

# Specifications for ColorRail Snow Retention System for Metal Roofs

## PART 1 – GENERAL

### 1.1 SUMMARY:

#### A. WORK INCLUDES:

1. Snow retention system that clamps directly to the standing seams without penetrating the roof system. Screw-down mounted ColorBrackets are used for mechanically fastened roofs.
2. Coordinate with the installation of the metal roofing system to assure the proper fastening of the metal roof to the substructure.
3. Provide all necessary components: Powder Coated Clamps/ColorBrackets, Bars, Set Screws, Tek Screws, End Caps and Optional Powder Coated IceStoppers.

#### B. RELATED SECTIONS:

1. Section 07410: Preformed Metal Roofing
2. Section 07600: Flashing and Sheet Metal
3. Section 07400: Metal Roof Panels
4. Section 07610: Sheet Metal Roofing

### 1.2 SYSTEM DESCRIPTION:

#### A. COMPONENTS:

1. ColorRail System consisting of 12 Ga. stainless steel one piece clamps and extruded 6061-T6 aluminum ColorRail that is powder coated to match the roof.
2. Set screws to be "cup tipped", Stainless Steel, 3/8" diameter, torqued to 90 in/lbs.
3. Bar to be attached to clamp with two (2) corrosion protected #10 tek screws. ColorBrackets are used for mechanically fastened roofs.
4. Splice plates to be used as couplers to connect the ColorRail.
5. *Optional:* Aluminum Powder Coated "Ice Stopper" centered on panel and mounted perpendicular to roof panel to prevent sliding ice. Use over pedestrian areas or on areas needing additional protection.

#### B. DESIGN REQUIREMENTS:

1. Clamps must be used at every roof seam in roof areas.
2. Snow retention system should have a minimum performance of 500# per linear foot of bar without deflection and 500# per clamp without significantly damaging the roof panel.
3. Based on snow load, climatic conditions, length of roof panel and width of panel; multiple rows of ColorRail may be needed.
4. Provides attachment without voiding roof panel warranty.

#### C. METAL ROOFING AND SUBSTRATE CRITERIA:

1. Metal roofing must be a minimum of 24 Ga. Steel.
2. All loads incurred by the ColorRail will be transferred to the panels; therefore proper panel attachment to substrate/structure is necessary to prevent roof panels from sliding under snow load. It is important to design new structures or assess the existing structure to make sure it can withstand retained snow loads. (*Architect Note: Add this requirement to Metal Roofing Section*)

1.3 SUBMITTAL: – Submit Manufacturer's specifications, standard detail drawings and installation instructions.

1.4 QUALITY ASSURANCE: – Installer to be experienced in the installation of metal roofing and snow retention systems for a period of not less than 5 years in the area of the project.

1.5 DELIVERY/STORAGE/HANDLING: – Inspect material upon delivery and order replacements for any missing or defective items. Keep material dry, covered and off the ground until installed.

## PART 2 – PRODUCTS

### 2.1 MANUFACTURER:

- A. ColorRail by Action Manufacturing exclusively distributed by Snoblox-Snojax, Lemoyne, PA (800) 766-5291 [www.SnobarColorbar.com](http://www.SnobarColorbar.com)

### 2.2 MATERIALS:

- A. Clamps: 12 Ga. one-piece stainless steel clamps with 2 "cup tipped" stainless steel set screws used at every roof seam.
- B. Bars: Specify an extruded 6061-T6 aluminum ColorRail powder coated to match the roof.

### 2.3 FINISH:

- A. Powder Coat – Color to match or be similar to metal roof or as selected by architect

## PART 3 – EXECUTION:

### 3.1 EXAMINATION:

- A. Substrate: Inspect roof system to be properly attached and installed to withstand additional loadings incurred. Notify General Contractor of any deficiencies before installing ColorRail.

### 3.2 INSTALLATION:

- A. Comply with architectural drawings for location and with Manufacturer's instructions for assembly, installation and erection.
- B. Clamps must be used at every roof seam in straight rows.
- C. All Set Screws torqued to 90 in/lbs. and rechecked annually
- D. Optional mechanically fastened, powder coated, Colorbracket attachment available.
- E. Refer to manufacturer's installation instructions <http://www.SnobarColorBar.com/installation-instructions/>.

### 3.3 WARRANTY

- A. ColorRail systems shall include free limited lifetime warranty on parts and finish for all systems following manufacturer's spacing/ installation recommendations.