

ASG Bronze Angle With ASGBR-Utility Blocks & Ice Flag Installation Instructions

I. ASGBR-Utility Block and Bronze Angle Snow Fence Installation

- A. When attaching clamps to seams which are machine folded the ASGBR-Utility clamp is designed to engage seams up to 1/4" thick. On many snap together type seams, the set screws are opposite the open, or overlap side of the seam. On some type panel seams, the aspect of clamp orientation is not critical. Note – The Bronze Angle can only be used in the “2,” “3,” and “4” positions.
- B. ALL SET SCREWS MUST BE INSTALLED IN THE SAME SIDE OF THE CLAMP**
- C. Only two set screws (on one side of the clamp) are used in any given Bronze Angle installation.
- D. Position the clamps appropriately on the panel seam. Using a 3/16" allen-wrench attachment tip for a 1/4" drive screw gun, tighten and retighten set screws as the seam material compresses. On low seam profiles, a 4" bit extension on the screw gun will facilitate this work. Most industrial grade screw guns are rated at 115 inch-pounds tightening torque and will deliver between 115 and 150 lbs (13-17Nm) at the *highest torque setting*.
- E. **CAUTION:** Battery-operated guns may not deliver consistent screw tension. Drywall guns may not deliver adequate tension.
- F. Attach Bronze Angle to the installed ASGBR-Utility blocks with the supplied 7/16"-14 x 3/4" brass hex bolts and washers. Unless special ordered, the Bronze Angle will need to have mounting thru holes drilled on site as needed. Make sure the cup of the Bronze Angle is facing up the slope of the roof with one leg extended towards the sky.



II. Ice Flag Installation

- A. Determine the center location of each roof pan in relation to the seams and mark these locations on the top surface of the snow fence. This is the same surface where the two mounting bolts are located.
- B. Align the mount hole in the Ice Flag with the mark on the top side of the Bronze Angle and clamp the Ice Flag to the Bronze Angle. Make sure that the cup of the Ice Flag is facing down slope of the roof and one leg is extended below the Bronze Angle (see Assembly Sheet – Bronze Angle with ASGBR-Utility Blocks & Ice Flag).
- C. Using the mount hole in the ice flag as a guide, drill a pilot hole through the Bronze Angle for a TEK Screw.
- D. Attach the Ice Flag to the Snow Fence with the supplied -14 x 1” TEK Screw.

NOTE: Once the point of the TEK screw is through the metal, only tighten enough to engage the TEK screw. Do not over-tighten or over-torque with a drill. Tighten by hand only to securely engage the flag.

III. Assembly - An assembly detail for the Bronze Angle with ASGBR-Utility blocks and Ice Flags is available from Alpine SnowGuards, www.alpinesnowguards.com

- A. Loads imposed on the Bronze Angle System will be transferred to the panels. Panels must be properly attached to building structure to resist these loads.
- B. This system is not approved as a fall arrest system.

Snow guard layout for Bronze Angle with ice flag

- Contact the manufacturer for detailed layout.
- Do not install runs of bronze angle snow retention more than 100 feet long without a break to allow for thermal expansion.
- First row of snow guards are installed above outer most wall or support of the building.

Document version 04.02.2019

