

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 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 herein 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" or 13 mm Open End or Socket Wrench

Use Proper Hardware

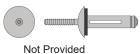
ProteaBracket is mounted directly onto the crown of the trapezoidal sheet using the stainless steel cap screws (**provided**) or Bulb-Tite rivets (**not provided**).



Screw Specifications:

1/4" (6.3mm) Diameter - 1" (25mm) Length - 5/16" (8mm) Hex head with EPDM rubber sealing washer





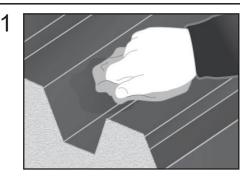
Rivet Specifications:

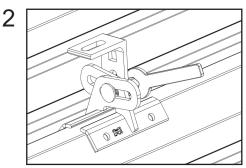
9/32" (7.7mm) Diameter - Alu/Alu Flat Head Bulb-Tite Rivet with 5/8" (16mm) EPDM Washer Grip: 0.032" / 0.8mm - 9.5mm

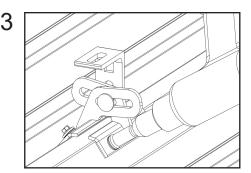
To Install ProteaBracket

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 ProteaBracket 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. (**Fig 1**)







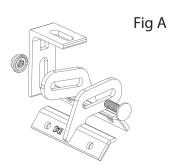
^{*}For time saving tool recommendations contact S-5!

- 2. To create the appropriate fit, place ProteaBracket onto the panel rib and tighten the hinge bolt to secure the bracket's proper position (**Fig 2**) (you will use a tool to tighten the hinge bolt to the specified torque at the end of Step 3). Align carefully and apply in the proper direction, (i.e. the L-foot should be on the same side of the bases and face the same way). **NOTE:** Peel release paper off the EPDM pad and adhere bracket to the roof.
- 3. Secure the ProteaBracket directly onto the crown of the roof profile by screwing the provided self-tapping screws through the pre-punched holes of the ProteaBracket, alternating from one side of the bracket to the other, and back again. (Fig 3) 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 rail or S-5-PVKIT ™ 2.0.* Do not attach additional L-foot on provided L-foot.

*When used in conjunction with the S-5-PVKIT 2.0, an extra nut is necessary to secure ProteaBracket's slotted L-flange to the PV Standoff and mounting disk.

For Use With the S-5-PVKIT 2.0 or Top Rail

When utilizing ProteaBracket to mount the S-5-PVKIT 2.0 or top-mounted rail, the L-foot should be installed as shown in **(Fig A)**. Tighten the hinge bolt. Keep the slotted L-foot 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, orient the L-foot as shown in **(Fig B)**. In this position, the hinge bolt will lock into the square hole on the slotted L-foot. Tighten the hinge bolt. Keep the slotted L-foot straight as you tighten the nut to 225 inch pounds or 18.75 foot pounds. (The rail will now be attached to remaining slot.)

NOTE: ProteaBracket comes preassembled in this orientation.

