Roofing and Re-Roof Covering Requirements

Scott Greer, CBO

This is a summary of City of Golden roofing requirements. This is not intended to be, nor is it, a complete listing of all roofing requirements. The applicant is responsible for compliance to all required codes and ordinances. If you belong to a Homeowners Association your roofing options may also be regulated by covenants, it is recommended that you contact your association prior to permit application. Special care should be taken when working on high or step roofs and when working around overhead power lines.

IMPORTANT NOTICE.

Permit holder is responsible for providing access to roof for both mid- roof and final roofing inspection. (Ladder in place and secured to the roof with a minimum extension of three feet.) Failure to provide such access may result in a re-inspection fee. Roofs w/o a mid inspection will be required to remove 2 sqs.

- **Basic Minimum Wind Speed** – 116 mph Vₚₚₚₚ, 3 second gust, exposure C (See item 4, Specific Asphalt Roof Covering Requirements, pg. 2)

- **Minimum Roof Snow Load** – 30 pounds per square foot

- **Ice Barrier** – It has been determined that the City of Golden has a history of ice forming at the eaves of roofing, therefore, an approved ice barrier is required on all new and re-roofing applications. Ice barrier needs to be placed 2 feet inside of the heated wall.

- **Drip Edge.** Drip edge as required by IBC Section 1507.2.9.3 is required for all new and re-roof applications. (Rakes and Eaves)

- **Wood shakes and wood shingles** are required to have a minimum of a Class A fire rated roofing assembly.

- **All other roof coverings** are required to have a minimum Class C fire rating.

- **Eave overhangs** shall not exceed 3 feet unless designed to prevent uplift of 100-mph winds.

- **Gable end overhangs** shall not exceed 3 feet unless designed to prevent uplift of 100-mph winds.

- **Roof gutters, down spouts and their extensions or splash blocks** are required when they are called for by a soils report; when re-roofing, if an existing structure has gutters, down spouts and extensions or splash blocks, it is assumed that these items are required.

- **Metal flashing**, which is damaged or rusted, must be replaced.

- **Roof Jacks and vents** shall be raised to permit shingles to be installed under the lower edge of the flange with shingles installed over the top and sides of the flange past the point of the roof penetration.
  - Roof/Attic Ventilation – Proper Roof/attic ventilation shall be in accordance with section R806 IRC and as required per Manufacturers Installation Instructions.

- **Siding** or exterior wall finishes on sidewalls above lower roofs should be kept 2" to 4" above the roof/wall junction.
Repair or complete removal and re-roof? If the repair of a roof covering exceeds 25% of the total roof covering of the structure, the entire existing roof covering must be replaced.

**Specific Asphalt Shingle Roof Coverings Requirements:**

1. A total of **1 overlay is permitted** over an existing asphalt or wood shingle roof. Strip shingles may not be installed over T-Loc Shingles. **However,** the total weight of the existing plus the new roof covering material **shall not exceed** seven hundred and fifty (750) pounds per square (100 square feet) unless a structural analysis verifies the roof’s capability of supporting the total loads applied. Wood shingles weigh approximately 300 pounds per square and the traditional 20 to 25 year T-Lock or 3-Tab weigh approximately 220 pounds per square. **The newer longer life shingles are substantially heavier and may not permit a total of 2 layers without approval from an engineer.**

2. Asphalt shingles are not permitted to be installed over 1x board sheathing. A minimum 3/8” OSB or ply is required prior to asphalt shingle placement. Asphalt shingles cut or otherwise modified, located at eaves, rakes, valleys, ridges, hips, or other areas, shall be properly fastened, adhered, or otherwise secured. **Exposed fasteners are not permitted** except at gables, ridges, hips, and at exposed flashing when necessary and when properly sealed.

3. Fasteners must be corrosion resistant and long enough to penetrate through the total thickness of the roofing and a minimum of 3/4” into the decking material. Fasteners must not be over or under driven, they must set flush with shingle surface. Staples are not permitted. Fasteners shall comply with ASTM F 1667.

4. Due to the extreme wind exposure, shingles shall have a minimum weight of 300 pounds per square or have a minimum 30 year manufacturer’s warranty. Asphalt shingles shall be tested in accordance with ASTM D 7158.

5. 3/8" to 1/2" minimum shingle overhang is required at gable or eave edges.

6. **Asphalt strip shingles** shall be self-sealing or hand-sealed and shall be fastened with a minimum of 6 nails per shingle.

7. **Asphalt strip shingles** require a starter course with a factory adhesive at the eave line or a manufactured starter with a tar sealant.

8. **Underlayment** of a minimum Type 15 asphalt saturated felt, installed on a dry roof deck, is required for complete tear-offs. See item 9 for special low-slope application requirements. The underlayment shall be attached with corrosion-resistant fasteners in a grid pattern of 12” between side laps with a 6” spacing at the side laps.

9. **Asphalt strip shingles** may be installed on **low slope roofs** between 4 and 2 vertical to 12 horizontal if two layers of Type 15 (or heavier) felt underlayment are installed shingle fashion. These shingles **may not be installed on lower slopes.**

10. **Commercial Flat Roof** – Entire replacement of roof will require insulation to code. R30 above deck or split 19 below and 11 above deck. **Recover** over 1 layer is a laydown of roof cover.