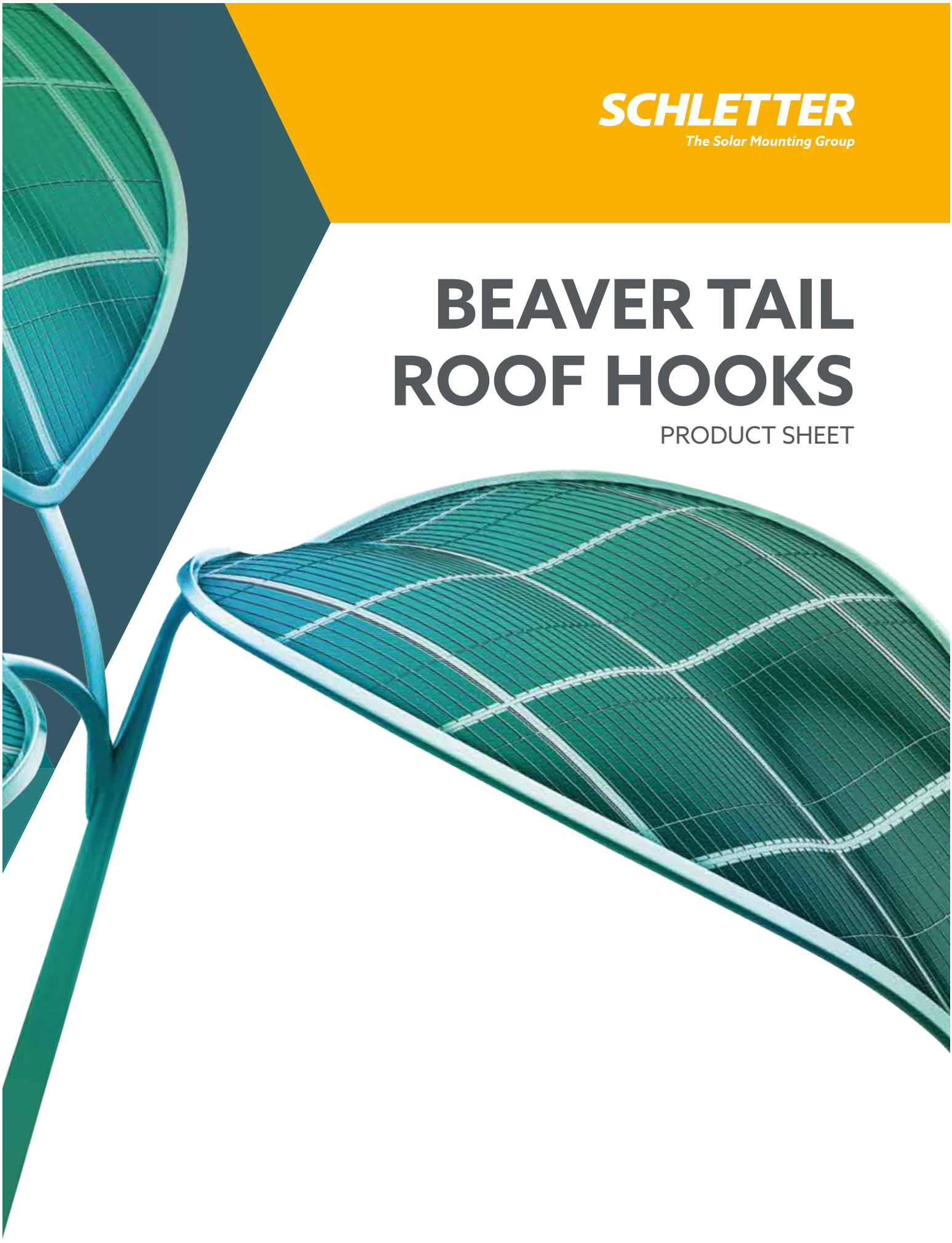
SCHLETTER
The Solar Mounting Group

BEAVER TAIL ROOF HOOKS

PRODUCT SHEET

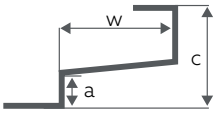


BEAVERTAIL ROOF HOOKS

SIMPLE AND UNIVERSAL

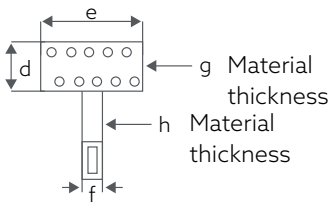
Advantages of the Rapid beaver tail fastening set:

- sheet metal replacement tile for high snow and wind loads
- proven Rapid connection for module-bearing profiles
- independent of roof lath thickness
- for lath distances 145 mm and greater
- 10-year warranty



Dimensional drawing for the tables

Beaver tail roofs are a special form of roof covering. In addition to varying tile shapes, different types of covering and overlap dimensions, even different lath thicknesses are used in various regions. Our beaver tail roof hook system was developed to fulfill as many requirements as possible.



109016-007	**BEAVER TAIL BEZ RAPID ALU** 180 x 380	VPE:20
109019-000	**ROOF HOOKS FOR BEAVER TAIL RAPID ALU INST.** 180 x 380	VPE:20

	a	b	c	d	e	f	g	h	i
mm	-	228	-	-	48	35	-	7	30

Beaver tail replacement plate
Aluminum with aluminum system hooks
Suitable for beaver format 180/380 mm

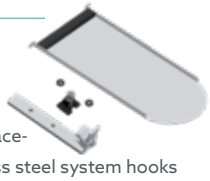
109016-009	**BEAVER TAIL BEZ RAPID ALU** 170 x 380
109019-000	**ROOF HOOKS FOR BEAVER TAIL RAPID ALU INST.** 180 x 380

	a	b	c	d	e	f	g	h
mm	-	228	-	-	35	35	-	7

Beaver tail replacement plate
Aluminum with system hooks
suitable for beaver format 170/380 mm

109016-010	**BEAVER TAIL BEZ RAPID ALU** 190X400 SET
109019-002	**ROOF HOOKS FOR BEAVER TAIL RAPID INSTALLATION** 190X400

	a	b	c	d	e	f	g	h
mm	-	250	-	-	35	35	-	6



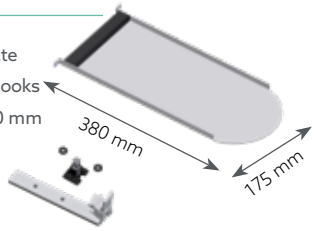
Beaver tail with aluminum replace-
ment plate with 1.4301 stainless steel system hooks
Suitable for beaver format 190/400 m

SCHLETTER SOLAR GMBH I WE RESERVE THE RIGHT TO MAKE CHANGES.

109016-009	**RAPID CU BEAVER TAIL FASTENING SET** 180 x 380	PU:20
109019-001	**ROOF HOOKS FOR RAPID CU BEAVER TAIL INST.**	PU:20

	a	b	c	d	e	f	g	h	i
mm	-	232	-	-	50	35	-	6	30

Beaver tail copper replacement plate
with 1.4301 stainless steel system hooks
suitable for beaver format 180/380 mm



INSTALLATION INSTRUCTIONS

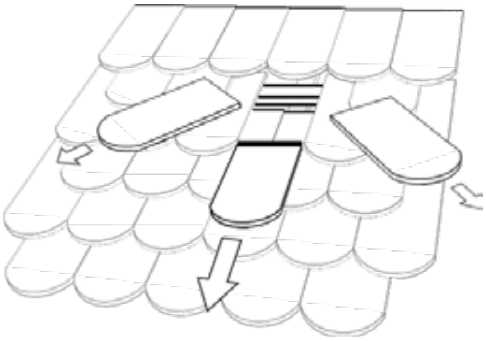
Required tool

- Drill
- Drill bit 8 mm, 5.6mm
- Screwdriver with bit insert
- T40 bit
- SW17 wrench

Accessories needed

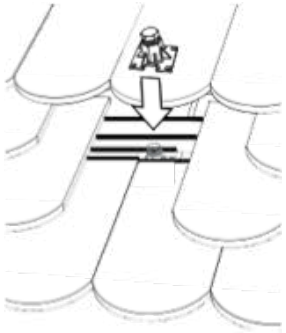
To secure the position of the Flex load support, 2 chipboard screws approx. 3x20 or 2 nails are required – not included with delivery.

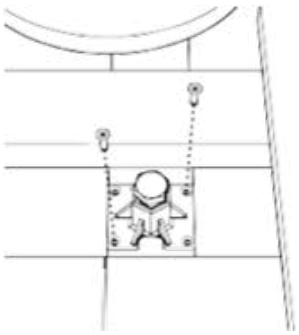
1. Remove the roof shingles over the selected rafters.

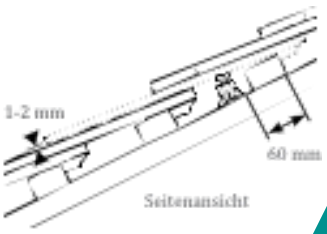


2. Premount the Flex load supports, press in the nuts, screw in the M10 screw.

3. Place the Flex load support between the roof lath and roof shingles on the rafter or counter-batten, and fasten them. Adjust the Flex load support so that the upper edge protrudes 1–2 mm above the roof shingles underneath. The included M10x25 screw is suitable for roof lath thicknesses of about 25–40 mm. Thicker roof laths can be attached with longer adjustment screws.

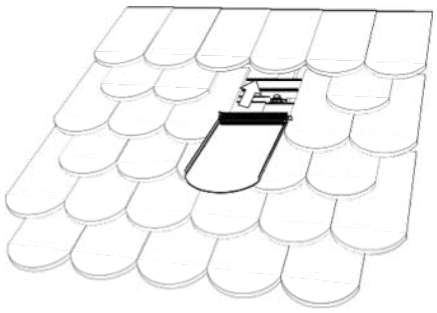


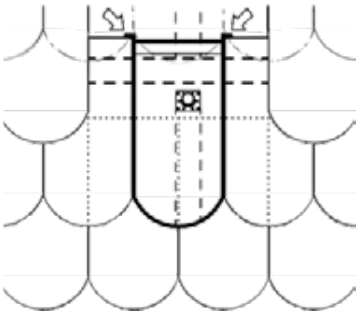




SCHLETTER

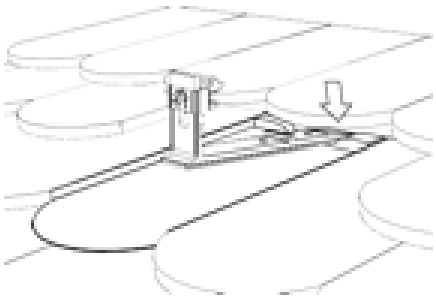
4. Inserting replacement shingles

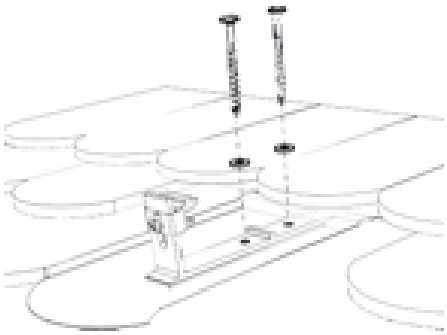




5. Hang the system roof hooks into the upper edge of the sheet metal replacement tile and position over the rafters.

With the stainless-steel hook version, this must be mounted flush on top with the sheet metal replacement tile.

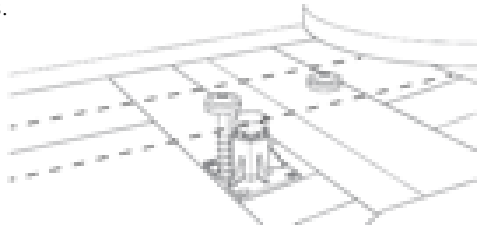




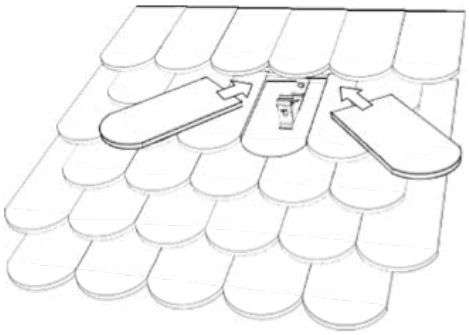
6. Pre-drill the holes through the sheet metal replacement tiles and wood construction (for 8 mm pan head screws, pre-drill at 5.6 mm).

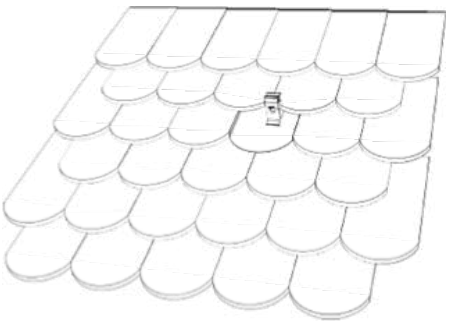
7. Firmly screw in the roof hooks with pan head screws and seals.

! Especially make sure the screws are installed in the mounting plate at a right angle. The seal must be pressed to the mounting plate all around the screw.



8. Hang the roof shingles – you're done!





TECHNICAL DATA

Material	Fasteners: 1.4301 stainless steel or better; roof hooks: EN AW 6063 aluminum or 1.4301 stainless steel; aluminum or copper beaver tail replacement plate; Flex load support bottom: PA; Other system components: aluminum EN AW 6063;
Planning guide	Configuration and static dimensioning with the AutoCalculator Easy and the Schletter Configurator
Statics	Statics calculation according to the current country-specific standards (in Germany EN 1991, EC1). Always follow the statics instructions!

For more information, see www.schletter-group.com

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The Solar Mounting Group

BITU-PLAN

PRODUCT SHEET

SCHLETTER

BITU-PLAN

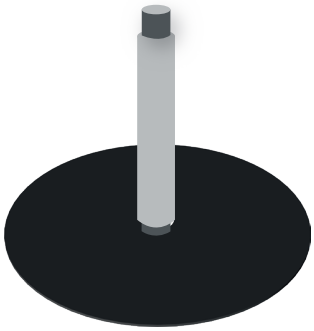
FIXPLAN OPTIMIZATION FOR BITUMEN ROOFS

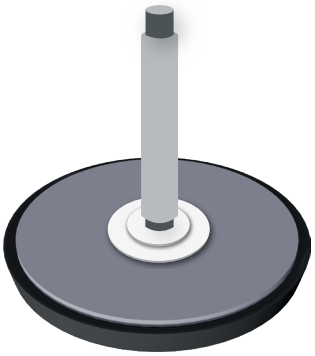
- Reliable, long-term seal for bitumen roofs
- Premium materials (VA 1.4301 and EPDM)
- 10-year warranty
- Defined fastening to the substructure

The Schletter FixPlan system is suitable for flat roof coverings without special attachment options. The new BituPlan system optimizes the conventional FixPlan with a special sealing pad for bitumen roofs and thus achieves an organic, long-lasting bond to the roof surface.

INSTALLATION

1. **1.** Screw in the hanger bolt.
2. **2.** Remove the protective film from BituPlan, apply BituPlan (adhesive side to roof covering), position using pre-mounted hanger bolt.
3. **3.** Place the sealing plate, position the cone seal and press it on gently with the sealing nut.
4. **4.** Then fasten the mounting plate with 2 lock nuts and connect the support structure.





NOTE

Clean, dry, grease free — bitumen strips must be heated at low temperatures to ensure adhesion.
Sanded or coated roofing strips must be cleaned all the way to the base layer.
Bonding is to be done according to roofing guidelines.

TECHNICAL DATA

Material	Aluminum, black, smooth with full-surface butyl adhesive on the rear side (also black)
Sizes	BituPlan external diameter approx. 120 mm, hole diameter 13 mm, Item No.: 114 004-000
Use	On even bitumen roofs, laid on flat sheathing, only in adequately dimensioned components of the substructure.

For more information, see www.schletter-group.com

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FIXZ-7
FIXZ-15

PRODUCT SHEET

SCHLETTER

FIXZ-7 & FIXZ-15

THE OPTIMAL ADDITIONAL SUPPORT FOR FLAT SLOPED TRAPEZOIDAL SHEET CLADDINGS

For flat trapezoidal sheet roofs with less than a 10-degree slope, module installation parallel to the roof is not always optimal, due to low yields and inadequate module self-cleaning. However, in many cases, conventional support with struts is not economical or is even impossible for static reasons due to higher loads. In these cases, only shallow support angles are desirable or feasible.
For these problematic situations, Schletter FixZ-7 and FixZ-15 offer simple, cost-effective additional support.

- Quick and easy to install
- Better rear ventilation
- Better self-cleaning
- Higher yields
- 10-year warranty

INSTRUCTIONS FOR USE

The FixZ system can be used for all common 60- to 72-cell modules. The resulting setup angles are between 5 and 7 degrees with FixZ-7, and 11 to 15 degrees with FixZ-15. Technically, the FixZ system is suitable only for framed modules. Transverse installation with linear mounting or clamping on the short side is just as possible as conventional vertical installation (please observe the module manufacturer's information). The location of the clamping points should be in the range of 1/4-1/5 of the module height (or according to manufacturer's information).
Please also observe the distances to be maintained from the edge of the roof – 1.5 m on the side and 1.2 m on the northern and southern roof edges.
In addition to trapezoidal sheet roofs, folded sheet roofs are also suitable for fastening to the roof covering. Fastening to the substructure of still other roofs is possible. However, here it should be noted that due to the rafter or purlin grid, a cross connection may have to be used.

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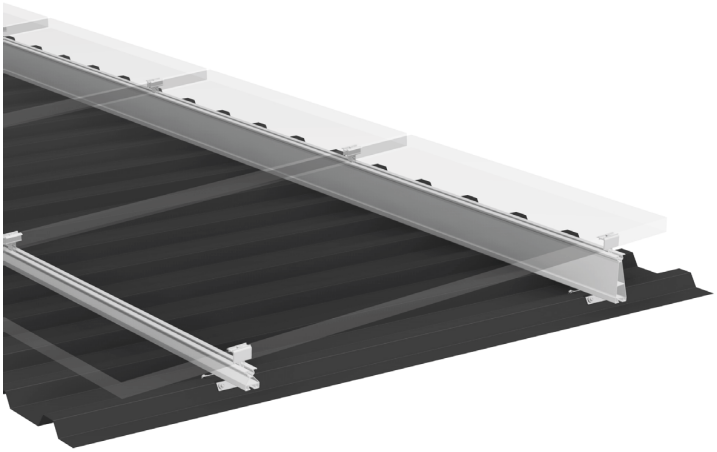
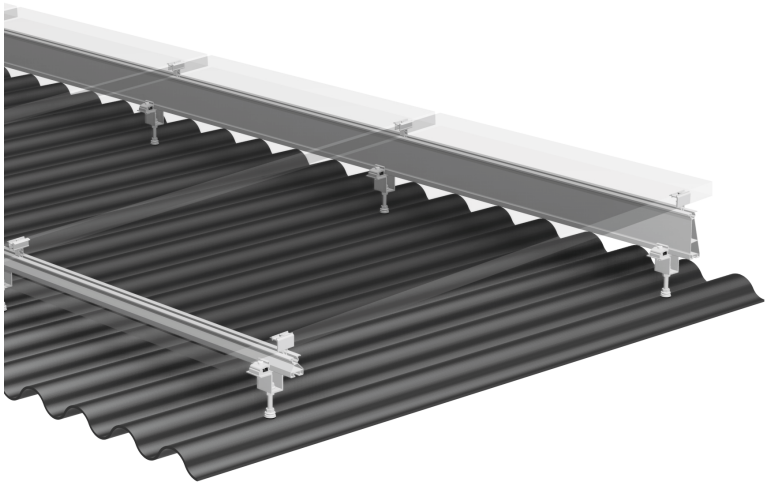
SAMPLE APPLICATIONS



FixZ-7 on trapezoidal sheet with SingleFix-Vario

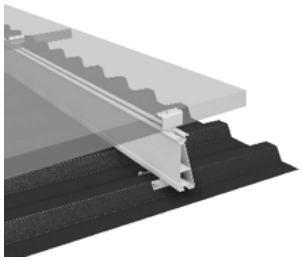
FixZ-15 on a wound folded roof



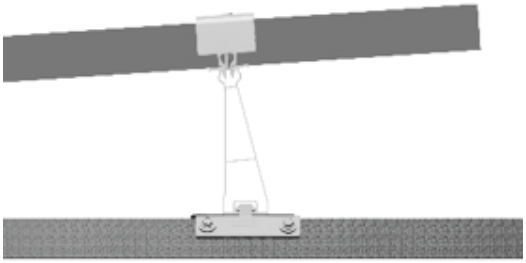
FixZ-7 on corrugated sheet metal cladding fastened to rafters

SCHLETTER

INSTALLATION



1. Fastener installation
(Pay attention to the shading distance to the module rows!)

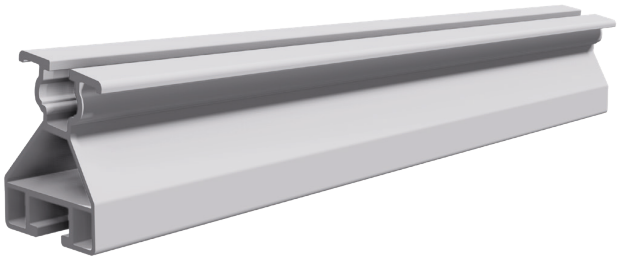


2. Module installation

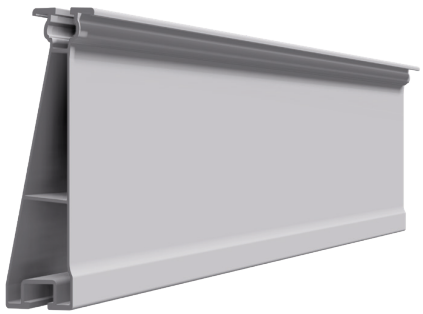
INSTALLATION KITS

For fastening to trapezoidal sheet metal, we offer the FixZ installation kit, which consists of a 450 mm profile cutting and a SingleFix-Vario pair set. The profiles are installed right where the modules' clamping ranges are. This allows the system to be additionally optimized for efficiency.

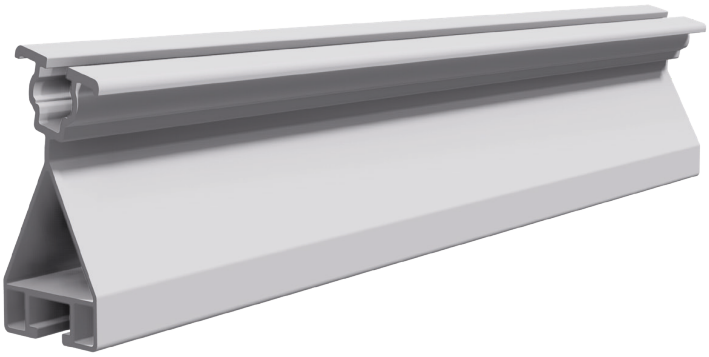
121010-202 FIXZ7 LOWER SYSTEM PROFILE 450 MM



121001-202 FIXZ7 UPPER SYSTEM PROFILE 450 MM



121009-202 FIXZ15 LOWER SYSTEM PROFILE 450 MM



121008-202 UPPER SYSTEM PROFILE 450 MM

TECHNICAL DATA

Material	System profile: Aluminum
Layout	Configuration and static measurement using the Schletter Configurator.
Statics	Statics calculation according to the current country-specific standards (in Germany EN 1991, EC1). Static systems for dimensioning the quantity of required fastening points. Please make sure you observe the statics information in each case!

For more information, see www.schletter-group.com

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RAPID16

PRODUCT SHEET

SCHLETTER

RAPID16

THE NEW FAMILY OF CLAMPS

Schletter's new Rapid16 family of modular clamps offers many advantages, such as better warehousing thanks to minimal versions, and a grounding pin in every module clamp. Rapid16 is right for any Schletter module-bearing profile with an 8 mm Klicknut and is designed for module frame heights of 30–50 mm.

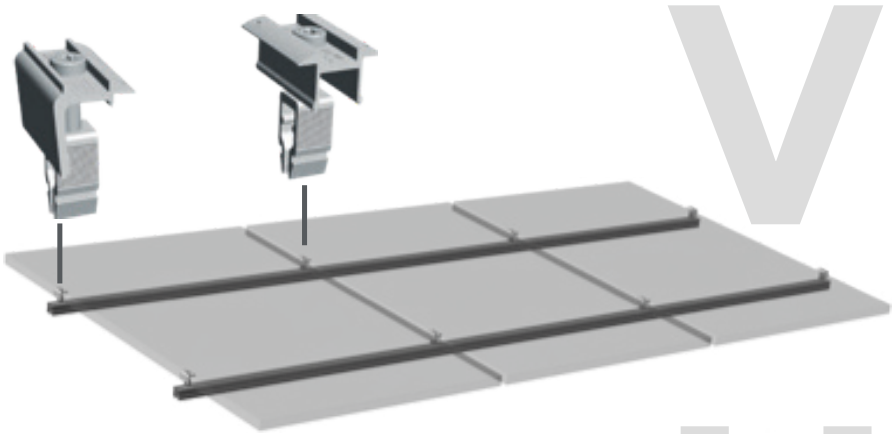
- **Minimal versions for all applications**
- **Integrated grounding pin**
- **Optimal warehousing and fast installation**
- **General building approval Z14.4-631**
- **10-year warranty**

The clamping range is divided into two sizes. The lower module clamps can hold modules with a frame height of 30–40 mm.
The higher ones are suitable for frame heights of 40–50 mm. With all middle clamps and the high end clamps, all claws can be rotated and are therefore suitable for vertical or horizontal (linear) module clamping. The exception is the end clamps for low module frames. For geometric reasons, rotation is not possible on them.
Therefore there is also a low end clamp in an "H" version.

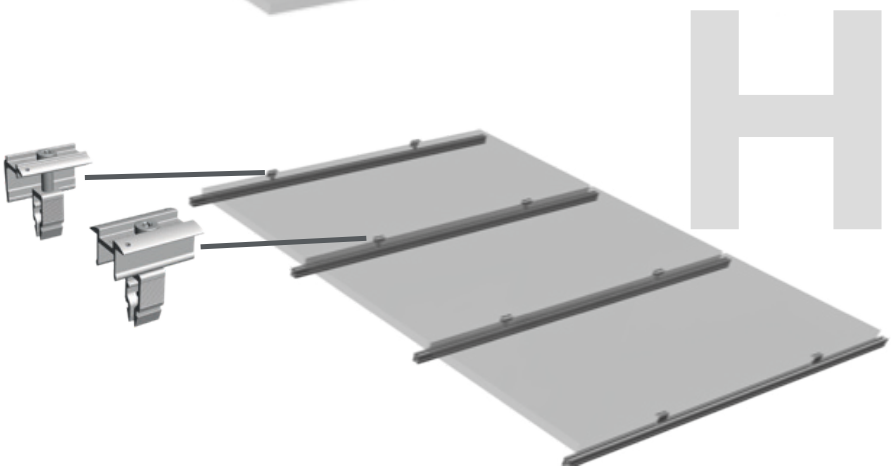
All clamps are also available in black anodized versions to best coordinate them with black module frames.

INSTALLATION TYPE

VERTICAL:



HORIZONTAL:



ITEM

BLANK ALUMINUM	BLACK ANODIZED	Item designation	Installation type
131121-002	**131121-902**	Center clamp Rapid16 40-50	
131101-002	**131101-902**	End clamp Rapid16 40-50	V + H
131121-001	**131121-901**	Center clamp Rapid16 30-40	V + H
131101-001	**131101-901**	End clamp Rapid16 30-40	V + H
131101-003	**131101-903**	End clamp Rapid16 H 30-40	V H

For more information, see www.schletter-group.com

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RAPID16

PRODUCT SHEET

SCHLETTER

RAPID16

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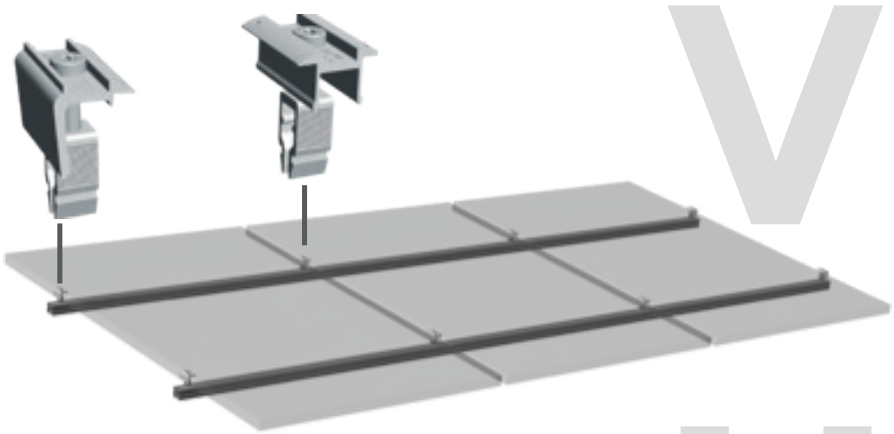
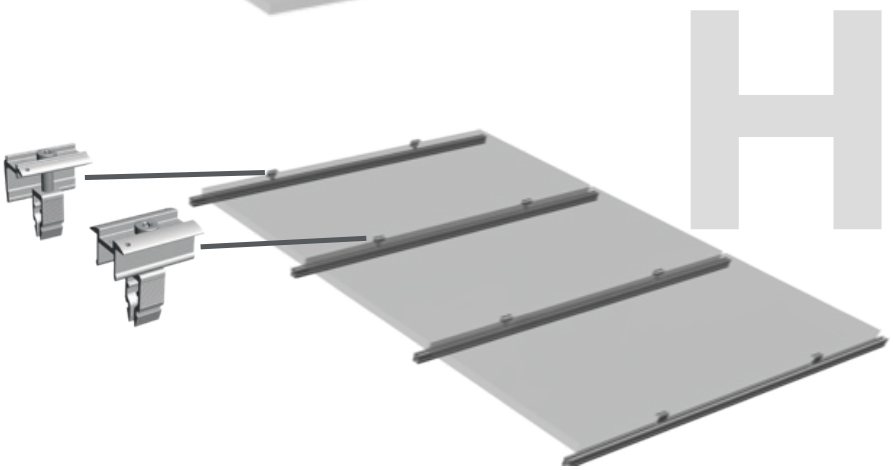


HORIZONTAL:



ITEM

BLANK ALUMINUM	BLACK ANODIZED	Item designation	Installation type
131121-002	**131121-902**	Center clamp Rapid16 40-50	
131101-002	**131101-902**	End clamp Rapid16 40-50	V + H
131121-001	**131121-901**	Center clamp Rapid16 30-40	V + H
131101-001	**131101-901**	End clamp Rapid16 30-40	V + H
131101-003	**131101-903**	End clamp Rapid16 H 30-40	V H

For more information, see www.schletter-group.com

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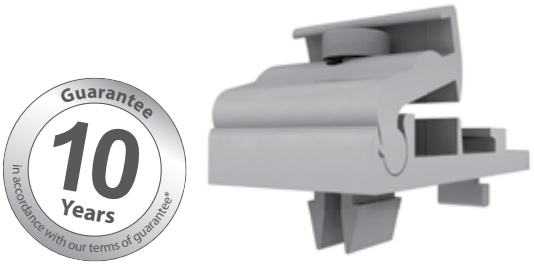
Rapid cross connector

The convenient way to connect overlapping rails

- Economically priced, quick and safe
- Can be assembled from above
- No additional tools required



The **Rapid cross connector** can be fastened to any rail which has a Schletter-Klick channel M8. One central fastening point with a single bolt guarantees quick assembly. The distribution of forces is structurally optimized by the new hook-in and clamp technique, to ensure that profiles cannot be twisted due to unsymmetrical loads.

All benefits of the Rapid system can now also be leveraged by the cross rail system!

❶ Hook in laterally and twist.

❷ Click in!

❸ Position the rail and bolt together from above.

Contrary to its predecessor, the **Rapid cross connector** (item no. 129063-000) is delivered completely pre-assembled, thus keeping the assembly effort to a minimum.

Further information at: www.schletter.eu

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*The terms of guarantee can be referenced at www.schletter.de/AGB_en