S-5!®
The Right Way

The Right Way™ to attach almost anything to metal roofs!

Installation Instructions

Attention! This document is a guide only. This product may not be suitable for every application. The user is responsible for all necessary applications engineering and design. Please scan the QR code to the right for additional information, warnings and disclaimers regarding product use.

You can also view load test results at www.s-5.com where applicable, or contact your S-5! distributor for more information.

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

What's Included in Your Box
- (100) pre-assembled ProteaBrackets*
- (401) stainless steel capped self-piercing screws*

*Broken-box quantities may vary

ProteaBracket is designed to fit most trapezoidal sheet shapes. Caution is advised for rail-mounted PV installations in snow country.

What You'll Need for Installation
- String line
- Rag
- Screw Gun
- 5/16" (7,7 mm) Drive Socket
- 1/2" (13 mm) Open-end (Spanner) or Socket Wrench

**When installing the PVKIT as illustrated in Fig. B, an extra M8 nut is needed. (Purchase separately.)**

Components

ProteaBracket
(Pre-assembled)

Stainless Steel Capped Self-Piercing Screws
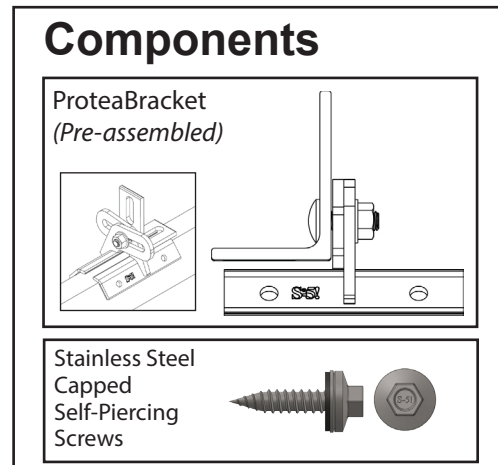
Are You Mounting With PVKIT® or Using Rails?
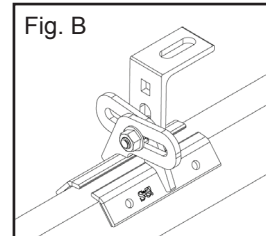
For Use With Side-Mounted Rails:
ProteaBracket comes pre-assembled in the correct orientation for use with side-mounted rails. If the assembly has been deconstructed, orient the L-foot as shown in Fig. A.

Fig. A
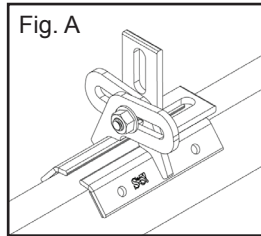
For the PVKIT or Bottom-Mounted Rails:
Remove the M8 nut and orient the ProteaBracket's L-foot as shown in Fig. B to mount the PVKIT or bottom-mounted rails.

Fig. B

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).

Provided   Not Provided

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

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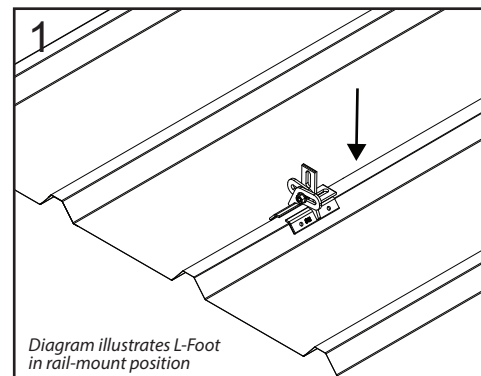9/32" (7.7 mm) Diameter - Alu/Alu Flat Head Bulb-Tite Rivet with 5/8" (16 mm) EPDM Washer Grip: 0.032" / 0.8 mm - 9.5 mm

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*Diagram illustrates L-Foot in rail-mount position*

How to Install ProteaBracket

1. Determine the location of assembly. Wipe away excess oil and dirt from panel surface.

2. To ensure brackets are correctly aligned, 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. For upslope bracket-spacing techniques, reference the S-5! website at www.S-5.com.

3. Before removing the protective paper over the EPDM pad, place ProteaBracket onto the panel rib and hand-tighten the hinge bolt to customize the bracket's proper fit. Because ProteaBracket is reversible, be sure all brackets on the same row have the L-foot in the same orientation and face the same way. Align carefully, peel the protective paper off the EPDM pad and adhere the bracket to the roof.

4. To secure ProteaBracket into the rib of the roof profile, alternate the provided screws through the pre-punched holes as shown in Fig. 4. Use all four pre-punched hole locations to achieve tested holding strength. Be careful not to over tighten the screws: a 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. To avoid stripping, use a screw gun with depth-sensing nose piece or an adjustable torque clutch. Lastly, hold the end or slotted L-flange straight and firmly in place while using the open socket wrench to tighten the hinge bolt to the specified torque. ProteaBracket is now ready to install other ancillaries, such as rail or PVKIT. **Do not attach an additional L-foot on the integrated ProteaBracket L-foot.**
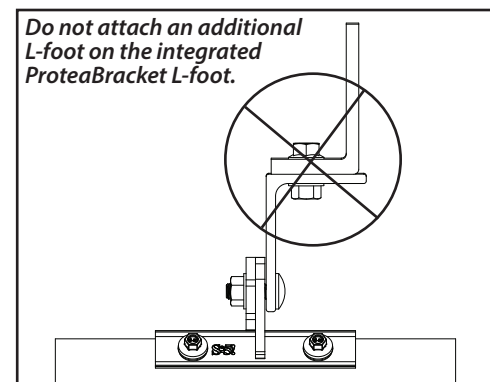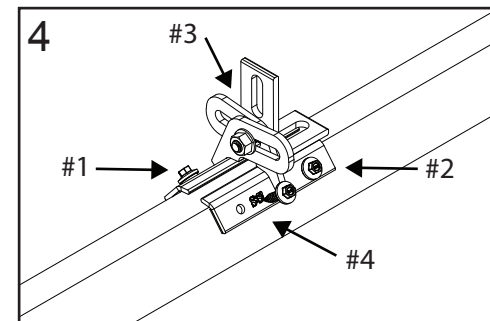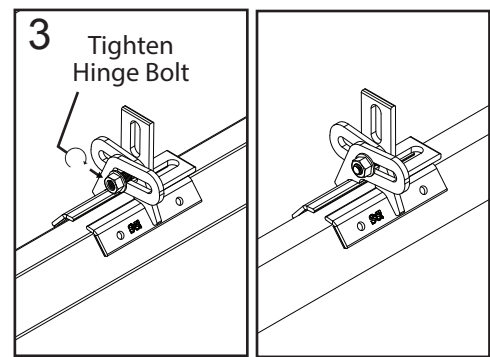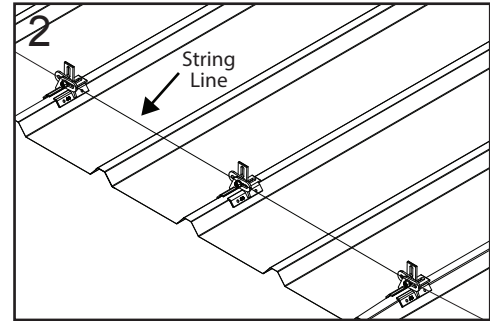
Specified Torque	Inch Pounds	Foot Pounds	Nm
Hinge Bolt	225	18.75	25.4
M8 Nut for PVKIT	225	18.75	25.4

NOTE: Any S-5! warranty and/or calculation may be void if hardware is used that was not furnished by S-5! directly or through one of their authorized distributors or any assembly that has not been tested by S-5!.

Do not attach an additional L-foot on the integrated ProteaBracket L-foot.