



Arapahoe County (Residential) Re-roofing Guide

The attached handout is designed to be a general residential (2015 IRC applicable) permit submittal and inspection guide covering most installation instances, however it is not possible to anticipate all individual site variations and therefore additional plan review or inspection comments may apply beyond what is included herein

The main office number is 720-874-6600, where you can speak directly with inspection staff from 7:00 to 7:30 AM, or any of the office / plan review staff from 8:00 to 4:30 on normal business days.

Inspections requested by 4:00 PM are, except for rare occasions, normally always completed the next business day, and may be performed anywhere from 7:30 AM to 5:00 PM

For inspections to occur, the address must be posted, the permit card, and any previous correction notices must be available, duty rated ladders must be provided to the inspection area (and secured), and permission must be provided prior to inspector entering a fenced yard if applicable.

Permit submittal requirements and project information to be submitted with the application

- **A completed building permit application – including total labor and material valuation along with complete property owner, contractor and contact information.**
- **All tile roof systems must be applied for over the counter. No online (Arapahoe County Citizens Portal) permits will be accepted. Additional Fees will apply.**

Permitting Application General Requirements

1. Re-roof permits are required for full roof replacement or for repairs/replacements when the total repair area on any roof, or combination of slopes, exceeds one hundred (100) square feet of surface area.
2. If repair of damaged area or replacement of existing roofing exceeds 25% of total roof surface area, the entire roof is to be replaced. This applies to multiple aggregate damaged & single damaged areas. (NOTE: not applicable when item No. 1 applies.)
3. Engineer's Letter Required:
 - a. When replacing existing metal or asphalt roofing with new concrete/clay tile roofing. Provide two copies, wet stamped and signed engineer's letter to the Arapahoe County Building Department, verifying that the existing structure is sufficient to meet the current adopted code requirements and design criteria.
 - b. An engineer's letter shall be required when replacing existing roof tiles with new tiles that exceed the pounds per square foot of the tile system being replaced.
4. Engineer's Letter NOT Required:
 - a. Asphalt shingle re-roofing "like-for-like replacement", and where existing decking and/or sheathing modifications are not required.

- b. The new proposed concrete or clay tile roofing material pounds per. square foot value “like-for-like” is equal to or less than the existing concrete or clay tile roofing to be replaced. The applicant must provide a signed letter by the Contractor/installer indicating that the proposed roofing material is equal to or less than the existing concrete or clay tile roofing to be replaced. Provide manufacturer documentation as proof of material weight/square meets this requirement.
5. R104.9.1 Used materials and equipment. Used materials, equipment and devices shall not be reused unless approved by the building official. Used, harvested or salvaged roofing tiles are not permitted unless the tiles are in an unopened package with the manufacturer’s certification of compliance with the applicable Building Code or the tiles have been certified by a licensed professional engineer as meeting the applicable Building Code requirements for such tile.

Inspection Requirements

1. A ladder or ladders must be provided and secured in place for all roofing projects and at all levels to be inspected.
2. The installation of a new roof covering over an existing layer shall be permitted per the limitations of IRC Section R908.3.1. As per IRC Section 908.3.1.1, a roof re-cover shall not be permitted where the existing roof has two or more applications of any roof covering, or where the existing layers must be removed prior to new roof installation. Any water damaged or rotted decking must be replaced and inspected prior to concealment.
3. All roof coverings and associated components must be installed according to the manufacturer’s installation instructions. Therefore, the installation instructions, normally included on the product wrapper, **MUST** be provided at the time of inspection.
4. The applicant is encouraged to be present during the roofing inspection, though this is not required. However, the applicant shall be responsible for requesting inspections upon completion of the work, ensuring that the permit card and manufacturer’s installation instructions are on site, providing access to the inspection area (ladders where required, unlocked gates, etc), and returning the permit card to the County upon receiving inspection approvals.
5. Flashings are required to be installed per code, as specified in Section R903.2, and would include protecting all areas / openings to prevent moisture from entering the structure, as in roof-to-wall joints, chimneys, roof openings, open areas at soffits and eaves, etc.
 - **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 (Amended).** Flashings shall be installed at wall and roof intersections, wherever there is a change in roof slope or direction and around roof openings, and shall include dripedge at all eaves, rakes and soffit locations. 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).

6. Asphalt shingle installation must comply with all applicable Sections of R905, including the wind resistance requirements of R905.2.4.1. This data should be shown on the product wrapper, and provided for confirmation at time of inspection.
 - **R905.2.4 Asphalt shingles.** Asphalt shingles shall comply with ASTM D 225 or D 3462.
 - **R905.2.4.1 Wind resistance of asphalt shingles.** Asphalt shingles shall be tested in accordance with ASTM D 7158. Asphalt shingles shall meet the classification requirements of Table R905.2.4.1 for the appropriate ultimate design wind speed. Asphalt shingle packaging shall bear a label to indicate compliance with ASTM D 7158 and the required classification in Table R905.2.4.1.
 - **Exception:** Asphalt shingles not included in the scope of ASTM D 7158 shall be tested and labeled to indicate compliance with ASTM D 3161 and the required classification in Table R905.2.4.
7. R905.2.1 Sheathing requirements. Asphalt shingles shall be fastened to solidly sheathed decks.
8. Re-roofing over gapped decking may require additional sheathing to be installed and inspected prior to concealment. **Where new decking is required and/or provided A ROOF DECKING INSPECTION is required prior to installation of any roof coverings being installed, i.e. prior to a mid-roof inspection.**
9. A mid-roof inspection is required for any batten type roofing application (tile, coated metal, etc) prior to concealment of battens. NOTE: No Tile / Coated Metal roofing to be loaded on the roof prior to mid-roof inspection.
10. Existing roof ventilation must be maintained for the concealed attic spaces.
11. Existing roof drainage systems (gutters & downspouts) must be maintained and/or replaced if removed.