When snow accumulations begin to melt, the result can be catastrophic as the blanket of snow avalanches off the roof, dumping tons of snow onto anything in its path. The patented S-5!® clamps make ColorGard® the strongest, easiest to install, and best priced solution for standing seam metal roofs.

S-5!® ColorGard®

**S-5! Clamps**

- **RSG505**
  
  For use with panel:
  - Dutch Seam
  - Colonial Seam

- **RSG500**
  
  For use with 90° & 180° seams:
  - 1” - FLL
  - 1½” - FLM
  - 2” - FLR
  - 2¾” - FLS

**S-5! SnoClips**

- **RSG520**
  
  For use with seam heights:
  - 2” - FLR
  - 2¾” - FLS

- **RSG525**
  
  For use with seam heights:
  - 1” - FLL
  - 1½” - FLM
  - 1½” - MRD
  - Colonial Seam

**S-5! Unpunched Crossmember**

- **RSG530**

**S-5! VersaClip™**

- **RSG510**
CLOSE UP OF CLAMPS

1”, 1½”, 2” Field-lok:

2⅜” Field-Lok:

Colonial Seam:

Dutch Seam:

OTHER VERTICAL SEAM ROOF SNOW RETENTION METHODS

AP 400 Snow Guard

• Seam mounted with set screws
• Does not puncture seam when properly attached
• Can be mill finish or painted to match

MODULAR METAL ROOF PANEL SNOW RETENTION OPTIONS:

Snow retention systems can be used to reduce potential damage to surrounding elements including plants, property, pedestrians, roof top units, and flashing assemblies. They can also be used for water management to prevent ice dams at valley areas of the roof. ATAS’ snow retention systems are easy to install and can be perfectly color matched to your roof.

CastleTop, Standing Seam, & Advanta Shingle Snow Retention

RSG100

ScanRoof Snow Retention

RSG151
Installation Guide: S-5-U Clamp System & ColorGuard

Specified Torque

<table>
<thead>
<tr>
<th>Material</th>
<th>Inch Pounds</th>
<th>Foot Pounds</th>
<th>Nm</th>
</tr>
</thead>
<tbody>
<tr>
<td>22 ga Steel</td>
<td>160-180</td>
<td>13-15</td>
<td>18-20</td>
</tr>
<tr>
<td>All other metals and thinner gauges of steel</td>
<td>130-150</td>
<td>11-12.5</td>
<td>15-17</td>
</tr>
</tbody>
</table>

- **Partially thread the set screws into the clamp by hand. (The S-5-U has four set screw locations to make the clamp more versatile; however, only two set screws are used per clamp. Both set screws should always be loaded into the same side of the clamp.)**

- **Determine how to position the clamp. When attaching to machine-folded seams (regardless of panel profile and geometry), S-5! clamps are designed to engage the seam with set screw opposite seam fold. On many snap-together type seams, the set screws are on the open side of the seam. On some seams, this aspect of clamp orientation is not crucial.**

- **Tighten the set screws using a screw gun and the included screw gun bit tip. Set screws should be tensioned and re-tensioned as the seam material compresses. The set screws will dimple the seam material but will not penetrate it. When relying on published load values, set screw tension should be verified periodically using a calibrated torque wrench as indicated below to ensure the tool is consistently achieving the proper torque range.**

- **For critical attachment applications utilizing an M8-1.25 x 16 mm Hex Flange Bolt, tighten the included M8 bolt to 160 inch pounds (13 foot pounds).**

- **When seam spacing is not divisible by 4”, when panels are not laid up true to dimension, or when ColorGard is installed askew to the panel seams, the VersaCLip facilitates installation. The VersaCLips are inserted into the ColorGard prior to placement of ColorGard on the clamps. Align clips with S-5! clamp. VersaClip can be used with punched or unpunched ColorGard.**

- **To maintain color conformity over time, ColorStrips should be sheared from the same prefinished metal as the roof panels. Shear strips to exactly 2” wide (8” or 10” long). Slide the ColorStrip into the ColorGard cross-member as shown. Joints in the ColorGard should be concealed by offsetting the joints of the ColorStrip from the joints of the ColorGard. The joints of the ColorStrips can be overlapped about 1/2” if desired. Each ColorStrip should be secured to the ColorGard somewhere along its length. This is done by pinching the retainer lip of the ColorGard with an ordinary pair of pliers.**

- **Attach ColorGard to clamps with the stainless bolts provided. Bolts can be tightened with a 1/2” (13mm) box-end wrench, or ratchet. On larger jobs, a 1/2” drive electric impact will expedite this work. Tension bolts to a minimum of 13 ft-lbs (18 Nm). Trim ColorGard at the end of the assembly; being sure it does not cantilever more than 4” beyond the last clamp of an assembly. Any trimmed piece of ColorGard must be attached with at least two clamps.**

**Illustration of Complete Vertical Seam Roof Snow Retention System**

1. **SLIDE THE SNOCLIP ON TO COLORGARD FROM END**
2. **ROTATE THE SNOCLIP DOWN**
3. **THE “TOE” OF A PROPERLY INSTALLED SNOCLIP WILL ENGAGE THE PANEL BEFORE THE “HEEL”DOES**

**Recommended Torque Pressure**

- **22 ga Steel:**
  - Inch Pounds: 160-180
  - Foot Pounds: 13-15
  - Nm: 18-20

- **All other metals and thinner gauges of steel:**
  - Inch Pounds: 130-150
  - Foot Pounds: 11-12.5
  - Nm: 15-17

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