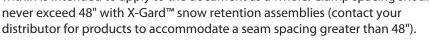


The right way to attach almost anything to metal roofs!

Installation Instructions

Stop! Has your snow retention system been designed properly with the assistance of a distributor?

Notice to S-5!® product users: Specific layout and assembly schematics for S-5! products are the responsibility of the user or project designer. 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! clamps are tested for ultimate holding strength on various seam types and materials. This information is available from S-5! distributors as well as 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. Clamp spacing should never exceed 48" with X-Gard™ snow retention assemblies (contact your



Tools Needed

- String Line

- Screw Gun*
- Calibrated Torque Wrench
- Electric Reciprocating Saw (to cut pipe)
- Allen Wrench (included) #10-16 x 1" Tek Screws (1 per every 50' of pipe) supplied by others
 - (For accurate tension values, do NOT use a clicking torque wrench)

*For time saving tool recommendations contact S-5!

To Install X-Gard[™] 1.0 & 2.0

Summary

- 1. The X-Gard attachment clamps will need to be properly spaced and mounted to the roof.
- 2. The X-Gard pipe will then be preassembled on the X-Gard brackets.
- **3.** The bracket/pipe preassembly will then be attached to the roof-mounted clamps.

Before You Start

Place a string line across the top of the panel seams at the desired location to establish a true line for installation of the snow retention system. Individually measuring each attachment location from the eave is not recommended.

Installation Steps 1-3

1. S-5! attachment clamps are installed differently depending upon clamp model and seam style. Please see the installation instructions included with your clamps.

To properly position/space the X-Gard attachment clamps on the roof, the clamps should be temporarily attached to the X-Gard brackets, aligned with the string line, tightened to the roof, and then the X-Gard brackets removed for preassembly with the X-Gard pipe.

- 1a. First, using the M8 bolt provided, manually tighten the attachment clamp to the X-Gard bracket. When using a directional clamp, make sure it is fastened to the X-Gard bracket correctly to ensure the clamps and their roundpoint setscrews engage the seam properly.
- **1b.** Next, thread the setscrews into the clamps by hand.
- 1c. Position the clamp/bracket assembly appropriately on the panel seams, using the string line as a guide, and tighten the setscrews. The pipe straps should be facing downhill.

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

