

SnoBar/ColorBar



RCB-2 / RCB-3 Bracket With RoofClamp Installation Instructions

Do not discard these instructions.

**Please read and fully understand all warnings,
instructions and regulations prior to use.**

Table of Contents

Required Tools.....	3
System Parts.....	3
Determine Layout of Rows	4
Installation Instructions.....	4-9
Design Conditions.....	9-10

Before Installing the SnoBar/ColorBar Bar System

Read the **DESIGN CONSIDERATIONS** on page 9-10.
Always make sure the roof panels are properly attached
to the structure at a fixed point.

NOTE:

Standing Seam Roof Clips normally **DO NOT** provide a fix point for floating roof panels. The standing seam panels must be attached with enough fasteners to withstand the added load incurred by retained snow. If unsure, please consult with a professional metal roofing installer.



REQUIRED TOOLS:

Recommended tools for SnoBar/ColorBar installation.

- Hammer for installing the SnoBar plastic end caps
- Drill Gun with 3/8” Nut Driver for driving Tek Screws
- Torque Wrench that reads into in/lbs (***inch pounds***)
- 3/16” Allen Bit for tightening set screws
- 9/16” socket for tightening the RoofClamp top bolts
- Flex Pivot Bit for Drill Gun – helps on shorter seams.
- Tape Measure
- Hacksaw
- Deburring File
- Pencil

SYSTEM PARTS:

Verify quantities of the parts against the packing slip. Your system should include:

- RoofClamps with cup tip set screws, top bolts and washers
- RCB-2 Bracket or RCB-3 Bracket for more severe angles.
- SnoBar or ColorBar
- Self-Drilling Tek Screws
- End Caps (only for SnoBar)
- Splice Connectors (only for connecting multiple ColorBars)
- Optional Ice Stoppers (If ordered with your project).



DETERMINE LAYOUT OF ROWS:

Refer to the layout that was provided when the system was purchased. If no layout was provided, then a preliminary basic layout would be one row 12” up from the eave (or over the load bearing wall) and all additional rows will be spaced evenly up the slope.

For example, if the roof, from eave to ridge, is 26'-0”, and you were putting on two rows, you would put the first row at 12” up from the eave (or over the load bearing wall), and the second row would be put at 13'-6” from the eave edge (or 12'-6” from the first bar).

Make sure all workers are properly harnessed and anchored to the roof according to OSHA fall protection guidelines.

Never use the SnoBar/ColorBar system as a tie off point.

INSTALLATION INSTRUCTIONS:

- ◆ **Never extend the bar more than 3” past the last clamp on the end of a row or a row terminating in a valley.**
- ◆ Bars may have to be cut to length depending on panel width. Do not discard any cutoffs until the job is completed.
- ◆ **Short sections of SnoBar or ColorBar must span at least two seams.** In a continuous run of SnoBar or ColorBar, cutting of the bar may be required to avoid having a short bar at one seam. **A short bar clamped to a single seam is not acceptable and will fail.**



INSTALLATION INSTRUCTIONS, Cont'd.:

1. Install 3 set screws into all of the RCT clamps with the provided cupped tips pointing inward towards the seam. Leave just enough room between screw tips for the clamps to slide over the seam.



Next, mount the RCB-2/RCB-3

bracket on top of the RoofClamp so the large hole in the RCB-2/RCB-3 bracket aligns with the threaded hole on top of the RoofClamp. The two smaller holes on the face of the RCB-2/RCB-3 bracket will be facing upslope. Use the supplied top bolt and washer to attach the RCB-2/RCB-3 bracket onto the



RoofClamp using a 9/16" socket. Torque the top bolts to 90 in/lbs. This will be referred hereafter as the RoofClamp/RCB-2/RCB-3 assembly.

2. Based on the manufacturer's recommended spacing layout, measure 12" to 18" up the seam from the eave (if there is an overhang, place the first row over the load bearing wall). Mark with a pencil at the farthest seam starting at the left. Then mark the same distance from the eave on the seam just short of the length of the bar you are installing. For example: If installing a



full 12' section of bar you would want the 2nd mark to be just short of 12' from the 1st mark. Be sure the two seams are not wider than the length of bar that you are installing. Do not place the clamps over clips whenever possible to avoid restricting the thermal expansion of the panels.

INSTALLATION INSTRUCTIONS, Cont'd.:

3. Set the first RoofClamp/RCB-2/RCB-3 assembly onto the furthest left seam of the bar section at your 1st pencil mark. Hand tighten the set screws to the seam, making sure that the clamp is centered and the bottom of the clamp is pressed down tight to top of seam. The (4) holes in the bar receiver section of the RoofClamp/RCB-2/RCB-3 assembly should be facing upslope when properly mounted onto the seam.



While putting downward pressure on the assembly, torque the 3 set screws in the RoofClamp to 90 inch/lbs. Repeat this step to install a second RoofClamp/RCB-2/RCB-3 assembly on the furthest right seam as marked in Step 2.

4. Place a full section of bar down into the receiver of the RoofClamp/RCB-2/RCB-3 assemblies (do not attach bars to assemblies yet). This section of bar will be used as a straight edge to install the remaining RoofClamp/RCB-2/RCB-3 assemblies for that bar section. These should only be set in place with the Roof Clamp RCT set screws hand tightened.

Once all RoofClamp/RCB-2/RCB-3 assemblies in the bar section are installed, torque all set screws to 90 inch/lbs. while applying downward pressure to the bar.



INSTALLATION INSTRUCTIONS, Cont'd.:

5. If using the 1" square SnoBar, install the supplied Plastic End Caps at each end of the SnoBar. Be sure to de-burr any field cut bars prior to installing End Caps.

If using the aluminum ColorBar, disregard this step.



6. Set the bar into the RoofClamp/RCB-2/RCB-3 assemblies, making sure not to extend more than 3" past the last RoofClamp/RCB-2/RCB-3 assembly at the end of the row. Make sure the bar is seated tightly in the RoofClamp/RCB-2/RCB-3 assembly. Apply downward pressure to the bar while installing the (4) Tek Screws through the back of the RoofClamp/RCB-2/RCB-3 bracket assembly into the SnoBar or ColorBar. Follow the same procedures for each clamp as you progress down the section of bar.

Repeat these 6 steps for each full section of bar



The RCB-2 bracket can swivel up to 19 degrees and the RCB-3 bracket can swivel up to 31 degrees in converging hips and valleys.



INSTALLATION INSTRUCTIONS, Cont'd.:

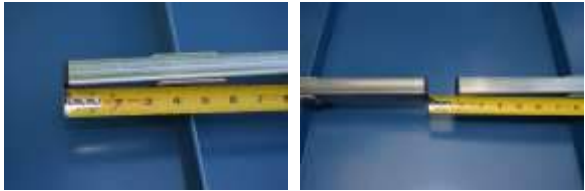
7. When the optional IceStoppers are installed, the short leg of the IceStopper should be facing upslope with the Tek screw holes lining up with the upslope side of the lower bar. If installing one IceStopper per panel, then center between clamps. Hold tightly to the upslope side of the lower bar and install (2) Tek Screws while applying downward pressure. On panels 18" or wider, use two or three IceStoppers spaced equally between panel seams.



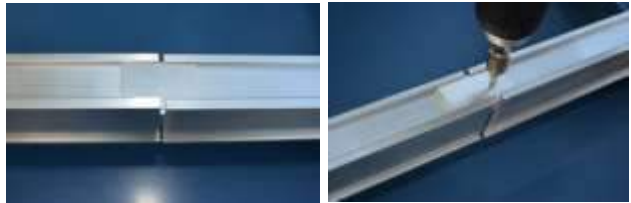
If you did not order IceStoppers with your system and you experience snow and ice sliding under the bars, they can easily be added in the future.

8. **For SnoBar**, butt joints should always be centered in the panel valley with no more than a 2" gap between butted ends. Some panels require the bars to be cut to obtain correct seam spacing.

Note: Never extend the bar more than 3 inches past the seam!



For ColorBar, the supplied Splice Connectors create a continuous run of bar therefore the bar ends should be no further than 1/8" apart. ColorBar butt joint connections can be made anywhere along the row other than inside the clamp, as long as the splice connectors are properly installed with 1 Tek screw.



INSTALLATION INSTRUCTIONS, Cont'd.:

9. Space additional rows of SnoBar or ColorBar evenly up the slope, always measuring from the eave edge according to the manufacturer's recommended spacing layout. This gives the best protection against snow and ice slides while providing balanced structural loading across the entire roof structure. If you have any questions or need spacing assistance, please call us at 800-766-5291.

Action Manufacturing LLC and/or IceBlox, Inc is not responsible if any system failure occurs from improper installation, improper panel attachment, improper roof system installation, or inadequate spacing layout of the SnoBar or ColorBar system.

DESIGN CONDITIONS:

1. All loads incurred by the SnoBar/ColorBar System will be transferred to the panels. Therefore, proper panel attachment to substrate/structure is necessary to prevent roof panels from sliding under snow load. New and existing structures must be evaluated to insure that they can withstand retained snow loads. (In instances where there is an overhang at the eave edge, it is imperative to make sure that the overhang can hold the accumulated snow load, otherwise, the first row of SnoBar or ColorBar should occur at the bearing wall.)
2. It is not recommended to place the SnoBar/ColorBar System in isolated areas such as over doorways, vents and partial roof areas. Please call for special design considerations in these areas.
3. No snow retention system is capable of retaining 100% of snow and ice from falling off of the roof. The system is designed to mitigate the dangers of sliding snow and ice.
4. The roof system should be a minimum of 24 gauge steel and have a seam height of at least 1". Do not use the SnoBar/ColorBar system on seams with separate seam covers or batten strips.



Design Conditions, cont'd.

5. Clamp spacing varies depending on seam spacing (12”o.c. up to 42”o.c.). Clamps should be placed at **every seam**, so that the load is distributed evenly to every roof panel. Yes, we know that other manufacturers may only provide a clamp for every other seam in order to be the lowest priced, but this is very risky and usually not warrantied against failure. We design systems that last the life of the roof and back them up with a Lifetime Warranty against failure.
6. Designer/Architect, Installer, or Owner of the project should have knowledge of the local snow loads (ground snow load PSF/kPa), climatic conditions, roof slope, roof orientation, potential drifting, and roof design prior to installing a SnoBar or ColorBar system.
7. System layout is calculated using length of panels, Ground Snow Load, roof slope, snow loading, and areas needing protection from falling snow. More than one row of SnoBar/ColorBar may be needed. We provide free design service to make sure it gets done correctly the first time. Call us at 800-766-5291 or email support@snojax.com with any questions.
8. Finally, no matter how well a system is designed, Mother Nature may create unforeseen conditions that may have not been considered, such as drifting, ice, uncharacteristic amounts of snowfall, etc. Owners must be aware of these conditions and when these extremes are reached, snow and ice should be physically removed from the roof. Snow retention systems do not prevent snow drifting on overhangs or cornices. The owner must be aware of these situations and remove them as they occur.

It is the sole responsibility of the Designer/Architect, Installer, or Owner to assess the suitability of using the SnoBar or ColorBar systems based on the above design considerations.



SnoBar/ColorBar



RCB-2 / RCB-3 Installation Instructions

Do not discard these instructions.

Please read and fully understand all warnings, instructions and regulations prior to use.

SnoBlox-Snojax

671 Willow Ave.

Lemoyne, PA 17043

(800) 766-5291

www.SnoBlox-Snojax.com

