Roofing Information Handout

Building Permits
A Building Permit is required for all re-roofing projects.
The inspection card shall be posted and accessible on the exterior of the residence until the final inspection has been made.

Special Notes
- All detached garages and accessory buildings are required to meet the current roofing code.
- No more than one layer of roof covering is allowed
- Homeowner is allowed to do own work
- All roofing contractors must be licensed by the State of Minnesota Department of Labor and Industry.

Overlay or Tear-off
A second layer of asphalt shingles is no longer allowed under Minnesota State Building Code. This also applies to repairing of damaged roofing with two or more layers of shingles. Asphalt shingles are required to be installed over solidly sheathed decks or nominal 1” thick wood boards.

Flashing
Flashings shall be installed at all wall and roof intersections, wherever there is a change in roof slope or direction and around all roof openings. Where flashing is of metal, the metal shall be corrosion resistant with a thickness of not less than 0.019 inch (0.5 mm) (No. 26 galvanized sheet).
- For open valley lined with metal, the valley lining shall be at least 24 inches (610 mm) wide and of corrosion resistant metal.
- For open valleys, valley lining of two plies of mineral surfaced roll roofing is permitted. The bottom layer must be 18 inches (457mm) and the top layer a minimum of 36 inches (914 mm) wide.
- For closed valleys (valley covered with shingles), valley lining of one ply of smooth roll roofing at least 36 inches wide (914 mm) or valley lining as described in
- Items 1 and 2 above shall be permitted.

Crickets and saddles. A cricket or saddle must be installed on the ridge side of any chimney or penetration more than 30 inches (762 mm) wide as measured perpendicular to the slope. Cricket or saddle coverings shall be sheet metal or of the same material as the roof covering.
Sidewall flashing. Flashing against a vertical sidewall shall be by the step-flashing method. Kick out flashing required at lower portion of roof intersecting a wall to divert water away from the wall.

Other flashing. Flashing against a vertical front wall, as well as soil stack, vent pipe and chimney flashing shall be applied according to the asphalt shingle manufacturer’s printed instructions.

Asphalt shingles
- Asphalt shingles shall be used only on roof slopes of two units vertical in 12 units horizontal (2:12) or greater. For roof slopes from two units vertical in 12 units horizontal (2:12) up to four units vertical in 12 units horizontal (4:12), double underlayment application is required.
- Asphalt shingles shall have self-seal strips or be interlocking. Fasteners for asphalt shingles shall be galvanized steel, stainless steel, aluminum or copper roofing nails, minimum 12 gage [0.105 inch (3 mm)] shank with a minimum 3/8-inch (10 mm) diameter head, of a length to penetrate through the roofing materials and a minimum of 3/4 inch (19 mm) into the roof sheathing. Where the roof sheathing is less than 3/4 inch (19 mm) thick, the fasteners shall penetrate through the sheathing.

Ice barrier
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 from the lowest edges of all roof surfaces to a point at least 24 inches (610 mm) inside the exterior wall line of the Building.

Required Inspections:
A. Underlayment – an inspection before the shingles are put in place. Alternate is pictures of the roof underlayment before covering with shingles.
B. Final – to be made after completion of the work

Roofing requirements:
- Kick-out flashing/diverters are required at all roof/wall intersections.
- All residential re-roofing requires removal of the existing roof system.
- Roof sheathing shall be repaired or replaced if rotted.
- Shingles shall be applied per the manufactures installation instructions.
- Existing flashing shall be replaced if rotted or damaged.
- Flashing shall be installed to prevent water from entering the wall or roof.
- Ice dam protection is required on all roofs and shall extend from the edge of the roof 24” past the exterior wall line.
- Roof ventilation is required at a rate of 1 square foot ventilation per 300 square feet of attic area.
- If the furnace chimney cap is replaced it must be with an approved cap. Verify approval with inspector.
- A final inspection is required on all re-roofing permits.
Typical Kickout Flashing Example

Notes:
1. Provide step flashing minimum 4" (100 mm) extending up the wall.
2. Provide stucco overlap of the step flashing 2" (50 mm) and terminate stucco minimum 2" (50 mm) above the finished roof. The space permits re-roofing at a future date and helps prevent debris from accumulating between roof and stucco.
3. Terminate the step flashing with a watertight diverter (kick-out) flashing to direct water into the gutter. Refer to Sto Detail 2.628 on fabrication of a diverter flashing.
4. Provide 3/16" (10 mm) joint around the diverter flashing and seal.