Installing Cedar Shakes

Cedar shakes—which are thick and rough—and shingles—which are tapered and smooth—are installed in much the same way, with one major difference. Shakes have felt paper installed between each course, while shingles do not. Shingles are often applied over open sheathing, while shakes are installed over open or solid sheathing. Air circulation under shakes and shingles can increase their life span. Check your local building codes to see what type of sheathing is recommended for your area.

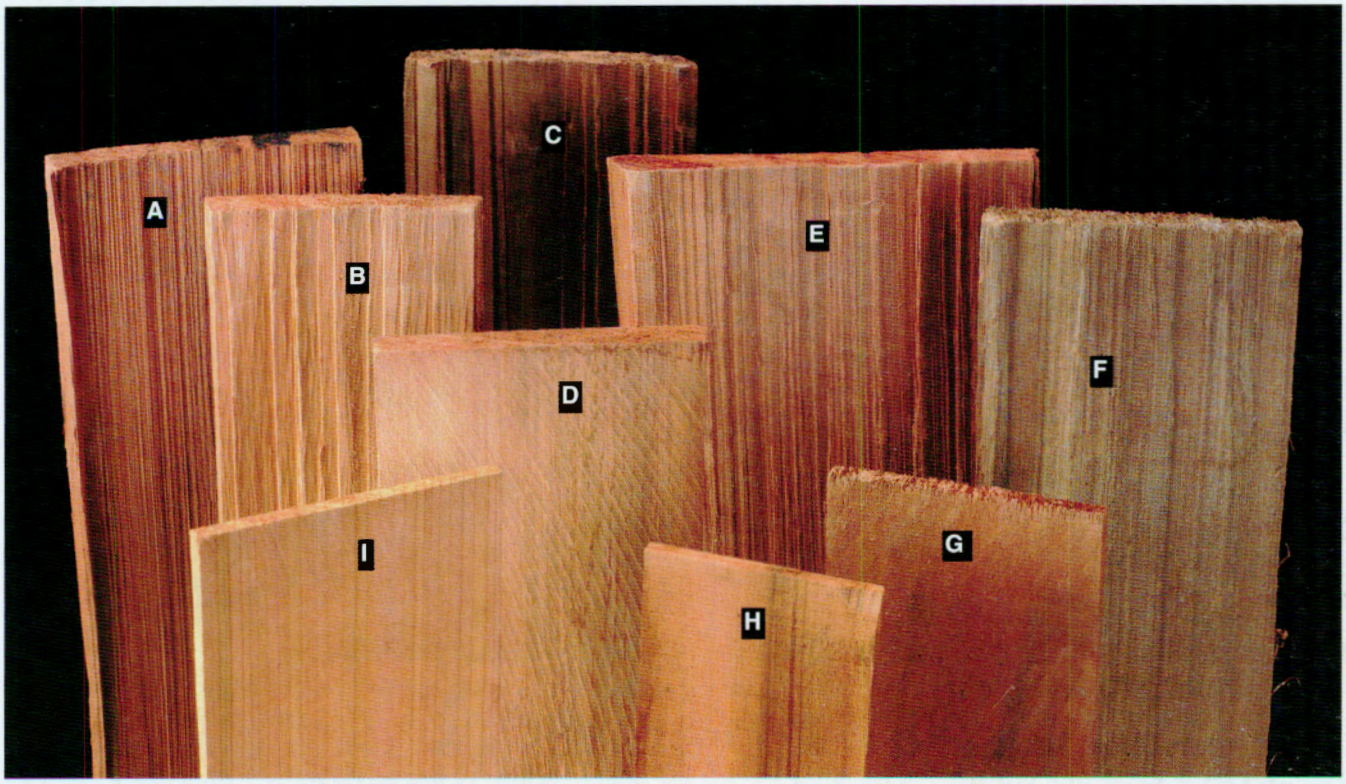
The gaps between shakes and shingles, called joints, are specified by the manufacturer. You can determine how much of the material to leave exposed below the overlap, as long as it falls within the manufacturer's guidelines.

Everything You Need

Tools: roofer's hatchet, tape measure, utility knife, stapler, chalk line, circular saw, jig saw, caulk gun.

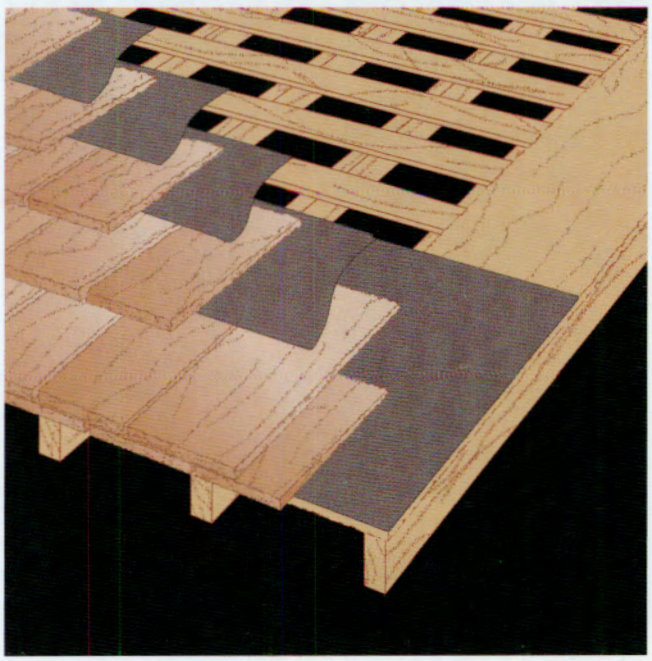
Materials: shakes, flashing, nails, 30# felt paper, stapler, mason's string, roofing cement.

Cedar Shakes & Shingles

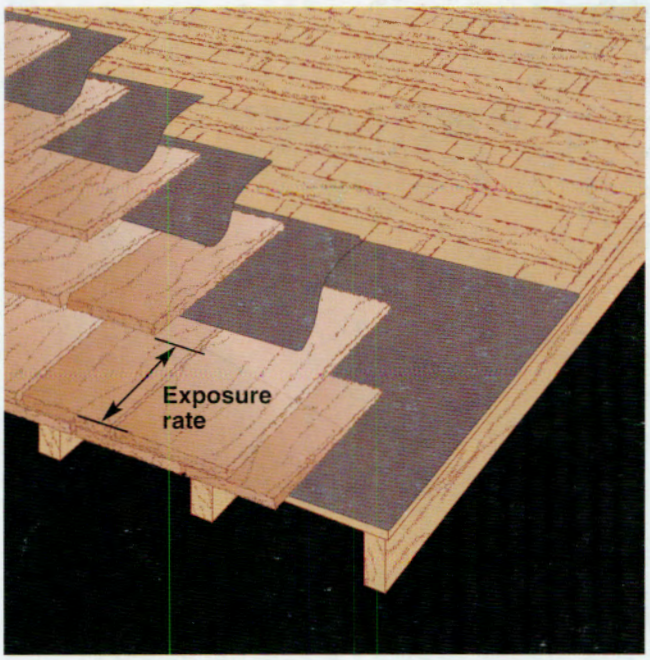


Wood shakes and shingles are available in different grades. Some of the more popular include: resawn shake (A), No. 1 hand-split medium shake (B), standard-grade shake (C), taper-sawn shake (D), No. 1 heavy shake (E), CCA treated medium shake (F), No. 2 shingle (G), undercoursing shingle (H), No. 1 shingle (I).

Roof Decking for Cedar Shakes & Shingles



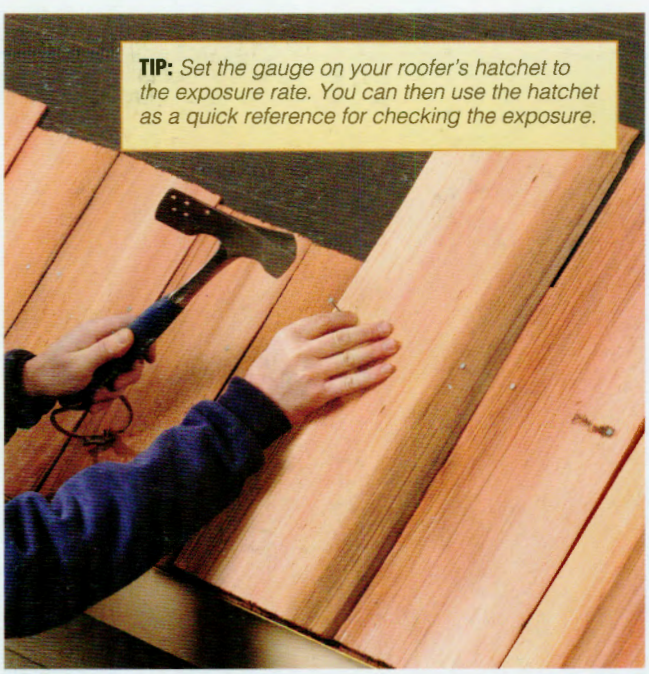
Spaced sheathing is common, and sometimes required, for cedar shakes and shingles. The sheathing is solid along the eaves and rake ends, and spaced in the field to allow for air circulation.



To install spaced sheathing over solid sheathing, place 2 × 4s flat over each rafter and nail them to the roof. Nail 1 × 4 or 1 × 6 nailing strips across the 2 × 4s. Keep the strips together along the eaves, then space them at a distance equal to the exposure rate in the field.

1 Prepare the roof decking by installing valley flashing at all valleys (pages 66 to 67). Apply felt paper underlayment to the first 36" of the roof deck. Note: Depending on your climate and building codes, you may want to install ice and water shield for this step rather than felt paper.

2 Install a starter shake so it overhangs the eaves and rake edge by 1½". Do the same on the opposite side of the roof. Run a taut string between the bottom edges of the two shakes. Install the remaining shakes in the starter row, aligning the bottoms with the string. Keep the manufacturer's recommended distance between shakes, usually ⅜" to ⅝".



TIP: *Set the gauge on your roofer's hatchet to the exposure rate. You can then use the hatchet as a quick reference for checking the exposure.*

3 Set the first course of shakes over the starter row, aligning the shakes along the rake ends and bottoms. Joints between shakes must overlap by at least 1½". Drive two nails in each shake, ¾" to 1" from the edges, and 1½" to 2" above the exposure line. Use the hatchet to rip shakes to fit.

4 Snap a chalk line over the first course of shakes at the exposure line. Snap a second line at a distance that's twice the exposure rate. Staple an 18"-wide strip of felt paper at the second line. Overlap felt paper vertical seams by 4". Install the second course of shakes at the exposure line, offsetting joints by 1½" minimum. Install remaining courses the same way.

5 Set shakes in place along valleys, but don't nail them. Hold a 1 × 4 against the center of the valley flashing without nailing it. Place it over the shakes to use as a guide for marking the angle of the valley. Cut the shakes, using a circular saw, then install.

6 Use the 1 × 4 to align the edge of the shakes along the valley. Keep the 1 × 4 butted against the valley center, and place the edge of the shake along the edge of the board. Avoid nailing through the valley flashing when installing the shakes.

7 Notch shakes to fit around a plumbing stack, using a jig saw, then install a course of shakes below the stack. Apply roofing cement to the underside of the stack flashing, then place it over the stack and over the shakes. Nail the flashing along the edges.

8 Overlap the exposed flashing with the next row of shakes. Cut notches in the shakes to fit around the stack, keeping a 1" gap between the stack and shakes.

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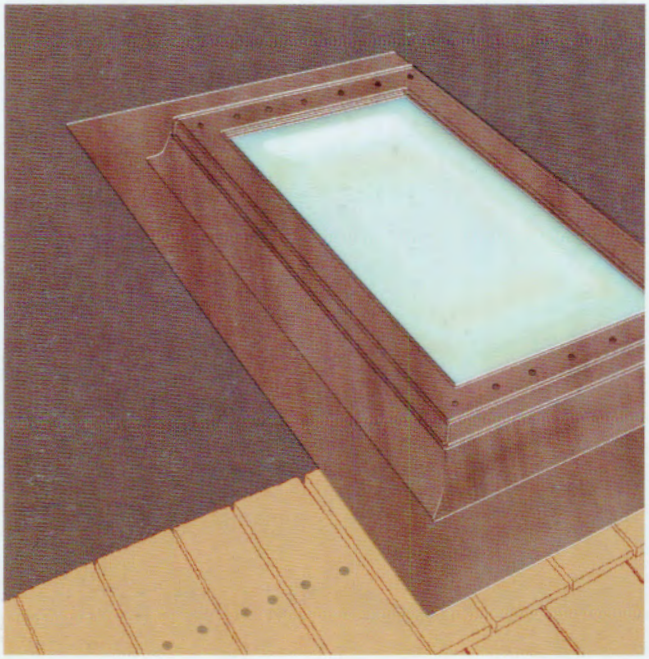
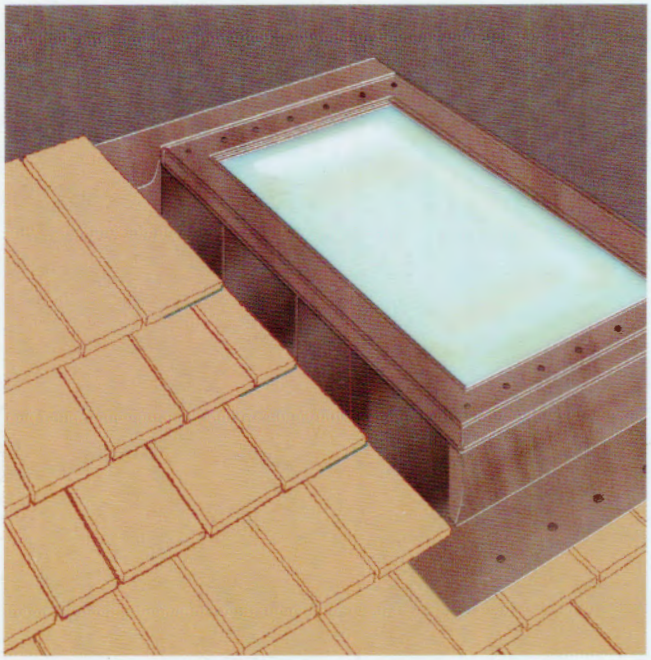


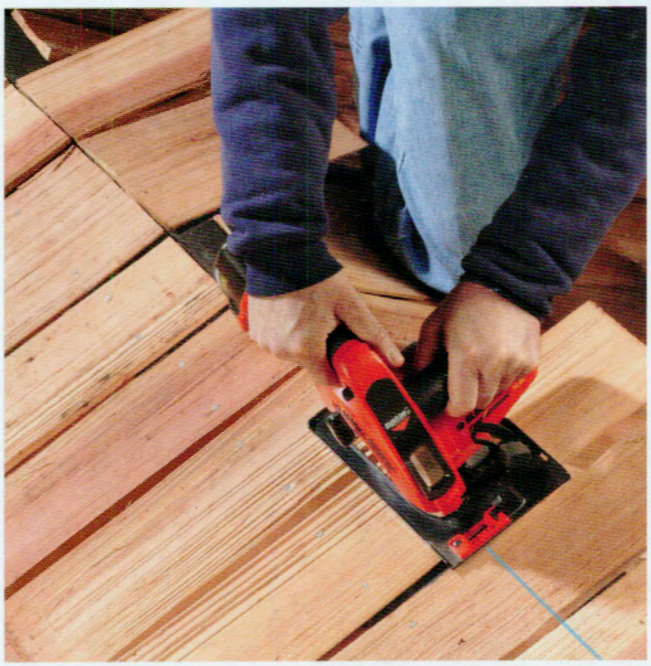
9 Install shakes under the bottom apron flashing beneath a skylight. Cut the shakes as necessary. Nail the shakes without driving nails through the flashing. Apply roofing cement to the underside of the flashing, then press to the shakes.



10 Interweave skylight flashing along the skylight with rows of shakes. After each row of shakes, install a piece of flashing with the vertical plane placed under the edge lip of the skylight and the horizontal plane flush with the bottom edge of the shake. A row of shakes covers the top apron flashing.

11 Apply roofing cement along the underside of the roof louver flange, then set it over the vent cutout and over the shakes directly below it. Nail the louver in place. Install shakes over the sides and back of the louver, trimming to fit, as needed.

12 As you approach the ridge, measure from the last installed row to the peak. Do this on each side of the roof. If the measurements are not equal, slightly adjust the exposure rate in successive rows until the measurements are the same. Make sure you're measuring to points that are aligned at the peak. The top of the sheathing is probably not level across the roof and cannot be a reference point.



13 Run shakes past the roof peak. Snap a chalk line across the shakes at the ridge. Set the circular saw blade to the depth of the shakes, then cut along the chalk line.

14 Cut 8" strips of felt paper and staple them over the hips and ridge. Set a factory-made hip and ridge cap at one end of the ridge, aligned with the roof peak. Do the same at the other end of the roof. Snap a chalk line between the outside edges of the caps.

15 Set a ridge cap along the chalk line, flush with the edge of the roof, to serve as the starter. Install with two nails. Place a cap directly on top of the starter cap, and nail in place. Install caps along the remainder of the ridge, alternating the overlap pattern. The exposure rate should be the same as the roof shakes. Nails should penetrate the roof decking by ½".

Variation: If the ridge caps are not pre-assembled by the manufacturer, install the first cap along the chalk line, then place the second cap over the edge of the first. Alternate the overlap pattern across the ridge.