

Installation Instructions

Stop! Has your snow retention system been designed properly with the assistance of a distributor?

Notice to S-5![®] product users: Specific layout and assembly schematics for S-5! products are the responsibility of the user or project designer. Due to the many variables involved with specific panel products, climates, snow melt phenomena, and job particulars, the manufacturer cannot and does not express any opinions as to the suitability of any S-5! assembly for any specific application and assumes no liability with respect thereto. S-5! clamps are tested for ultimate holding strength on various seam types and materials. This information is available from S-5! distributors as well as from the S-5! website: www.S-5.com. This document is an installation guide only and the photographs and drawings herein are for the purpose of illustrating installation tools and techniques, not system designs. Clamp spacing should never exceed 24" with standard products (contact your distributor for products to accommodate a seam spacing greater than 24").

Tools Needed

- Electric Screw Gun
- Hack Saw
- String Line
- Tape Measure
- Calibrated Torque Wrench
- Mallet or Pliers
- Allen Wrench (included)

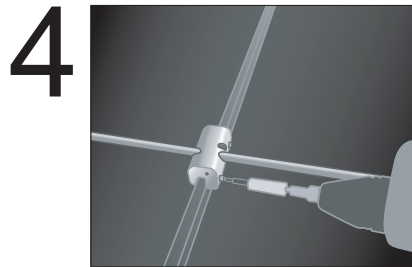
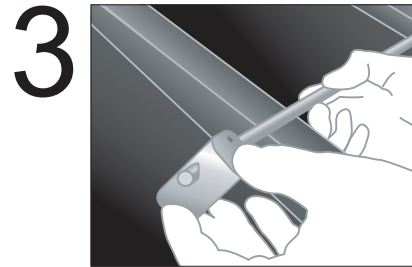
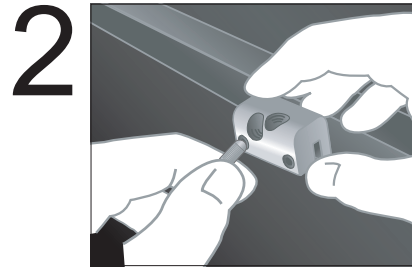
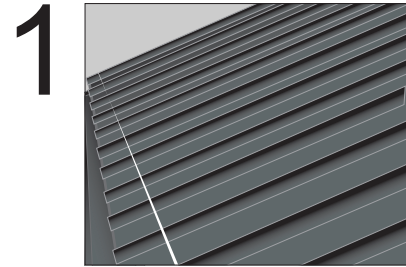
To Install the SnoRail™ / SnoFence™

- 1. Before You Start:** First, use a string line across the top of the panel seams at the desired location to establish a true line for installation of the S-5! clamps. Individually measuring each clamp location from the eave is not recommended.
- 2. Preparing the Clamps:** For copper roofs, use brass S-5-B SF clamps. For other standing seam roofing materials, use aluminium S-5-A SF clamps. Determine into which side of the clamp to load the round-point setscrews, and thread the setscrews into all clamps by hand. For vertical seams, determine which side of the seam should be engaged by the setscrew. On folded-seam profiles, the setscrew should engage the folding contours rather than the smooth side of the seam.
- 3. Preparing the Assembly:** Insert setscrews into all clamps and thread an appropriate number of clamps onto the SnoRod™. Take care that the orientation of all clamps on the rod is the same. Use one S-5-BE or S-5-AE clamp per 48' of installation, and at the ends of each installation, to fix the SnoRod, preventing lateral movement.

IMPORTANT NOTICE! — SnoClip design has changed. SnoClip must now slide on from the end of the SnoRod. Be sure to slide SnoClip onto assembly between clamps. One or two SnoClips are used between seams (please visit www.S-5.com for details).

Installing the Assembly: Position the clamp assembly appropriately on the panel seams, using the string line as a guide, and loose-fit all clamps to panel seams. Do not tighten setscrews onto seams at this time, but hand-tighten if necessary just enough to hold the assembly on the roof.

- 4. Tighten All Setscrews:** For maximum holding strength, setscrews should be tensioned and re-tensioned as the seam material compresses. Setscrew tension should be verified using a calibrated torque wrench between 160 and 180 inch pounds when used on 22ga steel and between 130 and 150 inch pounds for all other metals and thinner gauges of steel. If the system is SnoFence™, the clamp setscrews should not be tightened until the second upper rod has been fitted through the SnoPost™.



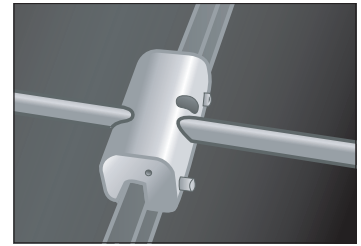
SnoRail™ Systems

One SnoRod™ is inserted through the S-5-A SF or S-5-B SF clamps, positioning it just above the panel seams. Use one S-5-BE or S-5-AE clamp per 48' of installation, and at the ends of each installation, to fix the SnoRod, preventing lateral movement. Thread the small 8-32 setscrews into the appropriate clamp holes and tighten with the Allen wrench provided. The resulting assembly is called SnoRail™.

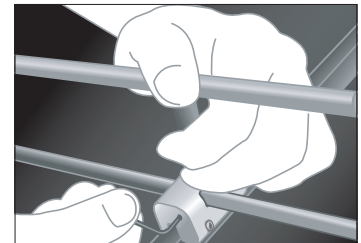
SnoFence™ Systems

Starting with an assembled SnoRail system, simply thread one SnoPost™ into the S-5-A SF or S-5-B SF clamp, ensuring that the rod hole in the SnoPost is parallel with the rod hole in the clamp. Use one SnoPost BE™ or SnoPost E™ per 48' of installation, and at the ends of each installation, to fix the upper SnoRod, preventing lateral movement. Insert a SnoRod through the SnoPosts. Thread the small 8-32 setscrews into the appropriate SnoPost holes and tighten with the Allen wrench provided. The resulting double-rod assembly is called a SnoFence™.

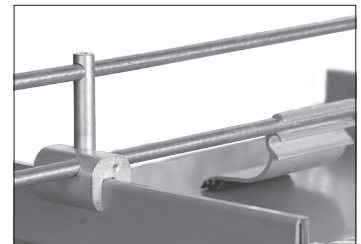
Secure all rod intersections using furnished rod coupling. If a rod intersection occurs at a clamp location, field cut the rod so that the clamp location is avoided. Rods should not cantilever past the last clamp at the end of an assembly by more than 4". Rods can be cut with an ordinary hack saw or a reciprocating saw with a metal cutting blade. Deburring the cut end with a metal file may facilitate installation.



SnoRail System

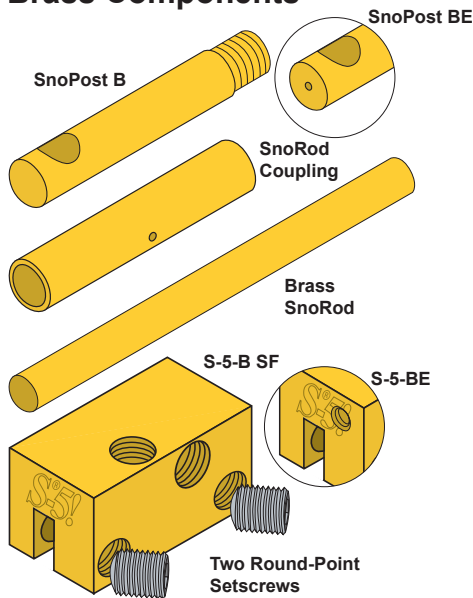


SnoFence System

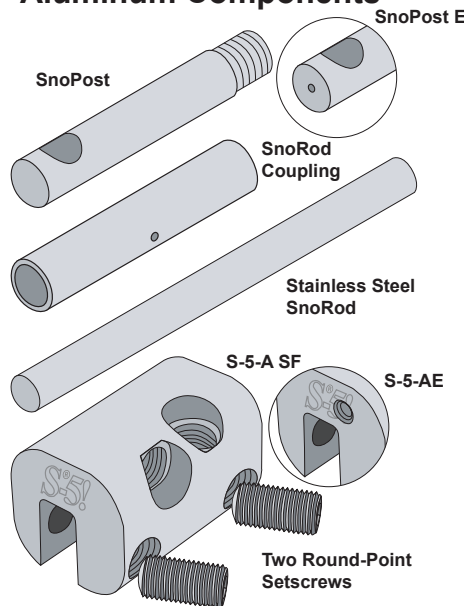


Using SnoClip

Brass Components

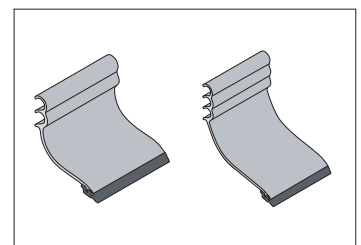


Aluminum Components

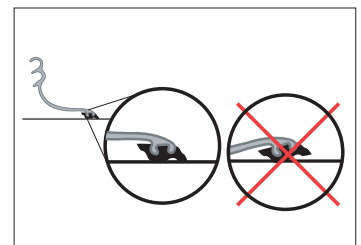


Using SnoClip™

SnoClip™ must now slide on from the end of the SnoRod. Be sure to slide SnoClip onto assembly between clamps. One or two SnoClips are used between seams (please visit www.S-5.com for details). Mount the SnoClip to the back of the SnoRail/SnoFence using the lock that results with the rubber "foot" resting properly on the panel surface. When applying downward pressure on the part, the "toe" should engage the surface of the panel just before the "heel." Periodic maintenance over time may be necessary to ensure that the SnoClips maintain the appropriate positioning, as snow weight may sometimes flip the clip up slightly. For further details, see SnoClip Installation Instructions. Please note: the SnapClip™ is not compatible with the SnoRail/SnoFence systems.



SnoClip II / SnoClip III



Correct Use of SnoClip

S-5!® Warning! Please use this product responsibly!

Products are protected by multiple U.S. and foreign patents. Visit the website at www.S-5.com for complete information on patents and trademarks. For maximum holding strength, setscrews should be tensioned and re-tensioned as the seam material compresses. Clamp setscrew tension should be verified using a calibrated torque wrench between 160 and 180 inch pounds when used on 22ga steel and between 130 and 150 inch pounds for all other metals and thinner gauges of steel. Consult the S-5! website at www.S-5.com for published data regarding holding strength.