

# SnoCheat RC / RCT



## 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
Design Considerations .....	8
Warranty .....	10

## Before Installing the SnoCleat Snow Guard System

Read the **DESIGN CONSIDERATIONS** starting on page 8.  
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 fixed 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:**

Make sure to have the proper tools for installing the SnoClea.

- Drill Gun with 3/8" Nut Driver Bit for driving Tek Screws
- Torque Wrench that reads into in/lbs. (*inch pounds*) for setting set screw torque to 90 in/lbs.
- 3/16" Allen Bits for tightening set screws
- Tape Measure
- Carpenter Pencil & Sharpener

## **SYSTEM PARTS:**

Verify quantities of the parts against the packing slip. Each SnoClea Seam Mounted snow guard should include:

- SnoClea Roof Clamp with 3 Cup Tipped Set Screws
- RCB-2 Swivel Bracket with Top Mount Bolt & Washer
- SnoClea with 2 Self-Drilling Tek Screws



## **DETERMINE LAYOUT OF ROWS:**

Refer to the layout that was provided when the system was purchased. If no layout was provided, then a basic layout would be one staggered 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 (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 SnoCleat product as a tie off point!**

## **INSTALLATION INSTRUCTIONS:**

**Special Disclaimer for Seam Mounted Snow Guards:**

***Since there is no release factor on individual standing seam mounted snow guards, panel damage may occur in the event of a sudden snow slide. This can be mitigated by adjusting the torque setting on the top mounted bolt. The most effective method of retaining snow and ice on a metal roof is to follow the manufacturer's layout before installing this or any snow guard system. Multiple rows of snow guards may be required.***



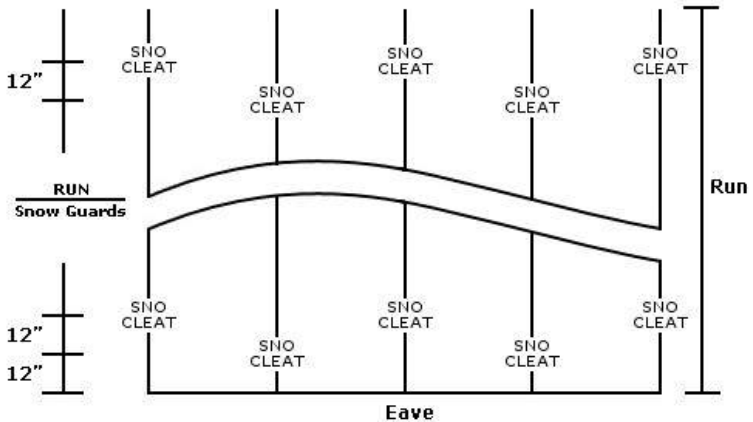
Installation, Cont'd.

1. Pre-load 3 set screws into all SnoCleat roof clamps prior to getting on the roof, with the cupped tips pointed inward toward the panel seam. Leave enough of a gap between the tips of the set screws for the clamp to slide easily over the seam.



2. Based on the layout, measure approximately 12" up the seam from the eave and make a pencil mark every other seam, skipping a seam. If there is a long overhang, place the first row over the load bearing wall. Do not place the clamps over clips whenever possible to avoid restricting the thermal expansion of the panels. Moving over to the skipped seams, make a pencil mark 12" above the first row that was marked on the alternating seams. There will be a SnoCleat placed on every seam but staggered across the roof. See sample layout as illustrated in below picture.

**Important: Always install guards on complete roof sections, never isolate areas of snow guards.**



## Installation, Cont'd.

3. Set the first SnoCleave Clamp onto the seam at your 1st pencil mark. Hand tighten the set screws to the seam, making sure the clamp is centered and the bottom of clamp is down tight to the top of the seam. While putting downward pressure on the SnoCleave clamp, torque the set screws to 90 inch/lbs. Do not overtighten or use an impact gun on set screws. Repeat this step to install each row of SnoCleave Clamps on alternating seams. Every seam must have at least 1 SnoCleave and the pattern(s) must be staggered. Never install the SnoCleave in straight rows.



3. Install the RCB-2 Swivel Bracket with top mounted bolt and washer on top of the SnoCleave Roof Clamp and torque to 100 inch/lbs. The RCB-2 Swivel Bracket can be torqued to a lower setting to help protect the seams in the event of a heavy snow impact. The RCB-2 Swivel Bracket should always be placed downslope to support the SnoCleave.



Installation, Cont'd.

4. An industry leading exclusive feature of the RCB-2 Swivel Bracket is that it can be adjusted to any angle desired as long as the leading edge on the underside contacts the seam. This is especially helpful when compensating for angles in hips and converging valleys.



5. After the top mounted bolt on the RCB-2 Swivel Bracket is torqued to the desired setting, center the SnoCleave in the bracket and install by securing with the (2) supplied Tek screws.



An optional 2 inch X 4 inch ColorStrip cut from excess roofing material can be installed in the face of the SnoCleave to color match the roof. Pinching one corner of the SnoCleave face with a pair of pliers will prevent the ColorStrip from sliding out.



Installation, Cont'd.

9. Space additional rows of SnoCleats evenly up the slope, always measuring from the eave according to the layout provided. This gives the best protection against snow and ice slides while providing balanced structural loading across the entire roof structure. If not sure how to space additional rows, please call us at 800-766-5291.

For example, if you have a 33 foot panel length from eave to the ridge that requires three rows of SnoCleaT, place the first staggered pattern 12" up from the eave, the second pattern at 11' from the eave, then place the third and final pattern at 22' up from the eave.

**Action Manufacturing, LLC and/or IceBlox, Inc. are not responsible if failure occurs from improper installation, set screw torque, panel attachment, roof system installation, or inadequate design layout.**

Be sure to read and follow all instructions. Please call 800-766-5291 if you have any installation questions.

**DESIGN CONSIDERATIONS:**

1. All loads incurred by the SnoCleaT 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 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 SnoCleaT should occur at the load bearing wall.)
2. It is not recommended to place the SnoCleaT System in isolated areas such as just over doorways, vents and partial roof areas.





Design Considerations, Cont'd.

3. No snow retention system is capable of retaining 100% of snow and ice from falling off the roof. The system is only designed to mitigate the dangers of sliding snow and ice.
4. Roof system should be a minimum of 24 gauge steel and have a seam height of at least 1 inch. Do not use the SnoCleat system on seams with separate seam cover or batten strips.
5. Clamp spacing varies depending on seam spacing (12"o.c. up to 24"o.c.) and panel width. Clamps should be placed on **every seam**, so that the load is distributed evenly across the roof. 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. The 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 SnoCleat system.
7. System layout is calculated using length of panels, Ground Snow Load, roof slope, and roof areas needing protection from falling snow and ice. More than one row of SnoCleat may be needed. We provide free design service to make sure it gets done correctly the first time. Call customer service at 800-766-5291 or email [support@snojax.com](mailto:support@snojax.com) with any questions.



## Design Considerations, Cont'd.

8. Finally, no matter how well a system is designed, Mother Nature can sometimes produce more snow and ice than what the SnoCleat system was designed to handle. Unforeseen conditions such as drifting, ice and unusual amounts of snowfall can overload the SnoCleat system. The building owner must be aware of these potential conditions and be prepared to physically remove the snow and ice from the roof when snow loads exceed what the SnoCleat system was originally designed to hold. 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. This system does not prevent ice dams. Ice dams typically happen when water runs down toward the colder eave where it freezes. The ice can potentially back up under the roofing material.

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

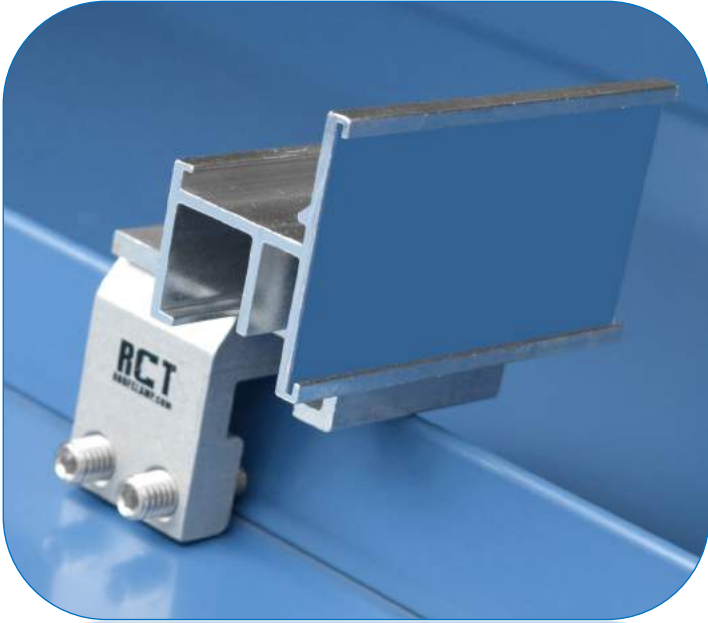
### **Warranty:**

The following warranty is made in lieu of all other warranties expressed or implied. Recommendations for proper use of the product are based on tests believed to be reliable. Any goods proven to be defective due to materials will be replaced, or purchase price refunded, but in no event shall the manufacturer be responsible for damages in excess of the purchase price. User shall determine the suitability of the product for its intended use and assumes all risks of its use or handling.

# **Installation Notes**



# SnoClead RC / RCT



## Installation Instructions

**Do not discard these instructions.**

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