Experts agree that metal drip edge is the ideal way to keep water away from roof edges. Drip edge is installed along the roof rakes and eaves to shed water away from the edge. It flashes the natural point of separation where the roof deck, fascia and rafter tail meet.

The roof deck is most vulnerable to leaks where it meets a vertical wall, at penetration sites such as a soil pipe or chimney, or at changes in slope such as at a valley, saddle, mansard, hip, or ridge. This vulnerability is due to:

- Deferential movements, (e.g. the roof deck moves but the chimney does not).
- An accumulation of turbulent water (e.g. in valleys and on the high side of chimneys).
- An accumulation of melting snow or ice (e.g. in valleys and on the high side of chimneys).
- Breaks in overlapped shingles (e.g. at hips and ridges).

Flashing is installed at these locations to bridge adjoining structures and prevent water penetration. flashing materials include sheet metal; cements, caulks, and sealants; and flexible sheets such as waterproofing shingle underlayment. At hips and ridges the cap shingles, not normally called flashing, serve the same function. Leaks are most likely to originate at a flashing that has failed or was improperly installed.

Corrosion-resistant metal flashing (aluminum or galvanized steel) is the ideal flashing since it offers long-lasting performance and can withstand structural movements as the result of settling, expansion and contraction.

Quality Edge Drip Edge comes in over 60 profiles including: T-style, C-style, Siders Edge, Open Drip Edge, Gutter Apron, Asphalt Drip and Gravel Stop. Many drip edge profiles are offered Hemmed and in 10’ and 12’ lengths.
HOW TO INSTALL DRIP EDGE

1. Drip Edge should extend back from the roof edges to provide a suitable surface for water runoff.

2. Nail one in the middle and one on each end of a 10' piece (approximately every 5') as overnailing can cause buckling.

3. On rakes: install drip edge on top of the underlayment to stop wind-driven rain from getting underneath.

4. On eaves: install drip edge below the underlayment so the water will shed efficiently off the roof if it gets under the shingles.

FOR SEVERE WEATHER CONDITIONS

In extreme ice dam areas:

A good option is to install waterproof underlayments under the drip edge and down the fascia at the eave. Make sure the waterproof underlayment is not exposed to the sun.
There are many different terms used throughout the U.S. to describe the same roofing components. This Roofer’s Guide uses the most common roofing terms. Here are a few descriptions and definitions to clarify common terms.

- **The Gable Roof**
  The most common type of roof.

- **The Hip Roof**
  Features four sides.

- **The Mansard Roof**
  An almost vertical wall ties into another roof plane.

- **The Shed Roof**
  With a single roof plane.

- **The Gambrel Roof**
  A variation of the mansard roof.

- **Contemporary Roofs**
  Here, roof planes drop off to open space.
SLOPE AND PITCH

These measure the steepness of the roof plane.

The Slope = The ratio of the roof’s rise in inches to the roof’s horizontal run in feet.

The Pitch = The ratio of the roof’s rise to the roof’s span.

The most common use in the field is the roof’s slope.

HOW TO DETERMINE THE ROOF’S SLOPE

\[
\text{Slope} = \text{Rise (inches)} \div \text{Run (in feet)}
\]

1. Determine the rise in inches
   \[8’ \times 12” = 96” \text{ of rise}\]

2. Determine the run in feet
   \[\text{Run} = \frac{1}{2} \text{ of span: } 24’ \div 2 = 12’\]

3. Divide rise by run
   \[96 \div 12 = 8\]

4. This is your slope 8”/12”.

![Diagram of roof parts and measurements](image)