

## Roof - care and maintenance

The roof is your home's first line of defense from the elements. But sun, wind and rain all wear down your roof over time. Since your roof is the largest component of your house it can also be the most vulnerable to severe storms and the costliest single site of damage.

Recognizing signs of a roof problem

- When it rains, do too many roof granules wash away?
- Are there water stains on your ceiling?
- Even the smallest leak or curling shingle can be a sign of trouble.

Care and Maintenance

- Proper eave and ridge ventilation may help extend roof life by reducing the buildup of heat and moisture.
- Keep trees trimmed to prevent them from rubbing against the roof, or from providing excessive shade.
- Keep roof, valleys, gutters and downspouts free from leaves, twigs and other litter that can build up and prevent proper drainage.
- Preservatives available for some roof types may help limit weathering effects of moisture and retard growth of molds and mosses.

If you have concerns, schedule a professional roof inspection.

If you are considering a new roof, make it stronger.

### Shingle roof - Evaluation Checklist

Keeping shingles on your house is extremely important. If edge shingles are not well fastened or extend beyond the drip edge more than the 1/4" typically recommended for high wind areas, the wind can lift them up and start a peeling process. This domino effect leads to significant loss of roof covering, which can allow water into your home or worse.



1. Inspect a number of shingle tabs and make sure they are well secured to the roof, particularly along the roof edges.
2. Use the tips of your fingers or thumbs to gently lift up on the edge of the shingle tabs.
  - Is the adhesive strong?
  - Are the tabs well anchored to the shingle below?
3. As long as the shingle is still flexible enough to lift and re-set flat, roofing cement can be applied.
4. Using a caulking gun, place three dabs of asphalt cement about the size of a silver dollar under each tab.
5. Press the tab firmly into the adhesive.
6. On gable ends, secure the three shingle tabs closest to the gable edge.

### Tile Roof - Evaluation checklist

1. Never walk on a tile roof.
2. Using a ladder, climb up to a corner of the roof and check the eave and edge tiles to make sure that they are well attached to the roof.
3. Do you see:
  - Loose tiles
  - Cracked tiles
  - Broken or missing tiles
4. If you see any of these, call a professional for repairs.



## Metal Roof - Evaluation checklist

1. Using a ladder, climb up to a corner of the roof and check the metal roofing along the eaves and any edge covering.
2. Gently lift up on the edge metal
  - Is it well attached?
  - Are the fasteners exposed?
  - If so, are they loose?
3. Check for rust and loss of the protective coating.
4. Inside the attic:
  - Go inside on a sunny day
  - Look for sunlight penetrating around vent pipes and chimneys or other roof penetration
    - If there is some light, check for signs of leaks
    - If there is lots of light, hire a professional to replace the flashing and other materials
  - Inspect the roof decking for water stains:
    - Above the chimney
    - Around vents
    - Along valleys or roof slope changes
5. Look for signs of discolored or deteriorating roof deck



## Schedule a professional roof inspection

Most roofing projects are not for the do-it-yourselfer. When hiring a reputable roofing inspector:

- Look for an established, licensed or bonded roofer.
- Ask for references and call them up.
- Ask to see certificates of insurance. Make sure that coverage for liability and workers compensation insurance is current.
- Contact your local Better Business Bureau to check for complaints filed against the contractor.

Ask the inspector to look for prior hail or wind damage or decay, which can allow water to penetrate the roof and damage ceilings and walls. Several factors can contribute to a roof's decay, such as:

- Ultraviolet light from the sun and temperature extremes in your area.
- Exposure to wind, snow, ice and rain, and foot traffic on the roof.
- Dark-colored shingles, because they absorb more light, may have shorter service lives than lighter colors in southern climates.
- Ask the inspector what you can do to reduce your wildfire risk on your existing roof and for advice about future roof protection.
- Get an estimate on the remaining life of your roof.

If it will be a while before you replace the roof:

- Inspect the roof in the fall and spring for cracked or curling shingles or damaged roofing materials.
- Clean rain gutters filled with dead leaves and other debris.

**TIP:** Schedule a professional roof inspection following each hail storm that strikes your area. Hail damage can be difficult to spot.

## Installing a new roof - make it stronger

When installing a new roof, making it stronger and more secure is as important as choosing the right roofing materials.

Make sure the contractor removes all existing roof covering down to the decking. (Building codes generally allow homeowners to install a second layer of asphalt shingles over an existing layer of old shingles, but that is not always best for your home, especially in high wind and hail areas.)

- Have the roof decking inspected for signs of rotting, delaminating, warping or anything else that would deem it structurally unsound.
  - If any of these conditions exist, replace these sections with similar materials of the same thickness.
- Inspect the points where the roof and the foundation meet the walls of your house. Strong connections are extremely important if your home is to resist high winds and the pressures they place on the entire structure.
  - If you are building a new home, have the builder use straps and wood structural sheathing to tie the structure together and anchor it to the foundation. These connections are relatively inexpensive when used during construction, adding three to four percent to the price of a home.
  - If you are remodeling, ask the contractor to install straps and anchors that will strengthen the house from the roof to the foundation, even if it is only in the area that is being remodeled. This should only cost a few hundred dollars for a typical 1,500 to 2,000 square foot house.
- Gable ends
  - Brace the end wall of a gable roof properly to resist high winds. Check the current model building code for high-wind regions for appropriate guidance, or consult a qualified engineer or architect.
- Check the fastening of the roof deck to the rafters or trusses that support the deck.
  - For wood plank decks: If at least two nails were installed every time one of the planks crossed a rafter or truss) you should not need to re-nail the deck.
  - For wood panel sheathing, including plywood or Oriented Strand Board, OSB:
    - Nail sizes and nail spacing commonly used, particularly along trusses and rafters in the middle of the panels, have not provided the needed resistance to uplift in high wind events.
    - Staples have been found not to hold roof sheathing down very well, regardless of how close together they may be.
    - Re-nail the roof to the rafters and trusses using 8d ring shank nails.
- Apply a secondary moisture barrier, such as modified bitumen, over the seams where the roof decking meets or apply a product that covers the entire roof.
- Choose a roof covering that is approved for the hazards in your area, better roofing materials will be approved for high wind, hail impact and wildfire).