



technical bulletin

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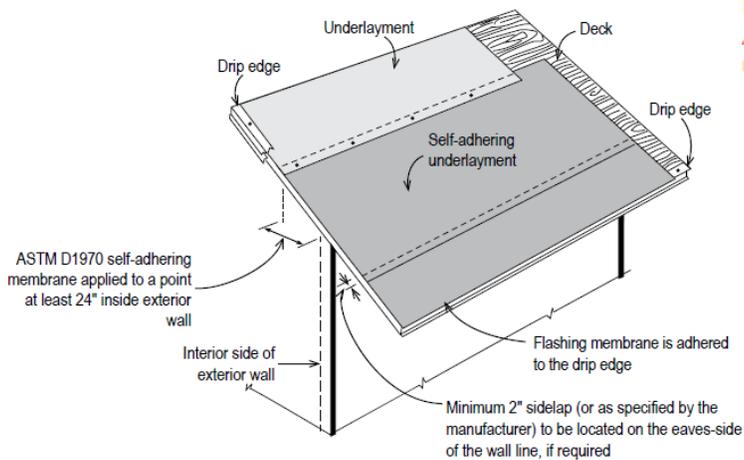
Protecting Against Damage from Ice Dams

Snow and ice accumulation on steep-slope roofs can lead to ice dams at the roof eaves. Ice dams are typically formed by the repeated thawing and freezing of melting snow or backing up of frozen slush in gutters. When ice dams occur, water can be forced under the roofing materials and may cause damage to a home's ceilings, walls and insulation, and long-term damage to structural components.

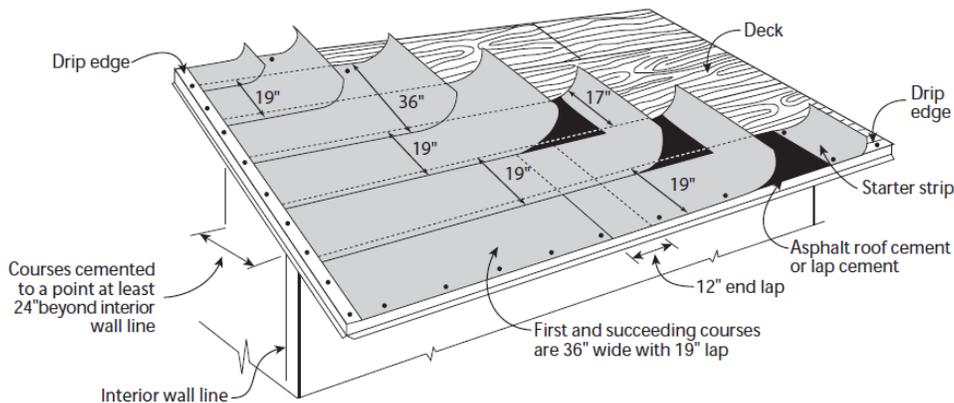
The installation of an ice dam protection layer along eaves is recommended to protect against leakage from ice dams. Per the International Building Code and the International Residential Code (IBC and IRC), in areas where there has been a history of ice forming along the eaves causing a backup of water, an ice barrier shall be installed. The International Residential Code (IRC) refers back to the local authority having jurisdiction. There are two methods of creating an ice dam protection layer. The installation of a polymer modified bitumen self-adhering underlayment that complies with ASTM D1970 (one layer) is one approach, as recognized by the current version of the IRC. It is ARMA's recommendation that the product should be extended a minimum of 24 inches (610 mm) inside the interior wall line of the building. There are some jurisdictions that will require eave protection to extend further up the roof slope, and other jurisdictions that will call for less. In all cases, apply per the roofing manufacturer's installation instruction and your local building code.

As an alternative, use two layers of asphalt saturated felt as the ice dam protection. Thoroughly adhere the felts to each other with a continuous bed of plastic cement from eaves to a point at least 24 in. inside the interior wall line of the building. Begin by applying the felt in a 19 in. (483 mm) wide strip along the eaves, overhanging the drip edge by $\frac{1}{4}$ to $\frac{3}{4}$ in. (7 to 19 mm). Place a full 36 in. (900 mm) wide sheet over the 19 in. (483 mm) wide starter piece, completely overlapping it. All succeeding courses will be positioned to overlap the preceding course by 19 in. Refer to the roofing manufacturer's installation instruction and the local building code for any additional requirements.

Self-adhesive as Ice Dam Protection



Double felt application for Ice Dam Protection



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