



Residential Re-roofing

Building permits: Required for re-roofing of all Residential buildings.

State License: Required unless work is completed by homeowner.

Inspections

Rough-In : Photos taken of roof deck, before and after

installation of icedam protection and underlayment.

Icedam protection must extend 24" inside exterior wall line.

Reference attached diagrams for flashing requirements.

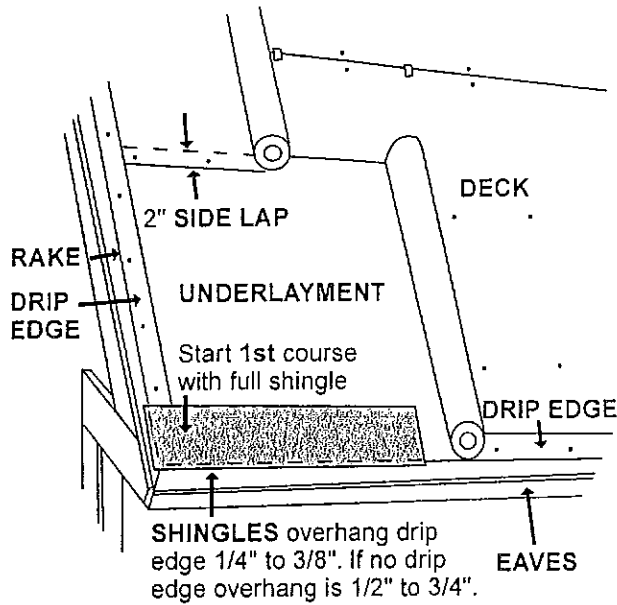
Final : Schedule inspection when work is completed.

Provide photos of installed icedam and underlayment.

Provide shingle manufacturers installation instructions.

Shingle Overlay Not Allowed

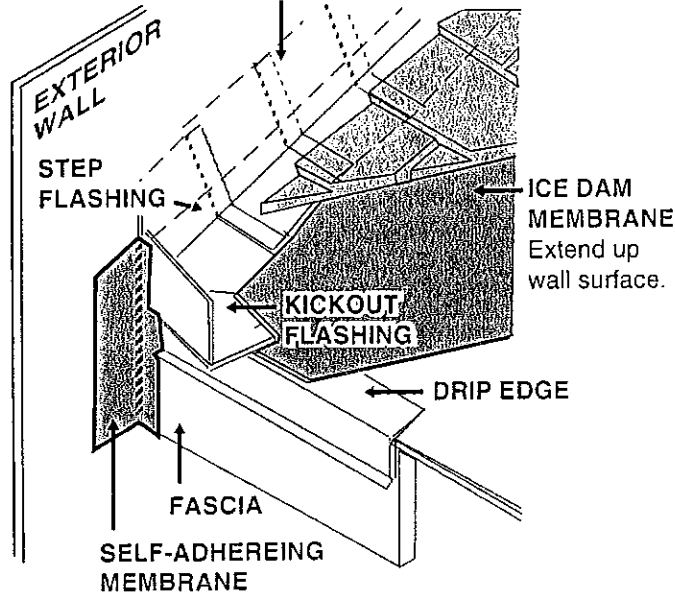
Ice protection underlayment



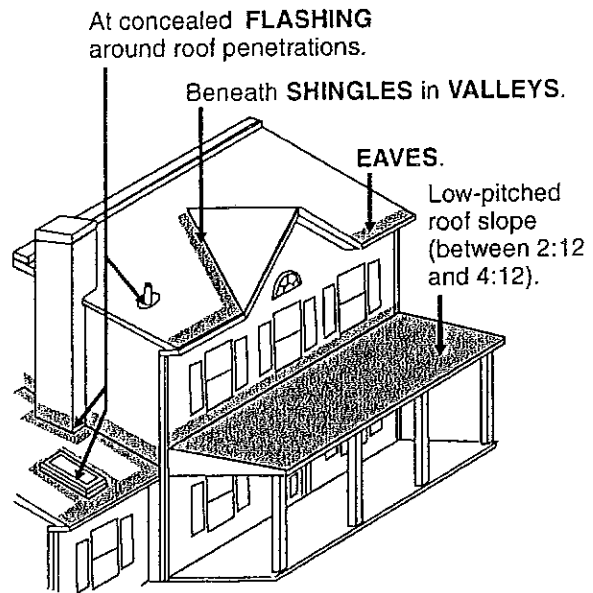
Installation: When applying underlayment, keep the product as wrinkle-free as possible. Unroll the underlayment parallel with the eaves. The underlayment should go over eaves' drip edge flashing, but go under the rake's drip edge flashing.

Kick-out flashing

WATER RESISTIVE BARRIER/HOUSEWRAP
Place over Step Flashing.



Where to use ice protection



Roof and soffit vents

If necessary, additional roof and soffit vents must be installed so that for every 300 square feet of attic area there is at least 1 square foot of ventilation. At least 50 percent, but not more than 80 percent, shall be in the upper portion of the roof and the balance to be provided by eave or soffit vents.

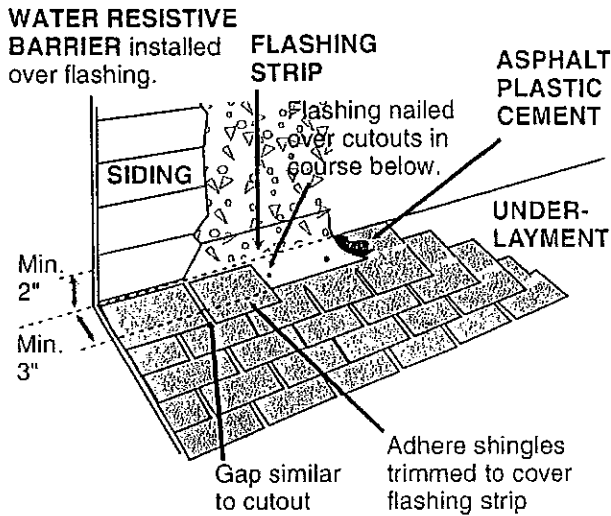
Exhaust vents

Care should be taken to ensure that kitchen and bathroom exhaust fan pipes are connected to the appropriate dampered exhaust roof vent with no openings into the attic that would allow exhaust air back into the attic space. The exhaust vents shall be installed the same as other attic vents and vent pipe flashings.

When re-roofing around furnace flues, take care to not dislodge the joints of the flue pipe within the attic or within interior chases this pipe might pass through. If in doubt, consult a licensed heating contractor.

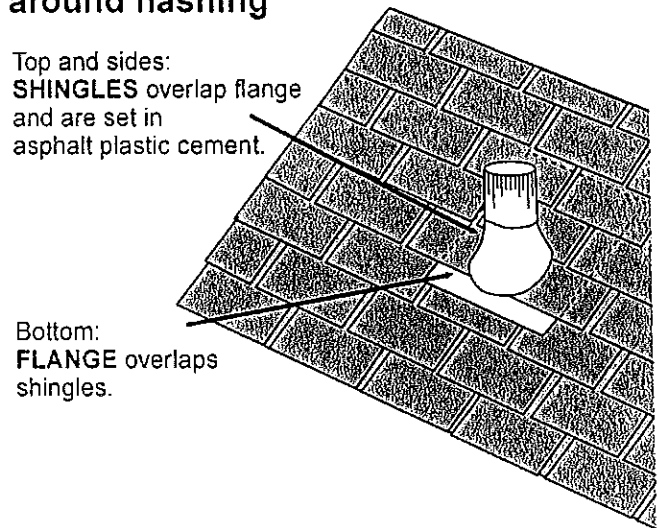
Vertical wall flashing (26-gauge)

1. Apply shingles up the roof until a course must be trimmed to fit at the base of the vertical wall. Plan to adjust the exposure slightly (and evenly) in the previous courses, so that the last shingle is at least 8 inches wide (vertically). This allows a minimum 5 inch exposure of the top course and a 3 inch headlap.

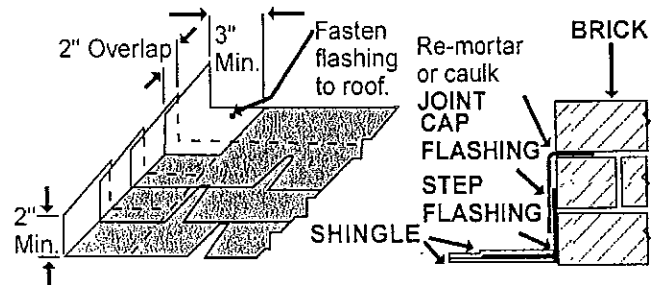


2. The flashing strip should be bent, using a metal brake, to extend at least 2 inches up the vertical wall and at least 3 inches onto the last shingle course; that is, to the top of the cutout.
3. Apply the flashing, 8 feet to 10 feet over the last course of shingles. Embed the flashing in asphalt plastic cement, or another appropriate adhesive, and nail it to the roof every 12 inches. Do not nail the strip to the wall.
4. If side laps are necessary, overlap the pieces at least 6 inches. Do not fasten in this joint area.

Shingle application around flashing



Sidewall flashing (26-Gauge)



Ice dam protection membranes

Required for ALL heated/conditioned building structures.

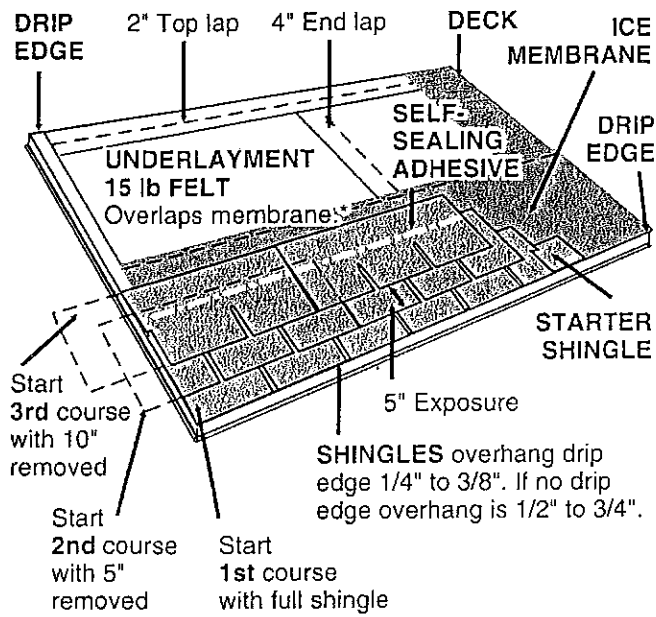
A. For roof pitches of 2:12 to less than 4:12

Same as for underlayment and, additionally, an approved waterproofing underlayment shall be installed to a point no less than 24 inches inside the interior wall line. When the manufacturer's specifications are more restrictive than the Building Code, the manufacturer's specifications shall be followed.

B. For roof pitches of 4:12 and over

Same as for underlayment and, additionally, a manufactured ice protection membrane or its code-approved equivalent assembly must be installed per manufacturer's instructions including, but not limited to, the following: The membrane shall extend from over the metal or wood drip edge to a point not less than 24 inches measured horizontally inside the exterior wall line. Depending on the depth of the soffit and width of the product, more than one layer could be required. The underlayments must extend to the outer edge at all fascia boards.

Shingle application using 5-inch method



*Felt underlayment must overlap the ice membrane a minimum of 2 inches.

Skylight: Basic sheet metal components

All dimensions approximate.

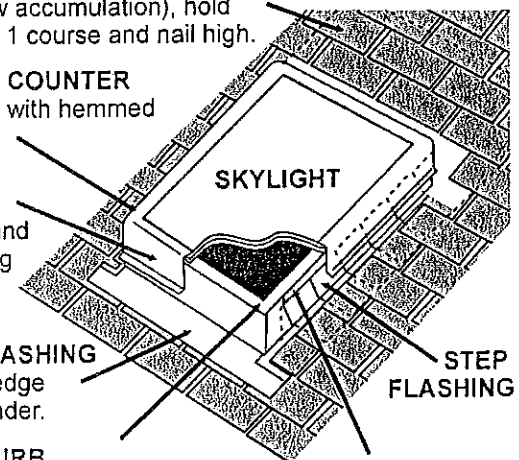
BACKER FLASHING under shingles minimum 3 courses. Where necessary (depending upon anticipated debris and/or snow accumulation), hold shingles up 1 course and nail high.

INTEGRAL COUNTER FLASHING with hemmed drip edge.

COUNTER FLASHING over base and step flashing approx. 2" min.

APRON FLASHING with lower edge hemmed under.

RAISED CURB (2" x 8" suggested as minimum to attain flashing clearance.)



WATERPROOFING UNDERLAYMENT turned up under curb