

# Repair a Wood-Shingled Roof

A pitched roof must be capped along the ridge (peak) where two roof planes intersect. If you have a roof leak at or along a roof peak, you'll need to replace the cap. With wood shingles this is done with shingles or 1x6 cedar boards. With shakes (a thicker shingle that is either handsplit or sawn), taper-sawn shakes are used rather than boards.

The work of cutting and installing the cap itself is relatively easy, provided you are comfortable working on your roof. Exercise extreme caution when working on a wood roof. Never walk on a wet roof, which can be very slippery. A proper ladder setup is essential, and wearing a roof harness (a rental item) is strongly recommended.

Tools and Materials you need:

- Extension ladder (rental item)
- Pry bar
- Single ladder section and ladder brace
- Pneumatic Nailer (rental item)
- Roof harness (rental item)
- Nail pouch with hammer hook
- Tape measure
- 30-lb. roof felt or roll of 8-in. metal flashing
- #1 red cedar shingles or 1x6 cedar
- Galvanized roofing nails
- Utility knife, metal straightedge, block plane (for shingles)
- 3-in. galvanized box nails (for shingles)
- Circular saw (for boards) (rental item)
- 3-in. ring-shank galvanized box nails (for boards)
- Goggles and gloves

## 1. Set up Your Ladders

Set your ladder against the house eaves so it extends a few feet above the roof. This allows you to step safely from the ladder to the roof surface with a handhold on the top of the ladder.



**TIP:** Once you are straddling the ridge you are quite safe on a roof, but getting there from the eaves can be quite risky. The safest approach is

to place a single ladder section (called a chicken ladder) flat on the roof, extending from the eaves to the ridge and hooked over the ridge. You can rent a specially equipped ladder for this purpose, or you may be able to purchase a ladder brace accessory. Rent a roof harness for personal safety.

Having a helper on a second ladder that extends directly from the ground to the ridge makes the job both easier and safer, since the helper can bring needed materials up the ladder and eliminate trips up and down the roof.

## **2. Prepare the Materials**

**If you are using shingles or shakes:** Cut the quantity needed, uniformly 3 to 5 inches wide. Unless you have a table saw the best approach is to use a straightedge to guide a utility knife, and score and break the shingle. Then clean up and bevel the edges with a block plane.

**If you are using ridge boards:** The top edge of each board may need to be ripped (cut along a board's length) with a circular saw or on a table saw to create a bevel that mimics that of the roof plane. This is not necessary for a 1/4-pitch roof because the two roof planes meet at a 90-degree angle. Any end joints should also be beveled with a miter cut.

## **3. Remove the Old Cap**

Remove the ridge boards or shingle cap with a pry bar and either pull or drive flush any nail heads. Work carefully to avoid damaging the underlying roof shingles.



**TIP:** Collect scraps in an old bucket or cardboard box to avoid cleanup that would be needed if you just let the scraps slide down the roof into a gutter or onto the ground.

## **4. Flash the Ridge**

Roll out 8-in. wide metal flashing or 30-lb. roofing felt over the ridge and secure it with roofing nails along the lower edge every few feet on each side of the ridge.

## **5. Install a Shingle Cap**

**5a.** Begin at one end with a double course. Apply these and the remaining shingles to alternating sides so each pair overlaps at the peak. If necessary

use a block plane to bevel the mating edges for a tight joint prior to nailing with 3-inch galvanized box nails (or nails twice as long as those required to install the shingles on the field of the roof). The nails must extend entirely through the sheathing. Use two nails per shingle, nailing so they will fall 1 inch above the exposed portion of the shingle. The exposure should match that of the rest of the roof.

**5b.** Work your way along the ridge to about the midpoint; then start from the other end.

**5c.** As you get about 6 feet away from the already installed cap, measure and adjust the exposure as needed to make sure that the remaining courses all have about the same exposure.

**5d.** Cut off the thin end of the last three courses to prevent excessive buildup. (The dimensions shown in the drawing are for an 18-in. shingle with 5-in. exposure).

## **6. Install Ridge-Board Cap**

**6a.** Install the first board so the end is flush with the rake edge of the shingles and its long edge is even with the ridge. Nail through the board into the sheathing at rafter locations if possible, using two nails every 16-24 inches according to rafter spacing. Use ring-shank 3-inch galvanized or stainless steel box nails for maximum holding power and rust-resistance.



**TIP:** As you work your way along the ridge, position a scrap of 1x6 "cap" on the opposite roof plane and bring the board that you are installing up tight to the scrap before nailing. This will assure a tight joint when the other half of the cap is installed.

**6b.** After verifying that the two boards will joint nicely without additional planning, secure the second board the same way. Drive all nails flush with the surface but do not countersink them, as that would create water-trapping depressions.

**6c.** If a single board length will not cover the entire ridge, join the ends of boards with a miter joint (precut in Step 2). Tack or hold the miter joint

together while you or a helper mark the other end for cutting. Then complete the installation.