

ROOF ASSEMBLIES TABLE R905.1.1(2) UNDERLAYMENT APPLICATION

| ROOF COVERING | SECTION | MAXIMUM ULTIMATE DESIGN WIND SPEED, <i>Vult</i> < 140 MPH | MAXIMUM ULTIMATE DESIGN WIND SPEED, <i>Vult</i> ³ 140 MPH |
|-------------------------------|---------|--|--|
| Asphalt shingles | R905.2 | <p>For roof slopes from two units vertical in 12 units horizontal (2:12), up to four units vertical in 12 units horizontal (4:12), underlayment shall be two layers applied in the following manner: apply a 19-inch strip of underlayment felt parallel to and starting at the eaves. Starting at the eave, apply 36-inch-wide sheets of underlayment, overlapping successive sheets 19 inches. Distortions in the underlayment shall not interfere with the ability of the shingles to seal.</p> <p>For roof slopes of four units vertical in 12 units horizontal (4:12) or greater, underlayment shall be one layer applied in the following manner: underlayment shall be applied shingle fashion, parallel to and starting from the eave and lapped 2 inches, Distortions in the underlayment shall not interfere with the ability of the shingles to seal. End laps shall be 4 inches and shall be offset by 6 feet.</p> | Same as Maximum Ultimate Design Wind Speed, <i>Vult</i> < 140 mph except all laps shall be not less than 4 inches. |
| Clay and concrete tile | R905.3 | <p>For roof slopes from two and one-half units vertical in 12 units horizontal (2 1/2:12), up to four units vertical in 12 units horizontal (4:12), underlayment shall be a minimum of two layers applied as follows: starting at the eave, apply a 19-inch strip of underlayment parallel with the eave. Starting at the eave, apply 36-inch-wide strips of underlayment felt, overlapping successive sheets 19 inches. For roof slopes of four units vertical in 12 units horizontal (4:12) or greater, underlayment shall be a minimum of one layer of underlayment felt applied shingle fashion, parallel to and starting from the eaves and lapped 2 inches. End laps shall be 4 inches and shall be offset by 6 feet.</p> | Same as Maximum Ultimate Design Wind Speed, <i>Vult</i> < 140 mph except all laps shall be not less than 4 inches. |
| Metal roof shingles R905.4 | | | For roof slopes from two units vertical in 12 units horizontal (2:12), up to four units vertical in |
| Mineral-surfaced | R905.5 | | |

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| roll roofing | | Apply in accordance with the manufacturer's installation instructions. | 12 units horizontal (4:12), underlayment shall be two layers applied in the following manner: apply a 19-inch strip of underlayment felt parallel to and starting at the eaves. Starting at the eave, apply 36-inch-wide sheets of underlayment, overlapping successive sheets 19 inches, and fastened sufficiently to hold in place. For roof slopes of four units vertical in 12 units horizontal (4:12) or greater, underlayment shall be one layer applied in the following manner: underlayment shall be applied shingle fashion, parallel to and starting from the eave and lapped 4 inches. End laps shall be 4 inches and shall be offset by 6 feet. |
| Slate and slate-type shingles | R905.6 | | |
| Wood shingles | R905.7 | | |
| Wood shakes | R905.8 | | |
| Metal panels | R905.10 | | |
| 2015 INTERNATIONAL RESIDENTIAL CODE® 415 For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm. Copyright © 2014 ICC. ALL RIGHTS RESERVED. Accessed by William Powers on Feb 26, 2016 8:16:29 AM pursuant to License Agreement with ICC. | | | |

2015 IRC Roofing Information:

R903.2 Flashing. Flashings shall be installed in a manner that prevents moisture from entering the wall and roof through joints in copings, through moisture permeable materials and at intersections with parapet walls and other penetrations through the roof plane.

R903.2.1 Locations. Flashings shall be installed at wall and roof intersections, wherever there is a change in roof slope or direction and around roof openings. **A flashing shall be installed to divert the water away from where the eave of a sloped roof intersects a vertical sidewall.** 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).

R903.2.2 Crickets and saddles. A cricket or saddle shall 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.

Exception: Unit skylights installed in accordance with Section R308.6 and flashed in accordance with the manufacturer's instructions shall be permitted to be installed without a cricket or saddle.

NMAC 14.7.3.17 CHAPTER 9 - ROOF ASSEMBLIES: (2) Section R903.3 Plastered parapets

R903.3 Coping. ~~Parapet walls shall be properly coped with noncombustible, weatherproof materials of a width not less than the thickness of the parapet wall.~~ **Plastered parapets shall require a seamless but permeable waterproof cover or weather barrier, capping the entire parapet and wrapping over each side. The cover shall extend past any break from the vertical a minimum of four (4) inches on the wall side. On the roof side, the cover shall properly lap any rising roof felts or membranes and be properly sealed. A layer of furred expanded metal lath shall be installed over the cover before plaster or stucco is applied. The lath shall extend past any break from the vertical on the wall side a minimum of five (5) inches and on the roof side, the same distance as the cover below, allowing for plaster stops or seals. No penetrating fasteners are allowed on the horizontal surface of parapets.**

SHINGLES

R905.2.8.3 Sidewall flashing. Base flashing against a vertical sidewall shall be continuous or step flashing and shall be not less than 4 inches (102 mm) in height and 4 inches (102 mm) in width and shall direct water away from the vertical sidewall onto the roof or into the gutter. Where siding is provided on the vertical sidewall, the vertical leg of the flashing shall be continuous under the siding. Where anchored masonry veneer is provided on the vertical sidewall, the base flashing shall be provided in accordance with this section and counterflashing shall be provided in accordance with Section R703.7.2.2. Where exterior plaster or adhered masonry veneer is provided on the vertical sidewall, the base flashing shall be provided in accordance with this section and Section R703.6.3.

R905.2.8.4 Other flashing. Flashing against a vertical front wall, as well as soil stack, vent pipe and chimney flashing, shall be applied in accordance with the asphalt shingle manufacturer's printed instructions.

R905.2.8.5 Drip edge. A drip edge shall be provided at eaves and rake edges of shingle roofs. Adjacent segments of drip edge shall be overlapped not less than 2 inches (51 mm). Drip edges shall extend not less than 1/4 inch (6.4 mm) below the roof sheathing and extend up back onto the roof deck not less than 2 inches (51 mm). Drip edges shall be mechanically fastened to the roof deck at not more than 12 inches (305 mm) o. c. with fasteners as specified in Section R905.2.5. **Underlayment shall be installed over the drip edge along eaves and under the underlayment along rake edges.**

REROOF

R908.1 General. Materials and methods of application used for re-covering or replacing an existing roof covering shall comply with the requirements of Chapter 9.

Exceptions:

1. Reroofing shall not be required to meet the minimum design slope requirement of one-quarter drainage.
2. For roofs that provide positive drainage, re-covering or replacing an existing roof covering shall not require the secondary (emergency overflow) drains or scuppers of Section R903.4.1 to be added to an existing roof.

R908.2 Structural and construction loads. The structural roof components shall be capable of supporting the roof covering system and the material and equipment loads that will be encountered during installation of the roof covering system.

R908.3 Roof replacement. Roof replacement shall include the removal of existing layers of roof coverings down to the roof deck.

Exception: Where the existing roof assembly includes an ice barrier membrane that is adhered to the roof deck, the existing ice barrier membrane shall be permitted to remain in place and covered with an additional layer of ice barrier membrane in accordance with Section R905.

R908.3.1 Roof re-cover. The installation of a new roof covering over an existing roof covering shall be permitted where any of the following conditions occur:

1. Where the new roof covering is installed in accordance with the roof covering manufacturer's approved instructions
2. Complete and separate roofing systems, such as standing-seam metal roof systems that are designed to transmit the roof loads directly to the building's structural system and do not rely on existing roofs and roof coverings for support, shall not require the removal of existing roof coverings.
3. Metal panel, metal shingle and concrete and clay tile roof coverings shall be permitted to be installed over existing wood shake roofs where applied in accordance with Section R908.4.
4. The application of a new protective coating over an existing spray polyurethane foam roofing system shall be permitted without tear-off of existing roof coverings.

R908.3.1.1 A *roof re-cover* shall not be permitted where any of the following conditions occur:

1. Where 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. Where the existing roof covering is slate, clay, cement or asbestos-cement tile.

3. Where the existing roof has two or more applications of any type of roof covering.

R908.4 Roof re-covering. Where the application of a new roof covering over wood shingle or shake roofs creates a combustible concealed space; the entire existing surface shall be covered with gypsum board, mineral fiber, glass fiber or other *approved* materials securely fastened in place.

R908.5 Reinstallation of materials. Existing slate, clay or cement tile shall be permitted for reinstallation, except that damaged, cracked or broken slate or tile shall not be reinstalled. Any existing flashings, edgings, outlets, vents or similar devices that are a part of the assembly shall be replaced where rusted, damaged or deteriorated. Aggregate surfacing materials shall not be reinstalled.

R908.6 Flashings. Flashings shall be reconstructed in accordance with *approved* manufacturer's installation instructions. Metal flashing to which bituminous materials are to be adhered shall be primed prior to installation.