

City of St. Peters Building Department

RESIDENTIAL RE-ROOFING REQUIREMENTS
(One- and Two-Family Dwellings and Townhouses)

The City of St. Peters has adopted the 2015 International Residential Code (IRC) with amendments. The IRC regulates work on one- and two-family dwellings and townhouses. The code requirements for re-covering or replacing an existing roof covering can be found in IRC Section R908 Reroofing. The City made one amendment to IRC Chapter 9 Sections R905.2.8.2 Valleys. Valley linings shall be installed in accordance with the manufacturer's installation instructions before applying shingles. Valley linings of the following types shall be permitted:

1. For open valleys (valley lining exposed) lined with metal, the valley lining shall be at least 24 inches (610 mm) wide and of any of the corrosion-resistant metals in Table R905.2.8.2.
2. For open valleys, valley lining of two plies of mineral surfaced roll roofing, complying with ASTM D 3909 or ASTM D 6380 Class M, shall be permitted. The bottom layer shall be 18 inches (457 mm) and the top layer a minimum of 36 inches (914 mm) wide.
3. For closed valleys (valley covered with shingles), valley lining of two ply of 15 pound felt complying with ASTM D 226 Type I, ASTM D 4869 Type I, or ASTM D 6757, or valley lining as described in Items 1 and 2 above shall be permitted. Self-adhering polymer modified bitumen underlayment complying with ASTM D 1970 shall be permitted in lieu of the lining material.

A building permit for the reroofing is required whenever any of the following is applicable:

- more than 25% of the sheathing needs to be replaced, or
- the type of roof covering is being changed to a different material (e.g. wood shingles changed to asphalt shingles, etc.) regardless of the slope, or The gaps/space between the existing boards are ½” or more – panel sheathing needs to be installed.
- panel sheathing needs to be installed because the existing spaced boards have to large of gaps/spaces between the boards.

The purpose of the remainder of this guideline is to summarize the responses to most of the common questions received from homeowners, roofing contractors, and insurance companies regarding City of St. Peters requirements for reroofing with asphalt shingles on residential structures with sloped roofs. It is not intended to be a complete list of all code requirements.

□ As indicated above, reroofing of existing structures is regulated by 2015 IRC Section R908 Reroofing. Reroofing Sub-section R908.1 General reaches out to other code provisions within IRC Chapter 9 Roof Assemblies as they (the provisions) relate to “materials and methods of

application used for re-covering or replacing an existing roof covering”. Material requirements are found in IRC Section R904 and methods of application in IRC Section R905. Both of these sections make reference to the manufacturer’s installation instructions. Thus, the portions of the manufacturer’s installation instructions pertinent to “materials and methods of application of roof coverings” must be followed on reroofing projects. “Roof covering” provisions generally regulate the roof deck, roof slope, underlayment, roof covering materials used, flashing, application, and attachment as they relate to weather protection.

□ Even though a building permit is not required to re-roof structures, the code includes a provision that the work must still be done in a manner that is not in violation of the provisions of the code (Refer to IBC Section 105.2 that is referenced through the IRC adopting ordinance). This means that all reroofing projects must be installed in accordance with IRC Reroofing Section R908 even when a permit and inspection are not required.

□ In accordance with 2015 IRC Section R908.3, all existing layers of roof coverings must be removed down to the sheathing before reroofing. The only exception is when there is only a single layer of existing roof covering and the roof covering and sheathing below is an adequate base that is neither deteriorated and not water soaked.

□ For asphalt shingle roofs, asphalt shingles are required to be fastened to solidly sheathed decks per 2015 IRC Section R905.2.1. Wood structural panel sheathing of the thicknesses and spans allowed under the building code in effect when the sheathing was installed is considered a proper base for reroofing installations provided the sheathing is not deteriorated, warped, cracked, or delaminated between supports. Similarly, existing wood sheathing boards having 1/2” spacing or less between boards, or sheathing boards having greater spacing or gaps overlaid with a minimum 3/8” thick panel sheathing product, will generally be considered a suitable alternative base for asphalt shingle reroofing.

□ For asphalt shingle roofs, underlayment (commonly 15 lb. felt) is required in accordance with 2015 IRC Sections R905.2.3 and R905.1.1. Underlayment must be provided as part of the reroofing even though underlayment may not have been present under the removed roof covering. Regardless of the existing conditions found during a complete tear off, current code requires two layers of underlayment for roof slopes from 2:12 up to 4:12 and one layer of underlayment for roof slopes of 4:12 and greater to be installed under the new asphalt shingles. Asphalt shingles are not permitted on roof slopes less than 2:12. When only portions of an existing roof covering needs to be repaired the repairs can match existing conditions.

□ For asphalt shingle roofs, the ice barrier mentioned in IRC Section R905.2.7 Ice Barrier, is not required by 2015 IRC Table R301.2(1) as completed and adopted by the City of St. Peters.

□ For valleys in asphalt shingle roofs, open valleys lined with corrosion resistant metal, open valleys lined with two layers of mineral surface roll roofing, or closed valleys lined with one or two layers of smooth roll roofing (depending on the type of roll roofing) are required in accordance with 2015 IRC Section R905.2.8.2 as amended by the Cities adopting ordinance.

□ For asphalt shingle roofs, sidewall flashing shall be step flashing in accordance with 2015 IRC Section R905.2.8.3. Flashings, if in good condition, may remain as long as they are reconstructed in a manner consistent with the manufacturer's installation instructions as required by IRC Section 907.6.

□ For asphalt shingle roofs, drip edges are required per 2015 IRC Section R905.2.8.5.

□ Attics should have ventilation to allow heat and moisture to escape the attic space. Any existing ventilation of the attic space, such as by ridge vents, must not be restricted, reduced, or eliminated by the reroofing installation. It is not permissible under the code to make a complying situation non-complying or to make a non-complying situation more non-complying. Some existing homes may not have adequate ventilation to meet new construction requirements found in IRC Section R806. For new construction, the ventilation requirement is one square foot of vent area per 150 square feet of attic area. The ventilation requirement may also be one square foot of vent area per 300 square feet of attic area depending on the placement of vents and installation of an approved ceiling vapor barrier. Inadequate ventilation may lead to various problems and future maintenance issues attributed to too much heat or moisture being present. Such conditions may also adversely affect the shingles. It is not a code requirement on a reroofing project to add more ventilation to an existing structure having inadequate ventilation but doing so should be seriously considered by the homeowner and reroofing installer for the reasons indicated.

□ Some existing homes may also have bathroom exhaust ducts that discharge to the attic rather than to the outdoors. The International Property Maintenance Code, which establishes minimum standards for existing structures, as adopted by the City requires air exhausted by a mechanical ventilation system from a bathroom to discharge to the outdoors. Discharging the exhaust directly to an attic gable vent or to a ventilated soffit vent is considered an acceptable alternative. Whenever improper bathroom exhaust conditions are found, for any reason, the homeowner is responsible for having the venting corrected to comply with the minimum property maintenance standards.