

S-5!®

The Right Way!

The right way to attach almost anything to metal roofs!

Installation Instructions

S-5!® Warning! Please use these products responsibly! Visit our website or contact your S-5! distributor for available load test results. The user and/or installer of these parts is responsible for all necessary engineering and design to ensure the ProteaBracket™ has been properly spaced and configured.

Notice to S-5! product users: Due to the many variables involved with specific panel products, climates, environmental phenomena and job particulars, the manufacturer cannot and does not express any opinions as to the suitability of any S-5! assembly for any specific application and assumes no liability with respect thereto. S-5! products are tested for ultimate holding strength on various profile types and materials. This information is available from the S-5! website: www.S-5.com. This document is an installation guide only and the photographs and drawings herein are for the purpose of illustrating installation, tools and techniques, not system designs. Information contained within is intended to apply to the document as a whole.

The ProteaBracket™ is designed to fit most trapezoidal sheet shapes. This product may not be suitable for snow retention or pv installations in snow country.

Tools Needed

- Rag
- String Line
- Tape Measure
- Screw Gun*-(optional depth sensing nose piece or adjustable clutch)
- 5/16" Drive Socket
- 1/2" Open End or Socket Wrench

*For time saving tool recommendations contact S-5!

Use Proper Hardware

ProteaBracket is mounted directly onto the crown of the trapezoidal sheet using the Bi-metal stainless steel screws (**provided**) or Bulb-Tite rivets (**not provided**).



Provided

Screw Specifications: 1/4" (6.3mm) Diameter - 1" (25mm) Length - Stainless Steel Self Tapping Screw with Hardened Steel Piercing Point - 5/16" (8mm) Hex Head - 5/8" (16mm) Stainless Steel / EPDM Sealing Washer



Not Provided

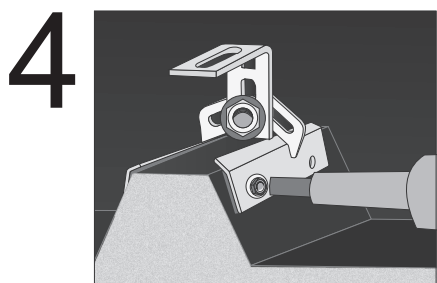
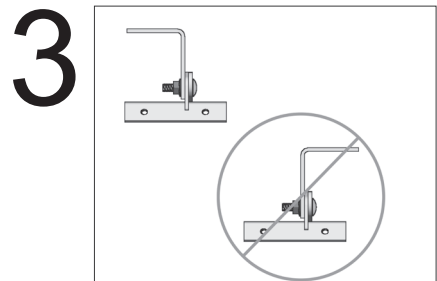
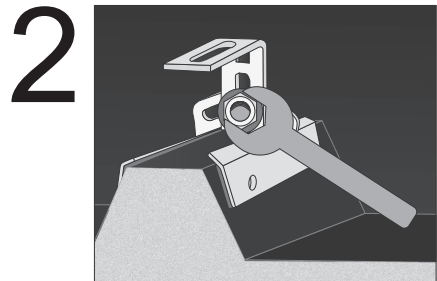
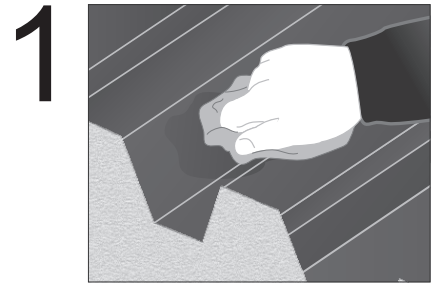
Rivet Specifications: 9/32" (7.7mm) Diameter - Alu/Alu Flat Head Bulb-Tite Rivet with 5/8" (16mm) EPDM Washer Grip: 0.032" / 0.8mm - 9.5mm

To Install ProteaBracket™

To ensure brackets are installed in a straight line, install a single ProteaBracket on each end of the roof at a measured, consistent distance from the bottom edge of the roof. Use a string line between the two brackets. Mount the remaining ProteaBrackets along the string line, directly into the sheeting of the trapezoidal rib of the roof. For upslope bracket spacing techniques reference the S-5! website at www.S-5.com.

1. Determine the location of assembly. The only surface preparation necessary is to simply wipe away excess oil and dirt from panel surface.
2. To create the appropriate fit, place ProteaBracket onto the panel rib and tighten the hinge bolt to secure the bracket's proper position (you will use a tool to tighten the hinge bolt to the specified torque at the end of Step 4). Note that the slotted L-flange should be oriented on the long side of the ProteaBracket base.

These instructions are for use by those experienced in the trade. Always follow appropriate safety precautions and use appropriate tools.



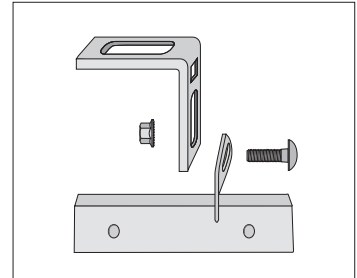
ProteaBracket™ Installation Instructions

3. Next, align carefully, and apply in the proper orientation. While the ProteaBracket is reversible, when installing multiple brackets, be sure that brackets on the same row have the same orientation, i.e. the longer side of the bases should face the same direction. Do not remove the EPDM sealant as this is for weather-proofing.
4. Secure the ProteaBracket directly into the crown of the roof profile by screwing the provided self-tapping stainless steel screws through the pre-punched holes of the ProteaBracket, alternating from one side of the bracket to the other, and back again. Be sure to use all four pre-punched hole locations to achieve tested holding strength. Be careful not to overtighten the screws; slight compression extrusion of rubber around the washer is a good visual check. If a fastener has been stripped, it is important to remove the fastener and replace it with a waterproof bulb rivet or larger diameter fastener. To avoid stripping, use screw gun with depth sensing nose piece or adjustable torque clutch. Lastly, hold the slotted L-flange firmly in place and tighten the hinge bolt to 225 inch pounds or 18.75 foot pounds. The ProteaBracket is now ready to install other ancillaries, such as the S-5-PV Kit.*

*When used in conjunction with the S-5-PV Kit, an extra nut is necessary to secure ProteaBracket's slotted L-flange to the universal PV stud and mounting disk.

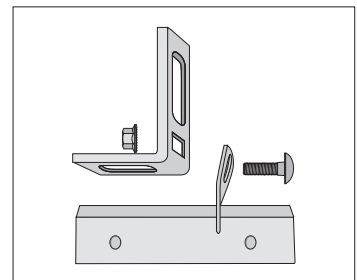
For Use With the S-5-PV Kit or Top Rail

When utilizing ProteaBracket™ to mount the S-5-PV Kit or top-mounted rail, the slotted L-flange should be installed with the shorter slotted side (the side without the square hole) rotated to the horizontal position. Tighten the hinge bolt. Keep the slotted L-flange straight as you tighten the nut to 225 inch pounds or 18.75 foot pounds.



For Use With Side-Mounted Rails for PV

When using a side-mounted rail for PV, flip the slotted L-flange upside down, causing the shorter slotted side (the side without the square hole) to be flush against the ProteaBracket base. In this position, the hinge bolt will lock into the square hole on the slotted L-flange. Tighten the hinge bolt. The slotted L-flange can now serve as a slotted L-foot for mounting the PV rail. Keep the slotted L-flange straight as you tighten the nut to 225 inch pounds or 18.75 foot pounds.



Caution: ProteaBracket™ may not be ideal for use in conjunction with snow retention systems. Take care when using to attach solar panels that are likely to be loaded with snow. All system design and engineering is the responsibility of the user. S-5! makes no recommendation as to specific layouts when using this part.

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