	Roof/module inclination									
1	1a	2	2a	3		20°	25°	30°	35°	40°	45°	50°	55°	60°	
≤ 444	–	–	–	–	0.65	2.51	2.66	2.77	2.45	2.12	1.80	1.51	1.25	1.04	
488	–	–	–	–	0.75	2.78	2.93	3.04	2.67	2.29	1.92	1.58	1.28	1.04	
528	≤ 458	≤ 337	–	–	0.85	3.05	3.20	3.31	2.89	2.45	2.03	1.65	1.31	1.04	
566	492	364	–	–	0.95	3.32	3.48	3.58	3.11	2.62	2.15	1.72	1.34	1.04	
603	524	390	–	–	1.05	3.59	3.75	3.85	3.32	2.79	2.27	1.79	1.37	1.04	
637	555	415	≤ 356	≤ 314	1.15	3.86	4.02	4.12	3.54	2.95	2.38	1.86	1.41	1.04	
670	585	438	377	334	1.25	4.13	4.30	4.39	3.76	3.12	2.50	1.93	1.44	1.04	
702	613	461	397	352	1.35	4.41	4.57	4.66	3.98	3.28	2.61	2.00	1.47	1.04	
733	640	483	417	370	1.45	4.68	4.84	4.93	4.20	3.45	2.73	2.07	1.50	1.04	

* s_k = characteristic value of snow load on the ground according to DIN 1055-5:2005

MEASUREMENT EXAMPLE: WITH SNOW GUARD

Number of roof hooks BASIC/m ²															
Height above sea level [m] for snow load zone:					Snow load s_k^* kN/m ²	Roof/module inclination									
1	1a	2	2a	3		20°	25°	30°	35°	40°	45°	50°	55°	60°	
≤ 444	–	–	–	–	0.65	2.51	2.66	2.77	2.73	2.66	2.56	2.42	2.27	2.09	
488	–	–	–	–	0.75	2.78	2.93	3.04	3.00	2.91	2.79	2.63	2.45	2.25	
528	≤ 458	≤ 337	–	–	0.85	3.05	3.20	3.31	3.26	3.16	3.02	2.85	2.64	2.41	
566	492	364	–	–	0.95	3.32	3.48	3.58	3.52	3.41	3.25	3.06	2.83	2.57	
603	524	390	–	–	1.05	3.59	3.75	3.85	3.78	3.66	3.49	3.27	3.02	2.73	
637	555	415	≤ 356	≤ 314	1.15	3.86	4.02	4.12	4.04	3.91	3.72	3.48	3.20	2.89	
670	585	438	377	334	1.25	4.13	4.30	4.39	4.31	4.16	3.95	3.69	3.39	3.06	
702	613	461	397	352	1.35	4.41	4.57	4.66	4.57	4.41	4.18	3.90	3.58	3.22	
733	640	483	417	370	1.45	4.68	4.84	4.93	4.83	4.65	4.41	4.11	3.77	3.38	

* s_k = characteristic value of snow load on the ground according to DIN 1055-5:2005

Conversion example for roof hooks/m² → max. roof hook spacing along rafter axis = 1: (1.80 x 0.7) = 0.79 m

Whereby 1.80 = number of roof hooks/m²; 0.7 = rafter spacing in m. Conversion example applies with each rafter as fastening point for the roof hooks. Measurement according to DIN 1055-4:2005, EC 1-4 and DIN 1055-5:2005. All values provided should be viewed as subject to the assumptions that have been made. They represent example calculations and apply subject to typographical errors and printing errors.

FURTHER ASSUMPTIONS:

gable roof; ridge height max. 18 m; wind load zone 1; suction coefficient of roof inclination $c_{pe,H,1} = -1.3$; pressure coefficient in accordance with the roof inclination with the least favourable value taken into account (F, G, H); net load of PV module 0.15 kN/m². Roof hook not supported on roof covering. Pitched roof installation profile 40/40. Load is applied by the installation profile centrally in the top connection area of the roof hooks. Max. span width of the installation profile 1.40 m.

ROOF HOOKS HEAVY

A2 stainless steel

The roof hook HEAVY is used to install solar panels in combination with the pitched roof installation profiles. To fasten the installation profile on the roof hook, you can use Eurotec hammer head screws in conjunction with the locking nuts.

Roof hooks HEAVY



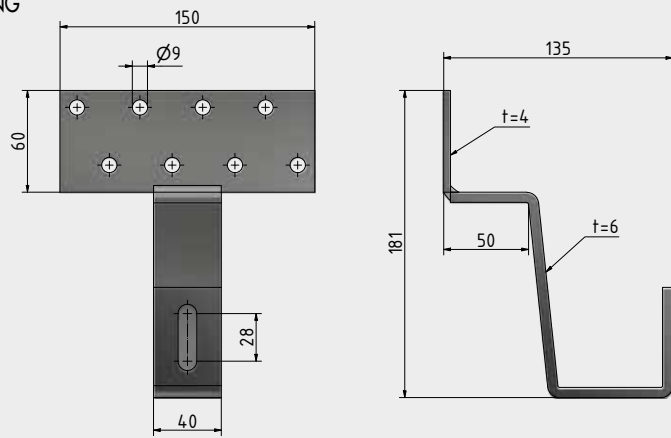
Art. no.	Base plate		Hook		Installation height [mm]	Slotted hole [mm] ^{c)}	PU
	Dimensions [mm] ^{a)}	Material	Dimensions [mm] ^{b)}	Material			
945628	150 x 60 x 6	1.4301	40 x 6	1.4301	135	Ø 11 x 39	20

a) Length x width x sheet thickness; b) Width x sheet thickness; c) Bore width x slotted hole length

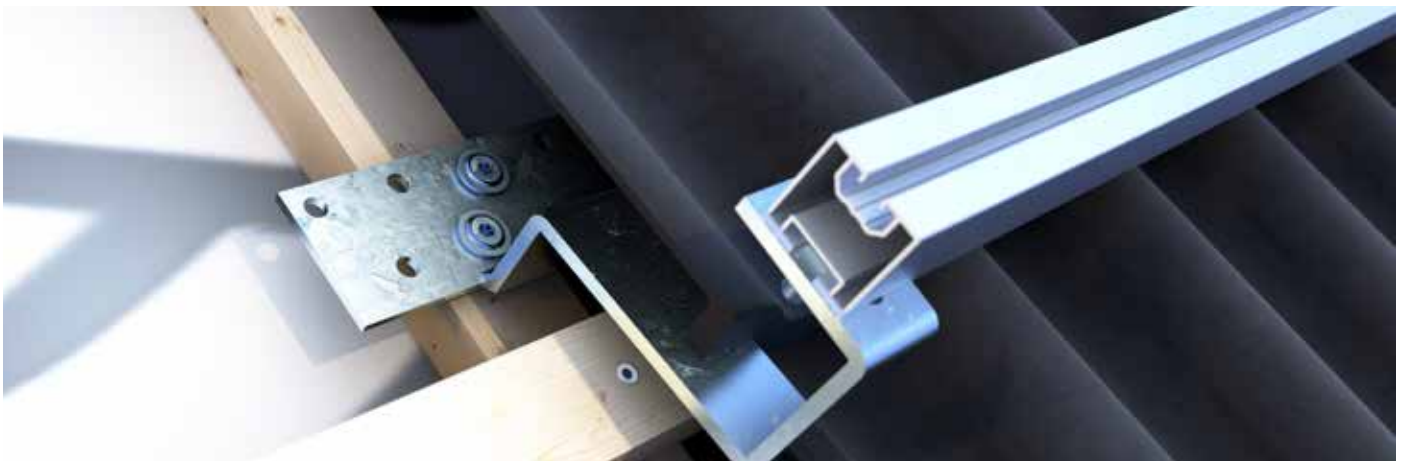
ADVANTAGES/SPECIFICATIONS

- Wider design and greater load-bearing capacity
- Compatible with all roof tiles
- Corrosion-resistant stainless steel
- Adapted drilling pattern for maximum efficiency
- Stainless steel according to national technical certification Z-30.3-6

TECHNICAL DRAWING



APPLICATION IMAGE



Roof hook HEAVY installed on the counter-batten, guided through the released roof tile, with pitched roof installation profile installed.

DETERMINING QUANTITIES – ROOF HOOKS HEAVY

MEASUREMENT EXAMPLE: WITHOUT SNOW GUARD

Number of roof hooks HEAVY/m ²															
Height above sea level [m] for snow load zone:					Snow load s_k^* kN/m ²	Roof/module inclination									
1	1a	2	2a	3		20°	25°	30°	35°	40°	45°	50°	55°	60°	
≤ 444	–	–	–	–	0.65	1.32	1.41	1.47	1.30	1.13	0.96	0.81	0.67	0.55	
488	–	–	–	–	0.75	1.46	1.55	1.62	1.42	1.22	1.03	0.84	0.68	0.55	
528	≤ 458	≤ 337	–	–	0.85	1.61	1.70	1.76	1.54	1.31	1.09	0.88	0.70	0.55	
566	492	364	–	–	0.95	1.75	1.84	1.90	1.66	1.40	1.15	0.92	0.72	0.55	
603	524	390	–	–	1.05	1.89	1.99	2.05	1.77	1.49	1.22	0.96	0.73	0.55	
637	555	415	≤ 356	≤ 314	1.15	2.04	2.13	2.19	1.89	1.58	1.28	1.00	0.75	0.55	
670	585	438	377	334	1.25	2.18	2.28	2.34	2.01	1.67	1.34	1.04	0.77	0.55	
702	613	461	397	352	1.35	2.32	2.42	2.48	2.13	1.76	1.40	1.07	0.79	0.55	
733	640	483	417	370	1.45	2.47	2.57	2.63	2.24	1.85	1.47	1.11	0.80	0.55	

* s_k = characteristic value of snow load on the ground according to DIN 1055-5:2005

MEASUREMENT EXAMPLE: WITH SNOW GUARD

Number of roof hooks HEAVY/m ²															
Height above sea level [m] for snow load zone:					Snow load s_k^* kN/m ²	Roof/module inclination									
1	1a	2	2a	3		20°	25°	30°	35°	40°	45°	50°	55°	60°	
≤ 444	–	–	–	–	0.65	1.32	1.41	1.47	1.46	1.42	1.37	1.31	1.22	1.13	
488	–	–	–	–	0.75	1.46	1.55	1.62	1.60	1.56	1.50	1.42	1.33	1.22	
528	≤ 458	≤ 337	–	–	0.85	1.61	1.70	1.76	1.74	1.69	1.63	1.54	1.43	1.31	
566	492	364	–	–	0.95	1.75	1.84	1.90	1.88	1.83	1.75	1.65	1.53	1.40	
603	524	390	–	–	1.05	1.89	1.99	2.05	2.02	1.96	1.88	1.77	1.64	1.49	
637	555	415	≤ 356	≤ 314	1.15	2.04	2.13	2.19	2.16	2.10	2.00	1.88	1.74	1.58	
670	585	438	377	334	1.25	2.18	2.28	2.34	2.30	2.23	2.13	2.00	1.84	1.67	
702	613	461	397	352	1.35	2.32	2.42	2.48	2.44	2.37	2.26	2.11	1.95	1.75	
733	640	483	417	370	1.45	2.47	2.57	2.63	2.58	2.50	2.38	2.23	2.05	1.84	

* s_k = characteristic value of snow load on the ground according to DIN 1055-5:2005

Conversion example for roof hooks/m² → max. roof hook spacing along rafter axis = 1: (0.96 x 0.7) = 1.49 m

Whereby 0.96 = number of roof hooks/m²; 0.7 = rafter spacing in m. Conversion example applies with each rafter as fastening point for the roof hooks. Measurement according to DIN 1055-4:2005, EC 1-4 and DIN 1055-5:2005. All values provided should be viewed as subject to the assumptions that have been made. They represent example calculations and apply subject to typographical errors and printing errors.

FURTHER ASSUMPTIONS:

gable roof; ridge height max. 18 m; wind load zone 1; suction coefficient of roof inclination $c_{pe,H,1} = -1.3$; pressure coefficient in accordance with the roof inclination with the least favourable value taken into account (F, G, H); net load of PV module 0.15 kN/m². Roof hook not supported on roof covering. Pitched roof installation profile 40/40. Load is applied by the installation profile centrally in the top connection area of the roof hooks. Max. span width of the installation profile 1.40 m.

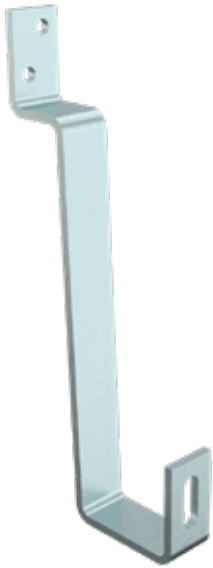
BEAVER TAIL ROOF HOOKS

A2 stainless steel

The beaver tail roof hook from Eurotec is used in combination with the pitched roof installation profiles to install solar panels on roofs with beaver tail tiles. To fasten the installation profile on the roof hook, you can use Eurotec hammer head screws in conjunction with the locking nuts.

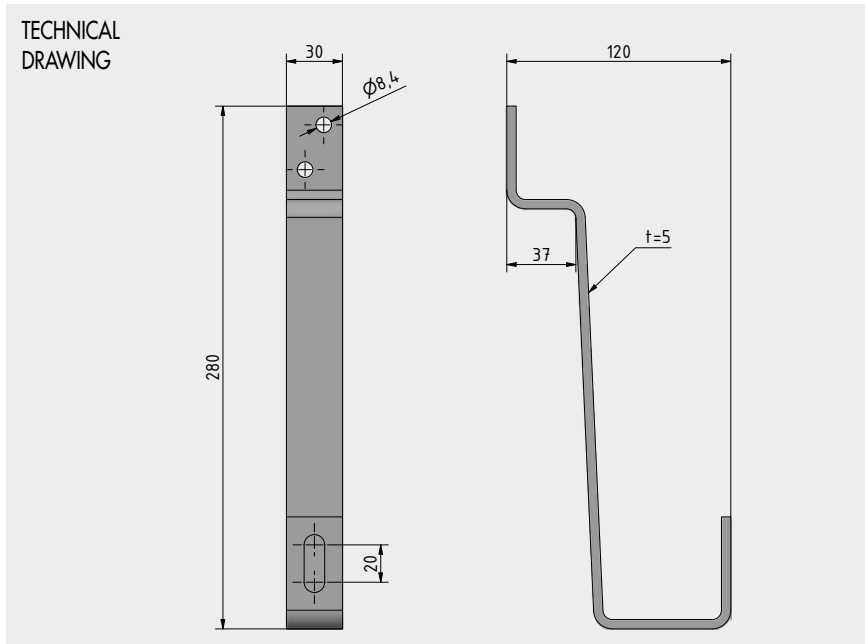
Beaver tail roof hook

Art. no.	Material	PU
S0L100682	1.4301	30



ADVANTAGES AND SPECIFICATIONS

- Easy to handle
- Corrosion-resistant stainless steel
- Stainless steel according to national technical certification Z-30.3-6



IMAGES OF APPLICATIONS



Beaver tail roof hook mounted on the counter batten and covered with beaver tail tile.



Sample application

PITCHED ROOF INSTALLATION PROFILE

Aluminium

The pitched roof installation profile can be installed to the roof hook easily with the hammer head screw and a locking nut. This enables the installation profile to form a high-quality and durable foundation for fixing individual solar modules. The installation profile is available in the heights 40 and 80 mm.

Pitched roof installation profile



Art. no.	Dimensions [mm] ^{a)}	Connection options ^{b)}	Material	PU
975688	40 x 40 x 6400	Slot nut / hammer head screw	Aluminium	100
975689	40 x 80 x 6400	Slot nut / hammer head screw	Aluminium	100

a) Width x height x profile length; b) Top: Slot nut M8. Bottom: Hammer head screw M8 or M10.

Recommended max. span = 1.40 m. This value applies for the assumptions made for determining the roof hook quantities.

ADVANTAGES/SPECIFICATIONS

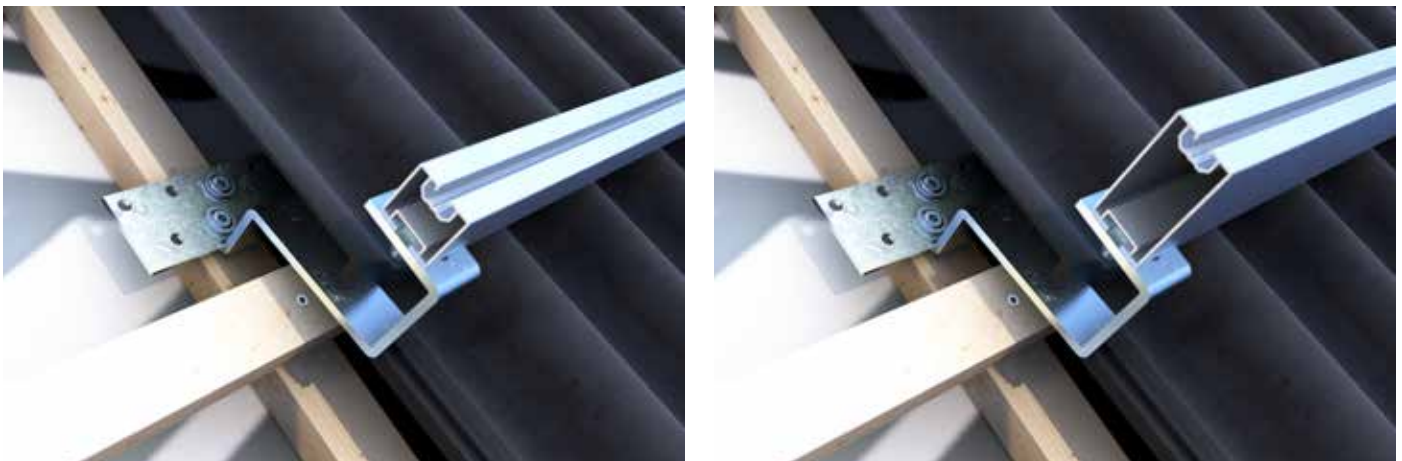
- Weather-resistant
- Thanks to the high rigidity, large spans can be achieved
- Quick and easy installation

Cross section values

W_x in mm ³	W_y in mm ³	I_x in mm ⁴	I_y in mm ⁴
93281	55440	381336	110880
32097	33195	65197	66390

W_x, W_y = section modulus, I_x, I_y = moment of inertia

IMAGES OF APPLICATIONS



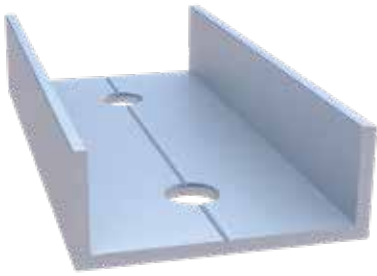
Pitched roof installation profile 40 x 40/40 x 80 fastened to the roof hook by means of the hammer head screw and locking nut.

U-PROFILE CONNECTOR, ALUMINIUM

For pitched roof installation profile

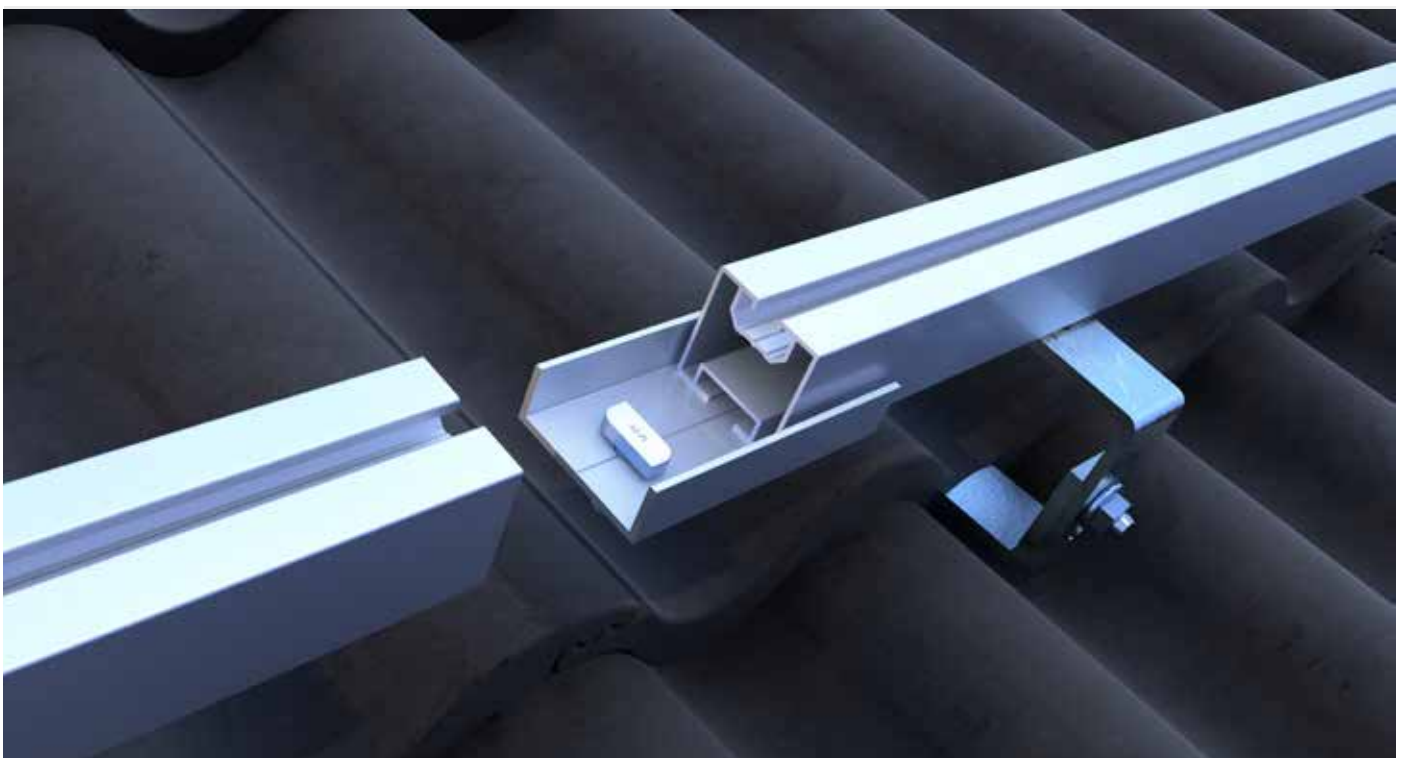
The U-profile connector is made of aluminium and is used to connect multiple individual pitched roof installation profiles. The connector is inserted under the ends of two installation profiles and fastened with hammer head screw and locking nut.

U-profile connector



Art. no.	Dimensions [mm] ^{a)}	Connection options ^{b)}	Material	PU
954654	50 x 20 x 100	Hammer head screw M8	Aluminium	5

a) Width x height x length



Two installation profiles are connected together with a U-profile connector.

END CAPS

For pitched roof installation profile

The end caps for installation profiles are an important fastening element for solar modules. End caps prevent undesired wind noises and also protect the hollow profile from dirt and rainwater. They also improve the aesthetics of the solar module.

End caps

Art. no.	Matching profile	Material	PU
SOL100683	Installation profile for pitched roof 40 x 40 mm	Polypropylene	10



APPLICATION IMAGE



End caps in the secured state on the pitched roof installation profile.

PITCHED ROOF INSTALLATION PROFILE SLIM

High span widths, aluminium

The pitched roof installation profile SLIM can be fastened to the roof hook FLEX SLIM easily with the hammer head screw and a locking nut. The combination provides a high-quality and durable foundation on which the individual solar modules can be fitted. For particularly fast and straightforward fastening of the solar panels, we recommend our module clamps FASTFIX, which were specially developed for the profile geometry.

Pitched roof installation profile SLIM



Art. no.	Dimensions [mm]	Material	PU
100670	30 x 40 x 6400	Aluminium	1

ADVANTAGES/SPECIFICATIONS

- High load-bearing capacity
- Streamlined design

Compatible
with it*



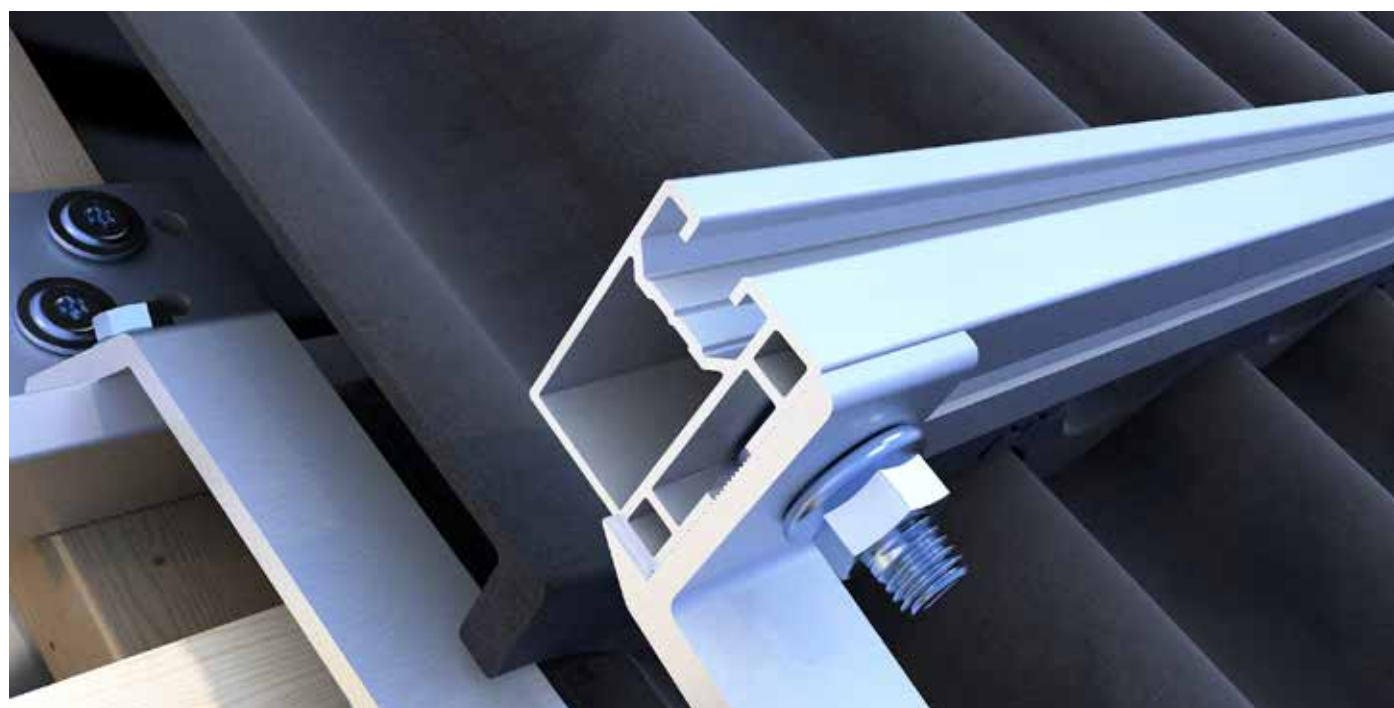
Centre clamp FASTFIX



End clamp FASTFIX

*Not included in the scope of delivery

APPLICATION IMAGE



Pitched roof installation profile SLIM fastened to roof hook FLEX SLIM by means of hammer head screw and locking nut.

L-PROFILE CONNECTOR SLIM

The L-profile connector SLIM is made of aluminium and is used to connect multiple individual pitched roof installation profiles SLIM. The connector is inserted under the ends of two installation profiles and fastened with hammer head screws and locking nuts.

L-profile connector SLIM

Art. no.	Dimensions [mm]	Material	PU
100673	30 x 40 x 150	Aluminium	10



ADVANTAGES/SPECIFICATIONS

- Complete set:
All necessary connectors are included in delivery

COMPRISING:

- 10 x L-profile connector SLIM
- 20 x hammer head screw M 8 x 20 mm
- 20 x locking nut DIN 6923, M 8



L-profile connector SLIM



Hammer head screw



Locking nut

IMAGES OF APPLICATIONS



Two Slim installation profiles are connected together with L-profile connector Slim.



Two Slim installation profiles are joined together with L-profile connector Slim.

Pitched roof solar fastening system

Eurotec calculation service

Solar mounting for slanted roof

Email: technik@eurotec.team

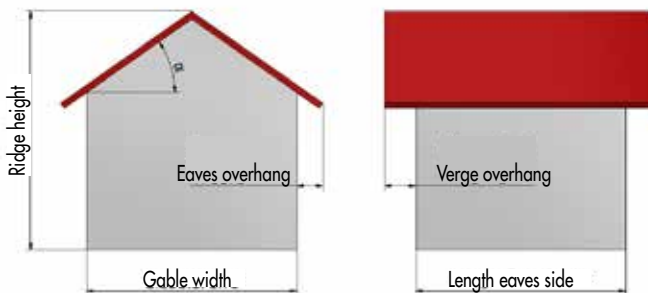
Request form for preparing a proposal for a photovoltaic system on a slanted roof. The proposal includes a quantity calculation as well as the feasibility check for your project. You will automatically receive a preliminary measurement of the mounting elements when you place your order. Additional verifications, such as inspecting the roof structure, are not included in the scope of delivery. We are happy to submit a proposal to you for this.

Dealer: _____ Executing company: _____
 Contact person: _____ Contact person: _____
 Email: _____ Place: _____
 _____ Tel: _____
 Construction project: _____ Email: _____

*We prefer to send you the planning guide in PDF format by email.
 Please complete the fields marked with an *. They are mandatory.*

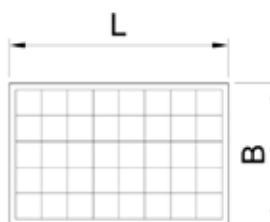
Information on the construction project:

Postal code * _____
 Snow load zone _____
(according to DIN 1055-5:2005)
 Wind load zone _____
(according to DIN 1055-4:2005)
 Ground elevation above sea level _____ m
(above sea level)

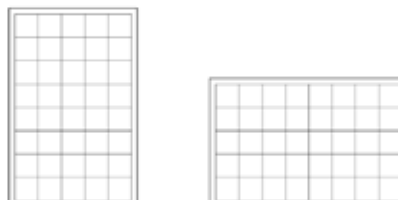


Module type * _____
(precise manufacturer specifications)

if the type is unknown
 Weight of module * _____ kg
 Module measurements * _____ mm
(length x width)
 Module height * _____ mm



Ridge height H * _____ m
 Gable width * _____ m
 Length on the eaves side * _____ m
 Roof inclination α [degrees] * _____ °
 Verge overhang * _____ m
 Eave overhang * _____ m



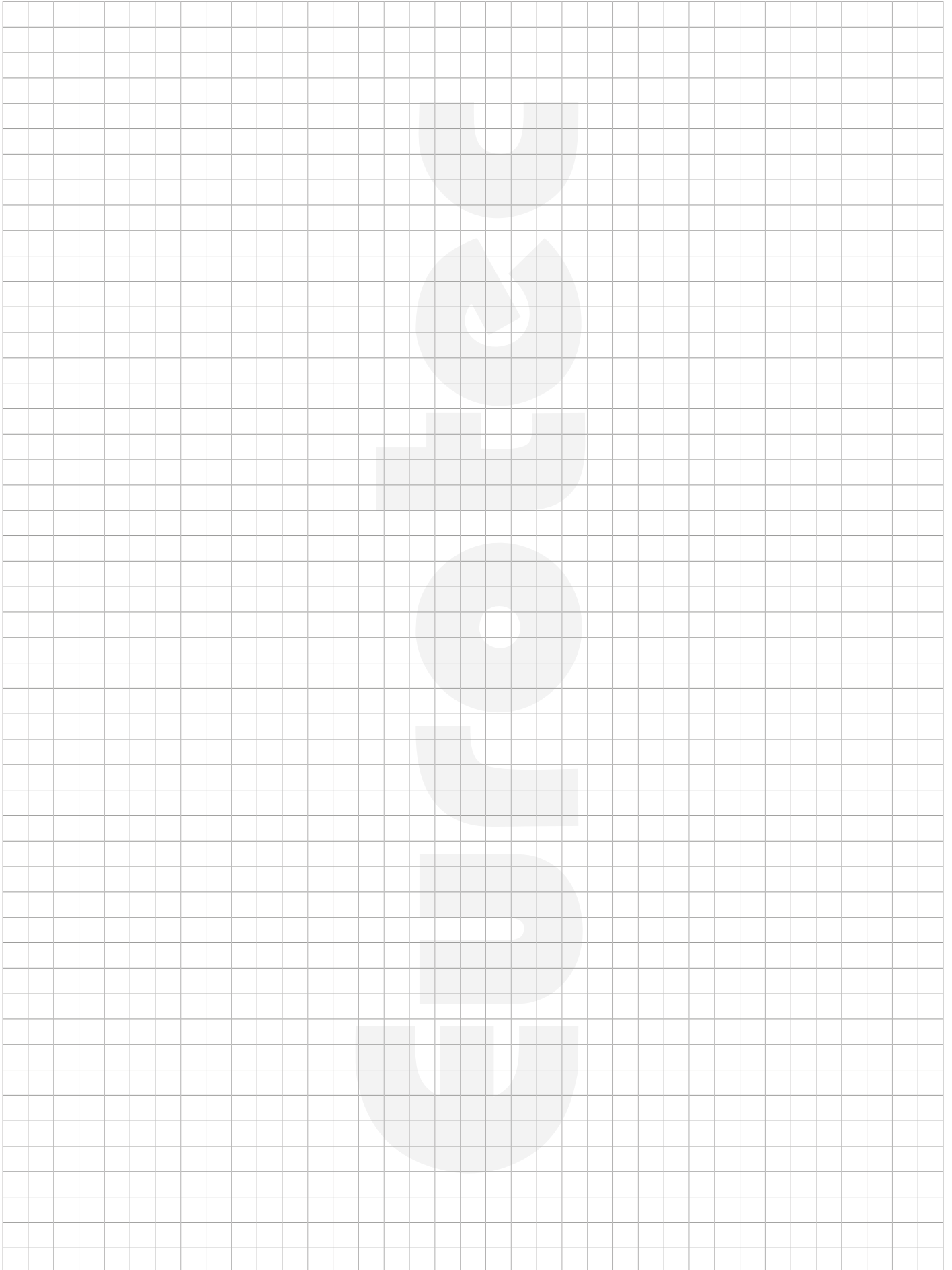
Cross section for rafters (WxH) * _____ cm x _____ cm

Alignment of modules* → vertical horizontal

Additional required information*:

- Dimensioned sketches or status plan of the flat roof while specifying the orientation of the roof and all openings, roof structures, chimneys, lightning protection systems, adjacent buildings, etc.
- Information on unloading points at the construction site and/or place of delivery

NOTES:



FASTENERS FOR ROOF HOOKS

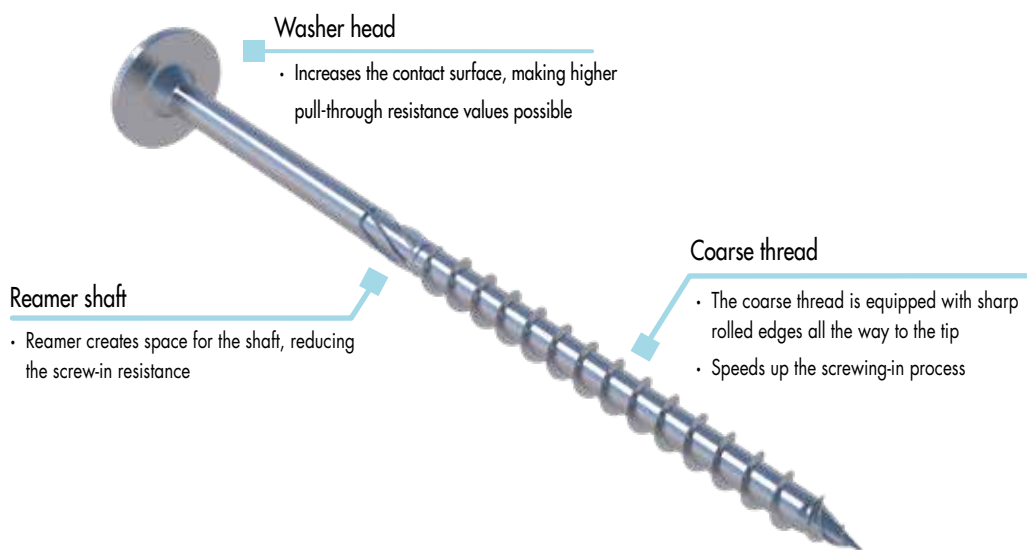




PANELTWISTEC AG, WASHER HEAD SCREW



Paneltwistec AG is a wooden construction screw with a special screw tip and reamer shaft above the thread. The AG screw tip's special geometry reduces the torque needed to drive it in and minimises the risk of the timber splitting.



The Paneltwistec washer head screw is used to fasten the roof hook and is screwed into the rafters through the counter-batten.

Panelwistec AG, washer head screw, hardened stainless steel

Art. no.	Dimensions Ød x L [mm]	Drive	PU
975772	6.0 x 60	TX30 •	100
975773	6.0 x 80	TX30 •	100
975774	6.0 x 100	TX30 •	100
975775	6.0 x 120	TX30 •	100
975776	6.0 x 140	TX30 •	100

Panelwistec washer head screw, hardened stainless steel

Art. no.	Dimensions Ød x L [mm]	Drive	PU
945278	8.0 x 80	TX40 •	50
945270	8.0 x 100	TX40 •	50
945271	8.0 x 120	TX40 •	50
945272	8.0 x 140	TX40 •	50

Panelwistec AG, washer head screw, A2 stainless steel*

Art. no.	Dimensions Ød x L [mm]	Drive	PU
903211	8.0 x 80	TX40 •	50
903212	8.0 x 100	TX40 •	50
903213	8.0 x 120	TX40 •	50
903214	8.0 x 140	TX40 •	50

*Panelwistec AG, washer head screw, A2 stainless steel does not have a reamer behind the thread

Panelwistec AG, washer head screw, blue galvanised steel

Art. no.	Dimensions Ød x L [mm]	Drive	PU
945713	6.0 x 60	TX30 •	100
945717	6.0 x 80	TX30 •	100
945719	6.0 x 100	TX30 •	100
945721	6.0 x 120	TX30 •	100
944588	8.0 x 80	TX40 •	50
944589	8.0 x 100	TX40 •	50
944590	8.0 x 120	TX40 •	50
944591	8.0 x 140	TX40 •	50



NOTE:
For longer sizes, visit our website.

TOPDUO ROOFING SCREW, WASHER HEAD

The timber construction screw for all over-rafter insulation systems



The Topduo roofing screw enables the fastening of over-rafter insulation materials with **high or low compressive resistance**. In addition, the high extraction resistance in both connecting timbers also makes the Topduo suitable for **many other applications in timber-frame construction**. Additionally, the screw is equipped with a double thread.

Washer head

- Increases the contact surface, making larger pull-through resistance values possible

Underhead thread with cutting notches

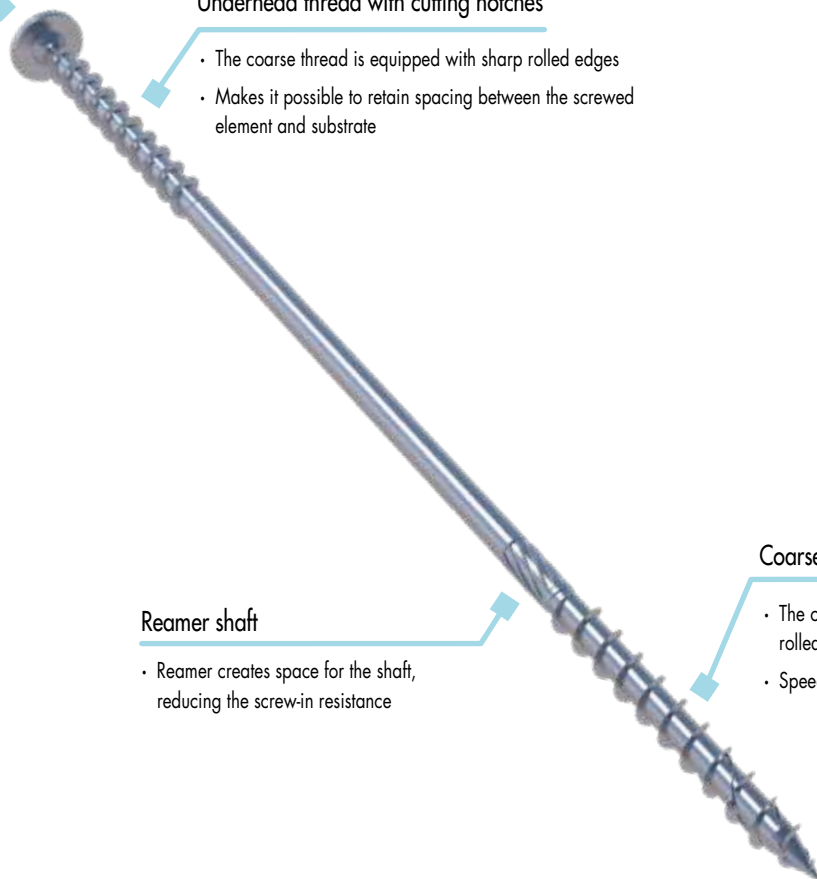
- The coarse thread is equipped with sharp rolled edges
- Makes it possible to retain spacing between the screwed element and substrate

Reamer shaft

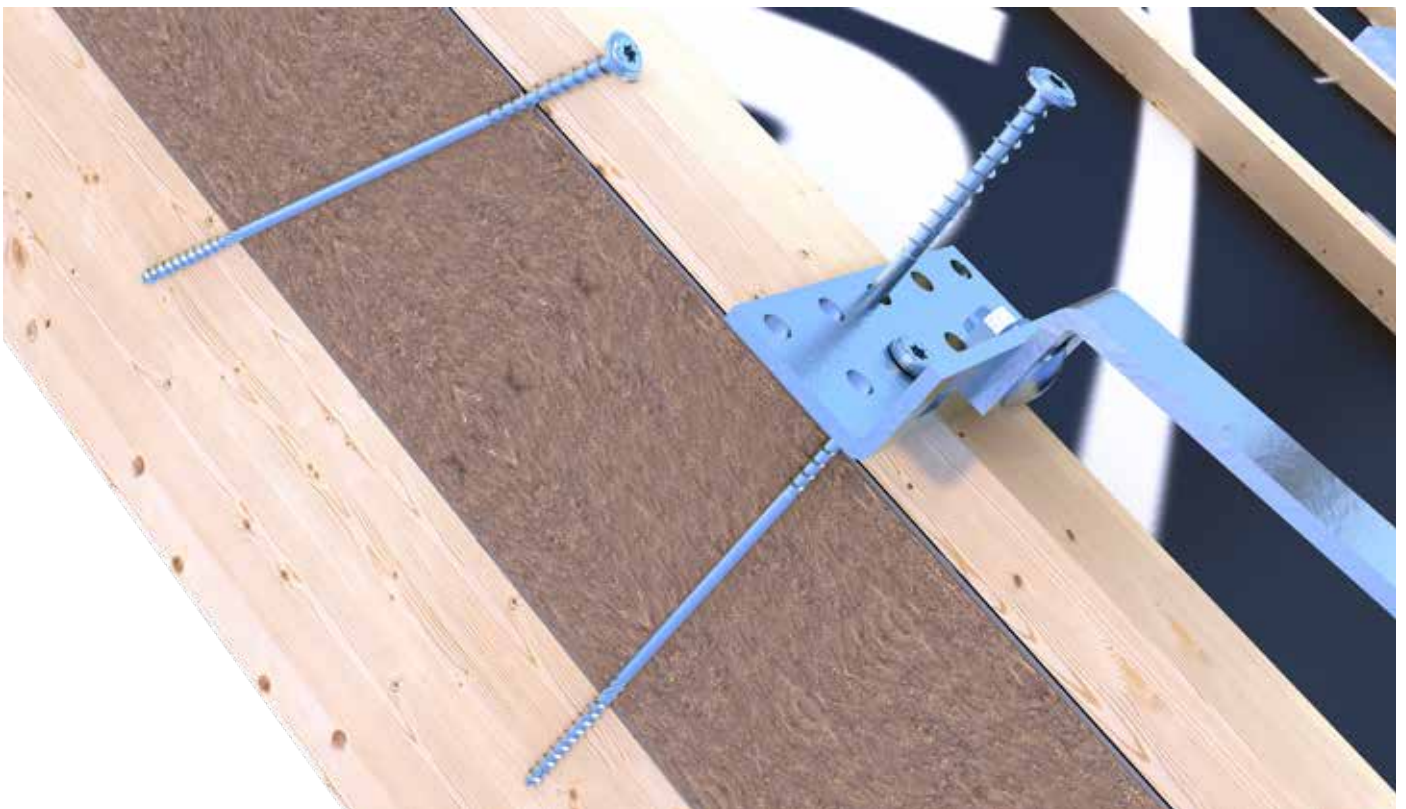
- Reamer creates space for the shaft, reducing the screw-in resistance

Coarse thread with cutting notches

- The coarse thread is equipped with sharp rolled edges all the way to the tip
- Speeds up the screwing-in process

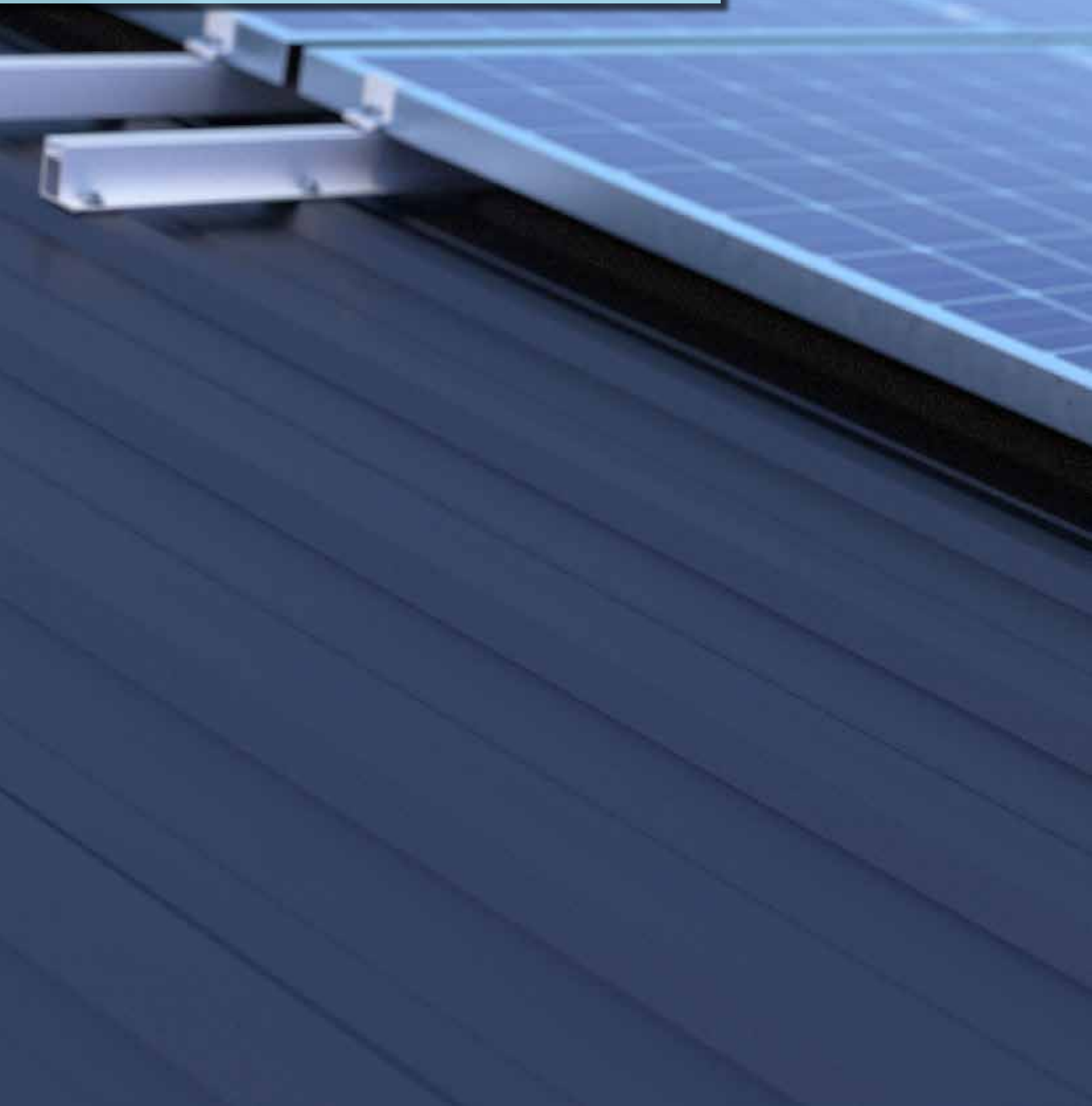


Topduo roofing screw						
Art. no.	Dimensions Ød x L [mm]	Thread beneath head [mm]	Driving thread [mm]	Head diameter Ødh [mm]	Drive	PU
Washer head						
945870	8.0 x 165	60	80	16.0	TX40•	50
945871	8.0 x 195	60	100	16.0	TX40•	50
945813	8.0 x 225	60	100	16.0	TX40•	50
945814	8.0 x 235	60	100	16.0	TX40•	50
945815	8.0 x 255	60	100	16.0	TX40•	50
945816	8.0 x 275	60	100	16.0	TX40•	50
945817	8.0 x 302	60	100	16.0	TX40•	50
945818	8.0 x 335	60	100	16.0	TX40•	50
945819	8.0 x 365	60	100	16.0	TX40•	50
945820	8.0 x 397	60	100	16.0	TX40•	50
945821	8.0 x 435	60	100	16.0	TX40•	50
945843	8.0 x 472	60	100	16.0	TX40•	50



Screwing a roof hook to a slanting roof with Topduo roofing screw

FASTENING SYSTEMS FOR TRAPEZOIDAL SHEET ROOFS





ATTACHMENT SYSTEM

for trapezoidal sheet roofs

The trapezoidal sheet installation profile is fastened to the trapezoidal sheet with thin-sheet screws and enables direct installation of solar modules parallel to the roof. Below, you will find an explanation of how the profile and the roof hooks can be installed on the roof in just a few steps.

WHAT YOU NEED:

- Trapezoidal sheet installation profile
- Thin-sheet screw
- Slot nut
- Module clamps

i

INFO:

Must not be used as basis profile for a mounting bracket.



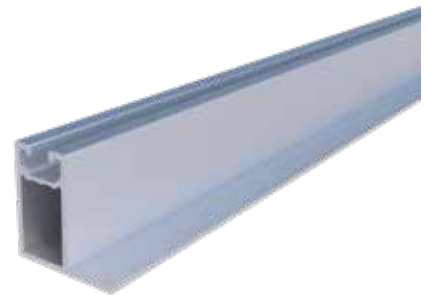
Slot nut



Thin-sheet screw



Module clamps

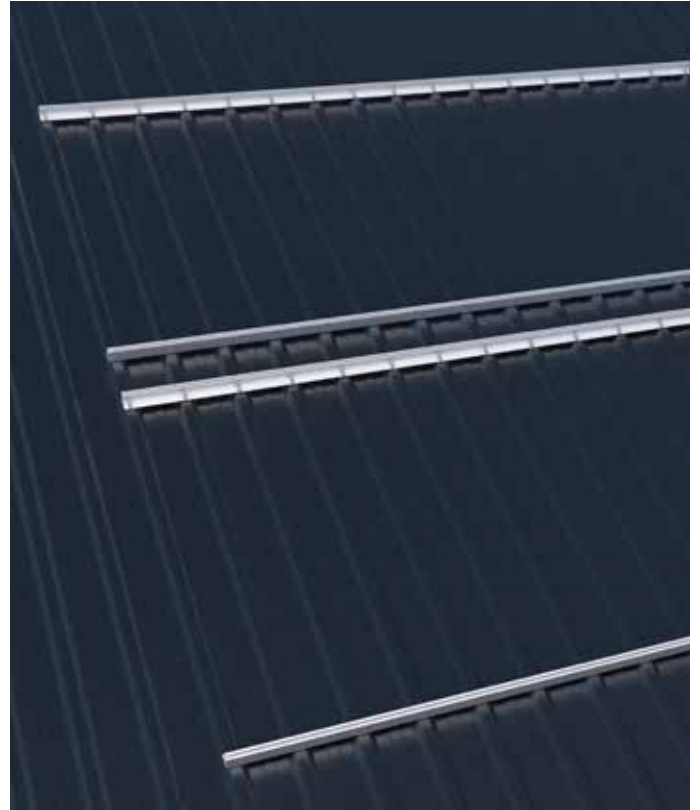


Trapezoidal sheet installation profile

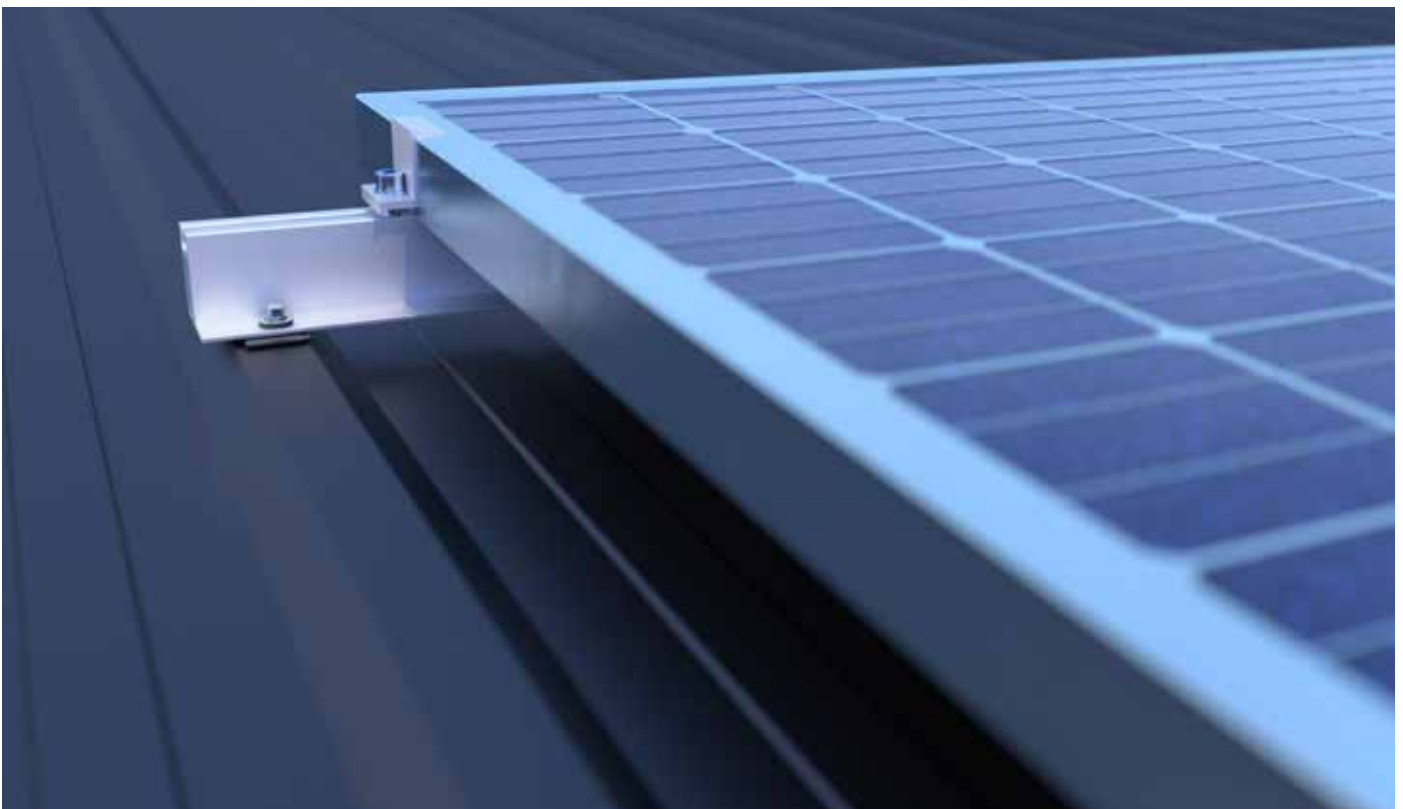
INSTALLATION EXAMPLE



STEP 1: In the first step, the trapezoidal sheet installation profile is screwed onto the trapezoidal sheet with thin-sheet screws.



STEP 2: You can choose between installation the trapezoidal sheet installation profile as a continuous element or as short individual pieces.



STEP 3: In the final step, the solar panels are placed on the trapezoidal sheet installation profiles and fastened with the module clamps.

TRAPEZOIDAL SHEET INSTALLATION PROFILE

The trapezoidal sheet installation profile is perfect for laying solar modules on trapezoidal sheet roofs. The profiles can be laid easily with a thin-sheet screw and the butyl rubber tape.

Trapezoidal sheet installation profile



Art. no.	Dimensions [mm]	Material	PU
975692	44.5 x 45 x 6400	Aluminium	1

ADVANTAGES

- Weather-resistant
- Thanks to the high rigidity, large spans can be achieved
- Quick and easy installation

APPLICATION IMAGE



The trapezoidal sheet installation profile can be cut to size and fitted only in the positions where it is needed.

TRAPEZOIDAL SHEET INSTALLATION PROFILE EASY

The trapezoidal sheet installation profile EASY is designed for installing solar modules on a trapezoidal sheet roof. With a length of 600 mm, it is compatible with all standard trapezoidal sheets and the large number of holes facilitates positioning and fastening. EPDM sealing strips are already applied under the profile, so no additional sealing/material partition layer needs to be fitted before fastening. As only the short elements need to be fitted at the required positions, this also makes handling and installation more user-friendly.

Trapezoidal sheet installation profile EASY

Art. no.	Dimensions [mm]	Material	PU
100692	100 x 41 x 600	Aluminium	10



ADVANTAGES

- Straightforward installation, as easy to handle
- Sealing strips already fitted
- Compatible with all standard trapezoidal sheets

Trapezoidal sheet installation profile EASY from below

APPLICATION IMAGE



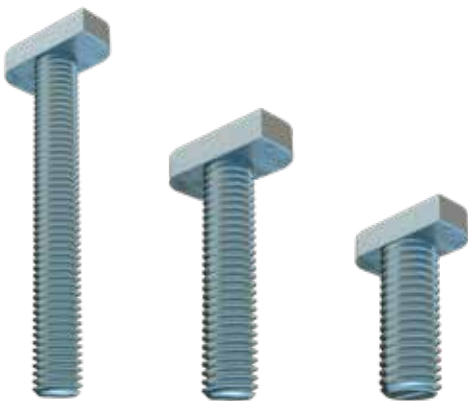
The trapezoidal sheet installation profile EASY is fastened at the necessary points and then serves as a installation base for the solar modules.

HAMMER HEAD SCREW

For installation profiles, A2-70 stainless steel

The hammer head screw is suitable for fastening installation profiles to the roof hook. Thanks to the special head geometry, the hammer head screws can easily be inserted into the underside of the installation profile.

Hammer head screw



Art. no.	Dimensions [mm]	Material	PU
945823	M 8 x 20	A2-70 stainless steel	100
945825	M 8 x 30	A2-70 stainless steel	100
945829	M 10 x 20	A2-70 stainless steel	100
945830	M 10 x 25	A2-70 stainless steel	100
945831	M 10 x 30	A2-70 stainless steel	100

* Thread diameter x L; kb= 10.2 mm; kL= 23 mm; kh= 4.5 mm

CYLINDER HEAD SCREW DIN 912

With hex socket, A2-70 stainless steel

The DIN 912 cylinder head screw is made of stainless steel and is used to fasten centre and end clamps. They are driven by a hex socket.

Cylinder head screw



Art. no.	Dimensions [mm]	Material	Width across flats	PU
100624	M 8 x 16	A2-70 stainless steel	6	100
100625	M 8 x 20	A2-70 stainless steel	6	100
100626	M 8 x 25	A2-70 stainless steel	6	100
100627	M 8 x 30	A2-70 stainless steel	6	100
100628	M 8 x 35	A2-70 stainless steel	6	100
100629	M 8 x 40	A2-70 stainless steel	6	100
100630	M 8 x 45	A2-70 stainless steel	6	100
100631	M 8 x 50	A2-70 stainless steel	6	100
100632	M 8 x 60	A2-70 stainless steel	6	100

LOCKING NUTS

DIN 6923, A2-70 stainless steel

The Eurotec locking nuts are made of stainless steel and are used in combination with the hammer head screw to fasten installation profiles with roof hooks.

Locking nuts



Art. no.	Dimensions [mm]	Material	Width across flats	PU
900015	M 8	A2-70 stainless steel	13	100
900016	M 10	A2-70 stainless steel	15	100
900018	M 12	A2-70 stainless steel	18	100

SLOT NUT M8, ALUMINIUM

For pitched roof and trapezoidal sheet installation profiles

The slot nut is made of aluminium and is used together with Eurotec installation profiles. The slot nut can easily be inserted into the top of the profile to provide an fastening point for end and centre clamps or other installations.

Slot nut M8



Art. no.	Dimensions [mm]	Material	PU
800330	22 x 9.8 x 12.8	Aluminium	200

MODULE CLAMPS, ALUMINIUM

Fastening with DIN 912, M8

Eurotec centre/end clamps fasten the frame of the individual solar module to the installation profiles. The end clamps are specially designed for fastening the edges of the solar module fields, while centre clamps can be used between two solar modules in the field. Furthermore, module clamps ensure even spacing between the individual solar modules.

Module clamps



Art. no.	Name	Dimensions [mm]	PU
100674	End clamp 30, black	32 x 33.3 x 37.5	50
100675	End clamp 30	32 x 33.3 x 37.5	50
100676	End clamp 32, black	32 x 35.3 x 37.5	50
100677	End clamp 32	32 x 35.3 x 37.5	50
100678	End clamp 35, black	32 x 38.3 x 37.5	50
100679	End clamp 35	32 x 38.3 x 37.5	50
100680	Centre clamp, black	39.9 x 14.9 x 37.5	50
100681	Centre clamp	39.9 x 14.9 x 37.5	50

APPLICATION IMAGE



Eurotec end/centre clamp installed on the installation profile, to fasten the solar modules

MODULE CLAMPS FASTFIX

The module centre clamp can be used with solar modules with frame heights of 28 – 35 mm. It fastens the solar modules with a simple click function and is compatible with both trapezoidal sheet and pitched roofs. The module clamp FASTFIX is compatible with the pitched roof, pitched roof SLIM and trapezoidal sheet installation profiles.

Module clamps FASTFIX

Art. no.	Name	Clamp thickness = module height	Clamp length	PU
100666	End clamp	28-35 mm	37.6 mm	40
100667	End clamp, black	28-35 mm	37.6 mm	40
100668	Centre clamp	28-35 mm	37.6 mm	40
100669	Centre clamp, black	28-35 mm	37.6 mm	40



End clamp



Centre clamp



End clamp, black

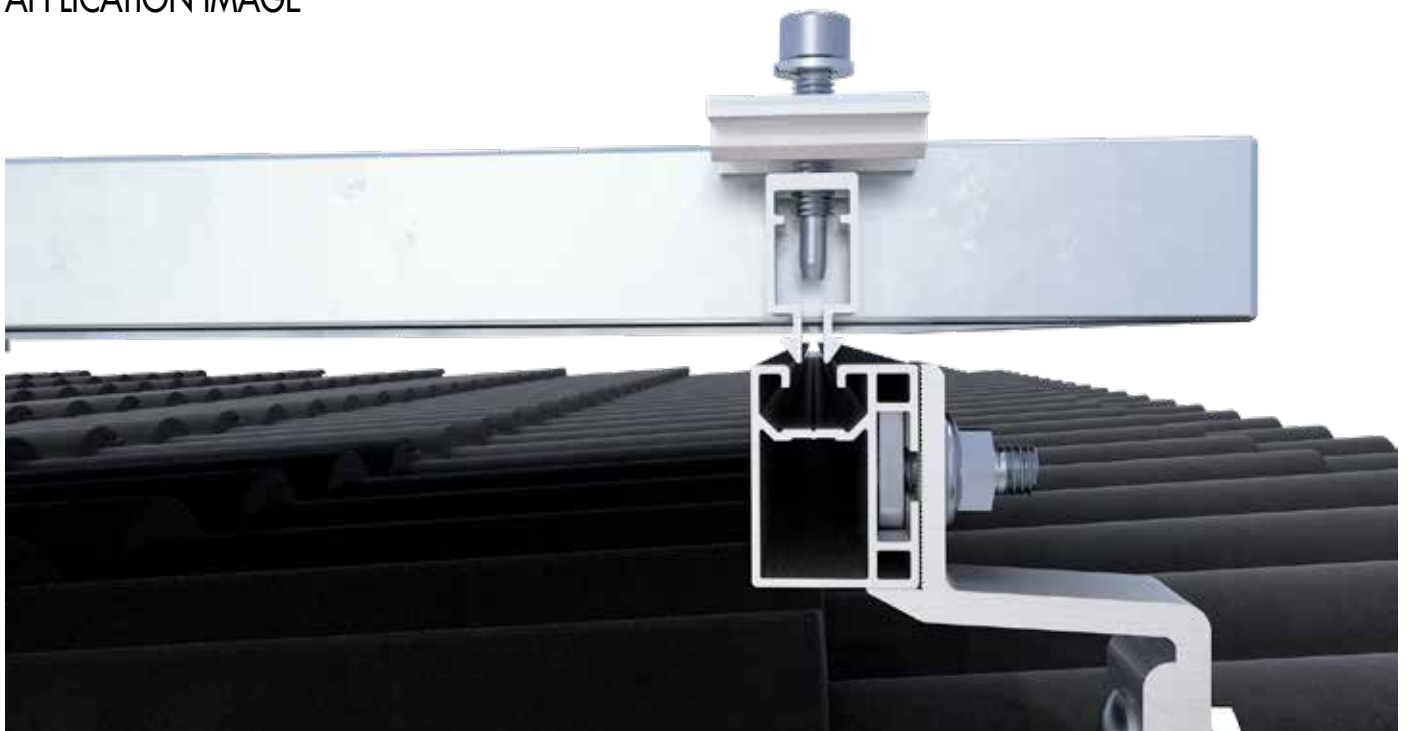


Centre clamp, black

ADVANTAGES

- Weather-resistant
- Quick and easy installation

APPLICATION IMAGE



The pitched roof installation profile SLIM is perfect for fastening solar modules quickly and easily with end clamp FASTFIX.

A2 SOLAR HANGER BOLT

A2-70 stainless steel with 3x locking nuts DIN 6923

A2-70 solar hanger bolt with EPDM seal for fastening installation profiles, compatible with corrugated sheet or corrugated fibre cement roofing.

A2 solar hanger bolt



A2 solar hanger bolt					
Art. no.	Dimensions, thread length		Material	Width across flats	PU
	M x L	Metric/wood thread			
111530	M10 x 180 mm	85 / 80 mm	A2-70 stainless steel	AF 7	50
111520	M10 x 200 mm	85 / 80 mm	A2-70 stainless steel	AF 7	50
111475	M10 x 250 mm	140 / 80 mm	A2-70 stainless steel	AF 7	50
111521	M12 x 300 mm	150 / 100 mm	A2-70 stainless steel	AF 9	50

* Pre-fitted with: A2 Solar hanger bolt, EPDM seal, 3 x A2-70 locking nut DIN 6923

ADVANTAGES/SPECIFICATIONS

- With EPDM seal
- For corrugated sheet or corrugated fibre cement roofing

APPLICATION IMAGE

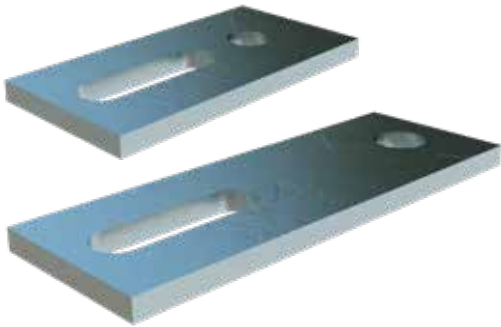


A2 solar hanger bolt on corrugated roof

ADAPTER FOR SOLAR HANGER BOLT

A2 stainless steel

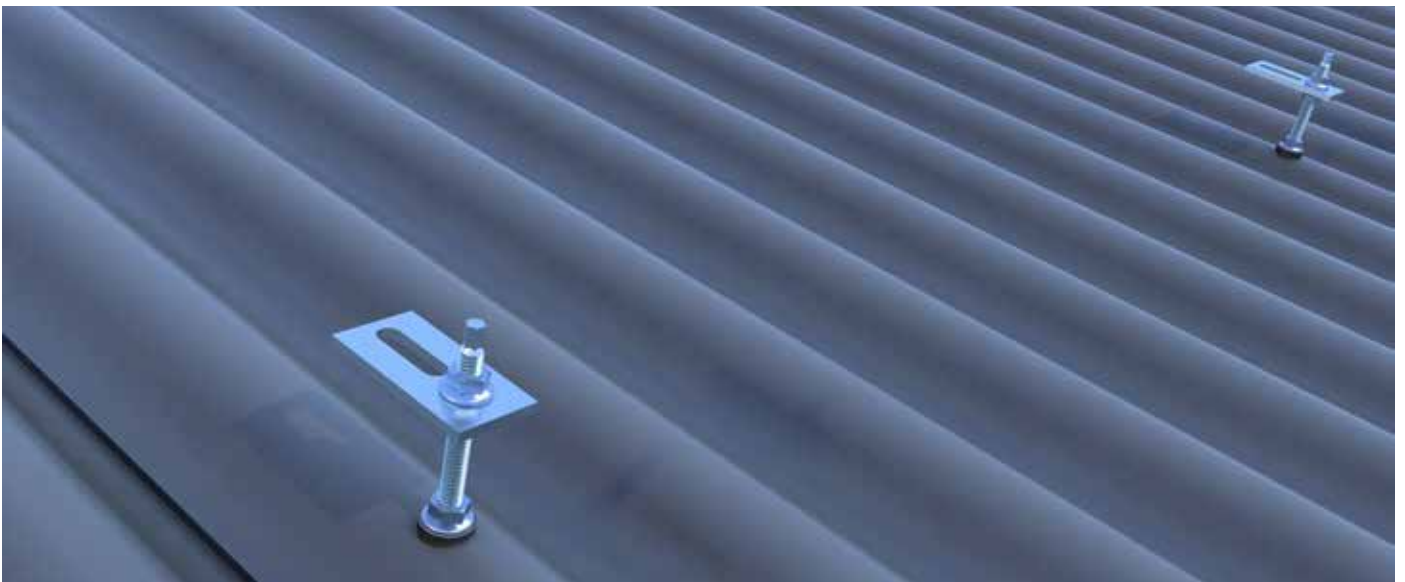
Adapter for solar hanger bolt



Adapter for solar hanger bolt					
Art. no.	Dimensions ^{a)}	Round hole	Slotted hole ^{b)}	Material	PU
945518	80 x 40 x 5 mm	Ø 11 mm	Ø 11 x 40 mm	A2 stainless steel	25
945519	110 x 40 x 5 mm	Ø 13 mm	Ø 11 x 40 mm	A2 stainless steel	25

a) Length x width x sheet thickness; b) Bore width x slotted hole length

APPLICATION IMAGE



Adapter plate and solar hanger bolt for fastening a solar module fastening system on a corrugated sheet roof

CROSS-CONNECTOR SET

For installation profiles

Two-part frame can bridge larger stretches and uneven spacings between rafters and level out uneven roofing surfaces. The cross-connector set is used for cross-connection of two installation profiles. The scope of delivery includes one connector plate, two slot nuts, two cylinder head screws, one hammer head screw and one locking nut.

Cross-connector set



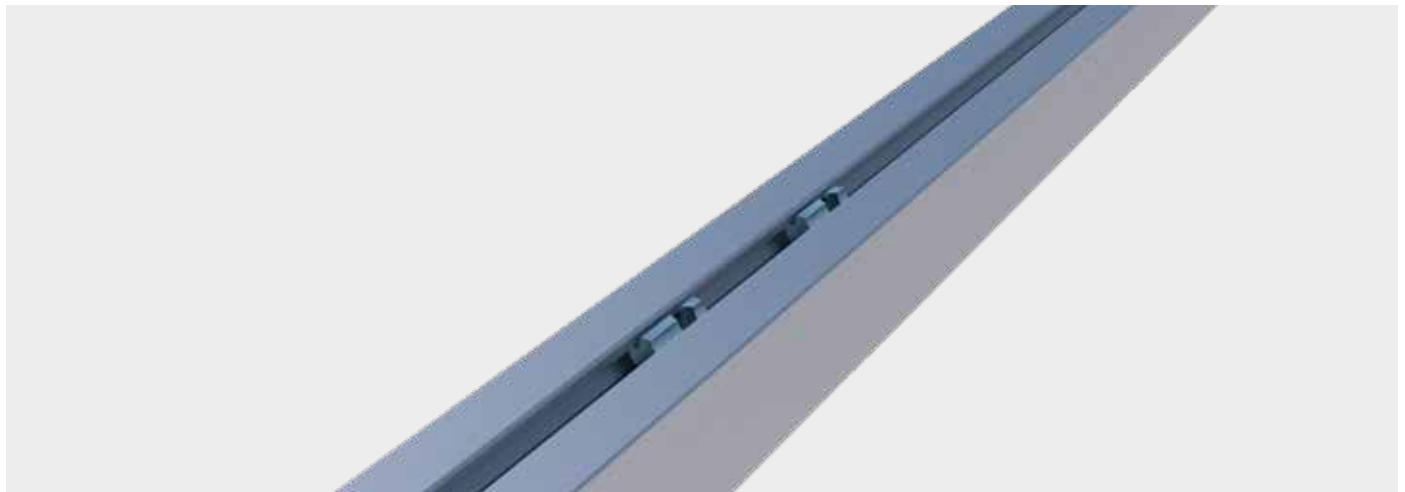
Art. no.	Dimensions [mm] ^{a)}	Material	PU
100633	115 x 80 x 5	Aluminium	Unit

a) Length x width x sheet thickness

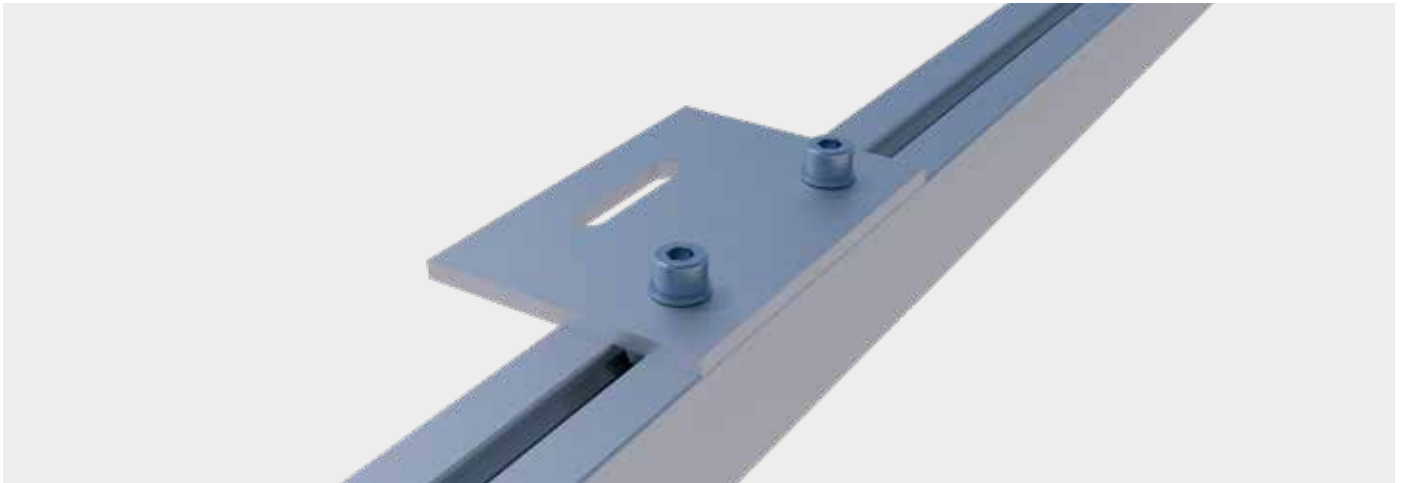
SCOPE OF DELIVERY:

- 1 x connector plate aluminium,
- 2 x slot nut M8 aluminium,
- 2 x A2-70 cylinder head screw DIN 912 M8x16,
- 1 x A2-70 hammer head screw M10x25,
- 1 x A2-70 locking nut M10

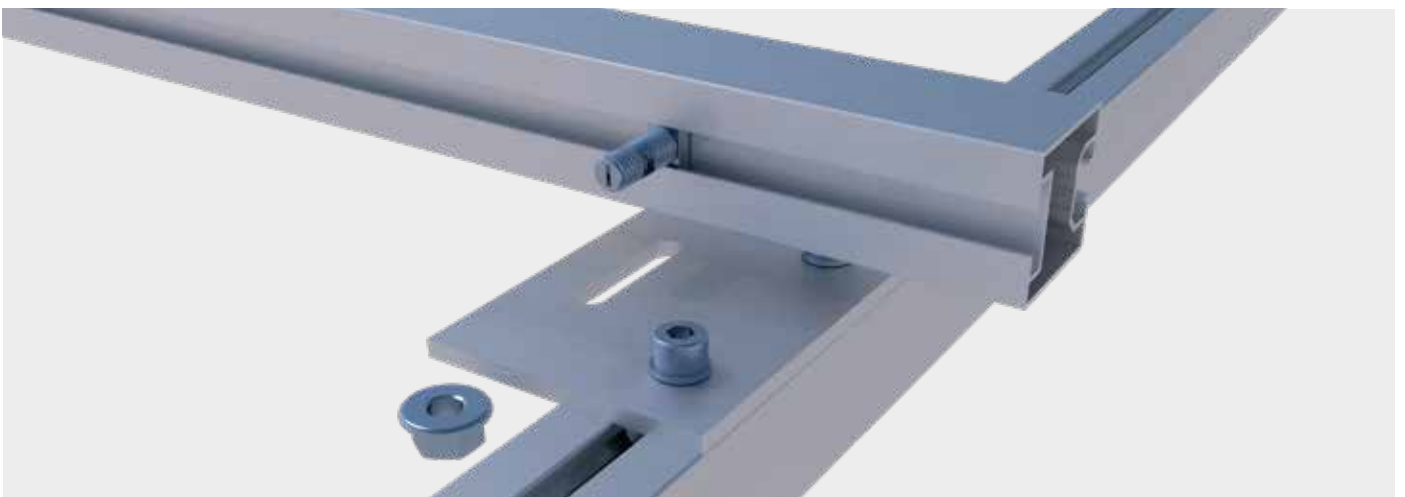
ASSEMBLY INSTRUCTIONS



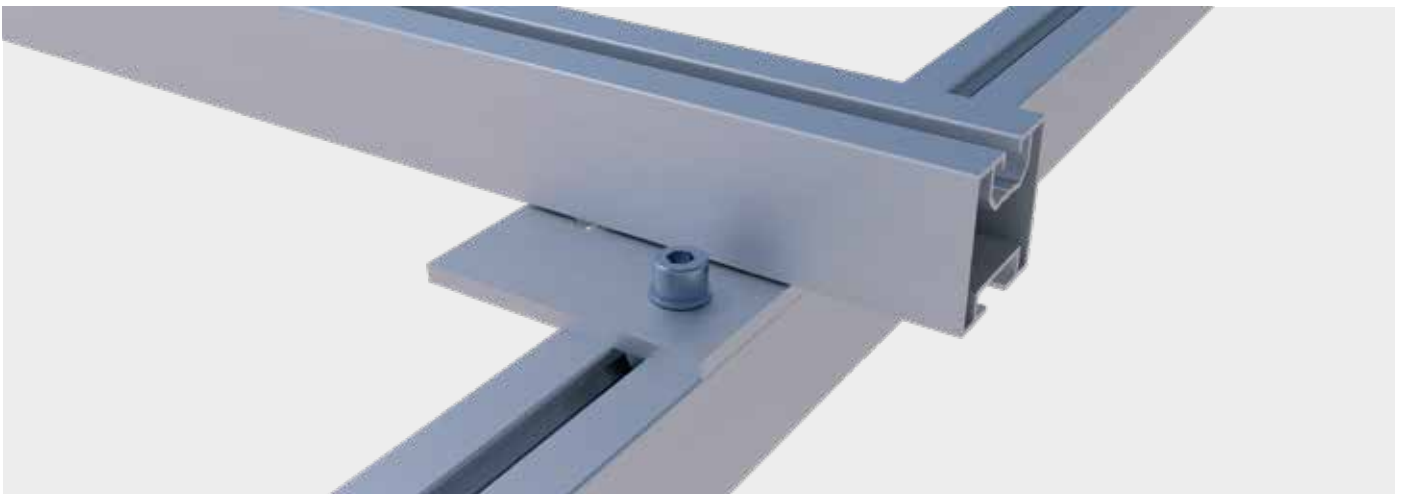
STEP 1: Insert slot nuts.



STEP 2: Fasten connector plate with cylinder head screws.



STEP 3: Insert hammer head screw into the crossbar.



STEP 4: Fasten through the connector plate with a locking nut.

BIGHTY BI-METAL THIN-SHEET SCREW



The BiGHTY bi-metal thin-sheet screw from Eurotec is used primarily in factory building construction, in the solar industry and in companies specialising in the installation of trapezoidal sheet / sandwich panels in roof and façade applications. The specially designed thin-sheet screw is made up of a combination of A2 stainless steel with a welded tip made from hardened carbon steel. The hardened carbon steel tip presses a sort of collar during the fluid screwing process, giving the threads a perfect fit. This means that chips do not risk or interfere with the leak-tight EPDM connection.

BiGHTY bi-metal thin-sheet screw



Art. no.	Dimensions [mm]	Width across flats	Ø Sealing washer [mm]	Clamp thickness [mm]	PU
100548	4.5 x 25	AF 8	14	0.88, max. 1.00	200
100550	6.0 x 25	AF 8	16	0.88, max. 1.00	200
100553	6.0 x 38	AF 8	16	See product data sheet	200

ADVANTAGES/SPECIFICATIONS

- Bi-metal screw
- Chip-free application of the seal
- High corrosion-resistance of screw
- Stainless steel according to DIN 10088
- No disruptive drilling chips between element and seal
- Maximum bore diameter:
 - Aluminium up to 2.4 mm
 - Sheet metal up to 2.0 mm
- High clamp thicknesses

MATERIAL

- Screw: stainless steel (1.4301) – EN 10088
- Washer: stainless steel (1.4301) – EN10088 with EPDM sealing ring

APPLICATIONS

- Fastening of steel profile sheet onto aluminium
- Fastening of steel profile sheet onto steel sheet
- Fastening of aluminium onto steel sheet
- Fastening of aluminium onto aluminium
- **Recommended tightening torque:**
 - For steel profile sheet from 0.5 to 1.25 mm = approx. 3 Nm (from 0.5 to 0.8 mm material thickness = approx. 1 Nm)
 - For aluminium from 0.5 to 1.5 mm = approx. 1 Nm (from 0.5 to 0.8 mm material thickness = approx. 0.5 Nm)



INFO:

Includes an EPDM sealing washer and a hexagon head with width across flats 8.

APPLICATION IMAGE



Thin-sheet screws are perfect for the direct installation of the installation profile on trapezoidal sheets.



BiGHTY DRILLING SCREW

BiGHTY is a drilling screw that drills/forms its own tapped hole and also the counter thread in the element. This eliminates the need for pilot drilling and selecting the right borehole diameter. The specially formed drilling tip prevents the screw from drifting on the element surface. This makes it easy to start drilling. Centre-punching the drilling point is no longer necessary. The BiGHTY drilling screw thus represents a time-saving alternative to conventional self-tapping screws. The BiGHTY drilling screw can be used with standard cordless, electric or compressed-air screwdrivers with speeds of 1000 – 2500 rpm.

BiGHTY drilling screw



ADVANTAGES/SPECIFICATIONS

- BiGHTY hardened stainless steel, special coating
- Stainless steel according to DIN 10088
- A2 and EPDM sealing washer

Bore diameter 3 mm					
Art. no.	Dimensions [mm] ^{a)}	Width across flats	Ø Sealing washer [mm]	H ^{a)} [mm]	PU
945660	4.8 x 19	AF 8	14	4	500
945661	4.8 x 25	AF 8	14	10	500
945662	4.8 x 32	AF 8	14	17	500
945663	4.8 x 38	AF 8	14	23	200
945664	4.8 x 50	AF 8	14	35	200
Bore diameter 5 mm					
Art. no.	Dimensions [mm] ^{a)}	Width across flats	Ø Sealing washer [mm]	H ^{a)} [mm]	PU
945665	5.5 x 19	AF 8	16	2	500
945666	5.5 x 25	AF 8	16	8	500
945667	5.5 x 32	AF 8	16	15	500
945668	5.5 x 38	AF 8	16	21	500
945669	5.5 x 50	AF 8	16	33	200
945670	5.5 x 60	AF 8	16	43	200
945672	6.3 x 25	AF 10	16	8	500
945673	6.3 x 32	AF 10	16	15	200
945674	6.3 x 38	AF 10	16	21	200
945675	6.3 x 50	AF 10	16	33	200
945676	6.3 x 60	AF 10	16	43	200
Bore diameter 12 mm					
Art. no.	Dimensions [mm] ^{a)}	Width across flats	Ø Sealing washer [mm]	H ^{a)} [mm]	PU
945671	5.5 x 38	AF 8	16	14	500

a) For wood-steel connections:

H= clamp thickness + sheet thickness t; t_{max} = bore diameter. See sketch on p. 148.

IMAGES OF APPLICATIONS



BiGHTY drilling screws for simple screw connection of trapezoidal sheets

EUROTEC PUR 60 MM

Eurotec PUR is a one-sided adhesive tape consisting of closed-cell polyethylene foam and coated with acrylate dispersion adhesive. The product was designed for use as a sealing tape for roof and building structures.

Eurotec PUR 60 mm

Art. no.	Dimensions [mm] ^{a)}	Material	PU
954194	60 x 1 x 25000	Polyethylene foam	1

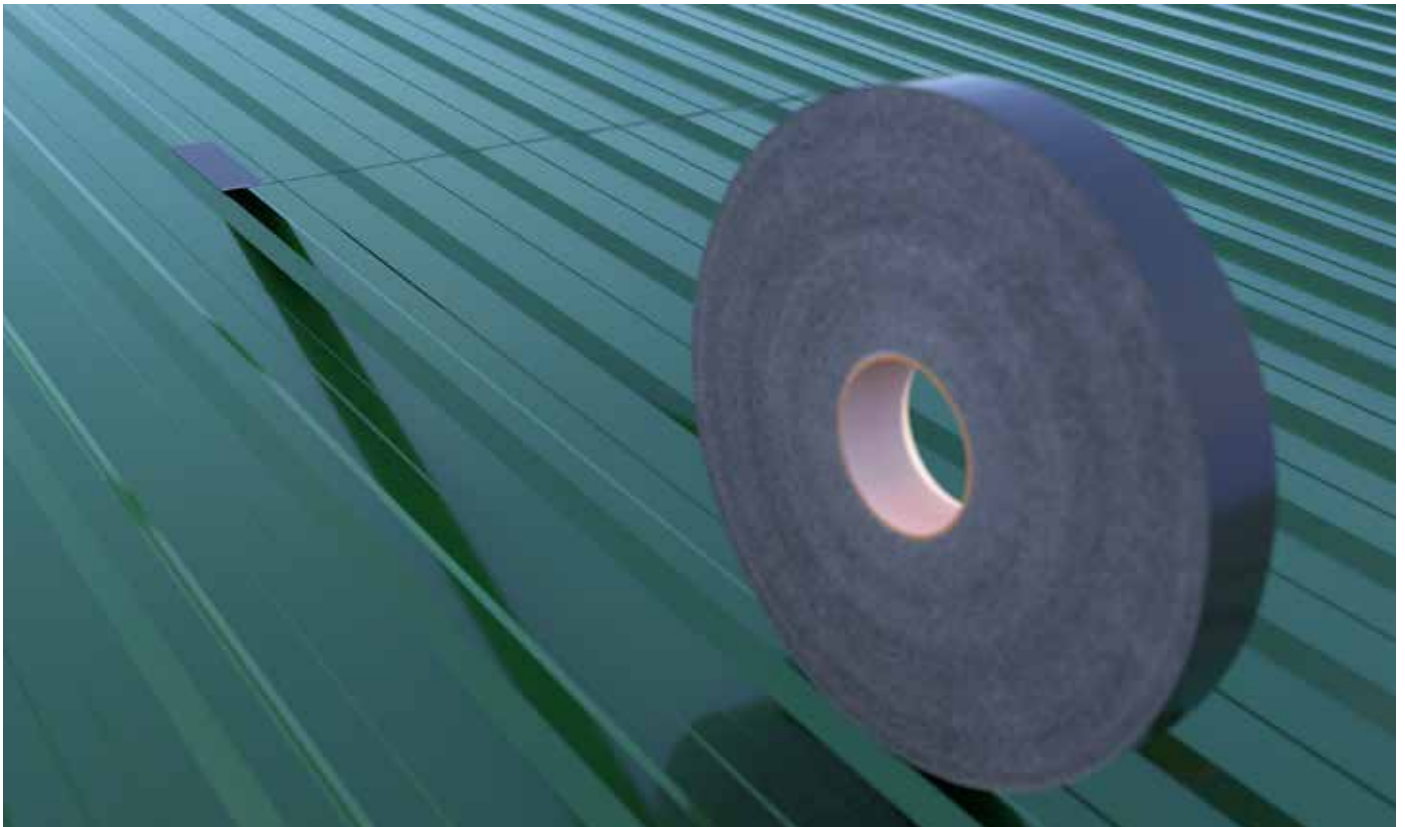
a) Width x thickness, length



ADVANTAGES AND SPECIFICATIONS

- Waterproof
- Solvent-free
- UV resistance

APPLICATION IMAGE



The Eurotec PUR 60 mm provides optimal sealing when the solar module fastening system is installed on trapezoidal sheet metal roofs.

MOUNTING ANGLE

Substructure for PV systems, L-profile 40 x 40 x 4 mm

The mounting angles are especially suitable for applications where other systems are no longer effective due to unfavourable roof geometries, roof structures etc. The rafter profile is equipped with two Ø11 mm holes. This is where the installation profiles are fastened that support the PV modules.

Mounting angle



Art. no.	Mounting angle $\alpha^a)$	Installation height H [mm]	Total length LG	PU
100634	10°	318	1533	1
100635	15°	447	1508	1
100636	20°	574	1467	1
100637	25°	696	1468	1
100638	30°	813	1469	1
100639	35°	924	1470	1
100640	40°	1028	1471	1
100641	45°	1125	1471	1

a) Can also be supplied for other angles on request. Mounting angles are not installed before delivery. Connectors for assembly are included in the scope of delivery.

ADVANTAGES/SPECIFICATIONS

- Suitable for unfavourable roof geometries
- Can also be supplied for other angles on request



INFO:

Mounting angles are not installed before delivery.

Connectors for assembly included in the scope of delivery

Eurotec calculation service

Solar mounting for trapezoidal sheet metal roof

Email: technik@eurotec.team

Request form for preparing a proposal for a photovoltaic system on a trapezoidal sheet metal roof. The proposal includes a quantity calculation as well as the feasibility check for your project. You will automatically receive a preliminary measurement of the mounting elements when you place your order. Additional verifications, such as inspecting the roof structure, are not included in the scope of delivery. We are happy to submit a proposal to you for this.

Dealer: _____ Executing company: _____

Contact person: _____ Contact person: _____

Email: _____ Place: _____

Tel: _____

Construction project: _____ Email: _____

*We prefer to send you the planning guide in PDF format by email. Please complete the fields marked with an *. They are mandatory.*

Information on the construction project:

Postal code * _____

Snow load zone _____
(according to DIN 1055-5:2005)

Wind load zone _____
(according to DIN 1055-4:2005)

Ground elevation above sea level _____ m
(above sea level)

Building height H * _____ m

Module type * _____
(precise manufacturer specifications)

Weight of module * _____ kg

Module dimensions * _____ mm
(length x width)

Module height * _____ mm

Alignment of modules* vertical horizontal

Trapezoid sheet metal type + manufacturer* _____

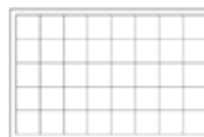
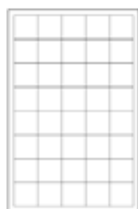
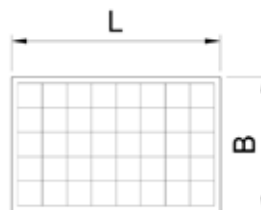
Length L1 * _____ mm

Length L2 * _____ mm

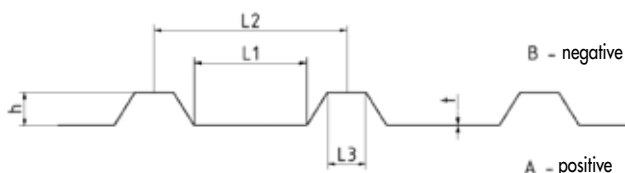
Length L3 * _____ mm

Height h * _____ mm

Sheet thickness t * _____ mm



If the type is unknown

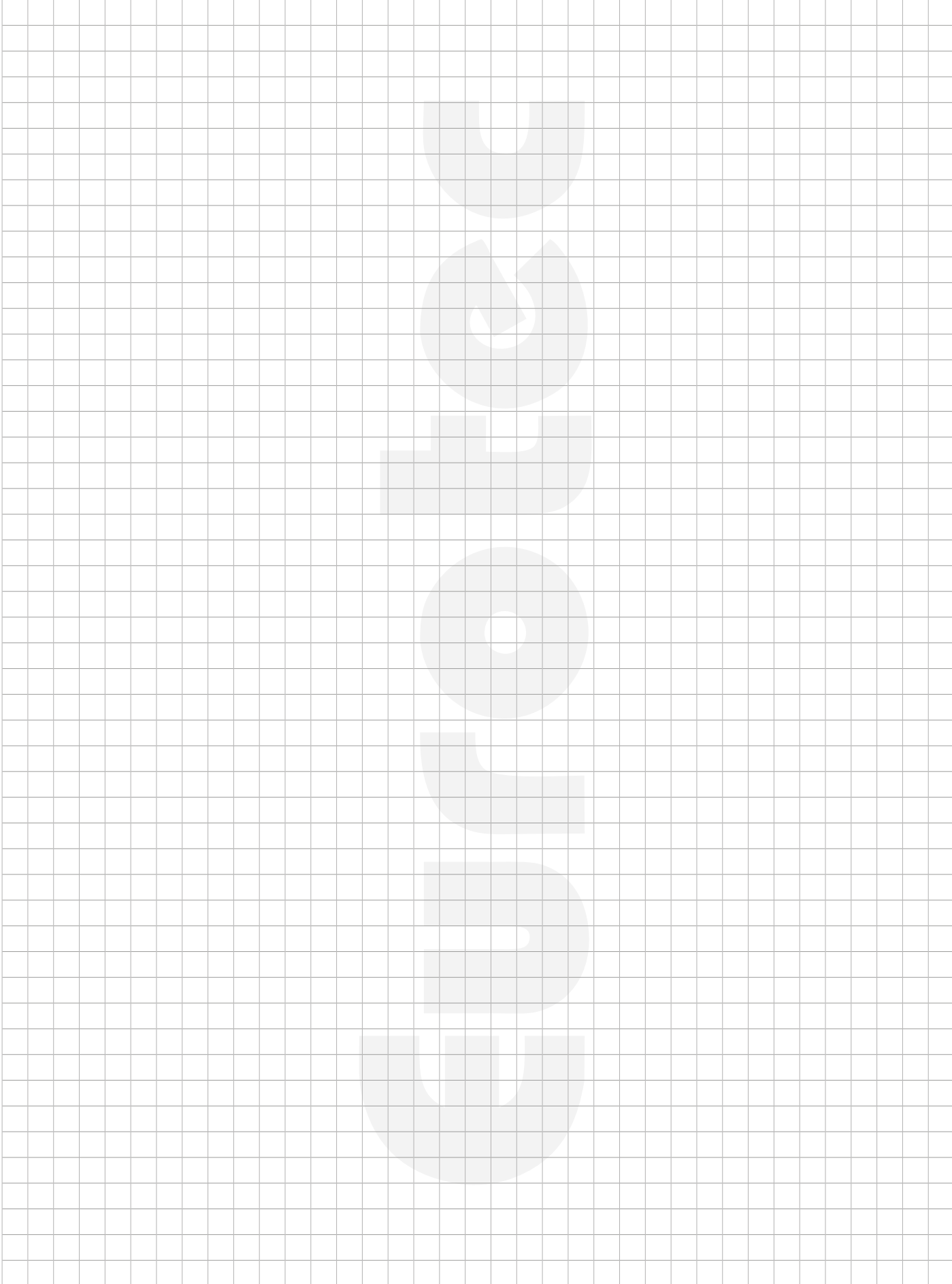


Installation type of the trapezoidal sheet metal (positive or negative position) * → negative positive

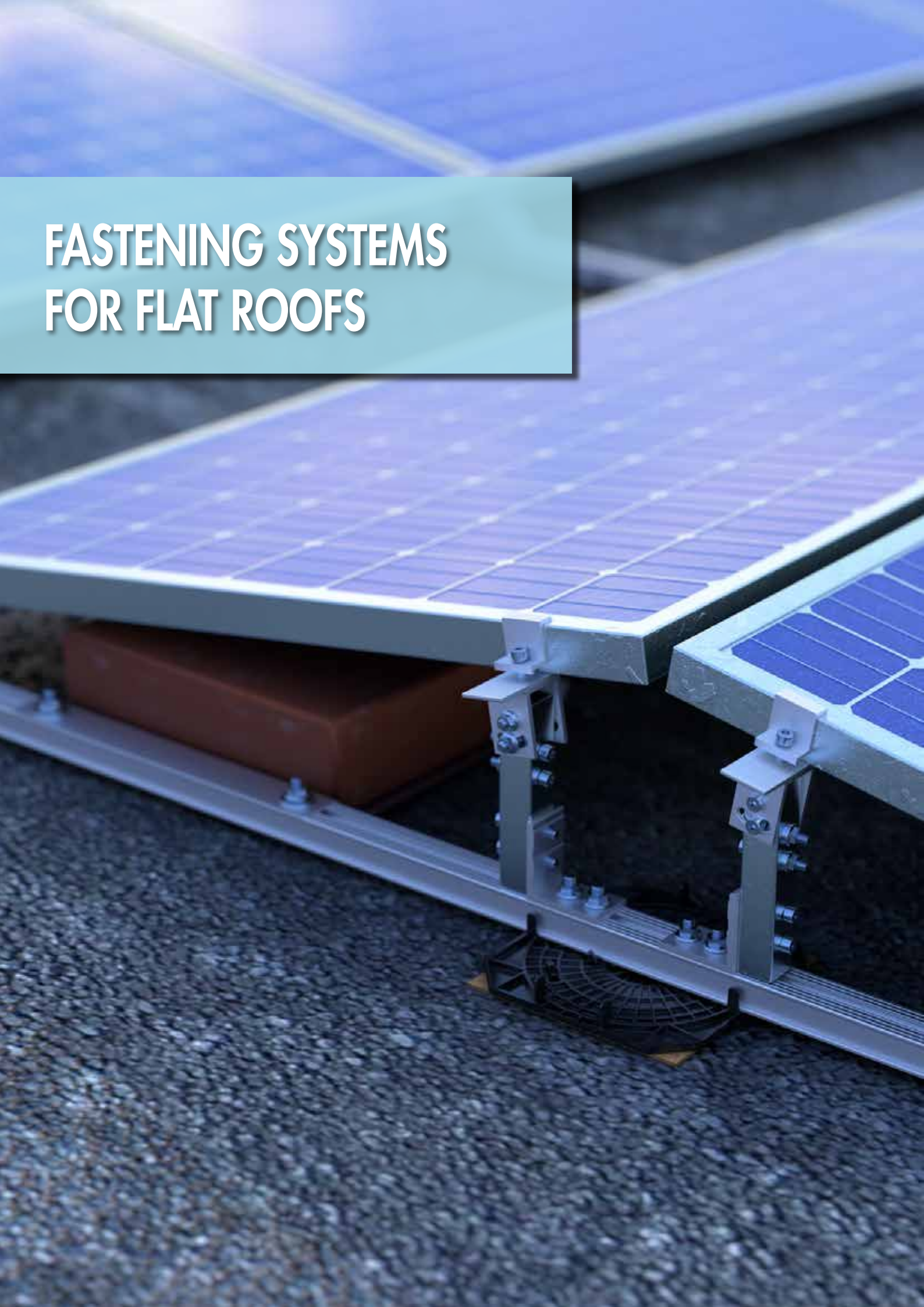
Additional required information*:

- Dimensioned sketches or status plan of the flat roof while specifying the orientation of the roof and all openings, roof structures, chimneys, lightning protection systems, adjacent buildings, etc.
- Information on unloading points at the construction site and/or place of delivery

NOTES:



FASTENING SYSTEMS FOR FLAT ROOFS





FASTENING SYSTEM

for flat roofs

In combination with the Eurotec fastening system for flat roofs, solar systems can be installed quickly, efficiently and flexibly. The 'joints' can be used to easily adjust the angles of the solar panels.

WHAT YOU NEED:

- Load distribution plate
- Flat roof installation profile
- Corner connector
- T-connector
- Joints
- Module clamps
- Ballast tray
- Wind deflector



Module clamps



Back joint



Front joint



T-connector



Wind deflector



Corner connector



Ballast tray



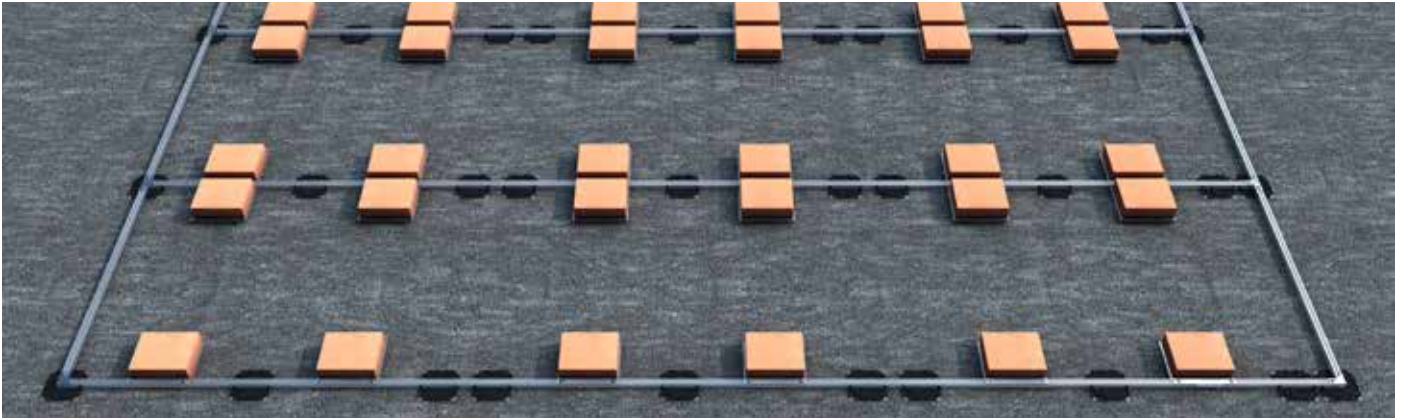
Load distribution plate



Flat roof installation profile



STEP 1: The load distribution plates are arranged with the correct spacing and fitted with installation profiles connected with T- and corner connectors.



STEP 2: The ballast tray is screwed onto the installation profiles and fitted with stones to weigh it down.



STEP 3: The various joints are screwed onto the profiles.



STEP 4: The solar panels are then placed on the various joints and fastened by means of the module clamps.



ALTERNATIVE: An additional mounting option for solar panels

ROOF PROTECTION CORK

The natural underlay for load distribution plates

When the load distribution plate is used on PVC film roofs, some of their contents, such as plasticisers, may cause problems. Thanks to the cork material, roof protection cork offers natural protection against mechanical damage to the roof membrane and prevents contact between the two materials. ***Free from PAH** (hazardous plasticiser in rubber).

Roof protection cork

Art. no.	Dimensions ^{d)} [mm]	Material	PU
945395	200 x 200 x 3	Cork	10

^{d)}Width x length x height

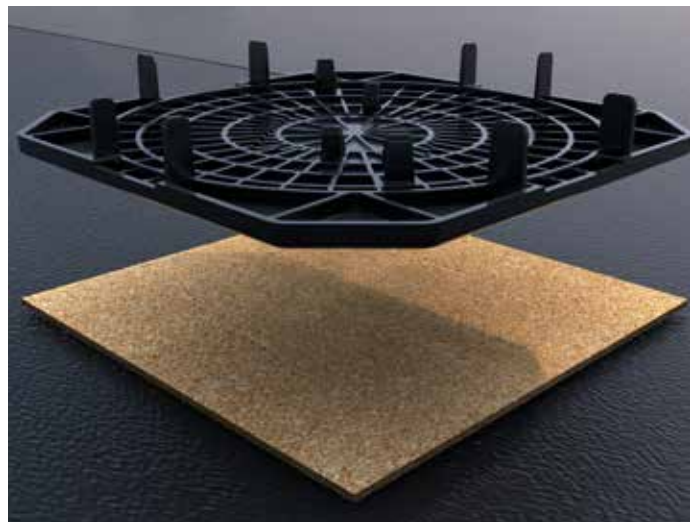
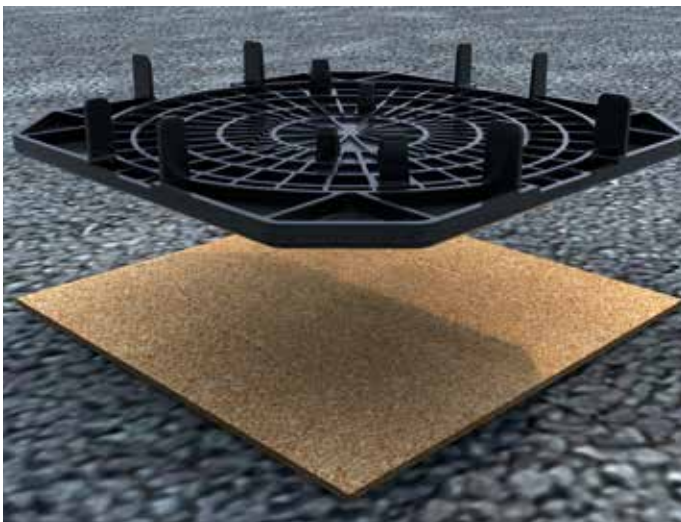


ADVANTAGES

- Water-repellent (hydrophobic) and chemically neutral
- Does not rot and is resistant to most acids and alkalis
- Heat-insulating, noise- and vibration-damping
- Slip-resistant



APPLICATION IMAGE



Thanks to the cork material, roof protection cork offers natural protection against mechanical damage to the roof membrane.

LOAD DISTRIBUTION PLATE

Installing a solar system on an insulated flat roof often gives rise to difficulties with regard to load and load distribution. Insulating materials can become compressed by the load concentrated at certain points, thereby damaging the insulation and the flat roof. The Eurotec load distribution plate, by contrast, spreads the load over a larger surface and distributes it more evenly across the solar system.

Load distribution plate



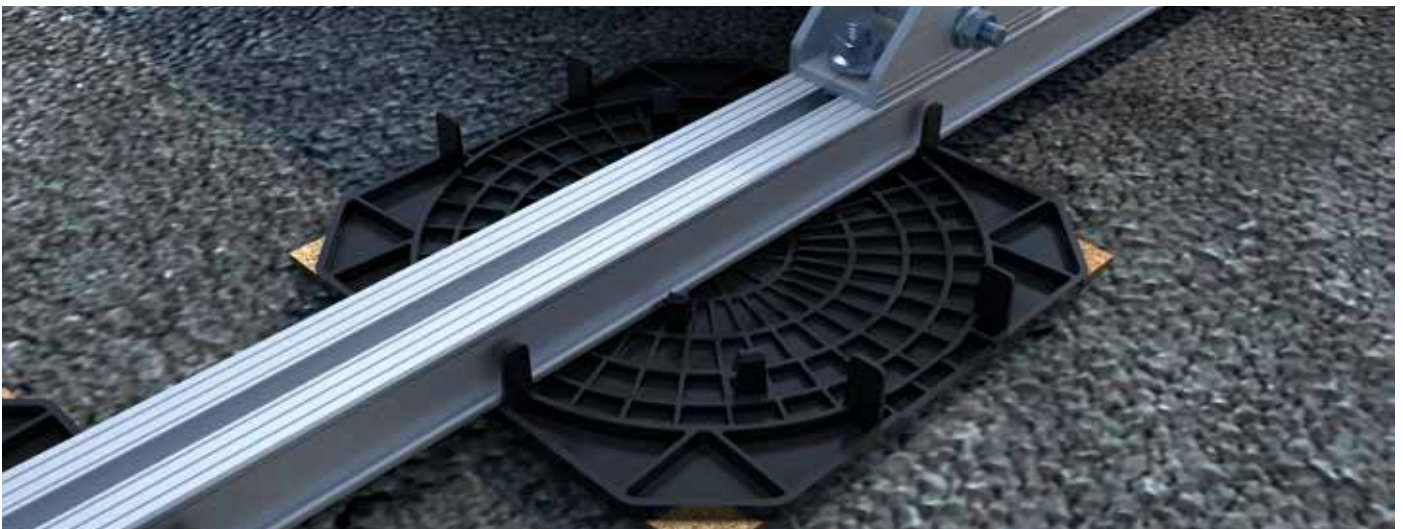
Art. no.	Dimensions ^{*)} [mm]	Material	PU
100016	28 x 210 x 210	PP-C (polypropylene copolymer)	10

^{*)}Height x width x length

ADVANTAGES

- Quick and easy installation
- Controlled load distribution
- Low net weight gives the base surface additional protection
- Easy to transport unlike alternative designs
- Highly durable and resistant to UV radiation and rot
- Low installation height unlike conventional solutions for load distribution

APPLICATION IMAGE



The load distribution plate is placed on the roof protection cork and fitted with an installation profile.

FLAT ROOF INSTALLATION PROFILE

The flat roof installation profile can be laid quickly and easily (in combination with the corner and T-connector). This enables the flat roof installation profile to form a high-quality and durable foundation for flexibly installation the components.

Flat roof installation profile



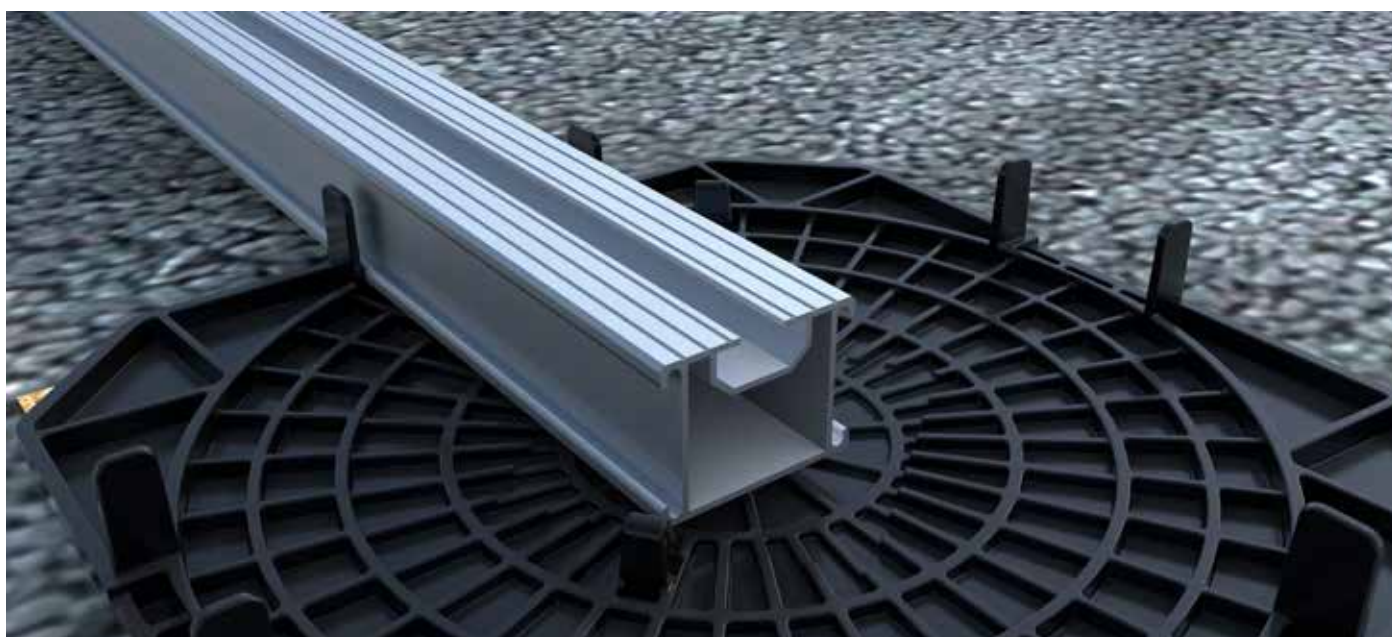
Art. no.	Dimensions ⁹⁾ [mm]	Material	PU
100649	30 x 40 x 1300	Aluminium	1
100650	30 x 40 x 1500	Aluminium	1
100651	30 x 40 x 1745	Aluminium	1
100652	30 x 40 x 2100	Aluminium	1
100653	30 x 40 x 2300	Aluminium	1
100654	30 x 40 x 2800	Aluminium	1
100655	30 x 40 x 3000	Aluminium	1
100672	30 x 40 x 5800	Aluminium	1

⁹⁾Height x width x length

ADVANTAGES

- Weather-resistant
- Thanks to the high rigidity, large spans can be achieved
- Quick and easy installation

APPLICATION IMAGE



The flat roof installation profile is simply laid on the load distribution plate.

PROFILE CONNECTOR

The profile connector is used to connect two installation profiles quickly and easily. The connector is inserted, aligned centrally to the connection point and tightened with the two screws.

Profile connector



Art. no.	Dimensions [mm] ⁰⁾	Material	PU
100642	26.2 x 8.2 x 150	Aluminium	1

ADVANTAGES/SPECIFICATIONS

- Easy to work with
- Aluminium

APPLICATION IMAGE



Connecting two installation profiles with profile connector

T-PROFILE CONNECTOR

The T-profile connector can be used to create simple cross-connections.

T-profile connector



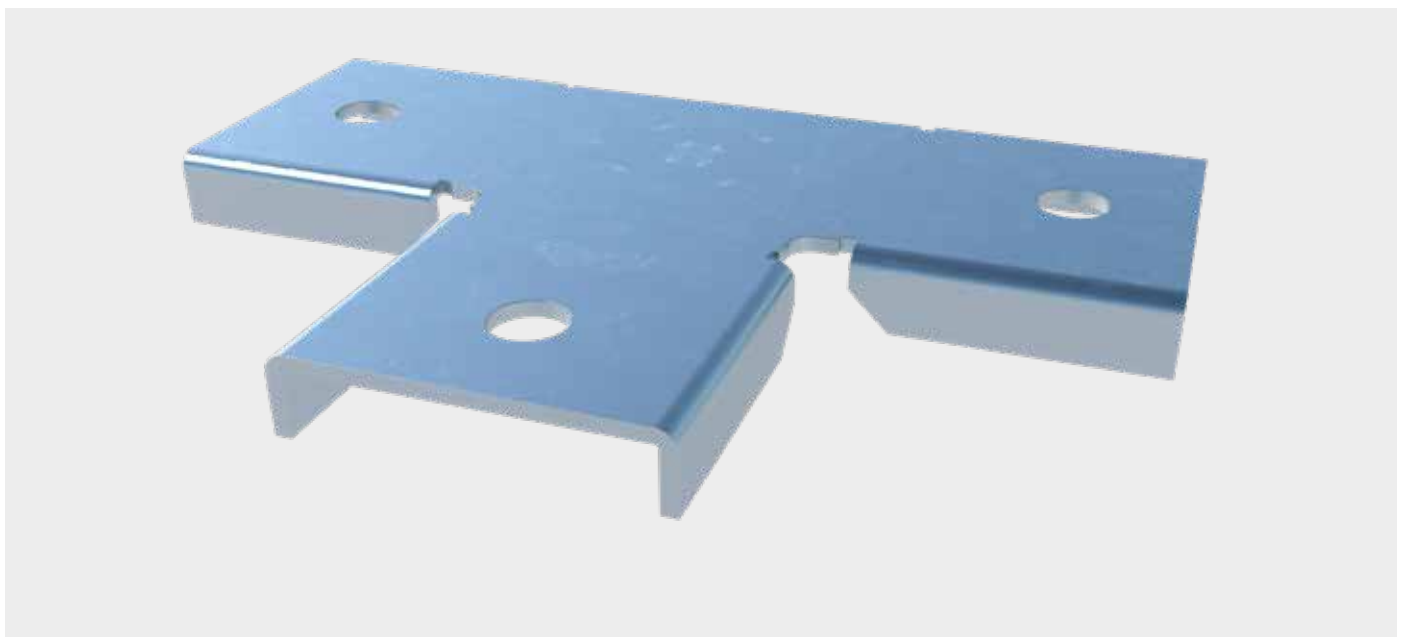
Art. no.	Dimensions [mm] ⁰¹	Material	PU
100643	10 x 87.5 x 130 t=2	A2 stainless steel	1

⁰¹Height x width x length x material thickness

ADVANTAGES/SPECIFICATIONS

- Easy to work with
- Stainless steel according to DIN 10088

APPLICATION IMAGE



The T-profile connector connects two installation profiles together at a 90° angle.

CORNER CONNECTOR

The corner connector can be used to create simple corner connections.

Corner connector



Art. no.	Dimensions [mm] ¹⁾	Material	PU
100644	10 x 87.5 x 87.5 t=2	A2 stainless steel	1

¹⁾Height x width x length x material thickness

ADVANTAGES/SPECIFICATIONS

- Easy to work with
- Stainless steel according to DIN 10088

APPLICATION IMAGE



The installation profiles are screwed together at the ends with the corner connector.

FRONT JOINT FOR MODULE MOUNTING

The solar panels can be fastened individually on the installation profile on the front joint for module mounting. The angle of the panels can also be flexibly adjusted.

Front joint for module mounting

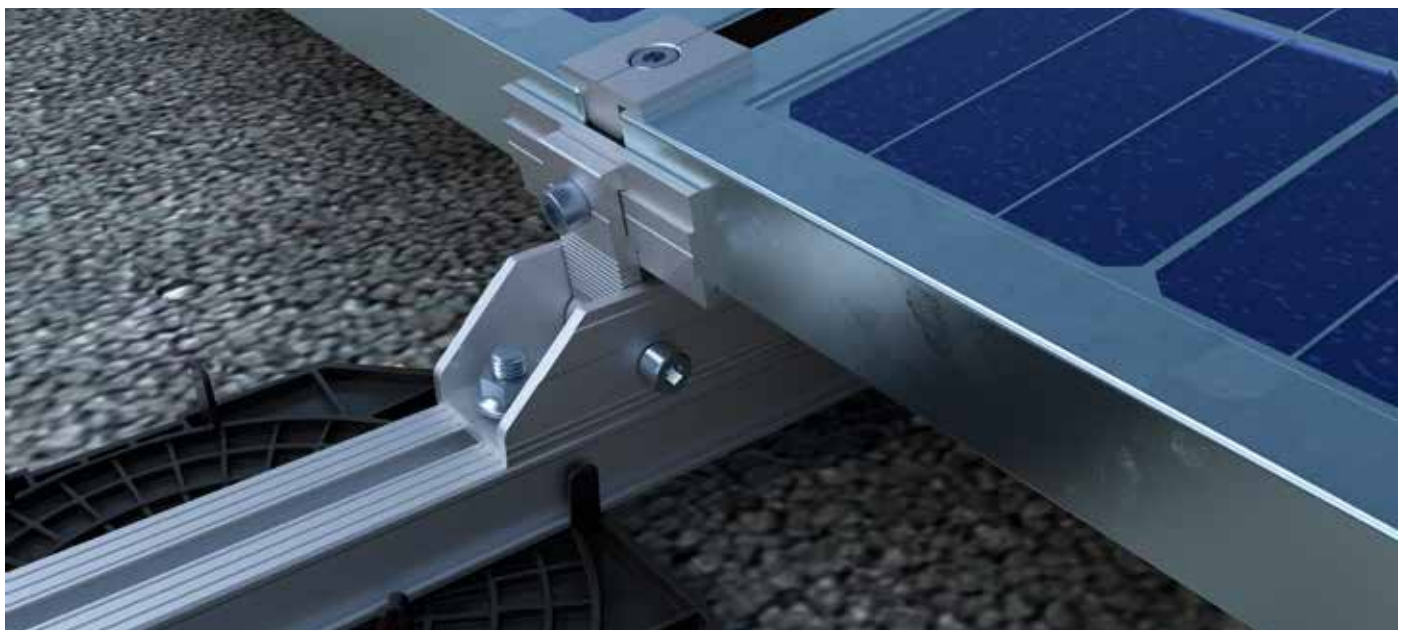


Art. no.	Dimensions [mm] ⁰¹	Material	Coating	PU
100660	80 x 90 x 100	Aluminium	Anodised	1

ADVANTAGES/SPECIFICATIONS

- Easy to work with
- Aluminium

APPLICATION IMAGE



Front joint for module mounting in installed state

REAR JOINT FOR MODULE MOUNTING

The solar panels can be fastened individually on the installation profile on the rear joint for module mounting. The angle of the panels can also be flexibly adjusted.

Rear joint for module mounting



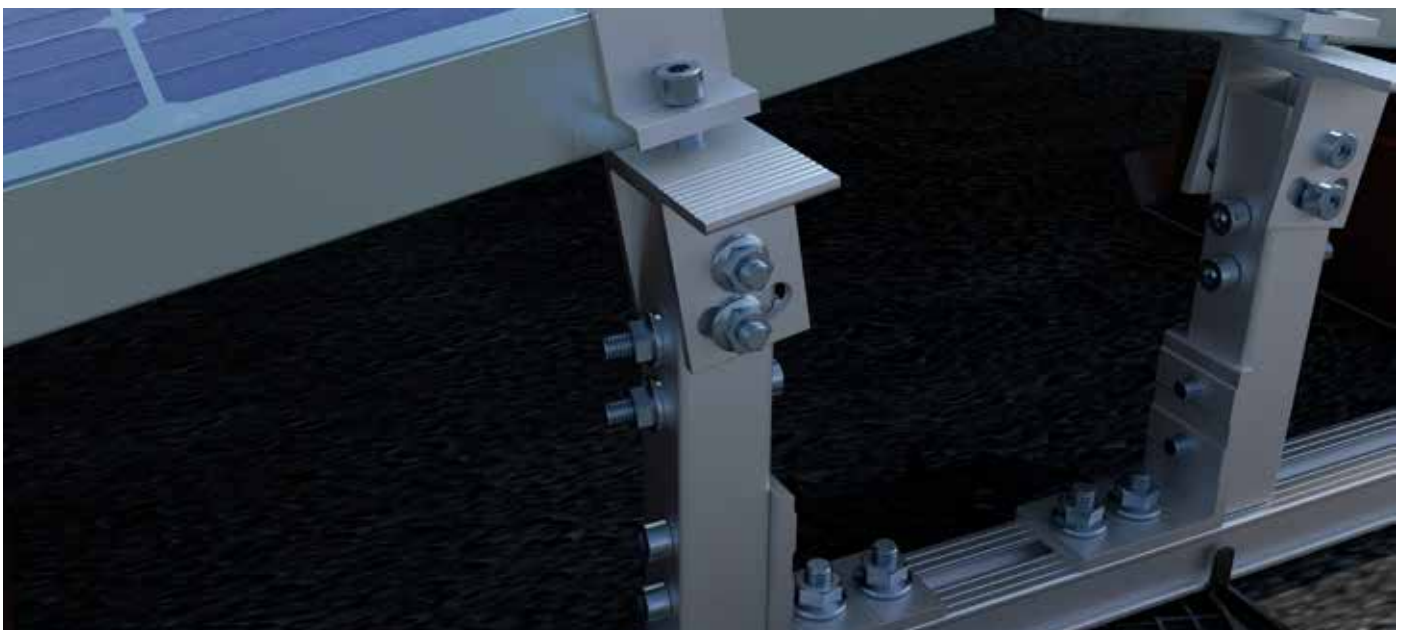
Art. no.	Angles	Material	Coating	PU
100661	10°	Aluminium	Anodised	1
100662	15°	Aluminium	Anodised	1
100663	30°	Aluminium	Anodised	1

*Bracket for wind protection not included in the scope of delivery

ADVANTAGES/SPECIFICATIONS

- Easy to work with
- Aluminium

APPLICATION IMAGE



Rear joint for module mounting in installed state

BALLAST TRAY

To enable the structure to be firmly secured on the roof, the ballast trays are installed and filled with stones.

Ballast tray



Art. no.	Design	Material	PU
100647	Single-sided	Aluminium	1
100648	Double-sided	Aluminium	1

ADVANTAGES/SPECIFICATIONS

- Easy to work with
- Aluminium

APPLICATION IMAGE

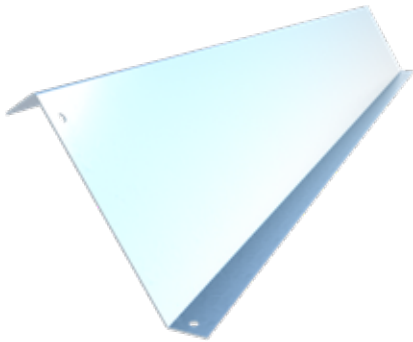


The single-sided ballast tray is fastened to the flat roof installation profile and weighed down with the corresponding stones.

WIND DEFLECTOR

The wind deflector is used to channel the wind away at the back of the solar system.

Wind deflector



Art. no.	Material	Coating	PU
100657	Aluminium	Anodised	1

ADVANTAGES/SPECIFICATIONS

- Serves to deflect wind

Bracket for wind deflector



Art. no.	Dimensions [mm] ¹⁾	Material	PU
100658	150 x 42.5 x 30	A2 stainless steel	1

APPLICATION IMAGE



The bracket is screwed onto the rear joint for module mounting. The wind deflector can then be screwed on.

Eurotec calculation service

Solar flat-roof mounting frame

Email to technik@eurotec.team

Inquiry form for preparing a proposal for a non-penetrative flat-roof mounting frame for a photovoltaic system. The proposal includes a quantity calculation as well as the feasibility check for your project. You will automatically receive a reviewed lifting verification when you place your order. Additional stability verifications, such as inspecting the roof structure, are not included in the scope of delivery. We are happy to submit a proposal to you for this.

Dealer: _____ Executing company: _____
 Contact person: _____ Contact person: _____
 Email: _____ Place: _____
 Tel: _____
 Construction project: _____ Email: _____

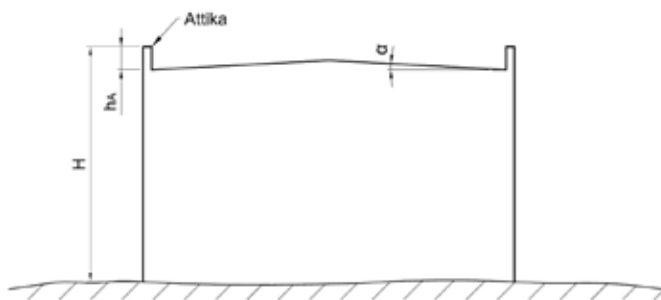
We prefer to send you the planning guide in PDF format by email.
 Please complete the fields marked with an *. They are mandatory.

Information on the construction project:

Postal code * _____
 Snow load zone (according to DIN 1055-5:2005) _____
 Wind load zone (according to DIN 1055-4:2005) _____
 Ground elevation above sea level _____ m
 (above sea level)

Module type * _____
 (precise manufacturer specifications)

if the type is unknown
 Weight of module * _____ kg
 Module measurements * _____ mm
 (length x width)
 Module height * _____ mm



Alignment of modules (please check) * vertical horizontal

Building height H * _____ m

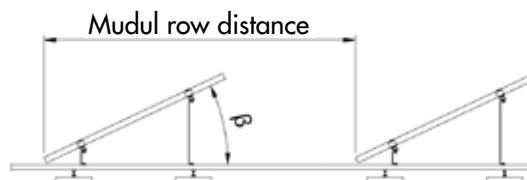
Attic height h_A * _____ m

Roof inclination, where applicable, α [degrees] * _____ °

Module inclination angle β [degrees]* _____ °
 (requested)

Module row spacing * _____ m
 (requested)

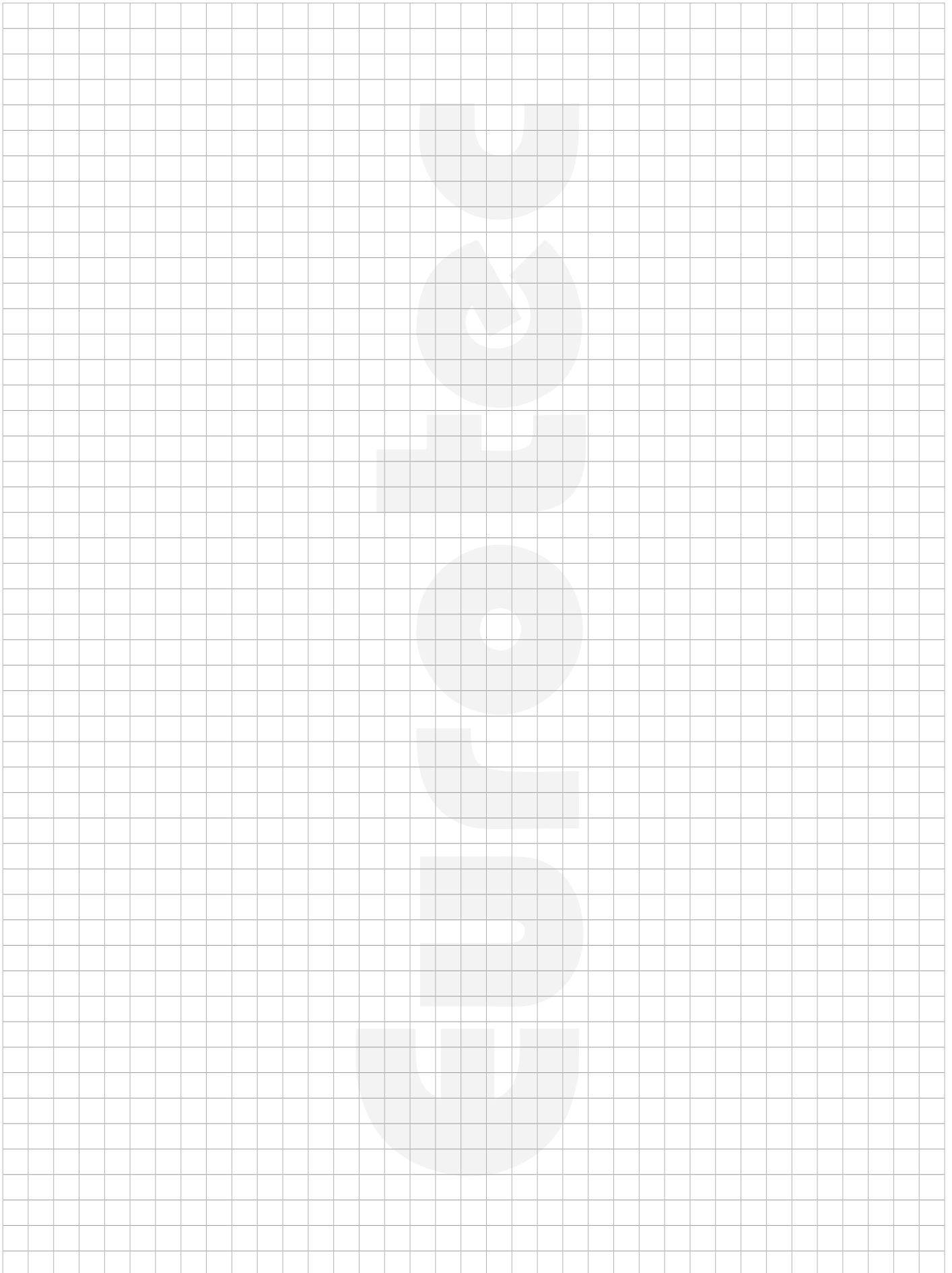
Mounting type of the modules (please check) * →



Additional required information*:

- Dimensioned sketches or status plan of the flat roof while specifying the orientation of the roof and all openings, roof structures, chimneys, lightning protection systems, adjacent buildings, etc.
- Information on unloading points at the construction site and/or place of delivery

NOTES:





CONDITIONS OF SALE AND DELIVERY

All sales to the buyer, purchaser and contracting party ("Customer") shall only be made under the following conditions, unless other written agreements have been concluded in detail:

1. Scope, general points

Our terms and conditions apply exclusively! We do not recognise conditions of our Customers that contradict or deviate from our terms and conditions, unless we have expressly agreed to them in writing. Our terms and conditions apply even if we unconditionally execute an order despite knowledge of conditions that contradict or deviate from our terms and conditions. Our terms and conditions apply for all future business with our Customers. The Customer can access the latest version of these terms and conditions at any time at www.eurotec.team.

2. Quotation in written form

Our quotations are non-binding and subject to confirmation until our definitive order confirmation. Contracts and other agreements and deals arranged via our representatives only become binding with our written order confirmation. Oral agreements, even those made as part of our contract execution, are not valid unless they have been confirmed by us in writing.

3. Prices, packaging, off-setting

Unless otherwise stated in our order confirmation, our prices apply ex works, excluding packaging. Packaging is invoiced separately. The minimum order value is 50 euros. For lower quantities, we charge a processing fee of 30 euros.

a) Our prices do not include statutory VAT. Statutory VAT is listed and collected separately in the invoice at the statutory rate on the day of invoicing.

b) Our Customer may only assert offset rights if counterclaims have been established in a court of law or are uncontested or recognised. The precondition for exercising a right of retention is that the counterclaim results from the same contractual relationship.

4. Delivery, delivery time and force majeure

Unless otherwise agreed to in writing, the place of performance is our business premises. The goods are dispatched by third parties commissioned by us, at the Customer's risk and expense. From the point in time when we have made the goods available for delivery and informed the Customer that they are ready for dispatch, the Customer bears the risk of accidental loss or deterioration of the goods. This applies even if dispatch is delayed due to circumstances that are outside of our responsibility.

A precondition for prompt handover of the goods to the road haulage company is prompt ordering on the part of our Customer. If the goods are handed over to the commissioned road haulage company on time, we assume no liability for delayed delivery of the goods to the Customer. This applies even if a delivery deadline has been arranged with the Customer, in particular to a construction site. In this context, collected express delivery charges may only be waived for the Customer if there is also a legal basis for deducting these charges from the forwarding agent.

Delivery time specifications are strictly to be considered as approximate and non-binding. They begin with the date of our order confirmation, but not before all details of the order are fully clarified. The delivery time is deemed fulfilled if the goods have left the factory or their readiness for dispatch has been announced before the delivery time has expired. It shall be extended, without prejudice to our rights arising from default on the part of the Customer, by the period during which the Customer is in default with obligations vis-à-vis us that arise from this or other orders.

Among other things, the following reasons also release us from the obligation to comply with the delivery time in the case of our suppliers and entitle us to extend the delivery deadlines, to make partial deliveries or to fully or partially withdraw from the unfulfilled part of the contract, without us becoming liable for damages as a result, on condition that we are not charged with intent or gross negligence. Disruptions to operation and supply difficulties of any kind, for example machine, goods, material or fuel shortage, or force majeure events, e.g. bans on export and import, fire, strike and lockout, and new official measures that negatively impact production costs and dispatch.

5. Dispatch

Dispatch is performed at the Customer's expense and risk, even if carriage-paid delivery has been agreed. Additional costs for express dispatch are borne by the Customer in any case. Freight costs paid by us are only to be considered as freight prepaid for the Customer. Additional freight costs for express goods are borne by the Customer, even if we have assumed the transport costs in individual cases.

Goods announced as ready for dispatch must be accepted immediately and are charged as delivered ex works. If the goods are sent abroad or directly to third parties, the inspection and acceptance must take place in our factory; the goods are otherwise considered delivered in accordance with the contract, under exclusion of any complaints. The risk, including any confiscation, is transferred to the Customer with handover of the goods to the forwarding agent or carrier, but no later than when the goods leave our premises. Returns strictly require prior coordination with our Sales department. Defective goods returns will only be accepted with our express agreement. The goods are then credited with the deduction of 25 % return fee per item or at least € 50 restocking costs. Debit notes are strictly not accepted.

6. Design and property rights

The Customer is solely responsible and liable for ensuring that the goods ordered do not infringe the property rights of third parties. No check is performed on our side in this regard. The Customer shall indemnify us from third-party prohibitory injunctions or claims for damages. If a prohibitory injunction is asserted against us, the Customer shall bear the processing costs and compensate us for the financial loss and damage thus incurred.

7. Approval, quantity tolerances and call-off orders

For agreements with continuous delivery, the goods must be called off in monthly quantities that are as uniform as possible during the term of the contract. If goods are not called off in due time, we shall be entitled, after having set a grace period to no avail, to divide the goods ourselves at our own discretion or withdraw from the part of the agreement that has not yet been fulfilled, or assert claims for compensation for non-performance. In the case of call-off orders, the call-off orders must strictly be made within 12 calendar months. Surplus or short deliveries of up to 10 % of the order are admissible.

8.1 Payment conditions, invoice, retention

Invoices shall become due regardless of receipt of the goods and without prejudice to the right to report defects within 10 days from the invoice date with 2% discount, or within 30 days net.

Payment by means of a bill of acceptance or note receivable requires separate prior written agreement. In the case of payment by means of bill of acceptance with a maturity term not exceeding three (3) months and issued within one (1) week after the invoice date, discount charges will be invoiced.

Credit in the form of bills of exchange and cheques is valid subject to their receipt and irrespective of an earlier due date of the purchase price if the buyer is in default. The value is credited on the day on which we are able to access the equivalent value; the discount charges are calculated at the respective bank rate.

If due dates are not met, interest and commissions may be charged, subject to other rights in accordance with the respective bank rates for overdrafts, but no less than 5 % interest above the respective discount rate of the Deutsche Bundesbank.

All our claims shall become due immediately, regardless of the term of any bills of exchange received and credited, if the payment conditions are not met or if we become aware of circumstances that in our opinion make it appropriate to downgrade the creditworthiness of the Customer.

We may then also only execute outstanding deliveries against prepayment and withdraw from the contract after

a reasonable grace period, and demand compensation for non-performance.

We may also prohibit the resale and processing of the delivered goods and demand their return or the transfer of the indirect ownership of the delivered goods at the Customer's expense. The Customer hereby authorises us to enter the Customer's premises in said cases and remove the delivered goods.

We are entitled to collateral in the customary scope and nature for our claims, even if they are conditional and limited. Offsetting or withholding of payments due to any counterclaims or notification of defects is excluded, with the exception of undisputed claims or claims determined in a court of law.

8.2 Payment conditions for online shop Customers

All orders must be paid for in advance. After placing an order in our online shop, you will receive an e-mail with the account details of our business account. The invoiced sum must be transferred to our account within 7 days. We are only able to execute your order after receiving your payment.

9. Reservation of title

Until all liabilities arising from the business relationship have been repaid in full, and in particular until all bills of exchange and cheques issued in payment, including finance bills, have been cashed, the goods we have delivered remain our property and are entitled to take them back at the Customer's expense in the event of payment default. Up to this point in time, the Customer is not entitled to pledge the goods to third parties or to transfer them by way of security; the Customer may only resell or process them in connection with the Customer's ongoing business activities. The Customer shall inform us of a pledging or any other impairment of our rights on the part of third parties without delay.

The Customer does not acquire any ownership of the goods delivered by us in the event of further processing pursuant to section 950 of the German Civil Code (BGB), as any processing on the part of the Customer is performed on our behalf.

The newly produced item serves as our security, without prejudice to the rights of third-party suppliers, up to the amount of our total claim arising from the business relationship. The item shall be kept by the Customer for us and deemed to be goods under the terms of these conditions. If the item is mixed with or otherwise connected to other objects that do not belong to us, we thereby acquire at least partial ownership of the new item in proportion to the value of the contractual item with regard to the other objects jointly processed. If the Customer sells the goods delivered by us, in any condition, we hereby assign to the customer all claims against the customer's purchasers arising from the sale of the goods, including all ancillary rights, until all our claims arising from the delivery of goods have been settled in full. At our request, the customer shall inform the sub-customers of the ceding of claims and provide us with the information required to assert our rights against the sub-customers, and hand over the documents to us. If the value of the securities provided to us exceeds our delivery claims by more than 20 %, we are obliged to reassign this amount at the Customer's request. If the reservation of title or the assignment of claims is not legally valid according to the law applicable where the goods are located, the security corresponding to the reservation of title or the assignment of claims that applies where the goods are located is deemed agreed upon. If cooperation on the part of the Customer is required hereby, the Customer must take all measures required to establish such rights.

10. Notification of defects and liability

Warranty rights on the part of our Customer are subject to the condition of the Customer duly fulfilling all legal obligations pursuant to section 377 and 378 of the German Commercial Code (HGB) with regard to obligations to inspect goods and provide notification of defects. In the case of defects, we may at our option rectify the defect or provide a replacement; if we are not willing or able to do this, in particular if the rectification of defects / provision of replacement is delayed beyond reasonable time limits for reasons within our responsibility or if the rectification of defects / provision of replacement fails to occur in some other way, our Customer shall be entitled to choose between withdrawing from the contract or demanding a corresponding reduction in the price. Unless otherwise stipulated below, any further claims of the Customer, regardless of their legal basis, are excluded. We are not liable for loss or damage that was not caused to the delivered item itself. In particular, we are not liable for lost profit or other financial loss of the Customer.

The above liability disclaimer does not apply where the loss or damage is the result of wilful misconduct or gross negligence; furthermore, it does not apply if the Customer asserts compensation claims for non-performance in the event of absence of an assured characteristic. Insofar as we have negligently breached a material contractual obligation, our obligation to pay compensation for personal injury or property damage is restricted to the coverage provided by our product liability insurance. We are willing to allow the Customer to view our policy on request. The warranty period is six (6) months, beginning with the transfer of risk. This period constitutes a statutory period of limitation. This period also applies for claims pursuant to section 1 and 4 of the German Product Liability Act (Produkthaftungsgesetz). Insofar as our liability is excluded or restricted, this also applies for the personal liability of our salaried and waged employees, staff members, representatives and performing agents. Goods that are the subject of complaints must not be returned without obtaining written agreement from us in advance, as we may otherwise refuse to accept the goods at the sender's expense. Returns of goods that have been fully or partially processed are not accepted under any circumstances.

Where available, the Customer must make use of technical descriptions and the Customer's specialist knowledge to satisfy itself that the purchased product is suitable for its intended application and make itself familiar with the application of this product. If the Customer is not familiar with the application, our staff are available to provide advice.

For all information and advice given by our employees, this information and advice is provided diligently and conscientiously. This information and advice does not by any means substitute the necessary consultation and construction-related services of architects and specialist planning companies. Only the authorised occupational groups are entitled to provide such consultation and services.

11. Place of performance, place of jurisdiction, miscellaneous

Consumer information: non-participation in dispute resolution. We are neither willing nor obliged to participate in dispute resolution proceedings before a consumer arbitration board. The place of performance for all obligations arising from this contract, including those for cheques and bills of exchange payable, is our company's head office. The place of jurisdiction for all disputes arising from the contractual relationship is at our discretion Hagen Local Court, insofar as the customer is a merchant.

Contracts with our Customer are governed exclusively by German law to the exclusion of the UN Sales Convention of 11 April 1980. The language of the contract is German.

Hagen, 16 February 2018
E.u.r.o.Tec GmbH

Unter dem Hofe 5 - 58099 Hagen

Managing directors: Markus Rensburg, Gregor Mamys

Registration court: Hagen Local Court Register number: HRB 3817 VAT Reg. No.: DE 812674291

Tax number: 321/5770/0639

Tel. +49 2331 62 45-0 · Fax +49 2331 62 45-200 · E-mail info@eurotec.team · www.eurotec.team



The specialist for fastening technology

Publisher: E.u.r.o.Tec GmbH - Last updated 03/2022
Errors excepted for the contents. We reserve the right to make technical changes and additions.
All measurements are approximate. Subject to model and colour variations. Errors excepted.
No liability for printing errors. Reprinting (including as extracts) only permitted with the permission of E.u.r.o.Tec GmbH.

E.u.r.o.Tec GmbH

Unter dem Hofe 5 · D-58099 Hagen

Tel. +49 (0)2331 62 45 0

Fax +49 (0)2331 62 45 200

Email info@eurotec.team

Follow us



www.eurotec.team/en