Components of a Shingled Roof System

1. **Metal Roof Edging**

- Metal roof edging is typically the first item that is applied during a roofing project and its use has many benefits. The drip portion on the vertical leg of roof edge helps get water in the gutter or away from the house. It also helps tie the soffit color into the roof system. Roof edge is commonly integrated with the ice and water shield which helps protect the edge of the roof sheathing from rot or decay. Metal roof edge is available in 12ft aluminum or 10ft steel lengths.

2. **Ice and Water Shield**

- Ice and water shield is a self-adhered roofing membrane made from a combination of rubberized asphalt for leak protection and a strong inorganic fiberglass mat for reinforcement. Its main application purpose is to prevent leaks and damage to a roof system. Ice and water shield is required to be installed one foot inside a building's vertical wall line. Most Minnesota homes have a 2 foot eave side overhang which requires two rows of ice and water shield after calculating for the roof's slope. Oslin Lumber Company carries ice and water shield in 100 sq ft rolls.

3. **Underlayment**

- Underlayment (tar paper, roofing felt) is a heavy-duty paper, fiberglass or polyester fleece material that is impregnated with a bituminous material (tar) for waterproofing purposes. It is used, along with ice and water, under shingles as a second line of defense against water infiltration into a building's roof system. Underlayment typically covers the entire roof deck system (some will hold out at ice and water location). Oslin Lumber carries 400 sq ft rolls of 15lb and 200 sq ft rolls of 30lb tar paper. We also have quick access to multiple synthetic shingle underlayment options.

4. **Architectural Shingles**

- Architectural (laminated) shingles are made with a base layer of a fiberglass reinforcing mat that are laminated for appearance and strength. The mat is made from wet, random-laid fiberglass that is bonded with a resin. The mat is then coated with asphalt which contains mineral fillers and makes the fiberglass shingle waterproof. Granules are added to the top for color and additional weather protection. Layers are laminated to give the architectural shingle its characteristic shake like look. Architectural shingles are figured by square (100 sq ft) and are the most widely used product for roof coverings. Oslin Lumber stocks many colors of Tamko Heritage 30 year and GAF / Elk Timberline Prestique HD 30 year shingles. We have quick access to many other brands, however, so don't be afraid to request a non-stock option.

5. **Ridge Cap Shingles**

- Ridge cap shingles are similar in composition to architectural shingles. They are used to cover the area where two roof planes meet at peak (ridge) or hip locations. They are typically perforated for ease of application and come in single or multiple layer pieces (multiple layers provide more definition at the roof peak). The amount of ridge coverage varies by manufacturer, but they usually cover between 20 and 33 lf per bundle.

6. **Starter Shingles**

- Starter shingles are a narrow, single layer shingle that are similar in composition to ridge cap shingles. Starter shingles are applied at a roof's eave side edge and occasionally along the rake portion. Starter shingles have a tar strip that helps bond the architectural shingle to the edge of the roof to prevent blow-off in high wind situations. The amount of starter coverage varies by manufacturer, but they typically cover between 75 and 125 lf per bundle.

7. **W-Valley**

- W-Valley is a 20" X 10ft piece of aluminum or steel that is shaped like a "W." W-Valley helps protect against water backing up in the valley portion of a roof. The rib portion in the center of the "W" helps to slow and change the direction of water as it moves down the roof plane. W-Valley comes standard as a mill finish, but can be ordered to match the shingle color. W-Valley is not used in all applications. Shingles can be weaved in the valley with ice and water shield or a valley pan below.

8. **Venting**

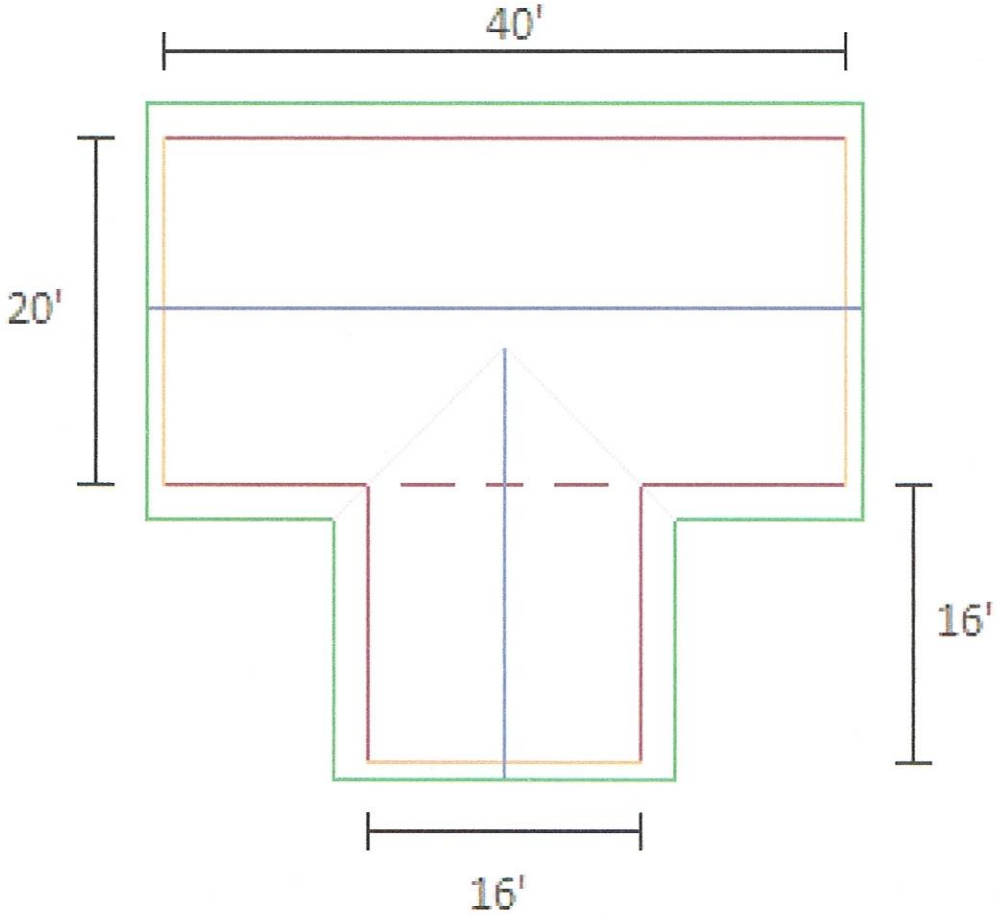
- Oslin lumber handles multiple types of roof vents. The two most common forms are ridge and box vents. Ridge vents have become the preferred form as they are discreet in appearance and don't require flashing in the roof's main plane. Ridge vents come in both 20 - 30 ft rolls and 4ft pieces. Many ridge vents can be applied with a pneumatic roofing nails. Box (turtle) vents are also a common venting option. They are available in plastic, aluminum and steel and are available in many colors. A typical box vent will vent 250 - 300 sq ft of an attic's footprint.

9. **Miscellaneous**

- Step Flashing
- Endwall / Sidewall Flashing
- Kick-out Flashing
- Nails
- Staples
- Pipe Boots

- Bath / Kitchen Vents
- Roof Jacks
- Adhesive Caulk

Green Line - Perimeter of Roof
Brown Line - Building Eave Side Wall Line
Orange Line - Building Gable (Rake) End Wall Line
Blue Line - Roof Ridge
Pink Line - Roof Valley



Sample Estimate 6 in 12 Slope

Sample Figures
Roof Slope 6 in 12
Eave Overhang Width (standard) 2ft
Gable Overhang Width (standard) 1ft