



# ***Maintaining the Home***

## ***A Guide to Roofs***

# ***Maintaining the Home: A Guide to Roofs***

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As a homeowner, you want your home to look nice and remain in good condition. Over the years, you may replace or repair different items to ensure your home stays safe and comfortable. Now may be the time to repair or replace your roof.

## **Care and Maintenance**

Simple maintenance can help many roofs last for years. Here are some tips:

- Proper roof and eave ventilation may help extend the life of the roof by reducing the buildup of heat and moisture.
- Preservatives available for some types of roofs may help limit weathering effects of moisture and retard growth of molds and mosses.
- Avoid walking on a roof to limit wear and tear. Only necessary repairs or inspections should warrant walking on the roof.
- Keep trees trimmed to prevent them from rubbing against the roof or from providing excessive shade.
- Keep roof, valleys, gutters and downspouts free from buildup of leaves, twigs and other litter preventing proper drainage.

## **Roof Maintenance Warning Signs**

- Missing, curling, cupping, broken or cracked shingles.
- Damage or deterioration around the flashing at chimneys, vents and other junctions.

- Damage or deterioration in valley areas of the roof.
- Excessive granular loss found in gutters and downspouts. Manufacturers cover asphalt composition shingles with granules to block ultraviolet rays from the sun. Natural aging will cause granules to erode and expose the asphalt. Granular loss begins during installation and occurs daily. This is an expected condition, but excessive loss may indicate a problem.
- Leaves, debris and dirt near roof edges or outside the gutters may impair drainage and lead to deterioration.
- Pooling or ponds of water that fail to drain from flat roofs may indicate low areas and inadequate drainage.

## **Choosing a Roof System**

There are a number of things to consider when selecting a new roof system. Of course, cost and durability head the list, but aesthetics and architectural style are important, too. The right roof system for your home or building is one that balances these five considerations. The following roofing products commonly are used for steep-slope structures.

**Asphalt shingles** possess an overwhelming share of the U.S. steep-slope roofing market and can be reinforced with organic or fiberglass materials. Although asphalt shingles reinforced with organic felts have been around much longer, fiberglass-reinforced products now dominate the market.

- **Organic shingles** consist of a cellulose-fiber (i.e., wood) base that is saturated with asphalt and coated with colored mineral granules.
- **Fiberglass shingles** consist of a fiberglass mat, top-and-bottom layers of asphalt and mineral granules.

Asphalt shingles' fire resistances, like most other roofing materials, are categorized by Class A, B or C. Class A signifies the most fire resistance; Classes B and C denote less fire resistance. Generally, most fiberglass shingles have Class A fire ratings, and most organic shingles have Class C ratings.

A shingle's reinforcement has little effect on its appearance. Organic and fiberglass products are available in laminated (architectural) grades that offer a textured appearance. Zinc or copper-coated ceramic granules also can be applied to organic or fiberglass products to protect against algae attack, a common problem in warm, humid parts of the United States. Both types of shingles also are available in a variety of colors.

Regardless of their reinforcing type and appearance, asphalt shingles' physical characteristics vary significantly. When installing asphalt shingles, the National Roofing Contractors Association (NRCA) recommends use of shingles that comply with American Society for Testing and Materials (ASTM) standards—ASTM D 225 for organic shingles and ASTM D 3462 for fiberglass shingles. These standards govern the composition and physical properties of asphalt shingles; not all asphalt shingles on the market comply with these standards. If a shingle product complies with one of these standards, it is typically noted in the manufacturer's product literature and on the package wrapper.

### **Built-up Roofs**

Built-up roofs are often found on homes with flat or nearly flat roof structures. They don't usually

shed water, quickly increasing the chance for ponding and leakage. A built-up roof is made of up to four-ply, or layers, of roofing felt paper and asphalt. A layer of gravel may be placed on a built-up roof to add protection from the weather and to improve wind resistance.

**Wood shingles** and shakes are made from cedar, redwood, southern pine and other woods. Their natural look is popular in California, the Northwest and parts of the Midwest. Wood shingles are machine-sawn; shakes are handmade and rougher looking. Some local building codes limit the use of wood shingles and shakes because of concerns about fire resistance. Many wood shingles and shakes only have Class C fire ratings or no ratings at all. However, Class A fire ratings are available for certain wood shingle products that incorporate a factory-applied, fire resistant treatment.

**Tile**—clay or concrete—is a durable roofing material. Mission and Spanish-style, round-topped tiles are used widely in the Southwest and Florida and flat styles also are available to create French and English looks. Tile is available in a variety of colors and finishes. Because tile is heavy, if you are replacing another type of roof system with tile, you will need to verify that the structure can support the load.

**Slate** is quarried in the United States in Vermont, New York, Pennsylvania and Virginia. It is available in different colors and grades, depending on its origin. Considered virtually indestructible, it is, however, more expensive than other roofing materials. In addition, its application requires special skill and experience. Many old homes, especially in the Northeast, still are protected by this long-lasting roofing material.

**Metal**, primarily thought of as a low-slope roofing material, has been found to be a roofing alternative for home and building owners with steep-slope roofs. There are two types of metal

roofing products: panels and shingles. Numerous metal panel shapes and configurations exist. Metal shingles typically are intended to simulate traditional roof coverings, such as wood shakes, shingles and tile. Apart from metal roofing's longevity, metal shingles are relatively lightweight, have a greater resistance to adverse weather and can be aesthetically pleasing. Some have Class A fire ratings.

**Synthetic roofing** products simulate various traditional roof coverings, such as slate and wood shingles and shakes. However, they do not necessarily have the same properties.

Before making a buying decision, NRCA recommends that you look at full-size samples of a proposed product, as well as manufacturers' brochures. It also is a good idea to visit a building that is roofed with a particular product.

This material was adapted from publications produced by State Farm Insurance. State Farm information can be found on the Web at <http://www.statefarm.com/consumer>.

*This resource is one in a series on **Maintaining the Home** which include:*

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