

S-5![®]

The Right Way!

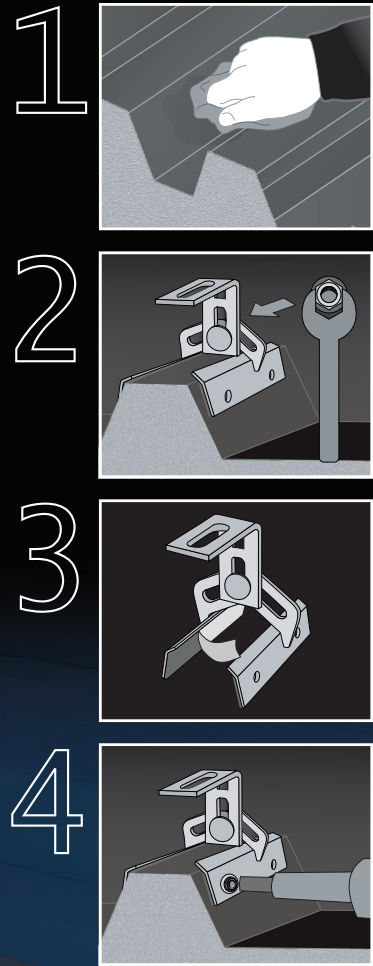
ProteaBracket[™]

ProteaBracket[™] is the most versatile standing seam metal roof attachment solution on the market, fitting most trapezoidal sheet profiles with and without intermediate insulation. It features an adjustable attachment base and multiple solar module attachment options (illustrated on back) to accommodate varying widths and heights. There are no messy sealants to apply and no chance for leaks; the ProteaBracket comes with factory-applied, adhesive rubber sealant to ensure quick installation and a weather-proof fit.

Installation is simple! The ProteaBracket is mounted directly onto the crown of the panel, straddling the profile. No surface preparation is necessary; simply wipe away excess oil and debris, align, and apply. Secure ProteaBracket through its pre-punched holes, using the hardened drill point S-5![®] screws.

ProteaBracket is the perfect match for our S-5-PV Kit and spares you the hassle of cold-bridging! For a solar attachment solution that is both economical and easy to use, choose ProteaBracket.*

*When ProteaBracket is used in conjunction with the S-5-PV Kit, an additional nut is required during installation.



S-5![®] ProteaBracket[™] is a versatile bracket that adjusts easily to most trapezoidal roof profiles.

ProteaBracket[™]

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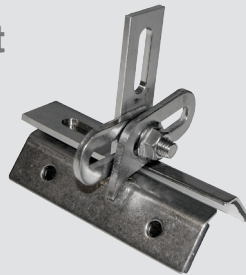
The right way to attach almost anything to metal roofs!

ProteaBracket™ is the perfect solar attachment solution for most trapezoidal exposed-fastened metal roof profiles! No messy sealants to apply. The factory-applied adhesive rubber sealant weather-proofs and makes installation easy!

Each ProteaBracket™ comes with a factory-applied, adhesive rubber sealant on the base. A structural A2 stainless steel bimetal attachment bracket, ProteaBracket is compatible with most common metal roofing materials. All four pre-punched holes must be used to achieve tested strength. Mounting hardware is furnished with the ProteaBracket. For design assistance, ask your distributor, or visit www.S-5.com for the independent lab test data that can be used for load-critical designs and applications. Also, please visit our website for more information including metallurgical compatibilities and specifications. S-5![®] holding strength is unmatched in the industry.

Multiple Attachment Options:

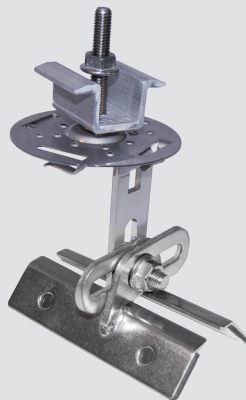
Side Rail Option



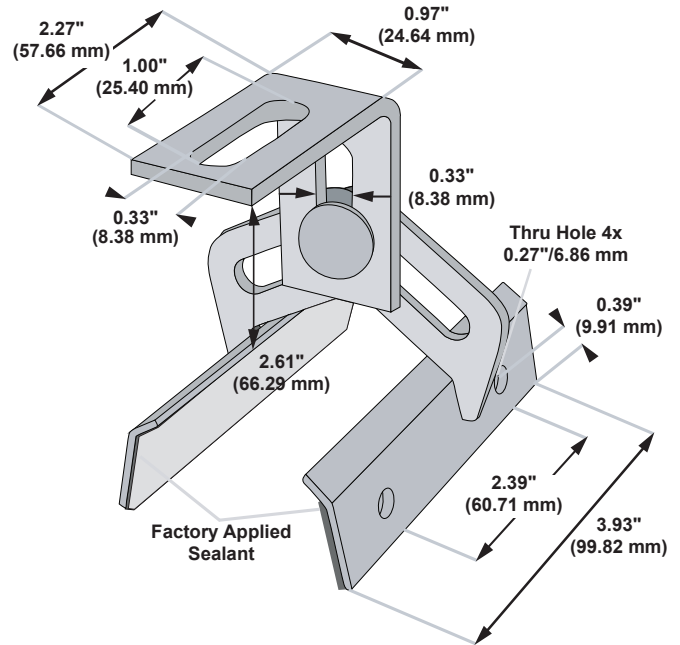
Top Rail Option



S-5-PV Kit Option

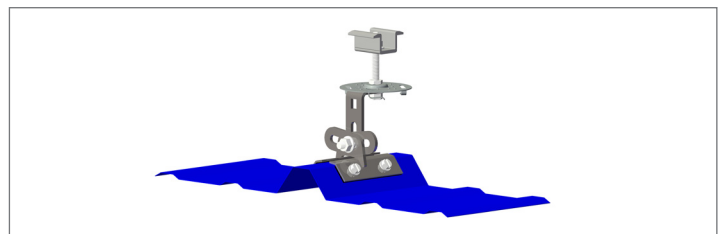


ProteaBracket™



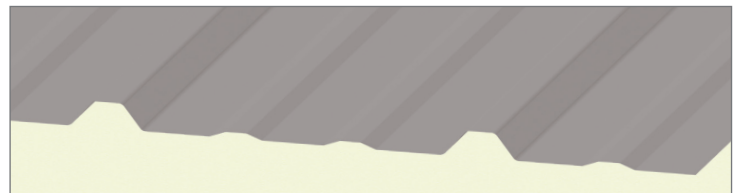
Please note: All measurements are rounded to the second decimal place.

Example Applications



S-5-PV Kit demonstrated with a ProteaBracket on a trapezoidal profile.

Example Profile



S-5![®] Warning! Please use this product responsibly!

Products are protected by multiple U.S. and foreign patents. For published data regarding holding strength, bolt torque, patents, and trademarks, visit the S-5! website at www.S-5.com.

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Distributed by

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
- ½" 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

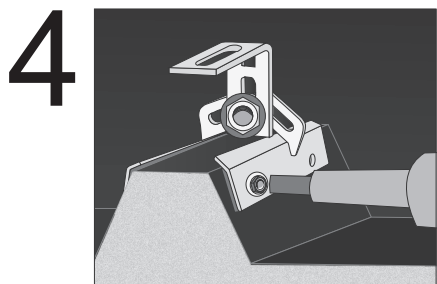
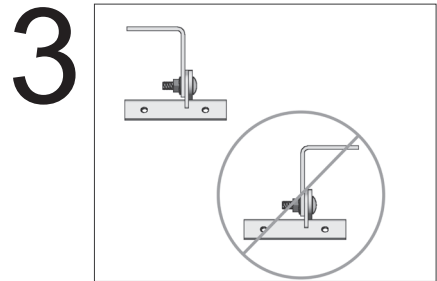
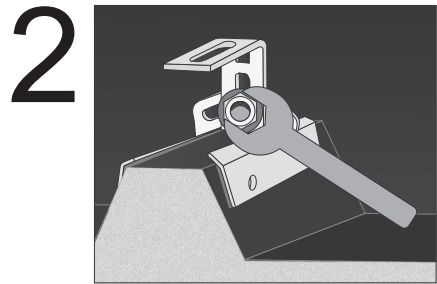
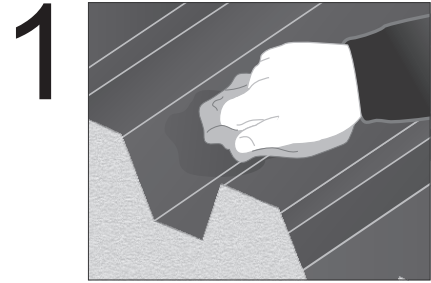
Rivet Specifications: 9/32" (7.7mm) Diameter - Alu/Alu Flat Head Bulb-Tite Rivet with 5/8" (16mm) EPDM Washer Grip: 0.032" / 0.8mm - 9.5mm

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.



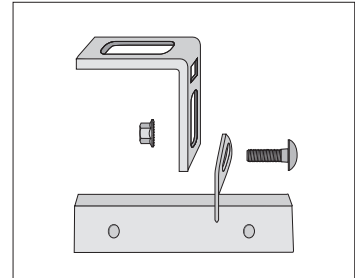
ProteaBracket™ Installation Instructions

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.

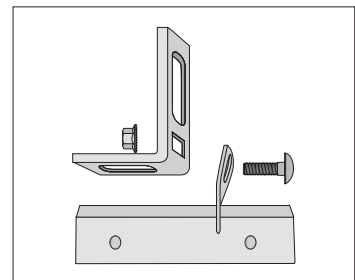
For Use With the S-5-PV Kit or Top Rail

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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