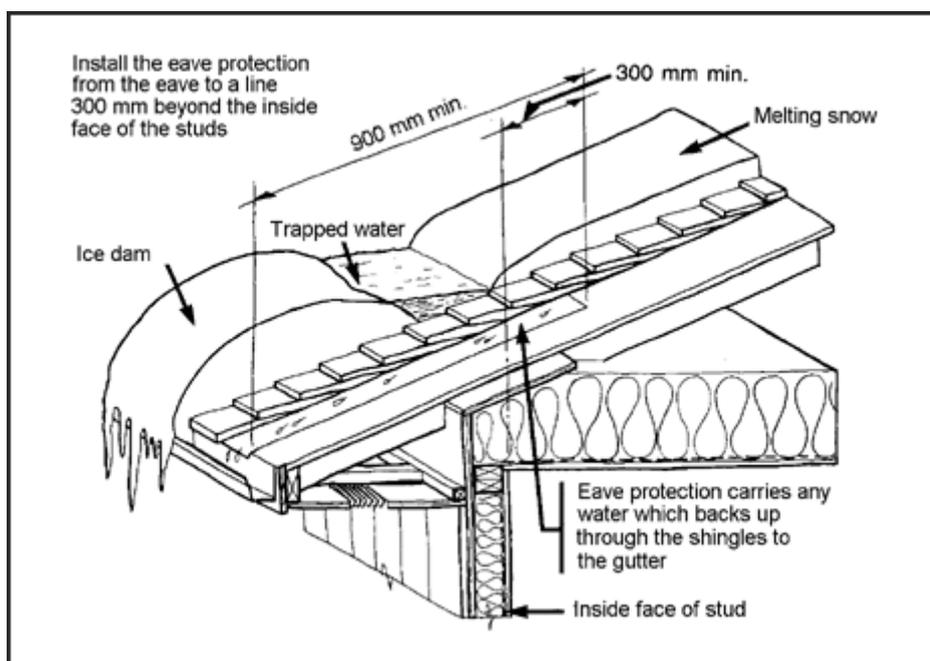


## PREVENTING PROBLEMS FROM ICE DAMS

Roof systems will sometimes leak due to the formation of ice dams. Ice dams are formed by the continuous melting and freezing of snow due to heat escaping from the house or by the backing up of frozen slush from the gutters. The melted water flows under the snow and freezes as it reaches the unheated soffit, thus creating the ice dam. When this occurs, water can be forced under the shingles and into the attic, causing damage to the home's ceilings, walls, insulation, gutters, eave and roof.



### To reduce ice dam formation and prevent ice dam problems:

1. Keep the attic space cold by insulating it from the warm house interior, thus reducing or eliminating snow melt.
2. Use high heel trusses, insulate to the outside of the plates, and install baffles to ensure ventilation at the eaves.
3. Ensure that the outer edges of the gutters or eaves trough are lower than the slope line to allow snow and ice to slide clear. Also ensure gutters are free of debris.

(Over)

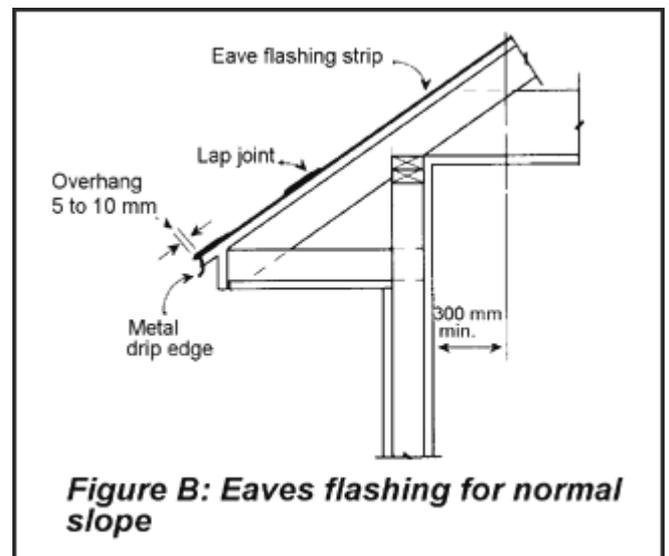
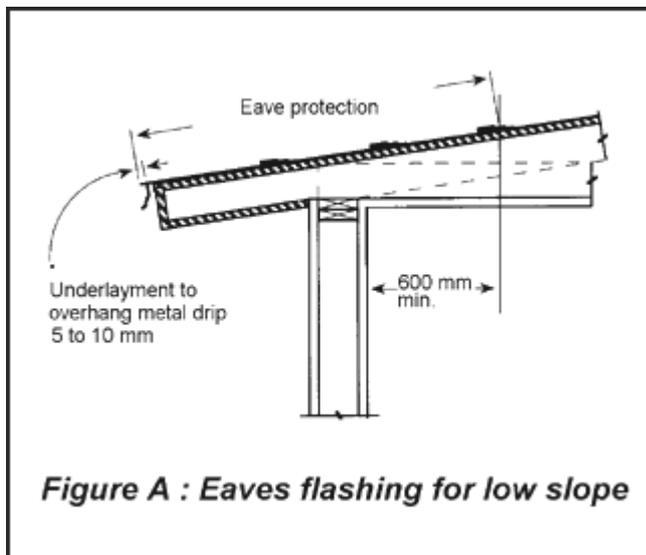
### Eave Protection requirements (NBC 9.26.5.1)

### Materials for Eave Protection (NBC 9.26.5.2)

- No. 15 asphalt-saturated felt laid in two plies lapped 480 mm and cemented together with lap cement
- Type M or S roll roofing laid with not less than 100 mm head and end laps cemented together with lap cement
- Glass fibre or polyester fibre coated base sheets, or
- Self-sealing composite membrane consisting of modified bituminous coated material, commonly known as Eave Protection Membrane, or Ice & Water Membrane

For proper application of the eave material, consult the eave protection material manufacturer's recommendations.

NOTE: The Building Code requires that the eave protection material extends 900 mm from the edge of the roof up the roof slope, to a minimum of 300 mm (12 in.) beyond the interior wall, but a minimum of 600 mm (24 in.) is recommended for better ice dam protection. Where icing conditions are severe, extending eave protection 1 m (40 in.) beyond the interior wall is the best option.



*For more information on this subject or other asphalt shingle technical issues, you may contact CASMA by e-mail at [casma@casma.ca](mailto:casma@casma.ca), or visit our website: [www.casma.ca](http://www.casma.ca). The information contained in this bulletin is for general education and is not intended to replace advice from a qualified contractor or direction on usage/installation from the manufacturer. Consumers should be aware of the safety hazards associated with work on roofs and, before doing so themselves, should consider following CASMA's advice of using qualified contractors. This bulletin may be reproduced with permission on condition that it be reproduced in whole, unedited, with attribution of copyright to CASMA.*