

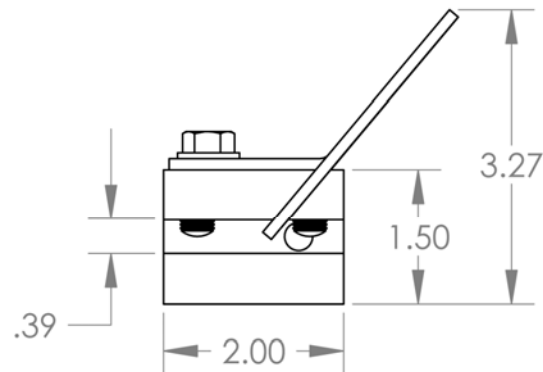
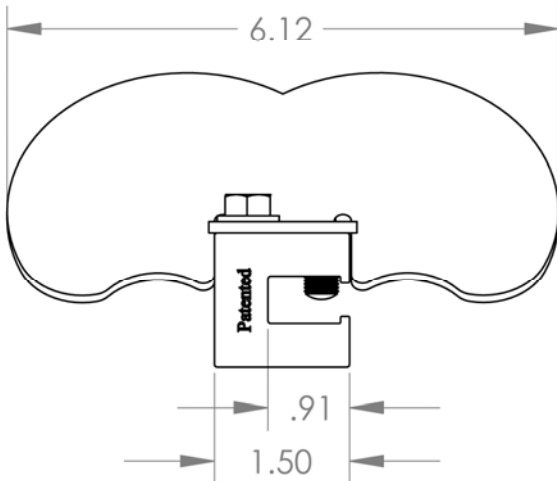
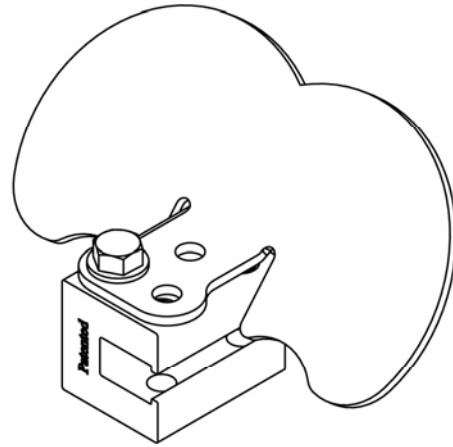
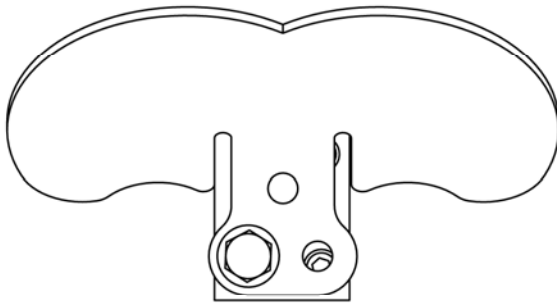


**NOTES:**

1. SNOW GUARDS TO BE INSTALLED ACCORDING TO MANUFACTURER'S SPECIFICATIONS.
2. DO NOT SCALE DRAWINGS.
3. CONTACT MANUFACTURER FOR CUSTOM MATERIALS AND COLORS.
4. CONTACT MANUFACTURER FOR SUGGESTED LAYOUT.

REVISIONS		
REV.	DESCRIPTION	DATE

- SELECT DESIRED FINISH
- MILL (STANDARD)
  - POWDER COAT
  - ANODIZED



**#33T Pad-Style Clamp to the Seam Snow Guard for Standing Seam Metal Roofs**

## #33T Snow Guard Specification Sheet

### PART 1 - GENERAL

- 1.1 SUMMARY
- A. WORK INCLUDES
    - 1. #33 Snow guard that does not penetrate the roof by using S-5! Technology.
    - 2. Provide appropriate snow guard and fasteners for the roof system.
  - B. RELATED SECTIONS
    - 1. Section 07600: Flashing and Sheet Metal.
    - 2. Division 7: Thermal and Moisture Protection.
- 1.2 SYSTEM DESCRIPTION
- A. COMPONENTS:
    - 1. #33 Snow guard system consists of snow guard block with bolt, washer, pad assembly and set screws.
  - B. DESIGN REQUIREMENTS:
    - 1. Spacing to be recommended by manufacturer or building engineer.
    - 2. Minimum 2 set screws per snow guard.
    - 3. It is important to design new structures or assess existing structures to make sure that they can withstand retained snow loads.
- 1.3 SUBMITTAL - Submit manufacturer's specifications, standard detail drawings, recommended layout and installation instructions.
- 1.4 QUALITY ASSURANCE - Installer to be experienced in the installation of specified roofing material and snow guards for not less than 5 years in the area of the project.
- 1.5 DELIVERY / STORAGE / HANDLING - Inspect material upon delivery and order replacements for any missing or defective items. Keep material dry, covered and off the ground until installed.

### PART 2 - PRODUCTS

- 2.1 MANUFACTURER
- A. Alpine SnowGuards. A division of Vermont Slate & Copper Services Inc., 289 Harrell St, Morrisville, VT (888) 766-4273.
- 2.2 MATERIALS
- A. Snow guard Block is extruded and milled 6061-T6 and 6005-T5 Aluminum
  - B. Snow guard Pad is extruded or milled 5052-H32 Aluminum.
  - C. Fasteners are 302 or 304 Stainless Steel.
- 2.3 FINISH - All materials provided mill finish. Coatings available upon request.

### PART 3 - EXECUTION

- 3.1 EXAMINATION
- A. Substrate: Inspect roof system to be properly attached and installed to withstand additional loading incurred. Notify General Contractor of any deficiencies before installing Alpine SnowGuards.
- 3.2 INSTALLATION
- A. Comply with architectural drawings for location and with Manufacturer's instructions for installation and recommended layout.

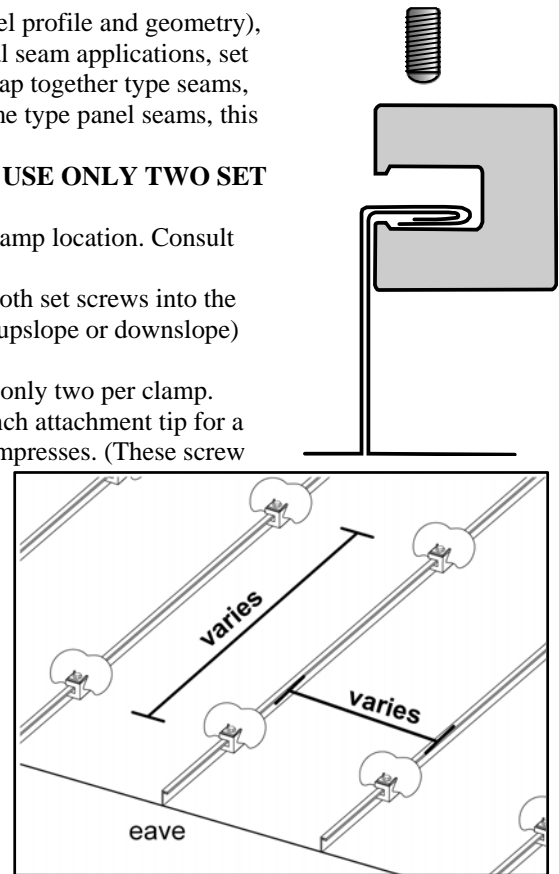
## #33T Pad-Style Clamp to the Seam Snow Guard for Standing Seam Metal Roofs

## Installation Instructions for #33 "T" Pad Style Snow Guards

### Bracket Installation

Note: #33 snow guards are shipped unassembled, the clamp is to attached to the seam before the flag is mounted.

1. When attaching clamps to seams which are machine folded (regardless of panel profile and geometry), the S-5-U clamp is designed to engage the seam as shown ("d"). For horizontal seam applications, set screws must be accessible from the top for tightening (see #33T). On many snap together type seams, the set screws are opposite the open, or overlap side of the seam ("b"). On some type panel seams, this aspect of clamp orientation is not critical ("c").
2. **BOTH SCREWS SHOULD BE IN THE SAME SIDE OF THE CLAMP; USE ONLY TWO SET SCREWS PER CLAMP.**
3. NOTE: Some horizontal seams may require additional hand crimping at the clamp location. Consult your S-5! distributor for crimping tool information.
4. Determine which side of the clamp to load the set screws into, and assemble both set screws into the same side of the clamp, being careful that the bolt hole will be in the desired (upslope or downslope) orientation, with the set screws on the correct side of the seam.
5. NOTE: S-5-U has four set screw holes to make the clamp more versatile. Use only two per clamp.
6. Position the clamps appropriately on the panel seam. Using a 3/16" allen-wrench attachment tip for a 1/4" drive screw gun, tighten and retighten set screws as the seam material compresses. (These screw gun tips are available from your S-5! product distributor). On low seam profiles, a 4" bit extension on the screw gun will facilitate this work. Most industrial grade screw guns are rated at 115 inch-pounds tightening torque and will deliver between 115 and -lbs (13-17Nm) at the *highest torque setting*. Please see ultimate load table on the back of this page or attached page for proper screw tensions and caution notes for various panel seams.
7. **CAUTION:** Battery-operated guns may not deliver consistent screw tension. Drywall guns may not deliver adequate tension.
8. Snow Guards may be installed in either a straight line along the eave or in a staggered pattern. If a staggered pattern is desired then the stagger should not be more than 18 inches.



The S-5! clamp is a handy gadget for a great many uses, but will not perform miracles. **PLEASE USE THIS PRODUCT RESPONSIBLY!** Any loads imposed on the S-5! clamp will be transferred to the panels. Panels must be adequately attached to building structure to resist these loads. For critical installations, inquire for specific test data of ultimate tensile load on specific panel materials and seam types. When tabled values are used, screw tensions should be verified and factors of safety should be used as appropriate. The manufacturer expresses no opinions as to the suitability of the S-5! for any specific application or project condition.

**ALWAYS PROVIDE WORKER FALL PROTECTION WHEN INSTALLING S-5!. THE S-5! CLAMP IS NOT APPROVED FOR USE AS A PERSONAL FALL RESTRAINT DEVICE**

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## #33T Pad-Style Clamp to the Seam Snow Guard for Standing Seam Metal Roofs

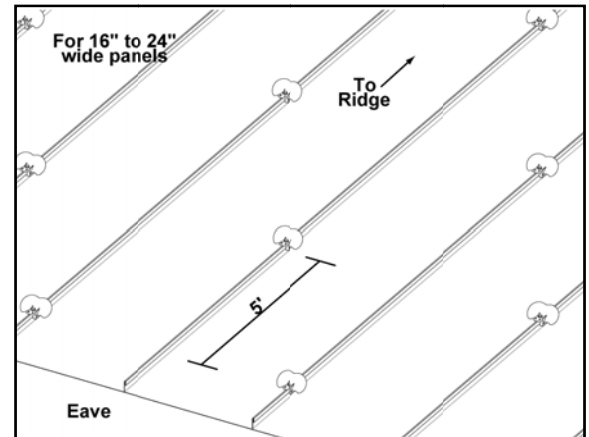
## Layout and Spacing for #33T Pad Style Snow Guards

### For Roofs with a Pitch of 6/12 or Less and a Building Design Load of 75 psf or Less

#### For 16' to 24" Wide Panels

Starting along the eave above the line of the exterior supporting wall (not on the overhang) install a snow guard on every other seam. Install the next row 5' above the first staggered by one panel – see illustration.

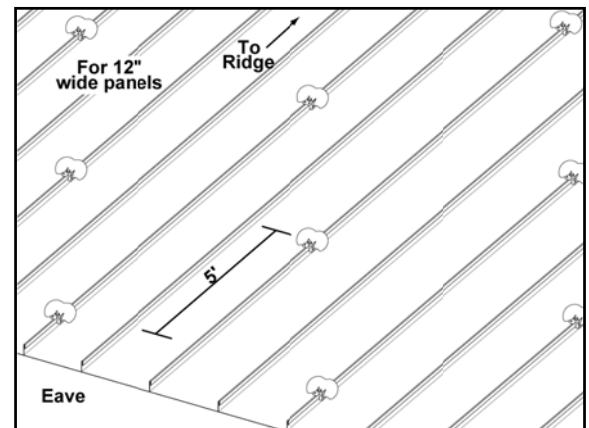
The snow guards should be 32" to 48" on center horizontally and 5' vertically to within 10' of the ridge.



#### For 12" Wide Panels

Starting along the eave above the line of the exterior supporting wall (not on the overhang) place a snow guard on every 4<sup>th</sup> seam every 5' up the rafter until you are within 10' of the ridge.

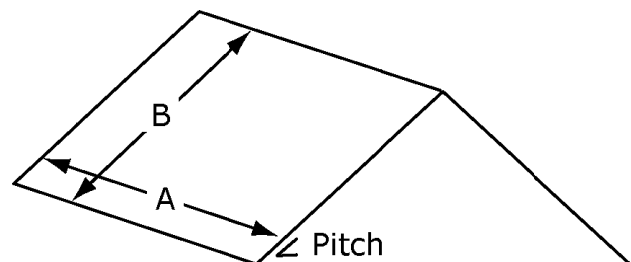
The snow guards should be approximately 48" on center horizontally and 5' vertically to within 10' of the ridge.



**For all other roofs or for a detailed recommended layout contact the manufacturer.**

#### Information Required for Layout

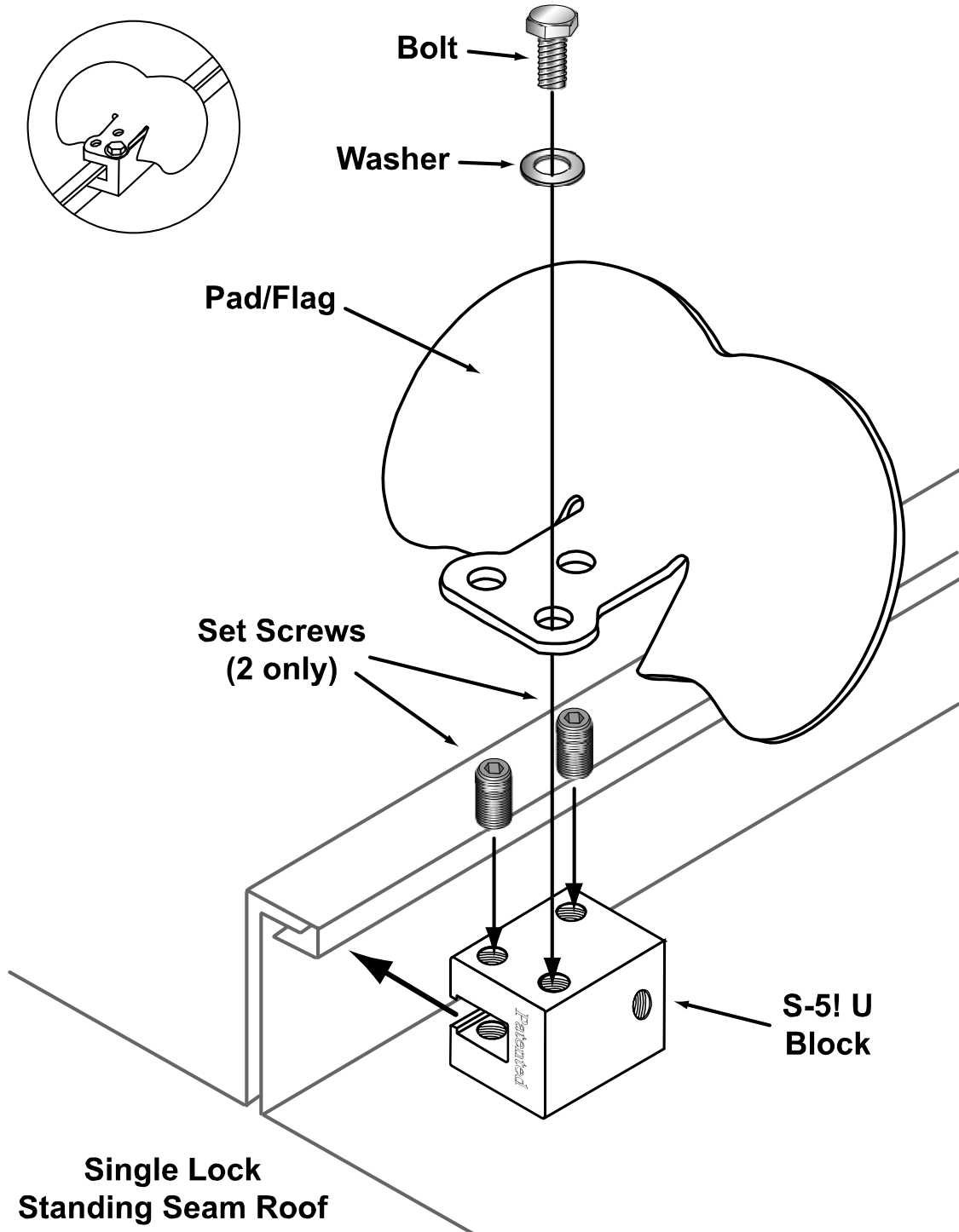
- Length along eave (A)
- Distance eave to peak (B)
- Panel width and seam configuration
- Roof pitch
- Building Design Load (psf)
- Panel manufacturer and model



### #33T Pad-Style Clamp to the Seam Snow Guard for Standing Seam Metal Roofs



**Assembly for #33 T Snow Guard**



**#33T Pad-Style Clamp to the Seam Snow Guard for Standing Seam Metal Roofs**