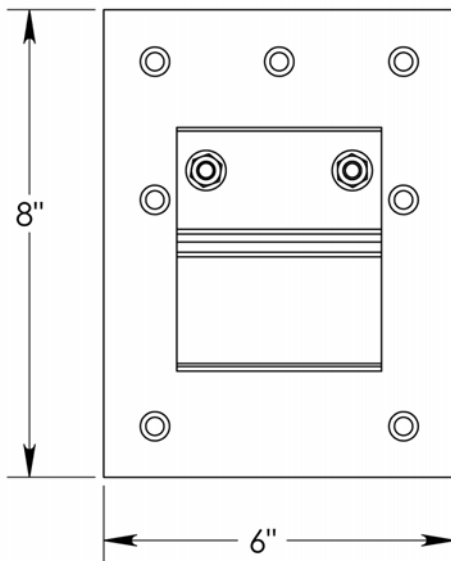




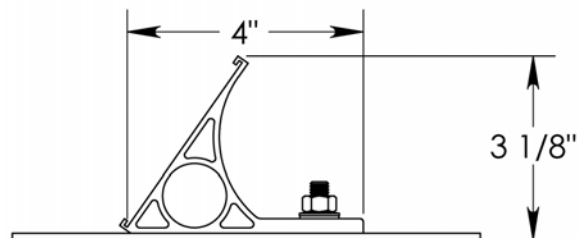
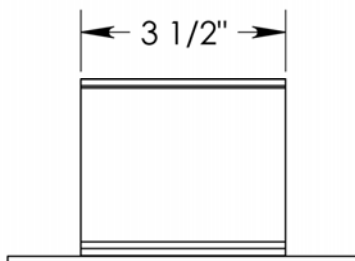
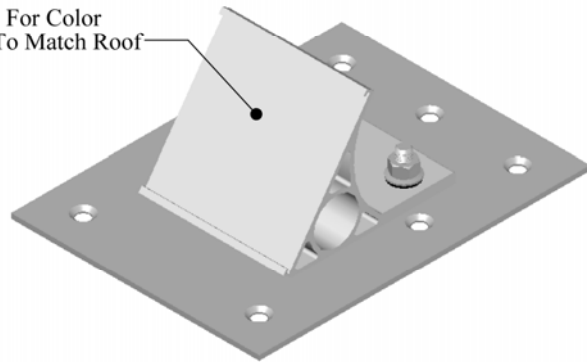
NOTES:

1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. DO NOT SCALE DRAWINGS.
3. CONTACT MANUFACTURER FOR DETAILED LAYOUT.

REVISIONS		
REV.	DESCRIPTION	DATE



Allows For Color Insert To Match Roof



#90 Hybrid Pad/Pipe-Style Snow Guard for Membrane Roofs

#90 Snow Guard Specification Sheet

PART 1 - GENERAL

- 1.1 SUMMARY
- A. WORK INCLUDES
- #90 Snow guard that attaches directly to the roof deck.
 - Provide appropriate snow guard and fasteners for the roof system.
- B. RELATED SECTIONS
- | | | |
|-------------------|----------------------------------|-----------------------------|
| 1. Section 07600: | Flashing and Sheet Metal | MasterFormat™ 2004 07 60 00 |
| 2. Section 07500: | Membrane Roofing | MasterFormat™ 2004 07 50 00 |
| 3. Division 7: | Thermal and Moisture Protection. | |
- 1.2 SYSTEM DESCRIPTION
- A. COMPONENTS:
- #90 Snow guard system consists of aluminum snow guard bracket and stainless steel base plate.
 - Fasteners
 - To be of metal compatible with snow guards.
 - Fasteners should be selected for compatibility with the roof deck.
 - Fastener strength should exceed or be equal to that of the snow guard system (see test information).
 - Sealant: to be membrane roof manufacturer approved when desired.
- B. DESIGN REQUIREMENTS:
- Spacing to be recommended by manufacturer or building engineer.
 - A minimum of 5 fasteners per snow guard base plate.
 - 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 05661 (888) 766-4273.
- 2.2 MATERIALS
- A. Snow guard Block is extruded and milled 6061-T6 Aluminum
- B. Base Plate is; (choose one)
- 11 gauge 302 Or 304 Stainless Steel.
 - 11 gauge 1010 cold rolled steel or 1008 hot rolled steel.
- C. Fasteners connecting base plate to Snow guard Block are 302 or 304 Stainless Steel.
- 2.3 FINISH - All materials provided mill finish.

PART 3 - EXECUTION

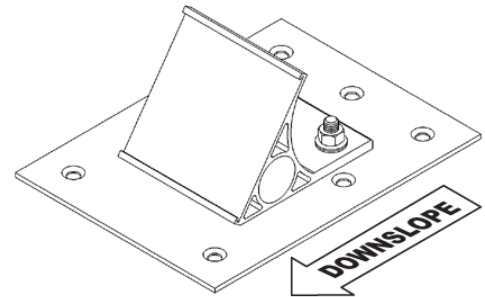
- 3.1 EXAMINATION
- A. Substrate: Inspect roof system to be properly attached and installed to withstand additional loading incurred. Notify General Contractor of any deficiencies before installing Alpine SnowGuards.
- 3.2 INSTALLATION
- A. Comply with architectural drawings for location and with Manufacturer's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

#90 Hybrid Pad/Pipe-Style Snow Guard for Membrane Roofs

#90 Snow Guard Installation Instructions for Membrane Roof

I. Base Plate (The base plate is the flat piece with the two threaded studs.)

- A. A Continuous block is required underneath the membrane roof surface to attach the base plate. This base flange is 8" long and 6" wide. Mounting this system over insulation alone may crush the insulation and cause the roof to leak.
- B. Place the base plate on top of the finished membrane roof.
NOTE: The threaded studs on the base plate are not centered. For #90 installation, align the base plate so that the studs are on the up-slope end of the base plate.
- C. Before fastening base plate through membrane to mounting block below, apply a generous amount of acceptable sealer under the flange.
- D. Consult with manufacturer, project engineer or fastener company to determine the fastener required to attach the base plate to the wood block. See test information for assistance.



II. Membrane Flashing of Base Plate

- A. Use Alpine SnowGuards' membrane flashing or cut a piece of membrane 12" square and punch two holes to match the studs on the base plate.
- B. Before installing flashing apply a generous amount of acceptable sealer around threaded studs.
- C. Apply flashing over base plate using proper mastics or installation techniques so as to create a water tight patch.
- D. The threaded studs are now the only part of the base plate exposed. NOTE: Due to the sealer applied around the studs there may be bleed out at this opening. When the snow guard block is installed over the studs and tightened this bleed out will help to create a water tight compression fitting.

III. Installation of snow guard block

- A. Install snow guard block over threaded studs. The Block will be centered on the base plate when installed properly.
- B. Place one bonded neoprene washer over each stud.
- C. Place locking nut over bonded neoprene washer and tighten.

Color Insert (optional)

The #90 snow guard accepts a metal color insert of material to match the roof color. An acceptable sealant should be applied to the back of the insert to hold it in place.

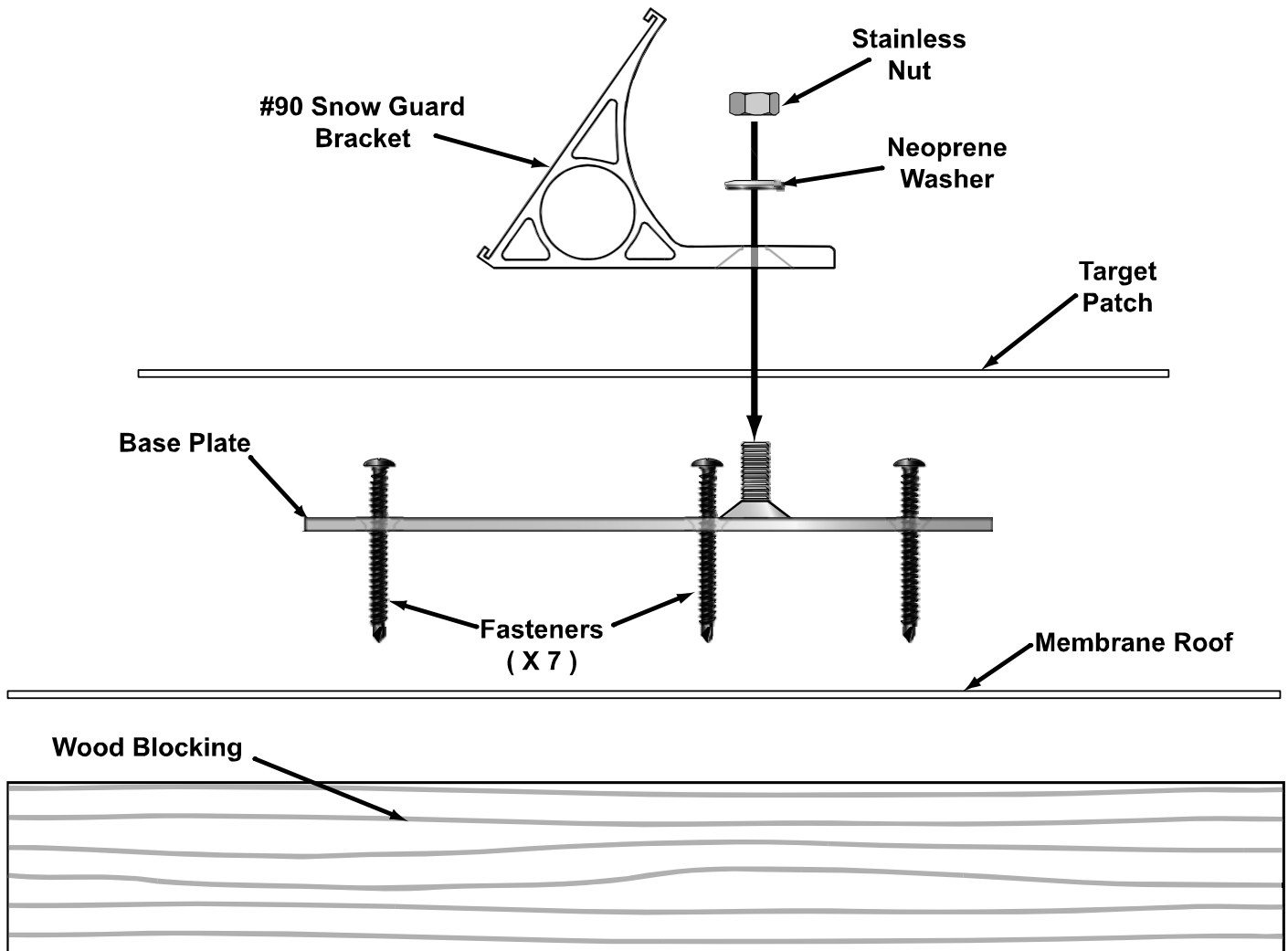
Snow Guard Layout

- * Contact the manufacturer for detailed layout.
- * First row of snow guards is installed above outer most wall or support of the building.
- * Brackets are made of aluminum.

#90 Hybrid Pad/Pipe-Style Snow Guard for Membrane Roofs



#90 Snow Guard Detail

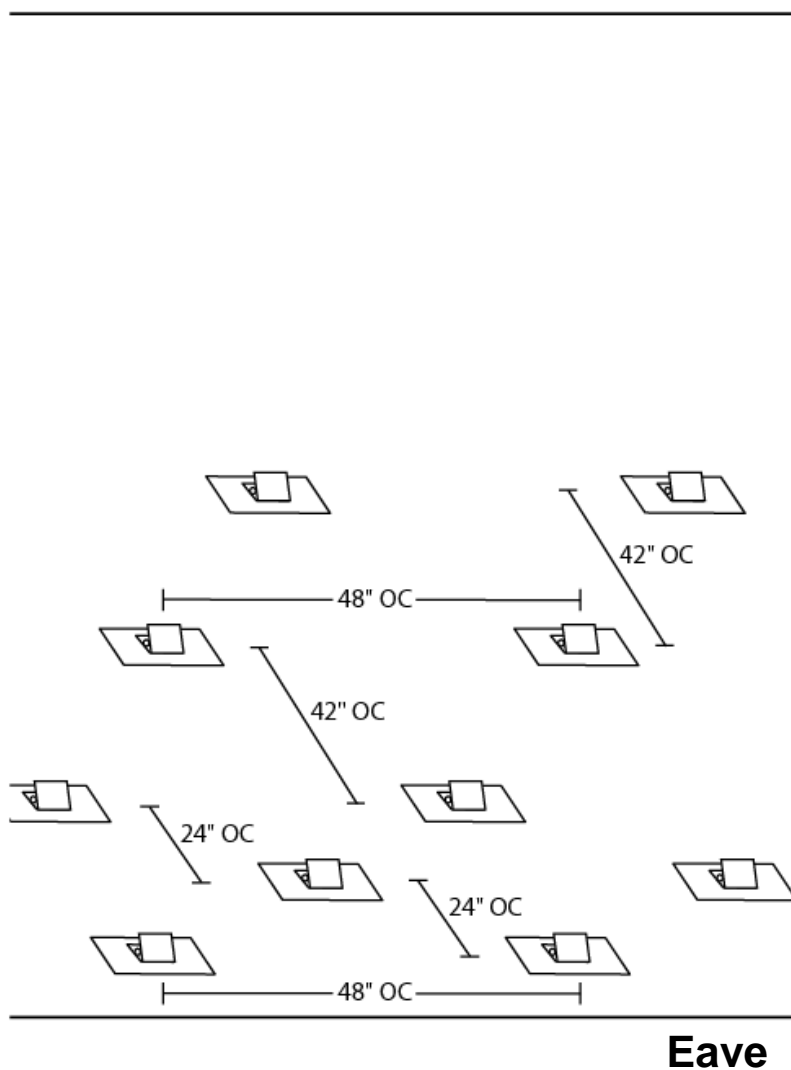


#90 Hybrid Pad/Pipe-Style Snow Guard for Membrane Roofs

#90 Snow Guard Layout

The standard layout is shown to the left. For roofs with a less than 24/12 pitch and less than 75 psf Building Design Load you will need approximately 6 #90 snow guards per square.

Peak



Most Roofs Do Not Need Snow Guards on the Top 10'.

Supplemental Rows are Spaced 48" On Center horizontally and 42" Vertically.

Three Row Pattern – 48" On Center Horizontally and 24" Vertically.

All snow guard installations must have the standard three-row pattern along the eave. Additional rows are required if the rafter length (distance gutter to peak) is greater than 15'.

If the rafter length is less than 15' and you only need to install the three-row pattern, you will need .8 snow guards per foot of eave length, or 8 for every 10' of eave.

#90 Hybrid Pad/Pipe-Style Snow Guard for Membrane Roofs