



TOWN OF FAIRPLAY BUILDING DEPARTMENT

BUILDING GUIDE

REROOFING

CHECKLIST OF REQUIRED INFORMATION FOR A REROOFING PERMIT

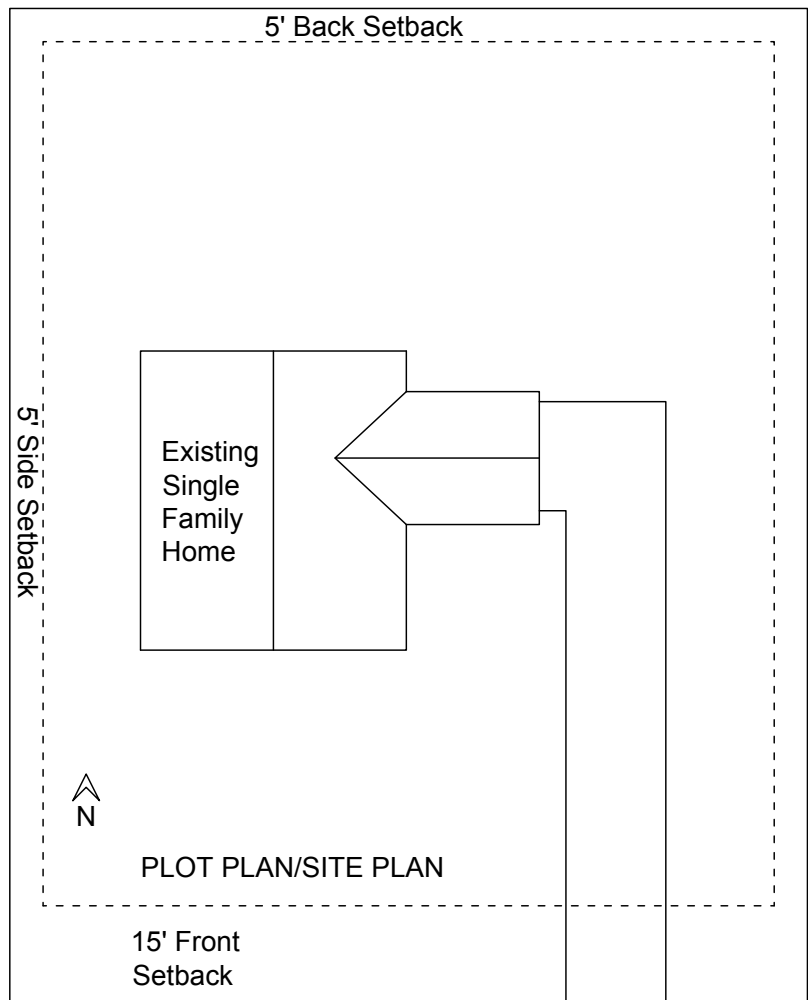
- _____ 1.) Completed Building Permit Application
- _____ 2.) Site Plan/Plot Plan Indicating Locations of Structures to be Reroofed on the Property
- _____ 3.) Roofing Plan with Slopes Indicated
- _____ 4.) Details of Proposed Construction
- _____ 5.) Copy of Recorded Deed Showing Current Owner
- _____ 6.) Permit Fee, Calculated After Application is Submitted

EXAMPLE SITE PLAN

A Site Plan will include all locations of both existing structures and proposed structures in relation to each other and the lot lines for the property.

Regulated setbacks specific to the property should be included.

Direction must be indicated to orient the drawing.



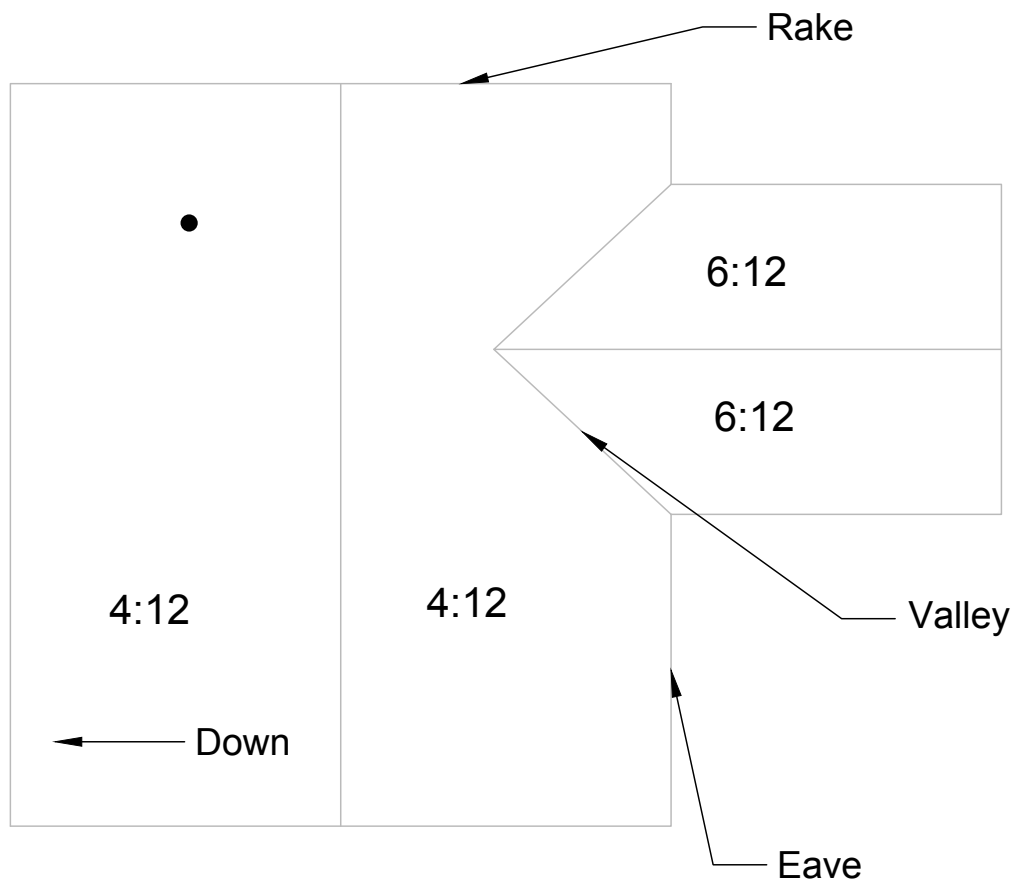
ROAD

ROOFING PLAN

A roofing plan will show a plan view of the roof and include more detail.

Required information is:

- Slope of the roof at all locations
- Locations of all penetrations
- Locations of valleys
- Location of underlayments that do not cover entire roof surface



Total area to be reroofed:
14 squares (1400 sqft)
Ice and Water: Entire Roof Surface

Ice and Water Shield

Ice and Water Shield is type of underlayment used underneath roofing materials that do not form a continuous waterproof membrane layer. These material types are commonly used in residential structures such as asphalt shingles, and metal roofing systems. Under these roofing materials, underlayment is always applied in case of minor water penetration. The standard underlayment materials usually consist of felt, or some other material that is laid out like paper and stapled onto the roof surface. Standard underlayment materials do not create a continuous membrane either.

Ice and Water Shield is a unique underlayment material that does form a continuous membrane layer by means of self-adhering to the roof surface, and to itself.

The image on the right illustrates the icing problem that can occur at higher altitudes such as our community, called Ice damming. Ice damming occurs when snow sits on top of the roof that is heated to the point of melting by the interior heat source. The water flows to the edges of the roof (eaves) where there is no longer heat from the building and refreezes. This ice then blocks additional water flow, and allows a pooling, that can backflow under the primary roof surface, and into the home.

Ice and Water Shield creates a continuous membrane that will block that water intrusion.



Although the ice damming usually occurs on the eave, our cold temperatures and heavier insulation values have caused the issue to commonly occur on any point on a roof.

The Town of Fairplay has a local amendment that requires the Ice and Water Shield material to be applied to the entire roof surface.

The Ice and Water Shield material must meet the code requirements of IRC 905.1.2, and must be installed in accordance with manufacturer recommendations. The material must be a self-adhering modified bitumen sheet.



Installation must be under the rake drip edge, but under the eave drip edge, and must be installed horizontally, as shown in the picture to the right.

In new construction, the Ice and Water Shield must extend 30 inches up the walls adjacent to the roof surface.

DETAILS OF CONSTRUCTION

Details of construction include but are not limited to:

- Underlayment material and specifications
- Roofing Material and Specifications
- Rake flashing details (drip edge)
- Eave flashing details (drip edge)
- Penetrations details
- Valley flashing details
- Gutter details

EXAMPLE PROJECT DESCRIPTION:

This residential single family home complete reroof will have the existing materials completely removed to the deck material. The deck material will be repaired where necessary to maintain a solid surface.

Specifications for each product is attached.

Underlayment will be ice and water shield over the entire roof surface. Proposed product is: Owens Corning WeatherLock G Granular Self-Sealing Ice and Water Shield Leak Barrier.

Shingles will be:

Owens Corning Oakridge Estate Gray Laminate Architectural Roofing Shingles

Drip edge will be installed on both rake drip edge and eave drip edge

One penetration is included on this project. The penetration is a plumbing stack. Penetration will be completed using the following product: Gibraltar Building Products 1-1/4 in. - 3 in. Plastic Adjustable Pipe Flashing with Hard Base and Rubber Collar

Example Product Specifications (page 1 shown, include document as attachment)

PRODUCT SPECIFICATION – MASTER

Owens Corning Roofing & Asphalt herein referred to as "Owens Corning"

Section 07311 Fiber glass-based Asphalt Shingles.

PART I – GENERAL

1.1 RELATED SECTIONS

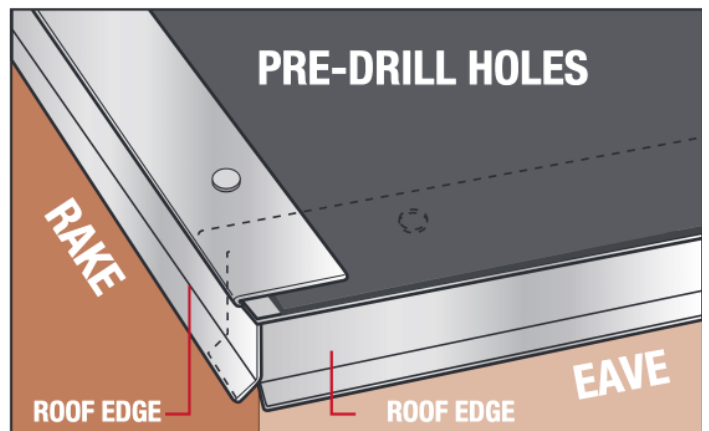
- A. Rough Carpentry Section 06100.
- B. Roof and Deck Insulation Section 07240 for insulation placed over roof decking.
Notes to Specifier:
 1. Underlayment and shingles installed directly over roof insulation or similar type decks is not approved.
 2. Roof deck must be dry, minimum 25/32" thick, maximum 6" wide boards, or APA rated sheathing (exposure 1), minimum 3/8" plywood, minimum 7/16" oriented strand board or waferboard. Consult your Owens Corning representative for other approved constructions.
 3. Ventilation under roof deck must meet FHA Minimum Property Standards.
- C. Flashing and Sheet Metal: Section 07600. For snow guards, metal flashing and drip edges, including step-type flashing installed with shingles.
- D. Roofing Essentials™ Accessories Section 07800.
 1. RAFT-R-MATE® UL® Listed
 2. Soffits or Intake Ventilation
 3. VentSure® Ventilation Products
 4. Hip & Ridge Shingles
 5. WeatherLock® Ice and Water Barrier Products
 6. Fiberglass™ Reinforced Felt Underlayment
 7. Deck Defense™ High Performance Roof Underlayment

1.2 REFERENCES

Standards and Building Codes:

- A. ASTM D 224 - Standard Specification for Smooth-Surfaced Asphalt Roll Roofing.
- B. ASTM D 226 - Standard Specification for Asphalt-Saturated Organic Felt used in Roofing and Waterproofing.
- C. ASTM D 1970 - Standard Specification for Self-Adhering Polymer Modified Bituminous Sheet Materials Used as Steep Roofing Underlayment for Ice Dam Protection.
- D. ASTM D 3018 - Standard Specification for Class A Shingles Surfaced with Mineral Granules.
- E. ASTM D 3161 - Standard Test Method for Wind-Resistance of Asphalt Shingles (Fan-Induced Method).
- F. ASTM D 7158 - Standard Test Method for Wind Resistance of Sealed Asphalt Shingles (Uplift Force/Uplift Resistance Method)
- G. UL 2390 - Test Method for Wind Resistant Asphalt Shingles with Sealed Tabs
- H. ASTM D 3462 - Standard Specification for Asphalt Shingles Made from Glass felt and Surfaced with Mineral Granules.

Drip Edge Flashing Installation Guide



For More Information, Please Visit: <https://coloradochaptericc.org/documents/building-guides/>