Townhomes at Heritage Center

Specifications for Snow Guard Installation on Metal Roofs

Snow guards are devices that are attached to the roof structure in order to uniformly retain and hold snow in place on the roof area. The snow guards need to be applied in sufficient quantity according to a prescribed pattern in order to be effective.

The only snow guards to be installed on metal roofs in our community are Berger AP400 in Black.

For your convenience, these snow guards may be purchased locally at Marvic Supply, 4083 E. Swamp Road, Doylestown.

There may be other sources as well or you may contact an installer of your choice.

The placement of these snow guards are as follows:

If your roof is approximately 5 ft in height:

The first row shall be installed 12" from the bottom edge of the roof and placed on alternating standing seams and the second row shall be installed 24" from the bottom edge of the roof and placed on seams that were skipped on the first row. If your roof is approximately 8 ft in height:

The first row shall be installed 24" from the bottom edge of the roof and placed on alternating standing seams and the second row shall be installed 36" from the bottom edge of the roof and placed on seams that were skipped on the first row.

Please see the attached information and installation instructions.

Prior to installation, please submit an Architectural Change Form to:
Heritage Center Community Association
Continental Property Management
975 Easton Road
Suite 102
Warrington, PA 18976

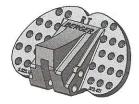


Berger AP Series Snow Guard

For Standing Seams on Metal Roofs

Installation Instructions:

Berger AP™ Snow Guards are non-penetrating devices which have been engineered specifically for use with the more popular structural and non-structural preformed and architectural metal roof systems. They are secured without glues or sealants, and utilize custom milled stainless steel set screws to clamp them in place. The attachment of the AP Snow Guard does not restrict thermal movement, and the deep throat permits it to be secured directly without damaging caps or compressing internal gaskets or sealant pockets. The wide, deep blade design makes it particularly effective in retaining snow with the higher seams and wider panel widths common in preformed architectural roofing.



AP400 - Designed to accommodate seams of up to 3/8" (0.400") in thickness and not more than 2.0" high.

AP516 - Designed to accommodate seams of just over 1/2" (0.516") in thickness and no more than 2.0" high.

The technical information is for informational purposes only and is not intended to replace the manufacturer's recommendations for a particular project. We will provide layouts upon receipt of roof plan with elevations. Manufacturer is not responsible for improper installation, or installation in insufficient quantities.

Every roof is not the same! Call today for a custom layout.

General Information:

Snow guards are devices that are attached to the roof structure in order to uniformly retain and hold snow in place on the roof area. The snow guards need to be applied in sufficient quantity according to a prescribed pattern in order to be effective. Snow Guards are intended to prevent snow movement and provide for the controlled melt and breakdown of the snow mass into smaller sections.

Snow guard placement will vary from region to region and will be influenced by roof pitch, the lengths of roof runs and roof features. Local installation customs may not be the best guide for placement. Additional information can be found in sheet metal and air conditioning contractors' national association (SMACNA) architectural sheet metal manual.

Berger Building Products, Inc. recommends that a qualified roofing contractor be employed to install these products. Roofing professionals have the proper equipment, knowledge and ability to complete the task in a safe and satisfactory manner. The applicator is responsible for compliance with regulations governing local building ordinances and safety regulations.

- · Roofing can be hazardous! Serious injury or fatality can result from falls or electrocution from contacting overhead wires. Observe ladder safety rules for load, positioning and security.
- Please make sure all roof surfaces are dry and clean before working. Avoid working in excessive heat, high wind or when there is a threat of lightning. Never work alone.
- · Do not allow material to be unsecured on the roof. Falling objects are dangerous.
- · Prior to application, Berger Building Products, Inc. requires that the installer evaluate all products in order to determine fitness for use.

Do not use Competing/Dissimilar Metals with each other!

Galvanic corrosion will occur when dissimilar metals are in contact in the presence of an electrolyte. Water in the form of condensation, rain or snow is an electrolyte. Water that flows over copper becomes electronegative and will cause corrosion of aluminum or steel. Copper, brass or stainless steel fasteners or nails must be used with copper or brass applications. Make sure rivets are solid copper; do not use copper plated steel rivets in copper or brass assembly. Do not use aluminum or galvanized nails to secure any copper products. Corrosion will be more rapid in the presence of salts such as ocean coastal areas or chlorinated water, acid rain, and polluted industrial atmospheres. Accelerated corrosion will occur when a larger area of an electronegative (cathode/protected) element contacts a small electropositive (anodic/corroded) element.

Warranty/Disclaimer

Berger Building Products, Inc. (BBPI) warrants that the products it manufactures shall be free from material defects. Should any of the products prove defective, the obligation of BBPI under this warranty shall be limited to replacement of the defective product or at our option the cost of the product originally shipped by Berger. This warranty is expressly in lieu of all other warranties expressed or implied including the warranties of merchantability and fitness for a particular purpose. There are no warranties, which extend beyond the description on the face hereof. BBPI in no event, whether claim is based on warranties, contract negligence or otherwise, is liable for incidental or consequential damages.

Berger Building Products, Inc (BBPI) will not be responsible for misapplication or modification of product, incorrect material or defects that were obvious at time of installation. Any consequential damage, schedule delays, additional labor, and or equipment rental costs will not be BBPI responsibility. Any BBPI product warranty claim is limited solely to Berger Building Products, Inc.

Berger Building Products, Inc. (BBPI) reserves the right to change design and specification of our products without prior notification or alteration of literature. Materials may be revised to improve strength and corrosion properties and incorporated as a running change without obsolescence.





25 ft height

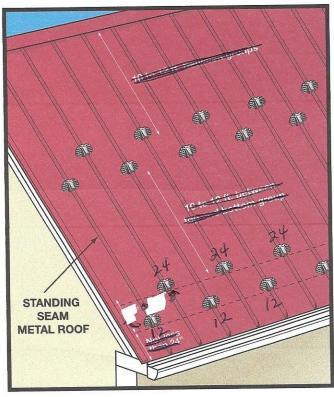


Berger AP Snow Guard Layout for Metal Roofs:

Every snow guard will not fit every application. It is important to know the type, style and profile of your metal roof prior to selecting a snow guard.

Installation - Layout:

- 1. The first row shall be installed or the edge of the roof and placed on alternating standing seams. This row should be placed no lower than two (2) feet up from the eave.
- 2. Subsequent rows shall be spaced vertically and placed on the seams that were skipped on the first row.
- 3. Guards should be placed on alternating standing seams. Horizontal spacing will depend on the seam spacing. Rule of thumb: odd rows odd seams (1-3-5), even rows even seams (2-4-6).
- 4. Snow guards should never be placed beyond the bearing wall on an extended roof section. This can result in ice damming and cause structural damage.
- 5. The number or rows will be dictated by size of the roof and climate of the location.
- 6. Improperly insulated roofs will require more snow guards.
- Every roof is different, call today for your free layout recommendation.



The pattern shown is typical for a rafter run of no more than 25 feet in an area with a ground snow load no more than 30 psf. If your project exceeds this criteria, contact Berger for a free consultation.

Installation on the Seam:

- 1. A 7/32" hex bit is needed for installation.
- 2. AP snow guards are furnished with a factory-installed oval and dish tipped setscrew combination, which should be tightened in place with a hex-bit socket.
- 3. AP snow guards comes with a third positioning screw. When secured to the seam, it may tilt to the left or to the right after the setscrews are tightened. The third setscrew is used to only to straighten the guard. These screws are packed with the guards, and installed in the field.
- 4. Torque set screws in a manner to align snow guard with the roof panel. Torque will vary depending on the type and gauge of the metal roofing; the recommended method for determining proper torque is to install one first, with the blade on the uphill side. After tightening the setscrews, loosen and remove the unit, and inspect the indentations created in the metal to see that proper compression was obtained. Over tightening can cause damage to snow guard resulting in failure. Maximum torque 28 ft lbs.





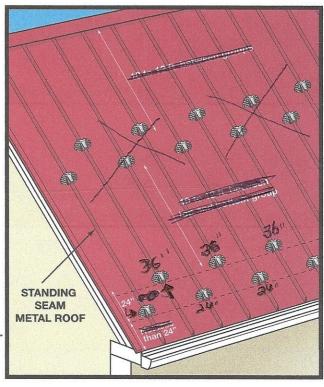
2 8 ft height

Berger AP Snow Guard Layout for Metal Roofs:

Every snow guard will not fit every application. It is important to know the type, style and profile of your metal roof prior to selecting a snow guard.

Installation - Layout:

- 1. The first row shall be installed 24" edge of the roof and placed on alternating standing seams. This row should be placed no lower than two (2) feet up from the eave.
- Subsequent rows shall be spaced vertically and placed on the seams that were skipped on the first row.
- Guards should be placed on alternating standing seams. Horizontal spacing will depend on the seam spacing. Rule of thumb: odd rows - odd seams (1-3-5), even rows - even seams (2-4-6).
- Snow guards should never be placed beyond the bearing wall on an extended roof section. This can result in ice damming and cause structural damage.
- 5. The number or rows will be dictated by size of the roof and climate of the location.
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