

ROOFING REQUIREMENTS

2020 MN Residential Code Chapter 9

Scope

This handout is limited to Residential Asphalt Shingles, Fiberglass and Metal Roofing Panels. For other materials or commercial roofing projects contact Building Official Andy Schreder at [763-291-3704](tel:763-291-3704).

Permits and Licenses

A Building Permit is required for all roofing projects beyond simple repairs. For questions about repairs, contact the Building Official. All roofing contractors must have a state contractor's license. Questions regarding contractor licenses should be directed to the Minnesota Department of Labor and Industry at 651-284-5069.

Existing Roofs

All roof covering materials must be removed before installing new materials except where the existing roof has one layer of asphalt shingles a second layer may be installed over the first layer.

Required Inspections (Allow at least 3 to 4 days' notice for inspection requests)

Roof replacements require an on-site final inspection after work is completed. To schedule this inspection, call 763-331-7722 or by email at: permits@rumrivercc.com.

Valley Linings

A Valley lining of one of the following types shall be installed per manufacturer's installation requirements before applying shingles.

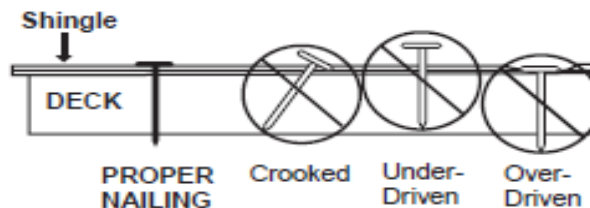
1. For open valleys: 24 inches wide, 26 gage galvanized metal or other corrosion resistant metal.
2. For open valleys: two plies of mineral surfaced roll roofing with bottom layer 18 inches wide and top layer at least 36 inches wide.
3. For closed valleys covered with shingles: one ply of smooth roll roofing at least 36 inches wide, or as described in items 1 and 2 is permitted, or one layer of self-adhering modified bitumen underlayment.

Roof pitch

Asphalt shingles shall not be installed on roofs with less than a 2:12 pitch and require double application of underlayment for less than 4:12 pitch. Manufacturer's instructions supersede all other requirements.

Fasteners

Fastener type and spacing shall be according to manufacture requirements but not less than four fasteners per strip shingle or two per individual shingle. Fasteners shall penetrate into roof sheathing at least $\frac{3}{4}$ -inch or through the sheathing when sheathing is less than $\frac{3}{4}$ -inch thick.



Roof Drip Edge (drip edge section of the code has been deleted)

Application of roof edge (must be according to shingle manufacturer requirements). In most cases the shingle drip edge shall extend not less than $\frac{1}{4}$ -inch or more than $\frac{3}{4}$ -inch over the eaves edge.

Ventilation

Ventilation of an enclosed attic and rafter spaces is required. If necessary, additional roof and soffit vents must be installed to provide at least 1 square foot of ventilation for each 300 square feet of roof area. At least 40 percent but not more than 50 percent of venting must be in the upper portion of the roof.

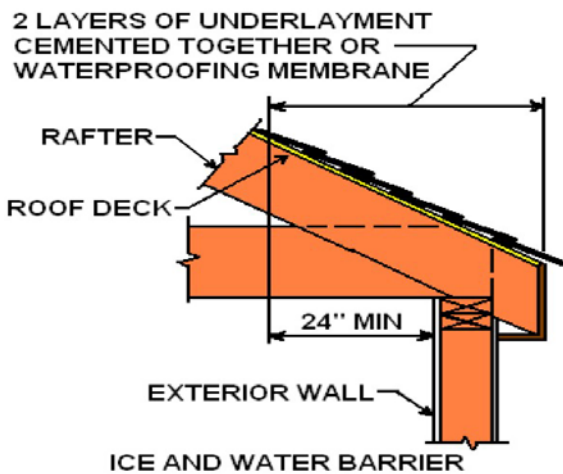
Ice Barrier

An *ice and water barrier* is required on all roofs except unheated detached accessory buildings. The barrier may be two layers of underlayment cemented together or a self-adhering polymer modified bitumen sheet. Ice Barrier must extend from eaves edge to at least 24 inches inside the building exterior wall line.

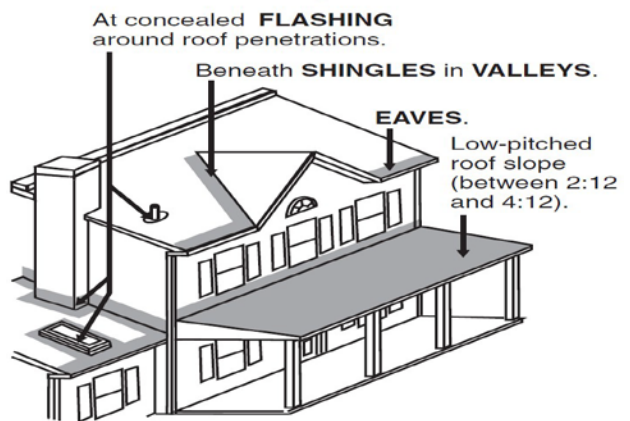
Flashing

Base and cap flashing shall be either a minimum .019-inch-thick corrosion resistant metal or approved mineral surface roll roofing and installed according to manufacture requirements. Base flashing against a vertical sidewall shall be continuous or step flashing and shall be at least 4 inches high and 4 inches wide.

Roofing Diagram Examples



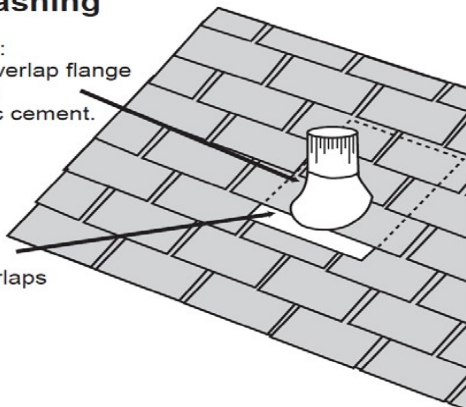
Where to use ice protection



Shingle application around flashing

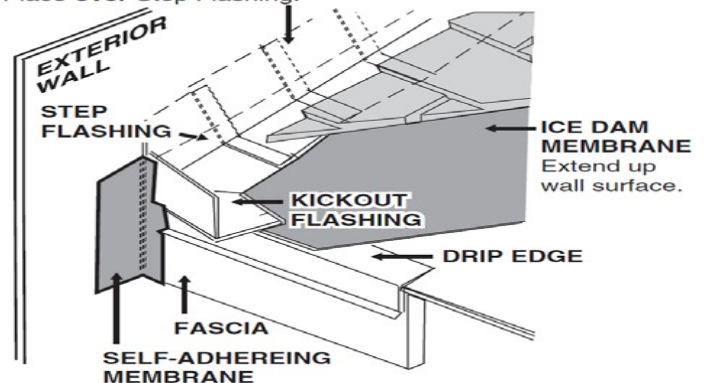
Top and sides: **SHINGLES** overlap flange and are set in asphalt plastic cement.

Bottom: **FLANGE** overlaps shingles.



Kick-out flashing

WATER RESISTIVE BARRIER/HOUSEWRAP
Place over Step Flashing.



Required on new roofs + re-siding or when simultaneously re-siding + re-roofing. Not required when only re-roofing.



Accuracy – Efficiency – Uniformity