

City of Hobbs, NM

<u>Residential Re-Roof Guidelines</u> In coordination with the 2021 New Mexico Residential Building Code (NMRBC)

The State of New Mexico has made a few amendments to the 2021 International Residential Code (IRC) which is our adopted Residential code book. SECTION R908 REROOFING has been amended to reflect the requirements for the State of New Mexico.

**** This checklist is intended for use to prepare for an inspection. This is only a general list and is not intended to address all possible conditions. ****

2021 IRC SECTION R904 MATERIALS.

See New Mexico Administrative Code (NMAC) 14.7.3.17(B) See this section of the IRC except <u>add the</u> <u>following new section:</u>

Section R904.5 Loose Granular fill. Pumice and other granular fill type materials are not permitted in roof assemblies.

2021 IRC SECTION R905 REQUIREMENTS FOR ROOF COVERINGS.

See NMAC 14.7.3.17(C) See this section of the IRC except add the following sections:

- 1. Section R905.9.4 Roof Deck Transitions. Where roof sheathing is overlapped to create drainage "crickets" or valleys to canales, taper board, or equivalent shall be used to transition between the two deck levels to create a uniform substrate.
- 2. Section R905.9.5 Canales and Scuppers. All canales and scuppers must have a metal pan lining extending six (6) inches minimum past the inside of the parapet and six (6) inches minimum to each side of the canale or scupper opening. All canales and scuppers must have positive drainage.

GENERAL RE-ROOF REQUIREMENTS:

See NMAC 14.7.3.17(D) Section R908 Reroofing.

Section R908.3 Roof Replacement. (Delete the text of this section in the 2021 IRC and substitute with the following):

New roof coverings shall not be installed without first removing existing roof coverings where any of the following conditions occur:

- 1. The existing roof or roof covering is water soaked or has deteriorated to the point that the existing roof or roof covering is not adequate as a base for additional roofing.
- 2. The existing roof covering is wood shake, slate, clay, cement, or asbestos-cement tile.
- 3. The existing roof has two or more applications of any type of roof covering.
- 4. Where pumice or other granular fill are present, the material must be removed prior to installing a new roof.

[14.7.3.17 NMAC – Rp, 14.7.3.17 NMAC, 7/14/2023]

Minimum Roof Slope for different Systems

- Asphalt Shingles Minimum 2 in 12. Roof slopes between 2 in 12 and up to 4 in12 require double underlayment as detailed in Table R905.1.1(2). See special installation requirements of manufacturer and the 2021 IRC Section R905.2.
- Clay and Concrete Tiles Minimum 2 1/2 in 12. Roof slopes between 2 1/2 in 12 and up to 4 in 12 require double underlayment as detailed in Table R905.1.1(2). See special installation requirements of manufacturer and the 2021 IRC Section R905.3.
- **Metal Roof Shingles** Minimum 3 in 12. See special installation requirements of manufacturer and the 2021 IRC Section R905.4.
- **Mineral Surfaced Rolled Roofing -** Minimum 1 in 12. See special installation requirements of manufacturer and the 2021 IRC Section R905.5.
- Slate and Slate-Type Shingles Minimum 4 in 12. See special installation requirements of manufacturer and the 2021 IRC Section R905.6.
- Wood Shingles Minimum 3 in 12. See special installation requirements of manufacturer and the 2021 IRC Section R905.7.
- Wood Shakes Minimum 3 in 12. See special installation requirements of manufacturer and the 2021 IRC Section R905.8.
- **Built Up Roofing** Minimum 1/4 in 12. See special installation requirements of manufacturer and the 2021 IRC Section R905.9.
- Lapped non-soldered non-sealed Metal Roof Panels Minimum 3 in 12. See special installation requirements of manufacturer and the 2021 IRC Section R905.10 Number 1.
- **Standing-Seam Roof Systems** Minimum 1/4 in 12. See special installation requirements of manufacturer and the 2021 IRC Section R905.10.2 Number 3.
- **Modified Bitumen Roofing** Minimum 1/4 in 12. See special installation requirements of manufacturer and the 2021 IRC Section R905.11.
- **Other Types of Roofing -** See the 2021 IRC Sections R905.12 R905.15.

Roof Drainage

- Roofs shall be sloped as required for drainage unless designed for water accumulation.
- Unless sloped to drain over roof edges, roof drains are installed at each low point of the roof.
- Size and discharge of roof drains shall be installed per the 2021 Uniform Plumbing Code (UPC) Section 1101.12 Roof Drainage.
 - Section 1101.12.1 Primary Roof Drainage
 - Section 1101.12.2 Secondary Drainage
 - Table 1103.1 Sizing Roof Drains, Leaders, and Vertical Rainwater Piping
- 2021 IRC Section R903.4.1 Overflow drains shall discharge to an approved location and shall not be connected to roof drain lines.

Plywood or Oriented Strand Board Sheathing

- Check for rot or delamination of existing sheathing or framing.
- Correct span rating based on spacing of rafters or trusses. 2021 IRC Section R803.2.2 and Table R503.2.1.1(1) or APA E30.
- Wood Structural Panel roof sheathing exposed to the underside shall be permitted to be of interior type bonded with exterior glue, identified as Exposure 1. (2021 IRC Section R803.2.1.1)
- Minimum prescriptive nailing is 8d common nails at 6" on center at supported edges and 12" on center in the field. Edge nail pattern also applies over gable ends and diaphragm boundaries. (2021 IRC Table R602.3(1) for nails and Table 602.3(2) for staples)
- Sheathing cut into widths less than 24" require solid blocking at all panel edges. (Per APA The Engineered Wood Association)
- Fastener's heads or crowns must not penetrate the outer veneer of plywood. (Per APA The Engineered Wood Association)
- Sheathing gapped 1/8" at edges. (Per APA The Engineered Wood Association)

Ventilation of Attic or Rafter Bays

When conducting reroofing projects, it shall be required that ventilation of the attic or rafter bays meet the requirements as described in Chapter 8 of the 2021 IRC.

- R806.1 Ventilation Required. Enclosed attics and enclosed rafter spaces formed where ceilings are applied directly to the underside of roof rafters shall have cross ventilation.
- R806.2 Minimum vent area. The minimum net free ventilating area shall be 1/150 of the area of the vented space. Exception: The minimum net free ventilation area shall be 1/300 of the vented space provided both of the following conditions are met.
 - In climate Zones 6, 7 and 8, a Class I or II vapor retarder is installed on the warm-in-winter side of the ceiling.
 - Not less than 40% and not more than 50% of the required ventilating area is provided by ventilators located in the upper portion of the of the attic and rafter space. Upper ventilators shall be located not more than three (3) feet below the ridge or highest point of the space, measured vertically. The balance of the required ventilation provided shall be located in the bottom one-third of the attic space.
- R806.3 Vent and Insulation Clearance. Where eave or cornice vents are installed, blocking, bridging and insulation shall not block the free flow of air. Not less than a one (1) inch space shall be provided between the insulation and the roof sheathing and at the location of the vent.

Final Inspection

- Proper installation of roof covering. Fasteners installed as required for the type of roofing material and per manufacturer's instructions. (Section R905 of the 2021 IRC)
- Flashing to cover all exposed sheathing edges. Proper flashing & counter flashings at chimneys, skylights, roof-to-wall transitions, as required for the type of roofing material and manufacturer's installation instructions. (Section R905 of the 2021 IRC)

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