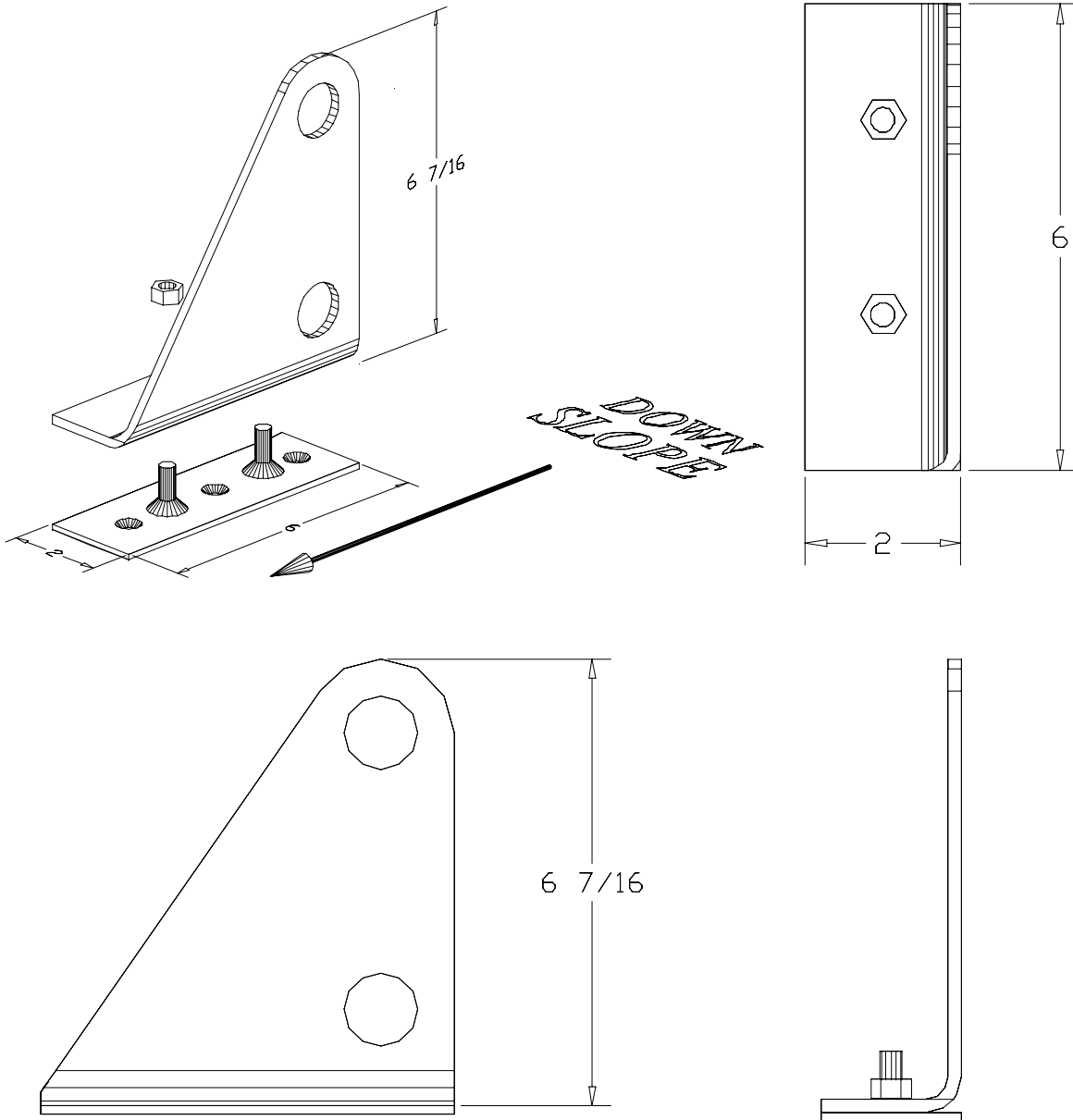




ALPINE SNOWGUARDS

A Division of Vermont Slate & Copper Services, Inc.

Web www.alpinesnowguards.com
E-mail info@alpinesnowguards.com
Toll Free Phone 1.888.766.4273
Toll Free Fax 1.888.766.9994
289 Harrell Street, Morrisville, VT 05661



#315 Pipe Style Snowguard Bracket and Base Plate custom Batten Roof Applications

Document version 08.02.2004



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Installation Instructions for #315 Snowguards

- I. Base Plate (The base plate is the flat piece with the two threaded studs.)
 - A. A Continuous block is required underneath the roof batten roof surface to attach the base plate. Mounting this system over batten alone may crush the batten and cause the roof to leak.
 - B. Place the base plate on top of the installed batten.
 - C. Before fastening base plate through batten to mounting block below, apply a generous amount of acceptable sealer under the flange.
 - D. Fasten base plate to mounting block using 3 fasteners that will achieve 2000 pounds combined sheer.
- II. Installation of snowguard flag
 - A. Install snowguard flag over threaded rods.
 - B. Place one gasketed washer over each stud.
 - C. Place locking nut over gasketed washer and tighten.
 - D. Insert tubing through the holes in the uprights.
- III. Locking Collars, End Caps, and Ice Flags (optional)
 - A. Locking collars (#65) should be placed over each end of each line of tubing. Center the tubing on the snowguards and tighten the set screw on the collar until it no longer slips.
 - B. End caps (#56) are installed by pressing the cap into the end of the pipe.
 - C. Ice flags (#95), if used, should be placed over the top tube so that the long leg rests against the uphill side of both tubes. Use the carriage bolt and nut to hold the ice flag in position.

Snowguard Layout for Pipe Style Brackets

- * Contact the manufacturer for detailed layout.
- * Horizontal spacing between brackets should be 48" maximum. This may have to be decreased due to variable conditions.
- * Do not install runs than 100 feet long without a break to allow for thermal expansion.
- * First row of snowguards is installed above outer most wall or support of the building.
- * Tubing is 1" O.D. aluminum.
- * Brackets are made of aluminum and are available in other metals.
- * One, two and three pipe systems are available.

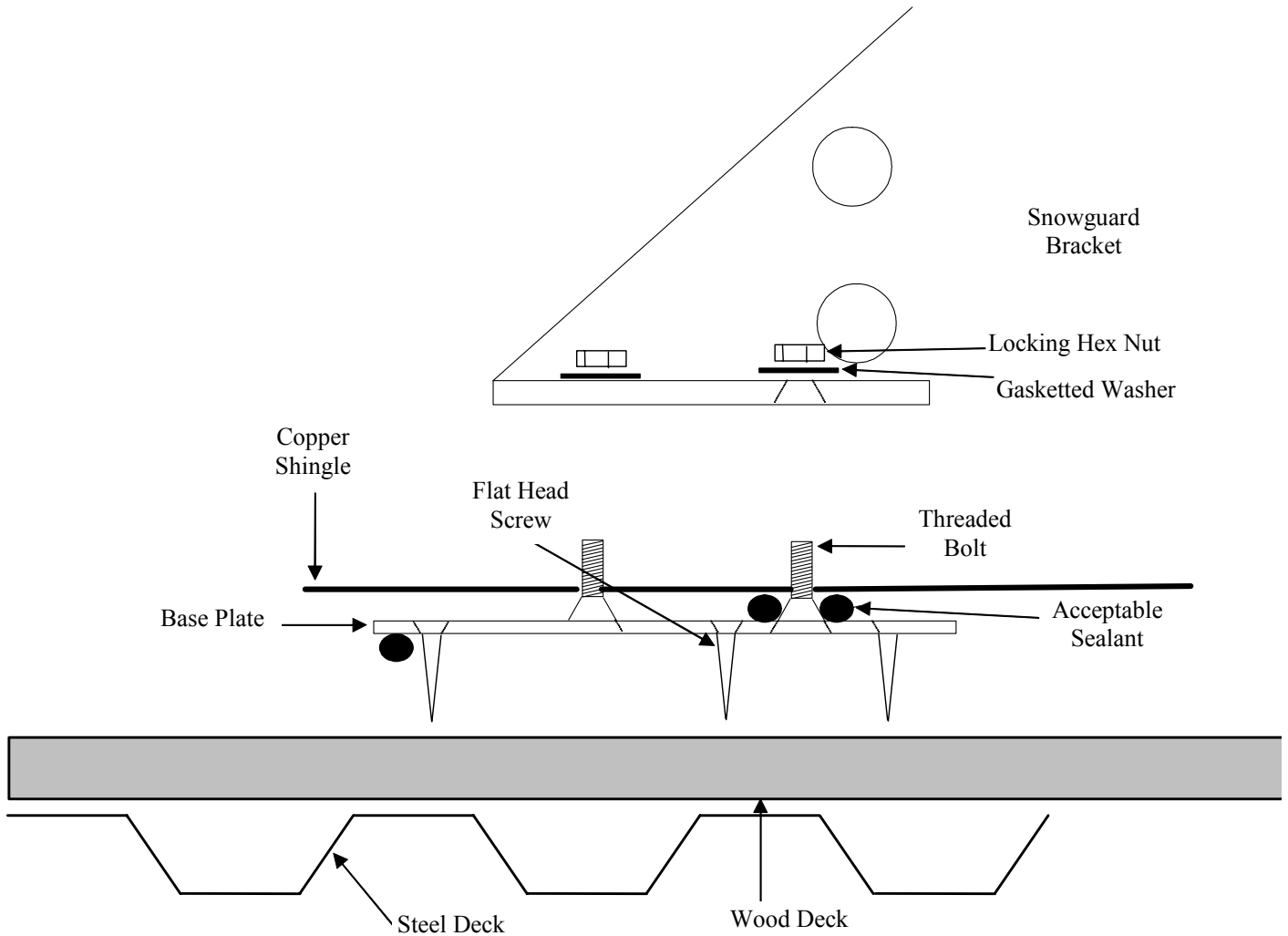
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#315 Snowguard on a copper shingle Installation Detail

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E-mail info@alpinesnowguards.com

Toll Free Phone 1.888.766.4273

Toll Free Fax 1.888.766.9994

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#315 Snowguard Specification Sheet

PART 1 - GENERAL

1.1 SUMMARY

A. WORK INCLUDES

1. #315 Snow guard that attaches directly to the roof deck.
2. Provide appropriate snowguard 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. #315 Snow guard system consists of snowguard flag and base plate
2. Aluminum tubing.
3. Threaded Couplings.
4. End Caps (optional).
5. End Collars (optional).
6. Ice Flag (optional)
7. Fasteners
 - a. To be of metal compatible with snowguards.
 - b. Fasteners should be selected for compatibility with the roof deck.
 - c. Fastener strength should exceed or be equal to that of the snowguard system.
8. Adhesive: to be roof manufacturer approved.

B. DESIGN REQUIREMENTS:

1. Spacing to be recommended by manufacturer or building engineer.
2. Minimum 4 fasteners per snowguard.
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 snowguards 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., P.O. Box 430, Stowe, VT (888) 766-4273.

2.2 MATERIALS

- A. Snowguard Flag is extruded and milled 6061-T6 Aluminum
- B. Base Plate 11 gauge 302 Stainless Steel.
- C. Tubing is 6005-T5, 1" outside diameter and 1/8" wall thickness extruded Aluminum.
- D. Threaded Couplings are 6061-T6 Aluminum 5" long.
- E. End Caps are 302 stainless steel.
- F. Ice Flags are 5052-H32 Aluminum 3" x _ as needed).
- G. End Collars are aluminum shaft collars.
- H. Fasteners 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.

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Toll Free Phone 1.888.766.4273

Toll Free Fax 1.888.766.9994

289 Harrell Street. Morrisville, VT 05661

#315 Brass Snow Guard Specification Sheet

PART 1 - GENERAL

1.1 SUMMARY

A. WORK INCLUDES

1. #315 Snow guard that attaches directly to the roof deck.
2. Provide appropriate snowguard 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. #315 Snow guard system consists of snowguard block and flag assembly base plate
2. Tubing.
3. Couplings.
4. End Plugs (optional).
5. Ice Flags (optional).
6. End Collars (optional).
7. Fasteners
 - a. To be of metal compatible with snowguards.
 - b. To be #14 screws and length as needed.
 - c. Fasteners should be selected for compatibility with the roof deck.
 - d. Fastener strength should exceed or be equal to that of the snowguard system.
8. Adhesive: to be roof manufacturer approved.

B. DESIGN REQUIREMENTS:

1. Horizontal spacing not to exceed 48".
2. Minimum 4 fasteners per snowguard.
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 snowguards 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., P.O. Box 430, Stowe, VT (888) 766.4273

2.2 MATERIALS

- A. Snowguard Flag is 353 1/4" Hard Brass
- B. Base Plate is 1/8" thick 260 Half Hard Brass or 302 - B2 - 11ga. Stainless Steel.
- C. Tubing is 330 Hard Drawn, 1" outside diameter and 1/8" wall thickness Brass.
- D. Couplings are 330 Hard Drawn 5" long.
- E. End Caps are brass plated 302 stainless steel.
- F. End Collars are 330 Hard Drawn, 1" inside diameter and 1/8" wall thickness Brass.
- G. Fasteners are 18-8 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

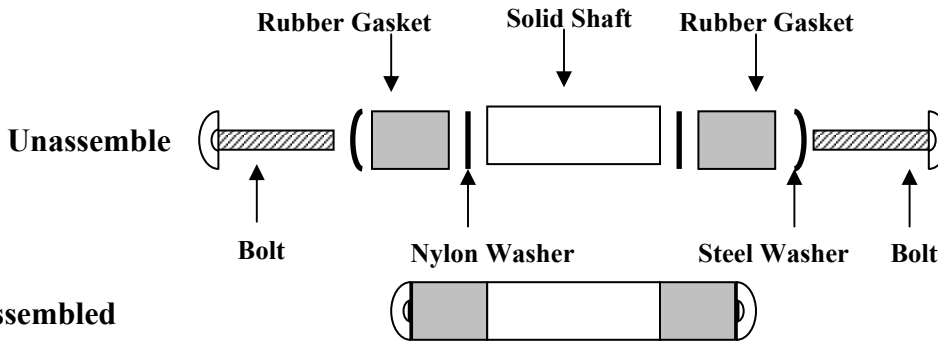
- A. Comply with architectural drawings for location and with Manufacturer's instructions for installation.

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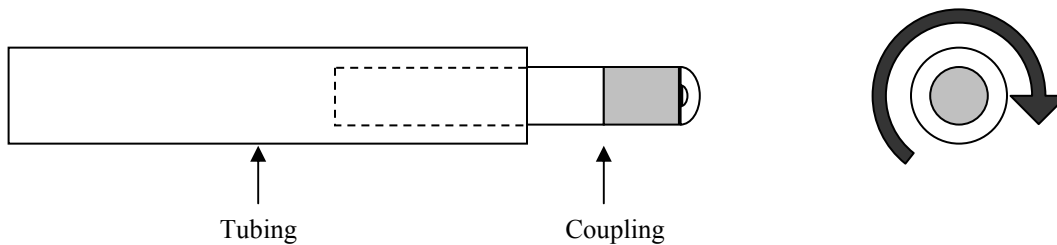


Installation of #86 Pipe Coupling

Couplings come assembled and ready for application. If they come unassembled or loosened during shipping then assemble as per the detail below. **DO NOT OVERTIGHTEN** prior to inserting the coupling into the #75 tubing. Overtightening the bolt will cause the gasket to expand and make installation of the coupling difficult.



1. Insert assembled coupling into the end of one pipe so that half of the solid aluminum shaft is inserted.
2. Begin twisting the exposed half of the coupling in a clock-wise motion until the rubber gasket engages the pipe. Continue to tighten until the coupling can not be easily pulled out of the pipe.



3. Slide next section of tubing over the exposed half of the coupling. Begin twisting the tubing in a clock-wise motion until the rubber gasket engages the pipe. Continue to tighten until the tubing can not be easily pulled off of the coupling.
4. If the system needs to be unassembled, simply turn the tubing counter clockwise until the coupling disengages. Then turn the coupling's solid shaft counter clockwise until it disengages from the tubing.

