

## Understanding Roofs

One of life's basic necessities, along with food and clothing, is a roof overhead. A secure and well-maintained roof means more than just physical comfort. It symbolizes the entire concept of domestic shelter and well being.

Some homeowners pay little attention or no attention to their roof, until it leaks. Even then, repairs often are put off until the problem is too great to be ignored.

Roof leaks are more than annoyances, they are an integral part of a home that must be repaired. Leaks can cause internal structural damage to a home, which is more difficult and more costly to repair than the leak.

Periodic maintenance is both simple and relatively inexpensive. All it takes is some basic information and conscientiousness.

Please remember that roofing is dangerous work and is best left to the professionals.

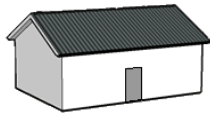
What style of roof do you have?



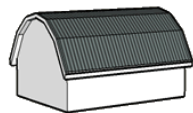
**Bonnet Roof**



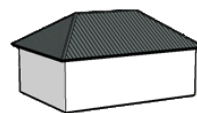
**Flat Roof**



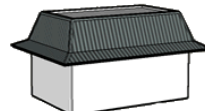
**Gable Roof**



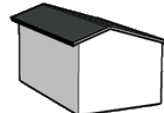
**Gambrel Roof**



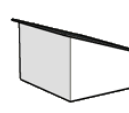
**Hip Roof**



**Mansard Roof**



**Saltbox Roof**



**Shed Roof**

## **Basic Facts**

Roofs have five basic components: (1) sheathing: boards or sheet material which are fastened to roof rafters, (2) roof covering: shingles, tiles or other material which protect the sheathing from the weather, (3) roof structure: the rafter or trusses constructed to support the sheathing and roof covering, (4) drainage: shape or slope are features which affect its ability to shed water, (5) flashing: sheet metal or other material laid into various joints, valleys, or protrusions in the roof to prevent water seepage.

## **Roofs Many Enemies**

**Sun:** The warmth and ultraviolet rays of the sun cause roofing materials to loose or dry out substances designed into them, causing them to deteriorate. Southern exposed roofs tend to wear out faster than those facing the North or East. However North facing roofs tend to have algae growth, most commonly seen with black shadowy lines that mark the roof.

**Rain:** When rainwater finds it way through the roof surface, it can set up a moisture condition that is conducive to mold, mildew and rot.

**Wind:** A strong wind can lift shingles off a building, as well as drive water under the edges of roofing materials.

**Snow/Ice:** Melting snow often refreezes at a roof's overhang, forming an ice dam and blocking proper drainage. Instead water backs up under the roof materials and seeps into the interior of the building.

**Moss:** Wood and built-up roofs are particularly susceptible to the decaying effects of moss. Its root systems can penetrate a roof surface and cause damage to the fasteners holding on the roof materials. Moss also impedes water runoff.

**Improper materials:** There are many factors involved in determining the proper materials to use on a roof surface. The roof's slope, pitch or angle has a major factor in determining what type of roofing material may or may not be used.

## **The Scoop on Leaks**

While many roof leaks are easy to repair, their sources often are difficult to find. Water dripping from a ceiling may not be from a leak directly above, but from a leak many feet away that runs down a rafter or across a ceiling before coming in. It also could be caused from condensation or just as easy from a plumbing leak situated in a wall or ceiling, and incorrectly attributed to a roof leak.

The most common causes of roof leak are:

- Improper flashing, sealing or worn-through flashing around projections through the roof such as plumbing vents, chimneys, skylights, dormers, etc.
- Missing, broken or pierced shingles.
- Tears in roof valleys
- Exposed nails or other fasteners
- Wind driven rain
- Ice dams
- Improperly hung gutters or drip edges
- Improperly installed roofing materials or a roofing material type which is incorrect for the slope involved
- Cracking and blistering of roof mastic
- Ponds of water
- Cracked or disintegrating chimney caps

Click here for Glossary of roof terms

[Click here to order a roof or full home inspection](#)