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 S-5! clamps have been properly spaced and configured.
**Notice to S-5! product 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 S-5-T, S-5-Z, S-5-Q, and S-5-H clamps fit "T" and "bulb" shaped seams. Please see individual clamp product sheets or the S-5! website for profile details and clamp dimensions.**

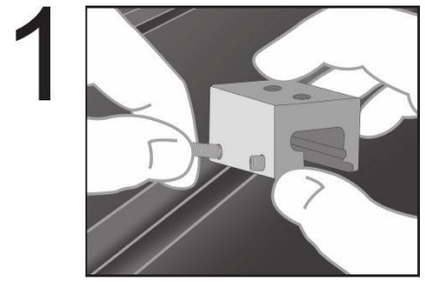
## Tools Needed

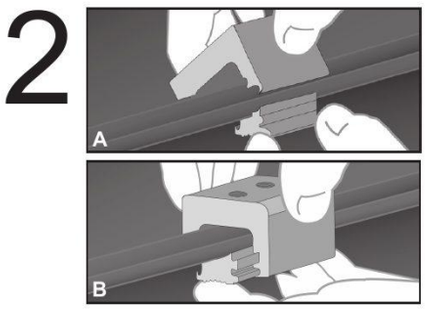
- Screw Gun*
- T30 Torx Bit Tip (Provided)
- Dial-Calibrated Torque Wrench
  (For accurate tension values, do NOT use a clicking torque wrench.)

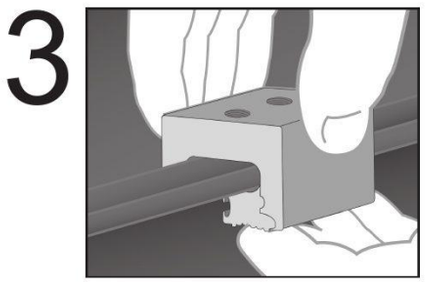
## To Install the S-5-T, S-5-Z, S-5-Q, and S-5-H

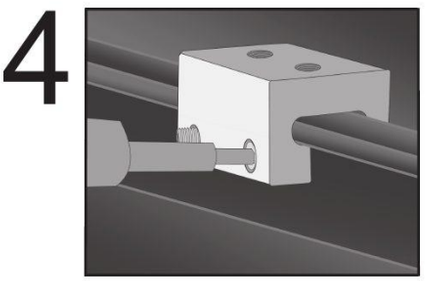
1. Partially thread the provided round-point setscrews into the clamp by hand.
2. Position clamp at desired location along seam with the bolt hole in the correct (upslope or downslope) orientation.
3. **For S-5-T, S-5-Z, and S-5-Q (illustrated in image 2A):** Install by holding the clamp insert piece under the edge of the seam, then roll the clamp into position over the seam and the insert.
   **For S-5-H (illustrated in image 2B):** Install by positioning clamp at desired location on seam. Then, **slide** insert into place.
4. Tighten the setscrews at the base of the clamp using a screw gun* and the included screw gun bit tip. Standard clamps requiring two setscrews should be tensioned and re-tensioned as the seam material compresses, i.e. tighten the first setscrew, then the second; then repeat until each setscrew achieves the recommended torque. The setscrews will dimple the seam material but will not penetrate it. When relying upon tested load values, setscrew tension should be verified periodically throughout installation using a calibrated torque wrench at 160 to 180 inch pounds on 22ga steel and 130 to 150 inch pounds on all other metals and thinner gauges of steel. Once installed correctly, these clamps require no maintenance or re-inspection for the life of the roof (See reverse for setscrew torque table and units).

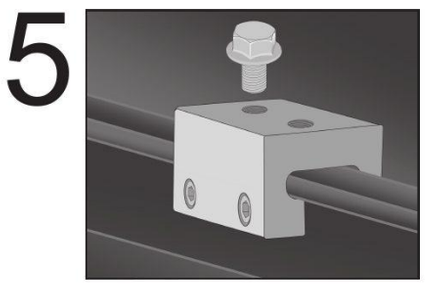
   *** For time-saving tool recommendations, call S-5!**
5. For critical attachment applications utilizing an M8-1.25 X 16 mm hex flange bolt, tighten the included M8 bolt to 160 inch pounds (13 foot pounds).



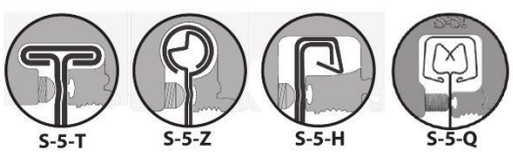




Above illustrations show S-5-T clamp, along with S-5-H clamp on step 2.




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

888-825-3432 | www.S-5.com S-5-T, S-5-Z, S-5-Q, S-5-H & Mini Install

# To Install the S-5-T Mini, S-5-Z Mini, S-5-Q Mini, and S-5-H Mini

1. Partially thread the provided round-point setscrew into the clamp by hand.
2. Position clamp at desired location along seam.
3. **For S-5-T Mini, S-5-Z Mini, and S-5-Q Mini (illustrated in 2A):** Install by holding the clamp insert piece under the edge of the seam, then roll the clamp into position over the seam and the insert.
   **For S-5-H Mini (illustrated in 2B):** Install by positioning clamp at desired location on seam. Then **slide** insert into place.
4. Tighten the setscrew at the base of the clamp using a screw gun* and the included screw gun bit tip. The setscrew will dimple the seam but will not penetrate it. When relying upon tested load values, setscrew tension should be verified throughout the installation using a calibrated torque wrench as indicated below to ensure the tool is consistently achieving proper torque range.

   ***For time-saving tool recommendations, call S-5!**

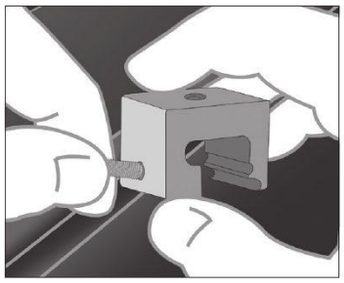
| Specified Torque | Inch Pounds | Foot Pounds | Nm |
|---|---|---|---|
| **22ga steel** | 160–180 | 13–15 | 18–20 |
| **24ga steel and all other metals** | 130–150 | 11–12.5 | 15–17 |

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

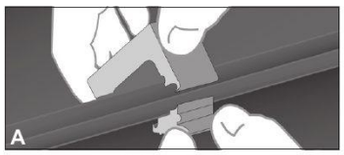
5. For critical attachment applications utilizing an M8-1.25 X 16 mm hex flange bolt, tighten the M8 bolt (sold seperately) to 160 inch pounds (13 foot pounds).

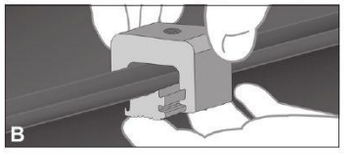
**NOTE**: Any S-5! warranty and/or calculation may be void if hardware is used that was not furnished by S-5! directly or through one of their licensed distributors

1

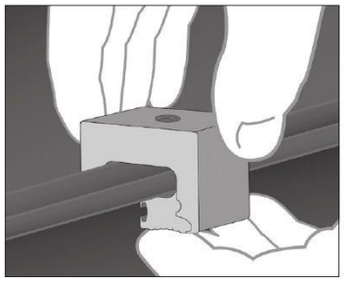


2

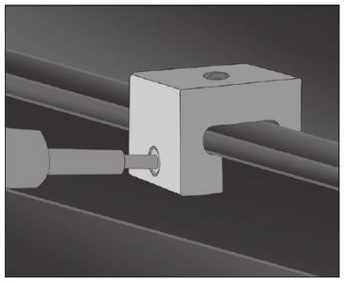



3



4



5



Above illustrations show S-5-T Mini clamp, along with S-5-H Mini clamp on step 2.

**S-5!® Warning! Please use this product responsibly!**

**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, i.e. tighten the first setscrew, then the second; then repeat until each setscrew achieves the recommended torque. 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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