

## **Installation Instructions for SnowMax-CRGT-2.5 or CRGT-3.5**

- I. Brackets:
  - A. The F-201 bracket is the low-profile, 1" wide aluminum component with 2 cone-shaped countersinks milled into the underside that rests on the roof.
  - B. The bar mounting bracket has the dovetail feature and a thru-hole for the height-adjustment stud to fit in.
  
- II. Cone shaped EPDM bushings (bushings are shipped with the bracket and will need to be inserted into the underside of the F-201)
  - A. Hold the F-201 bracket so that the embossed or countersunk cone-shaped (depressions) are facing you.
  - B. Insert each EPDM bushing, small end first, into the countersink (depression).
  - C. Push on the bottom of the large end of the EPDM bushings until the small ends protrude through the surface on the top side of the bracket.
  - D. When properly inserted, the EPDM bushings will snap into place and will not fall out.
  - E. For this system to work properly, the F-201 bracket must be installed on a roof surface that is fully supported. Unless there is some form of solid decking beneath the roofing material, the installer will not be able to exert enough pressure on the bracket to create a proper seal. This means that this system will not work on roof surfaces such as commercial metal roofs and membrane roofs that have compressible insulation between the roofing material and the roof substructure.
  - F. Place the F-201 bracket (with EPDM bushings inserted) on the roof surface above a supporting structural component. Align all F-201 bracket locations.
  - G. Fasten F-201 bracket to roof through the holes where the small end of the bushings protrude through the surface of the bracket.
  - H. Each fastener must have an EPDM and stainless steel bonded washer inserted. The washer is installed so that the EPDM surface engages the top of the cone shaped EPDM bushing and the stainless steel surface is facing up.
  - I. Using the proper fastener for the project (consult with manufacturer or project engineer), insert fastener through the bonded washer and the bushing.



- J. Torque fasteners until F-201 bracket is pulled down snug to the roof surface. The torque required will vary with the project roof deck, age, and type. Be sure not to over-torque the fasteners and strip the threads.
- K. Thread one flange nut, flange side up, onto the height-adjustment stud in the center of the F-201 bracket, until desired height is achieved.
- L. Install the bar mounting bracket onto the stud, until it engages the Flange nut.
- M. Install the SnowMax bar so that the dovetail features on the bar interface with the dovetail features on the bar mounting bracket.
- N. Place the SnowMax washer over the stud and over the interfacing features on the SnowMax bar. Use the second flange nut to tighten this washer.

### III. Optional Items

- A. Color Insert: The face of the SnowMax bar is designed to accept a 2" wide color insert using the color metal that the roof was made with. This Color Insert is available in a limited color selection from Alpine SnowGuards. Many installers will provide this part themselves using material they have on hand.
- B. SnowMax Ice Flags (IF): The SnowMax-IF is optional but is recommended at least on the bottom tier of guards (assuming the project needs more than one tier). These IF's are cut to length so that the flag does not rest on the panel.  
**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.

### IV. Completion

- A. When properly installed, the F-201 bracket and seal will be impenetrable to moisture
- B. Metal roofs expand and contract due to thermal change. As a result, exposed fasteners sometimes move. Although it is not necessary, sealing the perimeter of the F-201 bracket between the roof surface and the edge of the F-201 bracket using an acceptable sealant would be a good idea. In most cases, clear silicone is an acceptable sealant for this purpose.





### Snow guard layout for bar/pipe style brackets

- Contact the manufacturer for detailed layout.
- Do not install runs of snow retention bar 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.

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