

SnowTrapper™ Snow Guard Installation Guide for Metal Panels (ST6)

SnowTrapper™ Snow Guard Overview

Snow guards prevent damage by holding snow and ice in place on the roof, allowing it to melt safely away. SnowTrapper™ snow guards must be installed in a specific pattern and quantity on the roof to achieve this desired result. Snow guards are recommended in areas where snow and ice could fall from the roof in an avalanche, damaging people and property below.

SnowTrapper™ snow guards are manufactured from a variety of metals including 16 oz. cold rolled copper, aluminum and steel. They have been engineered to work with your metal shingle roofing systems to meet a variety of design and snow load requirements, providing protection, seamless component interface and easy installation.

SnowTrapper™ snow guard installation has been designed to be quick, easy and consistent.

Preparation and Basic Requirements

- Thoroughly clean metal roof panel surface where the snow guard is to be installed using Xylol or isopropyl alcohol.
- Completely coat the underside of the snow guard with adhesive or sealant before positioning it on the roof surface.
- Apply uniform pressure after positioning until adhesive or sealant is squeezed out around all edges of the snow guard to create a bead that is free of gaps and air pockets.

Installation

It is critical for a structural engineer to evaluate your roof, prior to snow guard installation. The placement and quantity of snow guards you need is determined by the roof design and geographic location of the project. Always follow your roofing consultant's recommendation for both installation and layout of your snow guards.

Adhesive Attachment

Surebond® SB-190 Everseal Sealant in a caulk tube is recommended for adhesive installation. Surebond SB-190 has demonstrated proven performance for the installation of snow guards. Always follow sealant manufacturers printed recommendations to ensure proper performance. Refer to Surebond's product literature for complete details.

There is no long lasting adhesive available for copper or lead coated copper. We recommend soldering for these material types.

To Install Using Adhesive:

1. Prepare the metal roof panel surface as detailed above.

2. Apply adhesive evenly across the base of the snow guard, ensuring there are no voids, which could create gaps or air pockets.
3. Place the snow guard in position with the flat face pointing toward the ridge.
4. Apply light, consistent pressure perpendicular to the roof, taking care to squeeze the adhesive out around all edges of the snow guard.
5. Finger wipe (using a rubber glove) to achieve a clean, smooth appearance and a water tight seal, preventing water or frost from getting under the base of the snow guard.

Note: Backyard Innovations, Inc. does not warranty the use of adhesives for installing snow guards. The cure rate and temperature requirements prevent installation using this product during the winter. Total cure for adhesive installation requires 28 consecutive days of 50 degrees Fahrenheit prior to being subjected to snow load. While the curing process does not have to take place all at one time, it is essential that a cumulative total of at least 672 hours of 50 degree Fahrenheit temperature be achieved. In many instances, the delay caused by cold temperatures can double or triple the required 28-day curing period.

Mechanical Attachment

Recommended for aluminum and galvalume roofing systems and where temperatures are not suitable for adhesive attachment or additional strength is required. Fasteners should be chosen by substrate and anticipated loads; stainless steel or corrosion resistant fasteners with neoprene gasket washers are recommended for best results.

1. Apply a long life industrial or marine grade clear silicone covering the entire underside of the strap.
2. Position snow guard on the roof and apply light, consistent pressure perpendicular to the roof, taking care to squeeze the sealant out around all edges of the snow guard, to create a water tight seal and prevent water or frost from getting under the base of the snow guard.
3. Install appropriate fastener through predrilled holes in the snow guard and metal roof sheet into purlin or structural support.
4. Tighten screws to cause approximately 50% compression in neoprene gasket.
5. A minimum of two screws should be installed per snow guard. Installer should determine the proper length of screws and fastener to engage purlin, accounting for insulation.

Solder Attachment

Recommended for copper, lead-coated copper, zinc, stainless steel and TCS.

1. Tin the entire underside of the SnowTrapper™ snow guard strap.
2. Prepare metal roof surface area where Snow Guard is to be installed, as described above.
3. Flux and tin the prepared area.
4. Position the snow guard in the desired location and heat the snow guard to melt the solder on the snow guard and the panel.
5. Allow snow guard and roof to cool.

Note: When possible, this procedure can be completed before panel install, while roofing material is still on the ground.

SnowTrapper™ Snow Guard Care

Follow these important steps to ensure the quality and durability of your snow guard investment:

- Keep boxes in a dry place under opaque tarps when on the jobsite.
- Limit stacking boxes to a maximum of three boxes per pallet, stacked no more than two pallets high.
- Boxes are marked with arrows showing the proper stacking direction. Never lay boxes on their sides, always stack them flat.
- Always secure materials on the roof when working.