

SNOW GUARD SPACING GUIDELINES

OBJECTIVE: Distribute snow guards uniformly throughout the sloped surface of the roof. With this method the snow guards hold the snow evenly, preventing slides and keeping a balanced snow load.

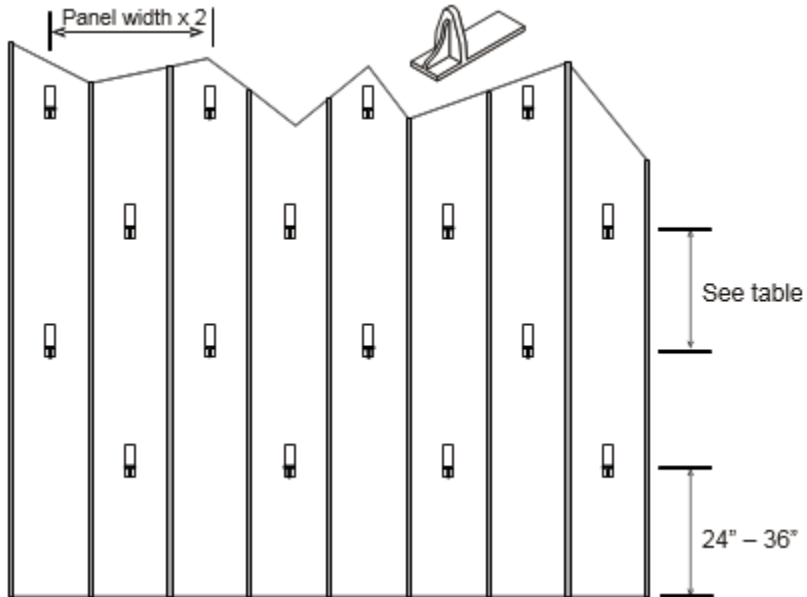
START FIRST HORIZONTAL ROW 24" – 36" FROM EAVES: This allows the first 2 – 3 feet of snow to shed off roof, preventing snow accumulation at the eaves.

VERTICAL SPACING OF ROWS FOR ALL ROOF TYPES:

ROOF SLOPE	VERTICAL SPACING BETWEEN ROWS
1/12	34"
2/12	34"
3/12	32"
4/12	30"
5/12	28"
6/12	24"
7/12	20"
8/12	18"
9/12	18"
10/12	16"
11/12	16"
12/12	14"
13/12 and greater	12" > 12/12 do not expect 100% result. Guards may only act to break up snow on very steep slopes.
STAGGER ROWS COUSE TO COURSE CONTINUING UP THE ROOF TO THE RIDGE AT TOP	

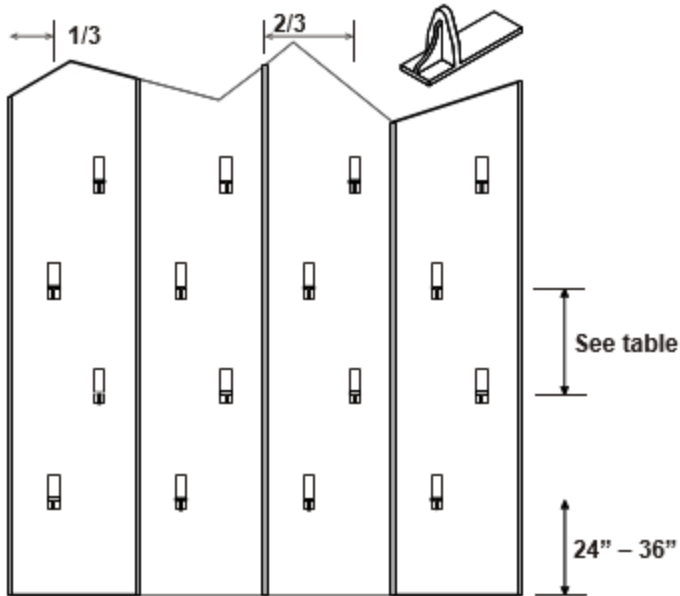
HORIZONTAL SPACING OF SNOW GUARDS WITHIN A ROW:

Panel size is less than 12”: One snow guard in the center of every other panel



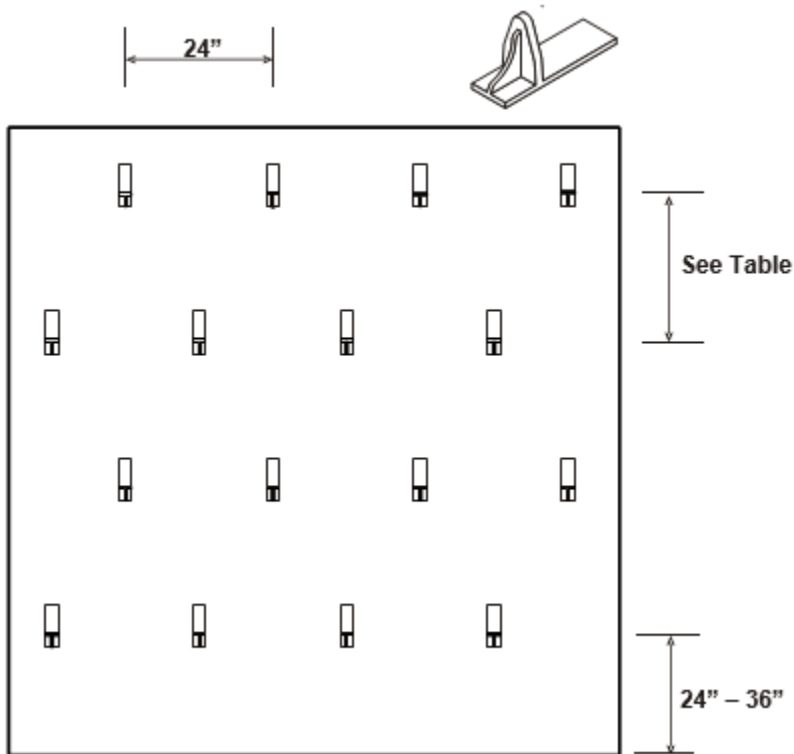
Panel size is greater than 12”:

- First row 1/3 in from the standing seam
- Second row 2/3 in from the standing seam
- Third row 1/3 in from the standing seam
- Fourth row 2/3 in from the standing seam (continue staggered pattern for all rows)



Flat Seam Metal Roof, Rubber Roof, TPO Roof, PVC Roof, Glass Roof:

Horizontally space snow guards **24"** apart

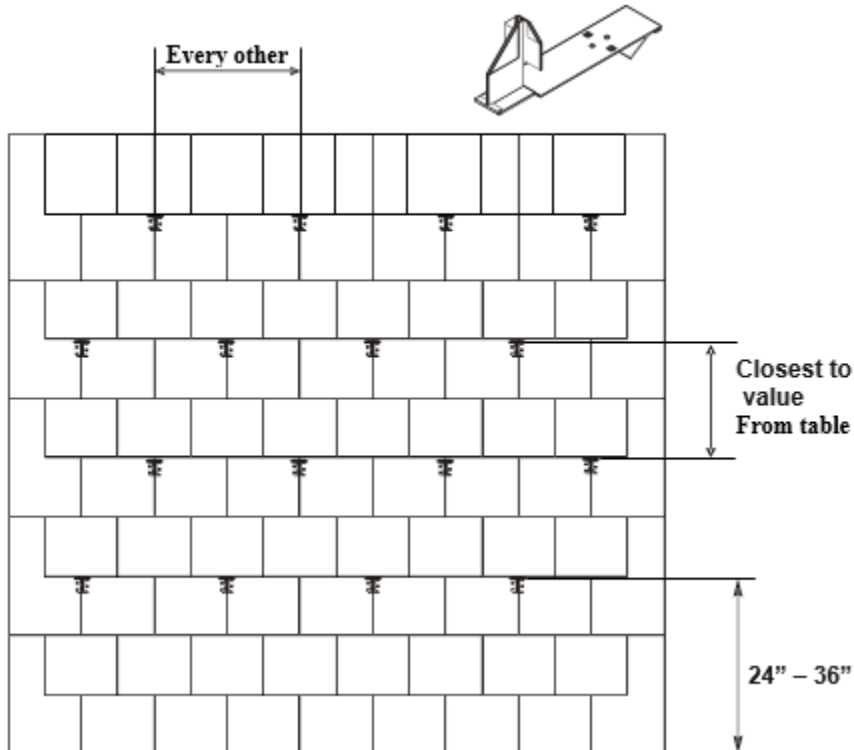


SLATE AND TILE ROOFS:

Use metal snow guards (models 4, 6, 8,12, or 13) that slide between the slate or tile and clip on to the head edge of the course below. See <http://snowguards.com/slateinstall.htm> for installation animation.

Vertical rows: The exposure to weather ultimately determines the increments for vertical placement. Use the table to determine the closest value. (example: slope is 6/12 so vertical rows would be 24 inches apart. Slate exposure is 8" so there would be a row of snow guards every third slate ($8" \times 3 = 24"$)

Horizontal placement: determined by slate width. One snow guard in every other slate. On very steep roofs consider one snow guard in every slate.



CALCULATION METHOD:

Calculate using rectangular roof area.

Need:

- Slope of roof (x/12)
- Rafter length from gutter to ridge (feet)
- Width of panel between standing seams (inches)
- Length along the eaves that you would like to protect (feet)

1) Convert rafter length to inches

$$[\text{rafter length}] \times 12 = [\text{rafter length inches}]$$

2) Subtract 36" at eaves (can also be 24")

$$[\text{rafter length inches}] - 36" = [\text{vertical length}]$$

3) Using slope, determine vertical row height from table

4) Calculate number of vertical snow guard rows

$$[\text{vertical length}] \div [\text{vertical row height from table}] = [\text{number of vertical snow guard rows}]$$

5) Determine horizontal spacing between snow guards:

- If metal panel width < 12 inches then: $[\text{panel width}] \times 2 = [\text{horizontal spacing increment}]$
- If metal panel width = > 12 inches then: $[\text{panel width}] = [\text{horizontal spacing increment}]$
- If flat, rubber, TPO, PVC, Glass then $[\text{horizontal spacing increment}] = 24"$

6) Convert length to protect to inches

$$[\text{length along eaves to protect}] \times 12 = [\text{horizontal length}]$$

7) Calculate number of snow guards per horizontal row

$$[\text{horizontal length}] \div [\text{horizontal spacing increment}] = [\text{number of snow guards per horizontal row}]$$

8) Calculate total number of snow guards

$$[\text{number of vertical snow guard rows}] \times [\text{number of snow guards per horizontal row}] = [\text{total snow guards}]$$