

Roofing Building Codes

When planning any work on your home, it's essential to understand the codes and procedures required by your local city or county. As a homeowner, you should expect your contractor to share all relevant information regarding these requirements. Unfortunately, not all contractors provide this level of transparency.

If you're considering a roofing project in Frisco or within a 30-mile radius, here are some key codes to be aware of to ensure compliance. Always feel free to ask your contractor about these codes. If they cannot clearly explain them or address your concerns, it may be time to explore other options.

Choosing a contractor isn't just about the work they perform—it's about their honesty, integrity, and transparency. These qualities are the hallmark of a contractor worth trusting with your home.

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.

R905 – Requirements for Roof Coverings

- This section specifies materials allowed for roofing, such as asphalt shingles, metal, tile, and slate, with standards for each type. It outlines minimum slope requirements for specific materials, ensuring proper drainage and durability based on material type and Frisco's climate.

R905.2.7.1 – Ice Barrier

- While ice barriers may not be critical in all Texas climates, this amendment requires an ice barrier underlayment on eaves for added water protection. It serves as an extra layer to prevent leaks during rare freeze-thaw cycles.

R905.2.8 – Flashing

- This code mandates the use of metal flashing around roof intersections, chimneys, skylights, and other penetrations. Proper flashing prevents water intrusion in these vulnerable areas and extends the roof's longevity.

R905.2.5 – Fasteners

- This section dictates the type, spacing, and installation method of fasteners (such as nails) used for roofing materials. Frisco's amendment may specify enhanced fastening patterns to meet local wind uplift standards, important for resilience against high winds.

R903.2.1 – Overflow Drains and Scuppers

- This code requires that any roofing system include appropriate overflow drains or scuppers to handle excess water, which is especially important in preventing water pooling on flat or low-slope roofs.

R907 – Roof Replacement and Recovering

- This section addresses guidelines for re-roofing, including when it is acceptable to add a new roof layer over an existing one. In Frisco, removing old roofing before adding new material may be required if the existing roof has two or more layers, ensuring safety and adherence to load limits.

R806 – Roof Ventilation

- This part outlines requirements for attic and roof ventilation to prevent moisture buildup, which can lead to mold and structural issues. Frisco's code amendment may require specific ventilation methods to ensure adequate air circulation.
- **Minimum Net Free Ventilation Area (NFVA):** NFVA be at least 1/150 of the attic area. However, this can be reduced to 1/300 if at least 50-80% of the ventilation is located 3 feet or more above the eaves, with the remaining ventilation at the lower portion of the attic.
- **Clearance:** A minimum 1-inch gap between insulation and the roof sheathing must be maintained to ensure unobstructed airflow.
- **Unvented Attic Assemblies:** The code also allows for unvented attics under specific conditions, such as using air-impermeable insulation (e.g., closed-cell spray foam) that adheres directly to the underside of the roof sheathing, creating a sealed environment within the building's thermal envelope.

R109.3 – Inspections

- Roof installations in Frisco require inspections at several stages, as per this code, to confirm that materials and installation meet all city standards. A final inspection ensures compliance with all local amendments.

1507.2.9.3 Drip Edge- A drip edge shall be provided at eaves and rake edges of shingle roofs. Adjacent segments of the drip edge shall be lapped a minimum of 2 inches (51 mm). The vertical leg of drip edges shall be a minimum of 1 1/2 inches (38 mm) in width and shall extend a minimum of 1/4 inch (6.4 mm) below sheathing. The drip edge shall extend back on the roof a minimum of 2 inches (51 mm). Underlayments shall be installed over drip edges along eaves. Drip edges shall be installed over underlayment along rake edges. Drip edges shall be mechanically fastened a maximum of 12 inches (305 mm) on center.

1507.2.8 Underlayment Application. For roof slopes from two units vertical in 12 units horizontal (17-percent slope) and up to four units vertical in 12 units horizontal (33-percent slope), underlayment shall be two layers applied in the following manner. Apply a minimum 19-inch-wide (483 mm) strip of underlayment felt parallel with and starting at the eaves, fastened sufficiently to hold in place. Starting at the eave, apply 36-inch-wide (914 mm) sheets of underlayment overlapping successive sheets 19 inches (483 mm) and fasten sufficiently to hold in place. Distortions in the underlayment shall not interfere with the ability of the shingles to seal. For roof slopes of four units vertical in 12 units horizontal (33-percent slope) 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 (51 mm), fastened sufficiently to hold in place. Distortions in the underlayment shall not interfere with the ability of the shingles to seal.

Per code, kick-out diverters must be installed at the end of each sidewall run to divert water away from the siding and towards the gutter.

Sidewall flashing: Base flashing against a vertical sidewall shall be continuous or step flashing and shall be a minimum of 4 inches in height and 4 inches in width and shall direct water away from the vertical sidewall onto the roof and/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 at the vertical sidewall, the base flashing shall be provided in accordance with this section and counter-flashing 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
(Reference: International Residential Code R907.5)

1507.2.2 Slope Asphalt shingles shall only be used on roof slopes of two units vertical in 12 units horizontal (17- percent slope) or greater. For roof slopes from two units vertical in 12 units horizontal (17-percent slope) up to four units vertical in 12 units horizontal (33-percent slope), double underlayment application is required in accordance with Section 1507.2.8.

1507.2.9.2 Valleys

Valley linings shall be installed in accordance with the manufacturer's instructions before applying shingles. Valley linings of the following types shall be permitted:

1. For open valleys (valley lining exposed) lined with metal, the valley lining shall be at least 24 inches (610 mm) wide and of any of the corrosion-resistant metals in Table 1507.2.9.2.
2. For open valleys, valley lining of two plies of mineral-surfaced roll roofing complying with ASTM D3909 or ASTM D6380 shall be permitted. The bottom layer shall be 18 inches (457 mm) and the top layer a minimum of 36 inches (914 mm) wide.
3. For closed valleys (valleys covered with shingles), valley lining of one ply of smooth roll roofing complying with ASTM D6380, and at least 36 inches (914 mm) wide or types as described in Item 1 or 2 above shall be permitted. Self-adhering polymer modified bitumen underlayment complying with ASTM D1970 shall be permitted in lieu of the lining material.