



Building Safety Department
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January 01, 2019

ROOFING INFORMATION CODE INFORMATION

The City of Cheyenne has adopted the **2018** editions of the *International Building Code (IBC)* and the *International Residential Code (IRC)*, which applies to one and two-family dwellings, 3-stories and under.

Adopted codes include the **2018 IBC**, with local amendments:

- Ground snow load: **30 lbs.** per square foot
- Ultimate Design Wind Speed: There are four (4) levels of wind speed depending on the Risk Category of the building. Most buildings will be in **Risk Category II** with a wind speed of **115 mph**.
- Wind exposure: **C**
- Seismic Design Category: **B**
- Weathering: **Severe**
- Climate zone: **6B**
- **Ice barrier IS REQUIRED on eaves only**
- **Drip edge IS REQUIRED on eaves and rakes**

Adopted codes include the **2018 IRC**, with local amendments:

- Ground snow load: **30 lbs.** per square foot.
- Ultimate Design Wind Speed: **115 mph**
- Wind exposure: **C**
- Seismic Design Category: **B**
- Weathering: **Severe**
- Climate zone: **6B**
- **Ice barrier IS REQUIRED on eaves only**
- **Drip edge IS REQUIRED on the eaves and the rakes**
- Max. layers of asphalt shingles: **one (1)**
- **One (1) layer of 15 lb. felt** as underlayment.
- The installation of asphalt shingles shall comply with section R905.2
- Asphalt shingles shall be fastened to solidly sheathed decks in accordance with section R905.2.1

ADDITIONAL ROOFING CODE INFORMATION

We are pleased to provide the following additional information relative to the City of Cheyenne's current roofing codes and are hopeful you find this information useful.

I. The City of Cheyenne adopted the 2018 edition of the *International Residential Code* on January 01, 2019. In order to view that particular portion of the Cheyenne City code, follow the instructions provided below:

1. Go to www.cheyennecity.org
2. Click "City Code" on the left-hand side of the page.
3. Click "Access the online Cheyenne City Code here" at the bottom of the page.
4. Click Title 15 — BUILDING AND CONSTRUCTION on the left-hand side of the page.
5. Click on Chapter 15.10 - INTERNATIONAL RESIDENTIAL CODE ADOPTED

There you will see:

15.10.010 - International Residential Code Adopted.

A document, one copy of which is on file and open for inspection of the public in the office of the city clerk, being marked and designated as:

International Residential Code, 2018 Edition, as published by the International Code Council, Inc., including Appendices E, G and H; is referred to, adopted, and made a part hereof as if fully set out in this chapter

II. The following sections are contained within the 2018 edition of the *International Residential Code*:

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 for each separate space by ventilating openings protected against the entrance of rain or snow. Ventilation openings shall have a least dimension of $\frac{1}{16}$ " minimum and $\frac{1}{4}$ " maximum. Ventilation openings having a least dimension larger than $\frac{1}{4}$ " shall be provided with corrosion-resistant wire cloth screening, hardware cloth, perforated vinyl or similar material with openings having a least dimension of $\frac{1}{16}$ " minimum and $\frac{1}{4}$ " maximum. Openings in roof framing members shall conform to the requirements of Section R802.7 Required ventilation openings shall open directly to the outside air and shall be protected to prevent the entry of birds, rodents, snakes and similar creatures.

R806.2 Minimum vent area. The minimum net free ventilating area shall be $\frac{1}{150}$ 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:

1. 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.
2. At least 40% and not more than 50% of the required ventilating area is provided by ventilators located in the upper portion of the attic or rafter space. Upper ventilators shall be located not more than 3' below the ridge or highest point of the space, measured vertically. The balance of the required ventilation provided shall be in the bottom 1/3 of the attic space. Where the location of wall or roof framing members conflicts with the installation of upper ventilators, installation more than 3' below the ridge or highest point of the space shall be permitted.

R903.2 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. Where flashing is of metal, the metal shall be corrosion resistant with a thickness of not less than 0.019" (0.5 mm) (No. 26 galvanized sheet).

R904.1 Scope of materials used. The application of all roof covering materials shall be applied in accordance with this chapter and the manufacturers installation instructions. Installation of roof assemblies shall comply with the applicable provisions of sec. R905

R905.1.2 Ice Barriers, AKA Ice and Water Shield, shall be installed on all residential roofs. This shall consist of a minimum of two layers of felt underlayment cemented together, or a self-adhering polymer-modified bitumen sheet used in place of normal underlayment and extend from the lowest edges of the roof to a point not less than 24" inside the exterior wall.

It is the policy and is the determination by the City of Cheyenne Building Safety Department that 1/4" maximum spacing of roof sheathing for the installation of asphalt shingles. **Information for the basis of this determination is available upon request and please follow all manufacturers installation instructions.**

R905.2.1 Sheathing requirements. **Asphalt shingles shall be fastened to solidly sheathed decks.**

R905.2.2 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 in accordance with Section R905.1.1

R908.3 Roof Replacement. Roof replacement shall include the removal of all 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 installed 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 manufacturers approved installation 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 buildings structural systems and do not rely on existing roofs or roof coverings for support and shall not require the removal of existing roof coverings.
- 3) Metal panel, metal shingle, concrete and tile roof coverings shall be permitted to be installed over existing wood shake roofs where applied in accordance with sec. R908.4
- 4) The application of new protective roof coatings over an existing protective roof coating, metal roof panel, metal roof shingle, mineral surfaced roll roofing, built-up roof, modified bitumen roofing, thermoset and thermoplastic single-ply roofing and spray polyurethane foam roofing system shall be permitted without tear-off of existing roof coverings.

R908.3.1.1 Roof Re-Cover. 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 an existing roof has one or more roof coverings.