City of Belvidere
BUILDING DEPARTMENT

401 Whitney Blvd. Suite 300 Belvidere, IL 61008 (815)-547-7177

Guide for Roofing Permits

These are some helpful tips for the process of acquiring a roofing permit and installing roof coverings on residential homes. This is not the entire code book and not all of the code sections are covered. These are some of the more important points. Please feel free to contact the City of Belvidere Building Department at 815-547-7177 if you have any questions.

Requirements for Roofing Permits (Work performed by Property owner)

1. Property owner's name, address, and phone number
2. The amount of roofing being replaced in squares (100 square ft.)
3. The number of layers of roofing being removed

Requirements for Roofing Permits (Work performed by Contractor)

1. Contractor's name, address, and phone number
2. Copies of Contractor's valid Illinois roofing license, current liability insurance, and photo ID of roofing license holder.
3. The amount of roofing being replaced in squares (100 square ft.)
4. The number of layers of roofing being removed

Required Inspections for Roofing Permit

1. Ice and water shield inspection (When the ice and water shield has been applied. Not necessary for overlay roofing permits)
2. Final building inspection (When all construction is finished)

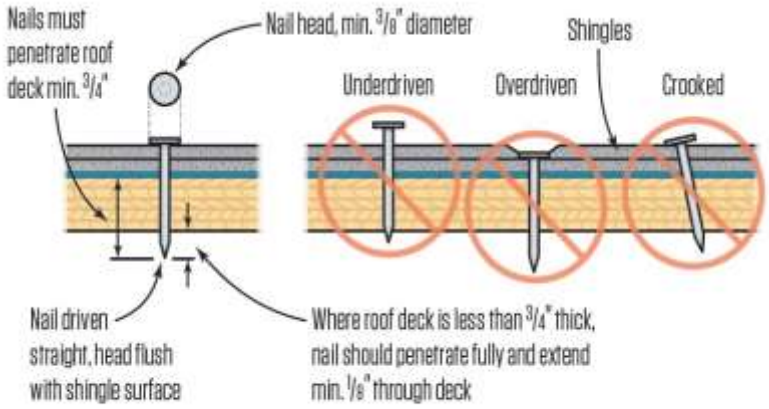
Basic Guidelines

The re-roofing of a structure having asphalt shingles may be accomplished by completely removing the existing shingles, underlayment, flashing, etc. (tear-off) and installing the roofing as if it were new construction. To assist in the decision whether to overlay or tear-off, consider the following:

1. Check the framing beneath. The framing must be adequate to carry the additional weight of new materials in addition to the weight of the roofers and their equipment.
2. Check the condition of the existing deck sheathing. The sheathing must be adequate for both support and anchorage for new roofing fasteners.
3. The code requires that manufacturer's specifications be followed in the installation process.
4. If the existing roof covering is asphalt, wood shake, slate, clay, cement, or asbestos-cement tile, it must be removed prior to re-roof.

Fastening

Asphalt shingles shall be fastened with not less than 4 nails. Nails shall not be less than 12-gauge with minimum 3/8-inch diameter heads. Nails should be of sufficient length to penetrate through roofing material and at least ¾ inch into roof sheathing or through thickness of sheathing, whichever is less. Nails must be installed per manufacturer's instructions.



Properly Driven Nails

Sheathing

Roof sheathing shall be checked prior to re-roofing. It shall be repaired or replaced if rotted or unsound. Replacement sheathing shall conform to the requirements of the 2015 International Residential Code for one- and two-family dwellings.

Roof Pitch

Asphalt shingles shall not be used on roofs with less than a 2:12 pitch. Asphalt shingles may be applied to roofs with a pitch between 2:12 and 4:12 if the required special application procedures for underlayment are followed. The manufacturer's instructions must be followed.

Underlayment (new or tear-off only)

Ice and water shield is required for any roof over conditioned space. Ice and water shield shall extend from the eaves' edge to a point at least 24 inches inside the exterior wall line of the building. For ice protection, manufacturer's instruction must be followed. Underlayment shall be one layer applied shingle fashion, parallel to and starting from the eave. Minimum lapping of underlayment is 2 inches. End lapping of underlayment shall be a minimum of 4 inches and shall be offset by a minimum of 6 feet. Valley Underlayment shall be installed per the manufacturer's requirements before applying shingles.

Valley Flashing

When existing flashing is no longer serviceable, is shall be replaced. Valley flashing shall consist of not less than 26-gauge corrosion resistant galvanized sheet metal. The metal shall extend at least 12 inches from the center line each way. Sections of flashing shall have an end lap of not less than four inches. Alternatively, the valley may consist of woven asphalt shingles or closed-cut style applied in accordance with the manufacturer's instructions.

Other Flashing

All other flashing shall be checked and if there are signs of corrosion or poor condition, shall be replaced. All replacement flashing shall consist of not less than 26-gauge corrosion resistant galvanized sheet metal. Flashing must be installed according to the manufacturer's instructions. Any replacement of flashing at masonry chimneys must be properly cut in and tuck pointed or caulked with an approved product.

Vertical Wall Flashing Installation

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 in the previous courses, so that

the last shingle is at least 8 inches wide vertically. This allows a minimum of 5 inches exposure of the top course and a 3-inch head lap.

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

Vertical Wall Flashing

Kick-out Flashing

Ice and Water Shield

Ice and water shield is required for any roof over conditioned space. Ice and water shield shall extend from the eaves' edge to a point at least 24 inches inside the exterior wall line of the building. Ice and water shield shall be installed beneath the shingles in any valley, around chimneys, and over dormers. **R905.1.2**

Roof and Soffit Vents

Roof vents must be installed so that for every 150 square feet of attic area, there is at least one square foot of ventilation. At least 50% but not more than 80% shall be the upper portion of the roof with the balance to be provided by the eave or soffit vents. Roof vents shall be installed per manufacturer's instructions. Where a continuous roof vent is used, the required ventilation is one square foot per 300 square feet of attic area.

Exhaust vents

Care should be taken to ensure that kitchen and bathroom exhaust vent ducts are connected to the appropriate exhaust roof vent. When re-roofing around furnace flues, take care not to dislodge the joints of the flue pipe within the attic or within interior chases this pipe might pass through.