



technical bulletin

**Asphalt Roofing
Manufacturers Association**

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Preventing Damage From Ice Dams

Snow and ice formations upon roofing structures can create ice dams at the roof eaves. Ice dams are typically formed by the continual thawing and freezing of melting snow or the backing up of frozen slush in gutters. When they occur, water can be forced under the roof and may cause damage to a home's ceilings, walls, and insulation.

The installation of eaves flashing is the recommended method for preventing such leakage. In climates where icing along the eaves is anticipated (where the average January temperature is 25°F or less), eaves flashing must be installed to insure maximum protection against ice dam damage. The appropriate selection of flashing material and the flashing strip width will depend upon the roof slope and the severity of icing conditions anticipated.

Proper Application Technique

I. New Construction

Low Slope (2" to 4" per foot):

Up to a point at least 24" beyond the interior wall line, overlap each saturated felt underlayment by 19" and cement the horizontal joint over the entire length of each felt. Uniformly apply the asphalt plastic cement at the rate of two gallons per 100ft.² so that there will be no contact between felts when the application is completed. Press the overlying sheet firmly into the cemented area. The double layer of cemented underlayment serves as the eaves flashing strip. The underlayment should overhang the metal drip edge by 1/4" to 3/8". See Figure A.

Note: For severe icing conditions, follow the same application instructions as stated above.

Normal Slope (4" per foot or greater):

Install a course of smooth, coated roll roofing, of not less than 50 pounds, parallel to the eaves. This course should overhang both the underlayment and the metal drip edge by 1/4" to 3/8". Apply the roll roofing flashing strip, ascending from the bottom of the roof, to a point at least 24" beyond the interior wall line. If a second flashing strip is required to reach that point, locate the lap in front of the exterior wall line. Overlap the flashings at least 2" and cement the horizontal joint over its entire length. Side laps should be 12" and cemented. See Figure B.

Note: For severe icing conditions, extend the flashing strip to at least 36" beyond the interior wall line and cement it to the underlayment using two gallons per 100ft.². Continue the application as stated above.

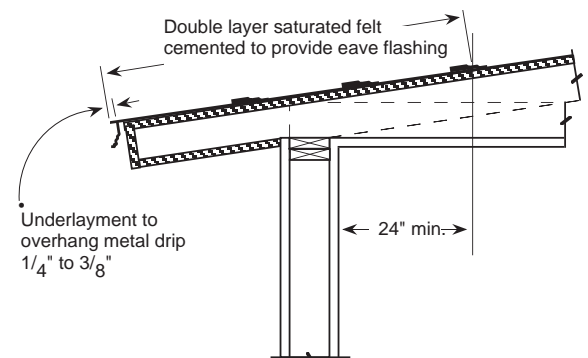


Figure A: Eaves flashing for low slope using asphalt saturated felt

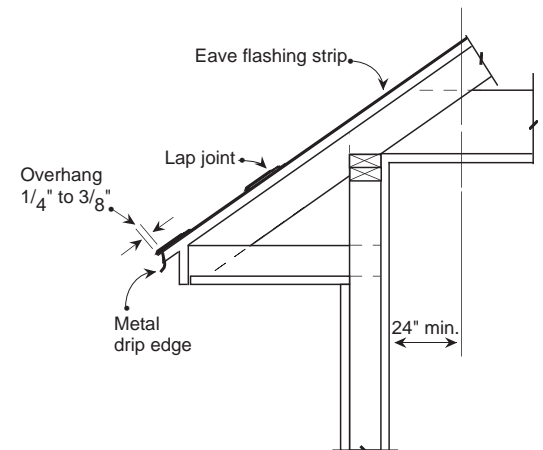


Figure B: Eaves flashing for normal slope using asphalt saturated felt

II. Reroofing and Repair

When repairing or reroofing over an existing roof, remove the old roofing to a point at least 24" beyond the interior wall line and follow the severe icing application instructions for the appropriate slope.

III. Alternative

For both new construction and reroofing, specialty eaves flashing membranes are available. Follow manufacturer's instructions for application of these products.

Note: These recommendations were prepared by and have the approval of the Asphalt Roofing Manufacturers Association for informational purposes only. They are not intended to revoke or change the requirements or specifications of the individual roofing material manufacturers or local, state and federal building officials that have jurisdiction in your area. Any question, or inquiry, as to the requirements, or specifications of a manufacturer, should be directed to the roofing manufacturer concerned.