



**BUILDING INSPECTION DIVISION, 9500 Civic Center Drive, Thornton, CO
80229, Phone: 303-538-7250, Roofing Inspection Request Line: 303-538-7430
email: buildings@thorntonco.gov**

ROOFING STANDARDS

Replacement of one (1) square (100 sq. ft.) or less of roof covering is considered a repair and does not require a permit.

The partial replacement of asphalt roof covering materials on a single slope is not allowed. When more than one (1) square of roof covering is required to be replaced a permit is required. When a permit is required, each slope containing damaged shingles shall be replaced in its entirety. A roof may contain different types of roof covering provided that the interface of the different types occurs at a ridge, hip or open valley.

Ice and water shield is not required unless specified in the shingle manufacturer's installation instructions.

Drip edge flashing is required at the eaves and along the rake of the roof. Drip edge flashing shall extend over the plywood sheathing at the fascia.

See shingle manufacturer installation instructions for maximum allowed sheathing spacing.

*The Building Inspection Division does **not** inspect the dryer duct or gas vent connection below the roof line at final inspection. To ensure that one of these vents did not become dislodged below the roof line during the reroof project, it is highly recommended that a licensed plumbing or mechanical contractor be contacted to inspect these components following the completion of your new roof.*

Permit Applications for Town Homes, Apartments, Condos and Duplexes

A permit for any building that has a single address and the units of that building are designated using a unit number or letter, shall be applied for on a single application and shall receive one permit.

A permit for a multi-unit building where each unit is addressed individually, shall be applied for on a single application and shall receive one permit. The permit application must list each address number contained within the building. Please use the lowest number for the Job Address on the application form.

A permit for a duplex where each unit is individually addressed shall require a separate application for each address.

Required Inspections: All Roofing Inspections will be done virtually.

Sheathing Inspection:

All installations of roof sheathing shall be inspected prior to covering. Sheathing shall be fastened to the structure in accordance with the currently adopted code.

Mid-Roof Inspection:

All old roof covering shall be removed.

All drip edge flashing and valley flashing shall be installed.

75% to 100% of felt underlayment installed.

40% to 75% of shingles installed per manufacturer's installation instructions.

*mid-roof inspections may be completed with photos.

Final Inspection:

A final inspection is required for all roofing permits.

Shingles shall be self-sealed.

All flashings installed and complete.

All residential mid-roof and final roof inspections are now done virtually in the City of Thornton. For our customers' convenience we now offer same day inspections by calling 303-538-7430 between the hours of 8:30a.m.-3:30p.m. The morning of your inspection a building inspector will contact you between 8-9 a.m. to confirm your inspection and answer any questions you may have at that time. There are two options available.

Option 1: Virtual Inspection (for mid-roof and final roof inspections):

Prior to the virtual inspection make sure you have the following:

- FaceTime or Google Meet app installed on your mobile device.
- Wi-Fi connection (be sure the signal works outdoors as you will be asked to verify your address as part of the inspection).
- Visual access to approved shingles, nailing patterns on shingles and underlayment, flashing, drip edge, approved valley lining material, ventilation, etc. as described in the City of Thornton Roofing Standards.

If at any time the inspector believes they cannot complete an inspection virtually due to poor signal, or other reason, they may require the inspection be rescheduled at a later date and/or in-person.

Option 2: Photo submittal (mid-roof inspection only):

All of the following must be clearly visible on the photos. Address of project (show numbers on house)

- Underlayment with ASTM D226, D1970, D4869 or D675 shown
- Roof Valley materials
- Starter course
- Metal flashing
- Nail pattern (6 nails per shingles)
- Picture of shingle wrapper showing approved shingles matching the roofing permit application.

Text photos, address, and permit number to 303-550-9401

Note that any special requests require prior approval from the Building Inspection Supervisor.

COMMERCIAL ROOFING

Commercial roofing permits require that it be determined whether the proposed roof covering installation is in compliance with the requirements of the building and energy codes based. Therefore, these permits will require a plan review with a maximum five working day turnaround time.

Submittal Requirements

Please note that modified bitumen, thermoset single-ply or thermoplastic single-ply roofing membranes that are sold to include a minimum 10, 15 or 20 year standard warranty from the manufacturer shall be installed to comply with the manufacturer's installation instructions for the warranty. Roof systems sold without such warranty shall be listed by the manufacturer as either a Factory Mutual I-90 system, a UL Class 30 system or shall be certified by an approved evaluation service report to withstand a minimum of 45 pounds per square foot of static wind uplift.

Please submit the following:

- Description of proposed work, including any demolition and a description of the existing roof assembly. Provide a narrative describing the complete proposed finished assembly (including thickness and type of any existing insulation intended to remain, thickness and type of new insulation, cover boards, slip sheets, any existing covering to remain and the new membrane).
- Product cut sheets for all membrane, insulation, cover board and/or slip sheet products to be used
- The membrane manufacturer's FM or UL system assembly numbers and details for both uplift and fire classification for the proposed assembly or the manufacturer's ICC Evaluation Service Report.

Required Inspections (Commercial other than asphalt shingles):

Sheathing Inspection:

All installations of roof sheathing/decking shall be inspected prior to covering. Sheathing shall be fastened to the structure in accordance with the currently adopted code.

Mid-Roof Inspection:

40% to 75% of roof covering installed per manufacturer's installation instructions.
Must have Manufacturer's Installation Instructions on site for inspector.

Final Inspection:

A final inspection is required for all roofing permits
All flashings installed and complete

Note: We no longer require the submittal of the manufacturer warranty, and submittal of the manufacturer warranty does not negate the inspection requirements.



City of Thornton

Existing Roof Data and Submittal Checklist

(For membrane roof installations)

Height of roof above grade _____

Roof pitch _____

Type of deck Combustible____ Noncombustible _____

Number of existing roof coverings _____

Types of existing roof coverings _____

Overlay____ Tear-off _____

Existing insulation thickness _____

Scope of work attached? Yes____ No _____

Product cut sheets attached? Yes_ No _____

New membrane installation Ballasted____ Mechanically attached____ Fully Adhered____ Welded _____

FM or UL assembly numbers and descriptions attached? Yes____ No____ or

ICC ES Report Attached? Yes____ No _____

Approved Asphalt Shingles

Atlas:

- StormMaster Slate
- StormMaster LM
- Pinnacle¹

Certain Teed:

- Grand Manor
- Belmont
- Carriage House
- Presidential Shake TL (&AR)
- Landmark TL (AR & IR)
- Presidential Shake (&AR)
- Highland Slate
- Hatteras
- Landmark Premium
- Landmark Pro
- Landmark Climateflex
- Landmark
- Northgate Climateflex
- Patriot

GAF – Elk:

- Camelot II
- Grand Canyon
- Grand Sequoia
- Woodland
- Timberline HDZ
- Timberline UHDZ
- Timberline CS
- Timberline AS
- Timberline Prestique 40
- Timberline NS
- Marquis WeatherMax

IKO:

- Armourshake
- Cambridge LT
- Crowne Slate
- Royal Estate
- Dynasty
- Nordic

Malarkey:

- Legacy¹
- Ecoasis
- Highlander

- Windsor

- Vista

Owens Corning:

- Woodmoor Collection
- Woodcrest Collection
- Berkshire
- Duration Shingle (All)
- Oakridge Shingles¹

Pabco:

- Paramount Advantage
- Paramount
- Cascade
- Premier Advantage
- Pabco Premier
- Pabco Prestige

Tamko:

- Heritage
- Heritage Vintage
- Proline Titan XT
- Proline Stormfighter Flex
- Proline Stormfighter IR

¹ Must be installed in accordance with the manufacturer's high wind installation requirements.

The manufacturers and shingle types are not all inclusive. The Building Inspection Division will consider any shingle that carries a national wind warranty for 80 mph sustained or 90 mph 3- second gust. **Shingles and other roof coverings not listed shall be approved prior to permit issuance and will require a building and/or planning department material review.**

NOTICE: Some manufacturers require that a warranty upgrade be purchased in order to be covered for the stated wind speed. Please consult the shingle manufacturer's representative for details.