



## ROOFING HANDOUT

### Scope

This handout is limited to Residential Asphalt Shingles, Fiberglass and Metal Roofing Panels.

### Permits and Licenses

A Building Permit is required for all roofing projects beyond simple repairs. A repair is defined as one square or less of material. 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

Roof replacements require an underlayment and final inspection. The underlayment inspection can be confirmed with an on-site inspection if no photos were taken or by emailing photos to [permits@oakdalemn.gov](mailto:permits@oakdalemn.gov).

*Photo requirements:* Clean decking, weather resistive barrier, front of the house.

An on-site final inspection is required after work is completed, which will be done after photos are received.

### Valley Linings

A Valley lining of one of the following types shall be installed per manufacturer's 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

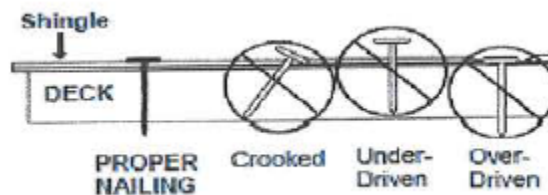
Asphalt shingles shall not be installed on roofs with less than a 2:12 pitch and require double application of underlayment for less than 4:12 pitch. Manufacture instructions supersede all other requirements.

### Decking:

If you have solid wood decking, knotholes, cracked or broken boards must be replaced. Gaps between boards cannot exceed 3/8"

### Fasteners

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



## 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. A conditioned garage also requires venting.

## Roof Edging (drip edge)

Application of roof edging must be according to shingle manufacturer requirements. In most cases the shingle drip edge shall extend not less than 1/4-inch or more than 3/4-inch over the eaves' edge.

## 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.

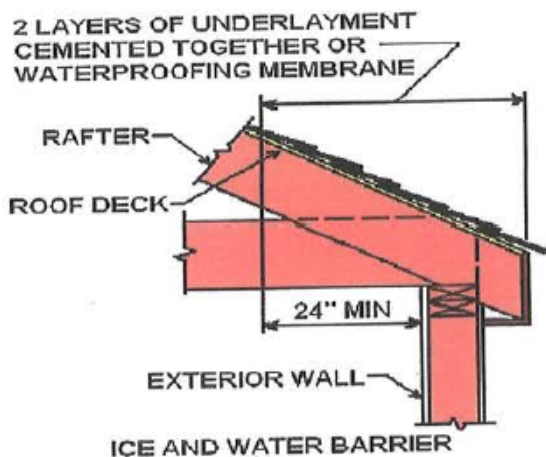
## Flashing

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.

## Chimney

Must have crickets(saddle) on all chimneys greater than 30" parallel to the ridgeline

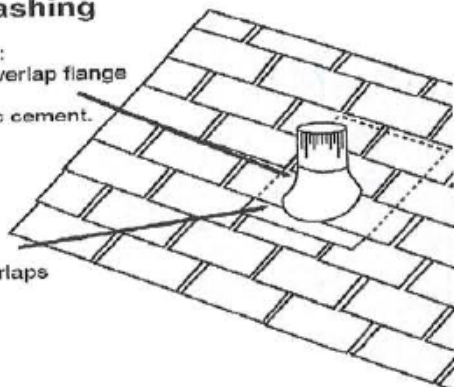
### ROOFING DIAGRAM EXAMPLES



### Shingle application around flashing

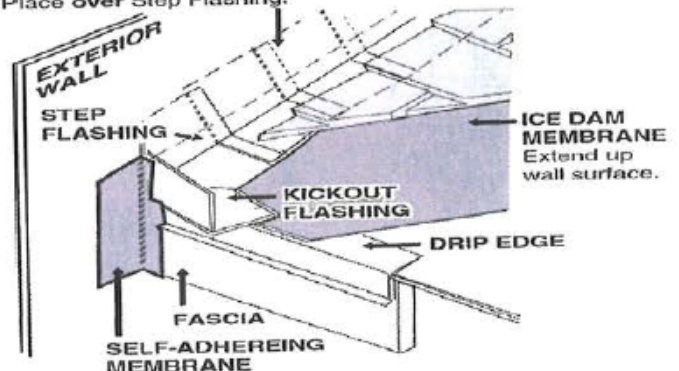
Top and sides: SHINGLES overlap flange and are set in asphalt plastic cement.

Bottom: FLANGE overlaps shingles.



### Kick-out flashing (required on new roofs only)

WATER RESISTIVE BARRIER/HOUSEWRAP Place over Step Flashing.



## Water Restrictive Barrier

703.1 Exterior walls shall provide the building with a weather-resistant exterior wall envelope with approved corrosion resistant flashing described in Section R703.8. The flashing shall be applied shingle-fashion in such a manner to prevent water from entering into the wall cavity.

1. Verify that WRB is an approved product.
2. WRB shall be applied horizontally shingle fashion over exterior wall sheathing.
3. All seams shall be taped with approved acrylic seam tape.
4. WRB shall be free from holes or breaks in the membrane.
5. Vertical joints lapped minimum 6", and horizontal joints lapped minimum 2", R703.2.
6. With newly constructed homes kick out flashings are required where the lowest part of the roof's eave edge comes in contact with a vertical wall plane. This will be verified at the final inspection but can be mentioned to the contractor at this inspection as well.

