

RESIDENTIAL ROOFING

<u>PERMITS:</u> A roofing permit is required for roofing of residential dwellings and garages in accordance with Section R105 of the International Residential Code.

City of Austin **Building Department**507-437-9950
500 4th Ave NE
Austin, MN 55912

INSPECTIONS: When roofing has been completed, a final inspection is required. Please call the Building Department at 437-9950 to arrange for this inspection or any questions regarding decking or underlayment.

ASPHALT SHINGLE APPLICATION

ROOF DECKING: Current building codes require that asphalt shingles be applied to solidly sheathed roof decks. NOTE: most shingle manufacturers include language that: asphalt shingles shall no be applied to existing decks with sheathing boards that exceed 6 inches in width. Solid sheathing (CDX, Plywood or OSB), which is manufactured and stamped for roof application may be required by the manufacturer's installation instructions before shingles are installed.

<u>SLOPE:</u> Asphalt shingles shall only be used on roof slopes of 2:12 or greater. For roof slopes from 2:12 up to 4:12 double underlayment application is required. (see attached illustrations)

<u>FASTENERS</u>: Fasteners for asphalt shingles shall be galvanized steel, stainless steel, aluminum or copper roofing nails, minimum 12 gage shank with a minimum 3/8-inch diameter head, of a length to penetrate through the roofing materials and a minimum of ³/₄ inch into the roof sheathing. Where the roof sheathing is less than ³/₄ inch thick, the fasteners shall penetrate through the sheathing.

<u>ATTACHMENT</u>: Asphalt shingles shall have the minimum number of fasteners required by the manufacturer. Asphalt shingles shall be secured to the roof with not less than four fasteners per strip shingle or two fasteners per individual shingle. Where the roof slope exceeds 20:12 special methods of fastening are required.

<u>ICE BARRIER:</u> In areas where there has been a history of ice forming along the eaves causing a backup of water, an ice barrier that consists of at least two layers of underlayment cemented together or a self-adhering polymer modified bitumen sheet, shall be used in lieu of normal roof surfaces to a point 24 inches inside the exterior wall line of the building.

NOTE: Detached accessory structures that contain no conditioned floor

area are exempt.

OVERLAYS: In accordance with Section R907.3 of the 2006 I.R.C., overlays are no longer allowed for asphalt shingling applications.

<u>CRICKETS AND SADDLES</u>: A cricket or saddle shall be installed on the ridge side of any chimney greater than 30 inches wide. Cricket or saddle coverings shall be sheet metal or of the same material as the roof covering. (See illustration)

<u>FLASHING</u>: All base and cap and flashing shall be installed in accordance with manufacturer's installation instructions. Base flashing shall be of either corrosion-resistant metal of minimum nominal 0.019-inch thickness or mineral surface roll roofing weighing 77 pounds per 100 square feet. Cap flashing shall be corrosion-resistant metal of minimum nominal 0.019-inch thickness.

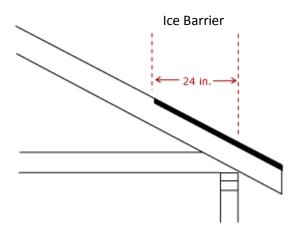
<u>VALLEYS</u>: Valley linings shall be installed in accordance with manufacturer's installation instructions.

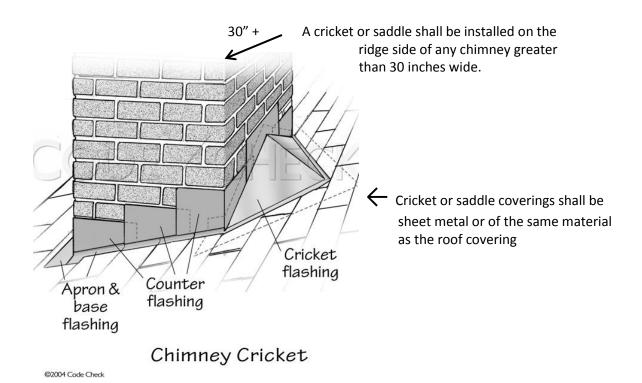
<u>SIDEWALL FLASHING:</u> Flashing against a vertical sidewall shall be by the step-flashing method.

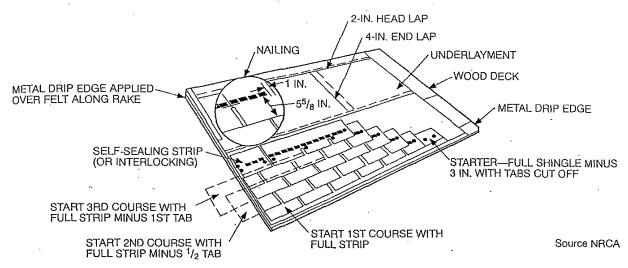
<u>903.3.3 KICK-OUT FLASHING/DIVERTER:</u> A kick-out flashing shall be installed where the lower portion of a sloped roof stops within the plane of an intersecting wall cladding, in such a manner as to divert or kick-out water away from the assembly. (See Illustration)

<u>ATTIC VENTILATION</u>: When re-roofing, attic ventilation must be brought up to present code (Section R806 I.R.C.). Requirements are as follows:

- 1) 1 sq.ft. of vent area per 150 sq.ft. of attic area without soffit venting.
- 2) 1 sq.ft. of vent area per 300 sq.ft. of attic with soffit venting.

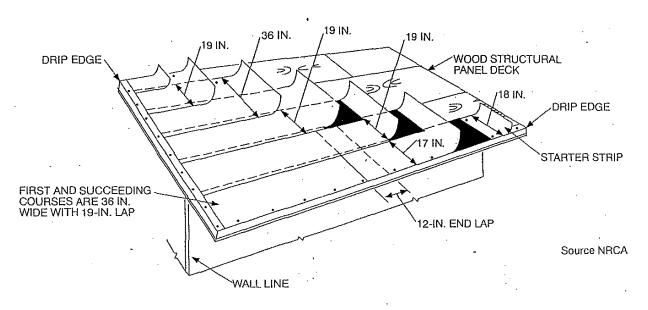




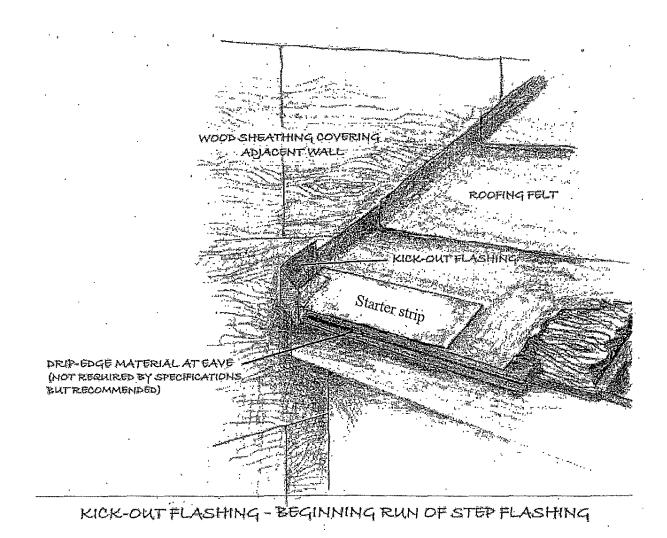


THREE-TAB, SQUARE BUTT STRIPS—CUTOUTS ARE CENTERED OVER THE TABS IN THE COURSE BELOW

ASPHALT ROOFING SHINGLES APPLICATION HIGH SLOPE (4:12 MINIMUM)



LOW SLOPE (LESS THAN 4:12) UNDERLAYMENT APPLICATION



ICR 903.2.2 Kick-out flashing/diverter. A kick-out flashing shall be installed where the lower portion of a sloped roof stops within the plane of an intersecting wall cladding, in such a manner as to divert or kick-out water away from the assembly.