

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 S-5-USF Mini or S-5-EF Mini has been properly spaced and configured.

**Notice to S-5! users:** Due to the many variables involved with specific panel products, climates, snow melt 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 clamps included in this installation guide are components of the S-5! Utility System. The S-5-USF Mini is designed to fit 85% of U.S. standing seam profiles. The S-5-EF Mini is designed to fit double-fold standing seam profiles. When attaching to machine folded seams (regardless of panel profile and geometry), S-5! clamps are designed to engage the seam as shown.



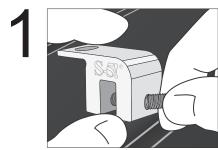
- Screw Gun\*
- 3/16" Allen Bit Tip (Provided)

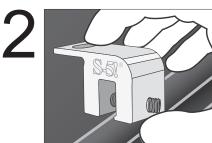
## To Install S-5-USF Mini / S-5-EF Mini

- 1. Partially thread the setscrew into the clamp by hand.
- **2.** Determine how to position the clamp. On many snap-together type seams, the setscrew is opposite the open (or overlap) side of the seam. On some seams, this aspect of clamp orientation is not critical.
- 3. Tighten the setscrew at the base of the clamp using a screw gun\* and the included screw gun bit tip. When relying on published load values, setscrew tension should be verified using calibrated torque wrench as indicated below to ensure the tool is consistently achieving the proper torque range. The slotted thru-hole in the flange is designed to accommodate a variety of nut and bolt connections.
  - \* For time-saving tool recommendations, call S-5!

Specified Torque	Inch Pounds	Foot Pounds	Nm
22ga steel	160–180	13–15	18–20
24ga steel and all other metals	130–150	11–12.5	15–17

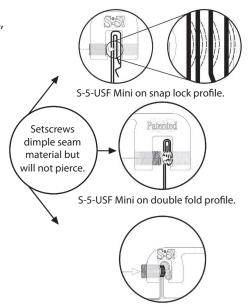
Once installed correctly, these clamps require no maintenance or re-inspection for the life of the roof







Above illustrations show S-5-USF Mini.



S-5-EF Mini on single fold profile.

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Products are protected by multiple U.S. and foreign patents. Visit the website at www.S-5.com for complete information on patents and trademarks. For maximum holding strength, setscrews should be tensioned and re-tensioned as the seam material compresses. Clamp setscrew tension should be verified using a calibrated torque wrench between 160 and 180 inch pounds when used on 22ga steel, and between 130 and 150 inch pounds for all other metals and thinner gauges of steel. Consult the S-5! website at www.S-5.com for published data regarding holding strength.

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