

Slate Roof Snow Retention Bracket Installation

AceClamp® snow retention brackets for slate roofs are custom-manufactured for each project. Each assembly includes a base plate and a two-, three-, or four-bar bracket.

Before Installation

Base Plate Requirements

The base plate is sized to replace one piece of slate. Before manufacturing, the customer must provide the required slate length and width.

Base plates typically include four countersunk ¼-inch holes. Alternative hole patterns or bolt configurations may be provided when specified.

Engineering and Layout

AceClamp Engineering will provide the required bracket spacing and overall system layout after reviewing the project's:

- Design snow loads
- Roof dimensions and configuration
- Rafter spacing

Standard load calculations assume rafters spaced 16 inches on center and a sound plywood roof deck at least ½ inch thick.

Do not exceed the maximum bracket spacing specified by AceClamp Engineering.

Installation Instructions

1. Begin at the Bottom of the Roof

Install the snow retention system from the bottom of the roof upward. Begin with the lowest required course of brackets.

2. Remove the Slate

Remove one piece of slate at each designated bracket location. The bracket base plate will take the place of the removed slate.

3. Position and Fasten the Bracket

Position the base plate in the opening and secure it using every provided mounting hole.

All fasteners must:

- Penetrate completely through the roof deck
- Be properly secured to the supporting structure

- Sit flush with the surface of the base plate

Important: Fasteners that extend above the base plate may place pressure on the overlying slate and cause cracking. AceClamp does not provide these fasteners as every decking is unique.

4. Complete the First Course

Continue installing brackets across the roof according to the layout and maximum spacing provided by AceClamp Engineering.

5. Reinstall the Slate

Continue installing the slate above the brackets. Individual slate pieces must be trimmed, fitted and sealed as necessary to accommodate the bracket and base plate.

Take care to prevent the slate from resting against raised fasteners or other uneven surfaces.

6. Install the Snow Bar

Please refer to the

<https://www.aceclamp.com/StaticDocs/Products/Snow-Bars/Snow-Bars-SSMR/ACECLAMP-SNOWBARS-A2-INSTALLATION-V031224.pdf>

7. Install Additional Courses

Continue the standard slate installation upward. If another snow-retention fence is required, install the next course of brackets using the same procedure and layout.

Final Inspection

Before completing the installation, confirm that:

- Every bracket is installed in the specified location
- Maximum bracket spacing has not been exceeded
- All mounting holes have been used
- Fasteners penetrate through the roof deck
- All fastener heads are flush with the base plates
- Slate pieces are properly fitted and sealed
- All bars and brackets are properly aligned and secured