# Solar Installations on Metal Roofs

Mounting Solutions with S-5!® Clamps and Accessories





Since 1992, S-5!® Metal Roof Innovation Ltd. from the USA has been developing innovative clamps for a wide range of standing seam metal roofs as well as products for PV mounting and snow retention.

With the multiple tested and well proven S-5!® clamps, many different constructions can be easily and permanently mounted in a stable manner. They offer reliability and maximum holding strengths that are not achieved by other seam clamps available on the market.

Since 2008 RoofTech is the S-5® Master Distributor in Europe and stocks the S-5® products and accessories such as the BirdBlocker and CADDY Tool-Free flat roof feet.

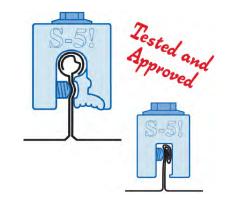












- ✓ The original S-5!® clamps for stable installation of a wide variety of applications.
- ✓ Simple, fast and penetrationfree installation.
- ✓ High holding forces in all load directions.
- ✓ S-5!® E and Z clamps approved by the building authorities: DIBt No. Z-14.4-719 - 05/2027
- ✓ S-5!® PV-Kit 2.0 MidGrab for PV mounting without rails.
- ✓ BirdBlocker for protection against nesting birds under the solar installation.
- ✓ Caddy Tool-Free feet for professional laying of cable ducts on flat roofs.

#### RoofTech GmbH - Master Distributor in Europa - www.rooftech.de

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## **Professional Solar - Mounting with S-5!® Clamps**

#### **Rail Systems mounted with S-5!® Clamps**

S·5®'s standard and Mini clamps continue to be the attachment choice of worldwide popular rack and rail solar systems. The Mini-Clamps from S·5!®! provide sufficient holding strength to install rail-systems on many types of standing seam metal roofs without penetrating the panels.

**To mount rail-systems with the screw channel located on the underside,** the approved E-Mini-FL and Z-Mini-FL clamps with flange are the right choice. The hammer-head bolts can be fixed quickly and securely through the 18x11mm hole in the flange. For mounting on the Mini-Clamps without flange we offer stainless steel adapter plates.

**C-shaped rails or rails with a side screw channel** that are fastened with a angle adapter plate, the S-5® Mini-clamps with the M8 threaded hole on top and the M8 stainless steel bolt are a simple and stable mounting option.





Rail systems fixed with S-5® E-Mini-FL on a double folded seam roof and with N1.5-Mini on a Nailstrip seam roof.



Rail with bottom channel fixed on the S-5® E-Mini-FL (with Flange)



C-rail mounted on S-5® Z-Mini for round bulb seams



Rail with side screw channel fixed with an angle adapter on S-5 $\mbox{\ensuremath{\mathbb{R}}}$  Z-Mini

### S-5!® PV-Kit 2.0 - The Direct-Mounting System

With the S-5® PV-Kit 2.0 you can fix solar modules with frame height from 30mm - 46mm directly without using rail-systems. The stainless steel module support disc of the PV-Kit 2.0 has optimized teeth which enable the grounding of the modules. Therefore, no straps or wires are required between the modules.

- Easy transport, no cuttings or unusable remains.
- Pre-assembled MidGrab module clamp saves time and money.
- Flat screw head provides a smooth and clean surface.
- Less wind loads due to roof-parallel mounting of the modules.
- Only one module is fixed crosswise to the seams therefore less crossmovements and stresses for the metal roof.
- Universally applicable on many different metal roofs with the S-5® Mini Clamps and the Multi-Trapezoidal Bracket MTH.





Roof-parallel installation, crosswise to the seam, with the PV-Kit 2.0 MidGrab and E-Mini on a double standing seam roof



S-5!® PV-Kit 2.0 MidGrab fixed on S-5!® Mini-Clamp



S-5!® PV-Kit 2.0 MidGrab can be universally mounted as end and middle clamp.

#### RoofTech – The Specialists for Attachments on Metal Roofs - www.rooftech.de

## Accessories for Solar Systems on Pitched and Flat Roofs



# Protect your Solar Installation on Pitched Roofs

- **Two needle lengths (12.5cm and 20cm)** for different distances between module and roof surface
- "Needles" are connected to each other for extra stability
- Easy mounting with stainless steel clips on the inner module frame
- Fastening without screwing, drilling or gluing
- No scratching or damage to the roof surface
- UV-resistant and recyclable HDPE plastic
- TÜV tested: UV resistance, product safety, REACH
- 10-year product guarantee

## CADDY® Solar Cable Clip

#### Made of steel and coated with CADDY® ARMOUR corrosion protection, Class C4: corrosion load strong, protection duration long - over 15 years.

- Accommodates up to two cables with diameters of 5mm to 7mm.
- Can be installed at frames with thicknesses of 1.5mm to 2mm.
- Attaches to the solar panel frame in up to four orientations.
- Flared edges help prevent damages to the cable's insulation.
- Provides a long-term and reliable fixing of the cables.
- Easy to install, no tools needed.

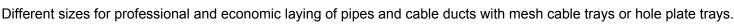
## CADDY® Tool-Free Flat Roof Support

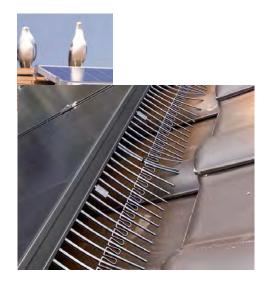
#### for installations of cable trays and conduit pipes on flat roofs

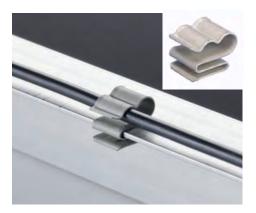
- Easy transport to the roof due to low weight and packed in boxes.
- Quick and simple installation with clamps or pins
- UV- and corrosion resistant. Material: PP und PE.
- Foam bottom for protection of the roof membrane.
- Optimized load balancing. Thereby minimized point load.
- Optimal mounting level 10cm above the roof surface.















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## S-5!<sup>®</sup> Clamp Assortment 2022

The S-5!® clamps with two set screws, M8 thread(s) on the top and one M8x16 stainless steel screw with locking serration, are used for very high loads such as e.g. for single fastenings, fall protection and the S-5!® ColorGard snow guard system.

#### S-5!® E-Clamps for Double Folded Seams

The E-clamps made of Aluminium have an opening slot of 7mm and offer mounting solutions on double standing seam roofs. Official approved by the DIBt.: Z-14.4-719.

#### S-5!® S-Clamps for Snap Lock and Angle Seams

With a bigger opening slot of 14mm the S-Clamps are extremely versatile for angle seams and abig number of industrial seams such as Snap-Lock or Snap-together profiles from Fischer-Kliptec, Schlehbach, Prive-Stylinov, Ruukki or similar.

#### S-5!® Z-Clamps for Round Bulb Seams

Z-Clamps are specially developed to fit profiles having round "bulb" seams with a max. 22mm diameter such as roofs of Kalzip®, Bemo®, Aluform, Euroseam® or Kingspan. Official approved by the DIBt.: Z-14.4-719.

#### S-5!® B-Clamps for Copper Roofs

The B-clamps with an opening slot of 6mm are the perfect choice for copper roofs with double standing seam. The B-clamps are **made of Brass** and thus enable materialcompatible installations on copper roofs.

#### S-5!® N-Mini and N1.5-Mini Clamps for Nail Strip Seams

The N-Mini clamp is suitable for 1 inch (25mm) high and the N1.5-Mini clamp and NH1.5-Mini clamp for 1.5 inch (38mm) high Nail-strip profiles such as those from Schlebach or similar.

The S-5!® R465 Mini Clamp are specially designed for the profiles Zambelli RIB-Roof 465, Domico GBS and similar. The exact fit with the set screws on both sides are the basis for the high holding forces.

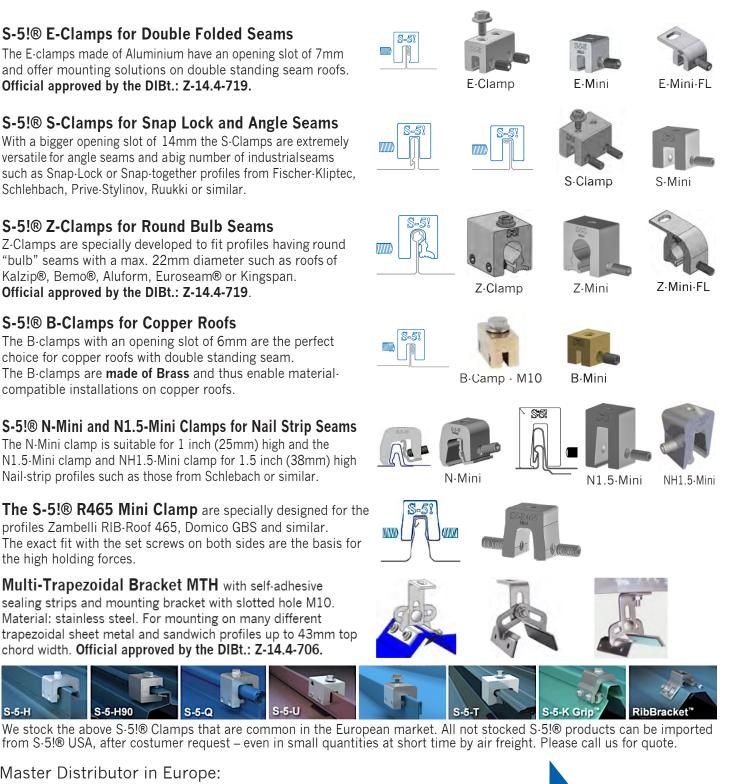
Multi-Trapezoidal Bracket MTH with self-adhesive sealing strips and mounting bracket with slotted hole M10. Material: stainless steel. For mounting on many different trapezoidal sheet metal and sandwich profiles up to 43mm top chord width. Official approved by the DIBt.: Z-14.4-706.

S-5-0





The S-5!® Minis with one set screw and M8 thread or with a flange and slotted hole are used in applications where rigid objects, such as rails, are to be fixed to the seams with several clamps. Other applications are the mounting of the S-5!®-PV-Kit 2.0, the RoofTech snow guard, cable trays, walkways, railings, satellite dishes, etc.



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