BY JLC STAFF

Sidewall Shingling With Cedar

Shingles and shakes have been used as siding for as long we've been building houses in this country. Made mostly from western red cedar and northern white cedar, sidewall shingles are rot-resistant and long lasting if installed properly. While there are subtle differences between cedar shakes and cedar shingles, installation is essentially the same.

The Cedar Shake and Shingle Bureau (CSSB) provides the guidelines for installing red cedar, and Maibec publishes guidelines for white cedar shingles. This article covers the basic steps for a successful installation of both.

PAY ATTENTION TO DRAINAGE

The biggest enemy of sidewall shingles is water. Even with cedar's rot resistance, the shingles still need to be able to thoroughly dry out after being exposed to precipitation. A drainage plane behind the shingles allows water to drain away and lets air circulate to dry the shingles completely.

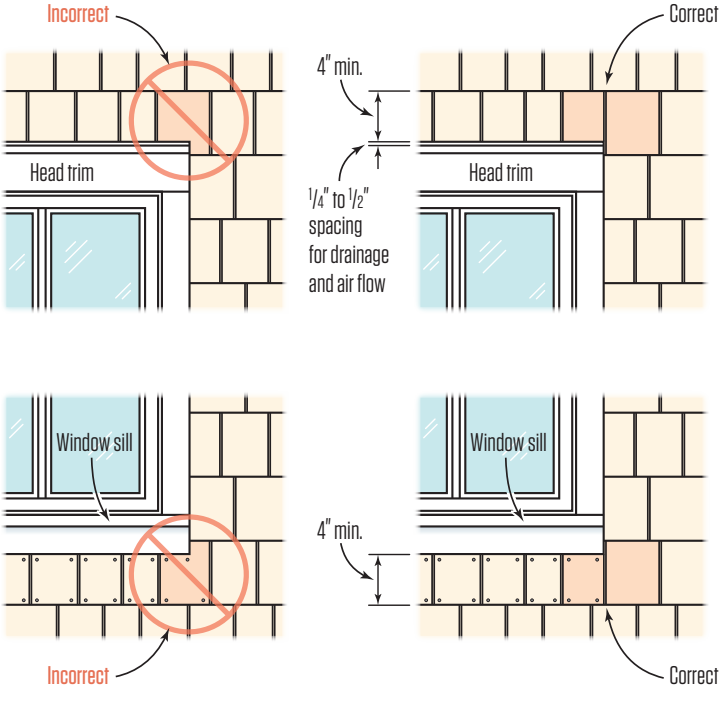
The most practical way to create a drainage plane is with a self-draining rainscreen mat that attaches to the wall over the WRB. The shingles then install over the mat. The mat creates enough space for air to circulate to dry the shingles while allowing the moisture to drain away. Another strategy is creating a grid of furring strips—vertical battens to create drainage overlaid with horizontal battens on which you attach the shingles.

CORNER STRATEGIES

One factor that determines what the finished job will look like is the corner treatment. For shingled walls, outside corners are usually done either with corner boards or as woven corners. For the purposes of this article on basics, we will stick to using corner boards. (For a more in-depth look at woven corners, see "Weaving Stained-Shingle Corners," Jun/16).

The simplest inside-corner trim is a 1x1 or 2x2 wood strip installed over a tar-paper or peel-and-stick spline that extends a few inches onto each wall. With this type

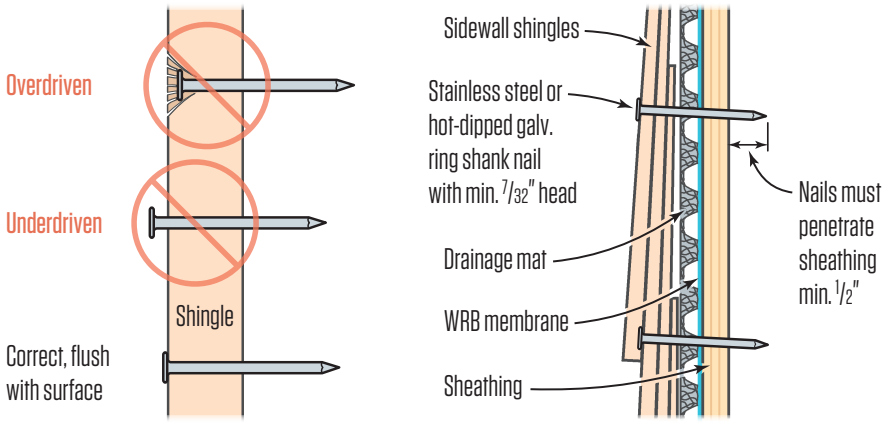
Window Finish Details



When you're shingling around windows, exposure should be no less than 4 inches for the courses above and below the windows. Be sure to leave ample clearance between the course above the window and the head flashing. For proper drainage, align the shingle gaps with the corners and avoid having shingles that wrap around the corners.

Illustrations by Tim Healey

Properly Driven Nails



Always drive nails flush to the surface of the shingle. Underdriven nails do not anchor the shingle properly and overdriven nails break the wood. Additionally, always use nails that are the proper length. Remember that nails must go through the layers of shingles, through the drainage plane, and then through the sheathing with a penetration of at least 1/2 inch. Nails for fastening shingles should be either stainless steel or hot-dipped galvanized.

of corner, the shingles butt against it, as they would with a corner board. Inside corners can also be woven like outside corners.

COURSE LAYOUT

The recommended exposure varies, depending on the size (height) of the shingles. For white cedar shingles, Maibec recommends a 5-inch exposure, but that figure can vary up to 1/4 inch to make a layout work in the space you have. Measure from the underside of the soffit or the frieze board to the bottom of the sheathing and add the overhang (see "Starter Course," below). Divide that distance by 5. This gives you the number of courses you'll need, but it is unlikely to be a whole number (you can forget the fraction). To find the exact exposure, divide the distance (including the overhang) by the number of courses.

In addition, measure the distance from the bottom starting edge to the bottom of the windows. Adjust the layout so that you are not left with a narrow strip to fill in under a window. Also measure to the top of the windows and try to make the bottom edge of a course line up with the top of the windows (including a drainage gap over the head flashing). Maibec says that you should not have less than a 4-inch course below or above a window.

Story pole. Transfer these measurements to a story pole. A story pole is a straight piece of wood, usually a 1x2 length of strapping on which you mark the layout for the courses as well as any other pertinent measurements, such as the tops and bottoms of windows. With a story pole, you can quickly mark off the heights of the courses at each corner of the house to keep the courses consistent as you work from wall to wall.

STARTER COURSE

The bottom of the wall starts with a double layer of shingles, so that the angle of the courses is consistent top to bottom. The inside layer is called the "starter course," and because it will be covered, it can be made with inexpensive, lower-grade shingles.

Overhang. Pay attention to the placement of the starter course. Maibec recommends that the bottom edge of the starter course extend down at least an inch past the top of the foundation. If the wall sheathing laps over the foundation, as it often does in new construction, the starter shingles only need to extend a small distance past the sheathing. The outer first course should then extend 1/2 inch below the bottom edge of the starter course so that water will drip off the outer edge. In addition, note that code requires at least 6 inches between the bottom edge of the first course and grade.

GUIDE STRIP

Installers typically nail a strip of wood (such as a straight length of 1x2 strapping) temporarily to the wall for installing each course. The shingles then sit on the guide strip to keep them in

a straight line for nailing. Some installers just nail the guide strip directly to the course below, but those nails can split the shingles that they nail into, and nail holes are left in the face of the shingles when the guide strip is removed. A better way is to attach pieces of thin-gauge aluminum flashing to the back of the guide strip. A single nail near the top edge of the aluminum holds the guide strip in place. After the course is all nailed in, a light tap on the strip tears the aluminum out from around the nail, and the guide strip is ready for the next course.

For the starter course, the guide strip has to be suspended below the sheathing. Starting at one end, set it at the right height for the finished first course, tack it in place, and then level it across. You can eyeball the starter course to locate it about 1/2 inch above the support strip. Then install the outer course with the shingles sitting directly on top of the strip.

NAILING AND GAPPING THE SHINGLES

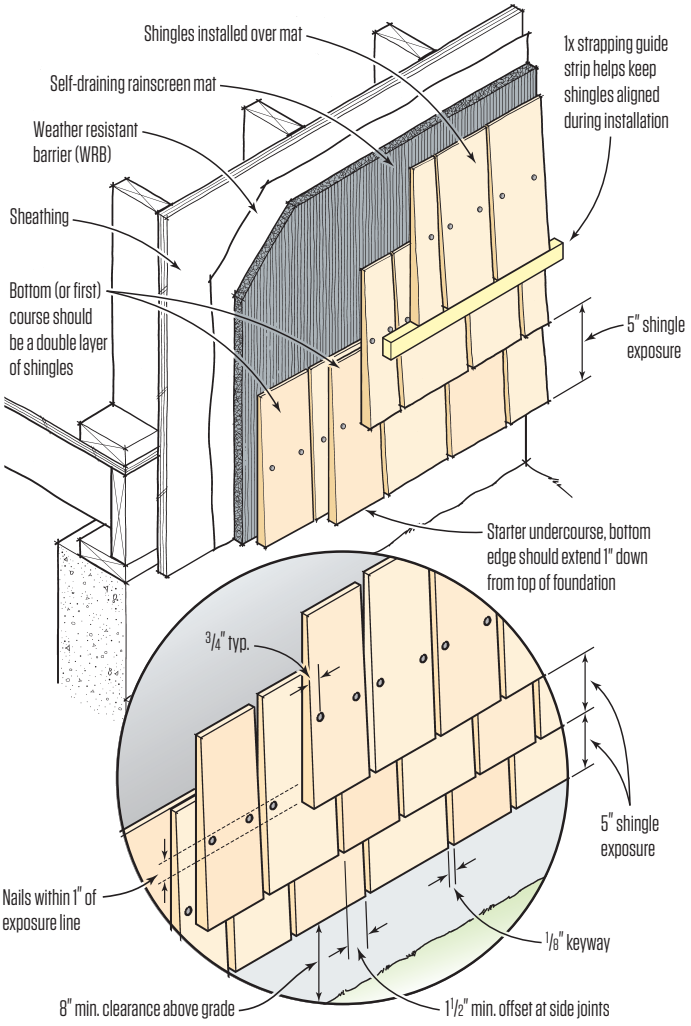
For the next courses, use your story pole to mark out the height of the courses lightly in pencil on the corner boards. Then stretch a chalk line between the corners and snap a guide line. Align the guide strip with the snapped line and tack it in place.

As you place the shingles on the guide strip, take care to offset the gaps between the shingles at least 1 1/2 inches from the gaps in the course below. Leave about 1/8 inch between the shingles to let them expand and contract as they get wet and dry out. Never install the shingles tight to one another.

Nails for attaching cedar shingles should be stainless steel or hot-dipped galvanized and have heads with a minimum 7/32-inch diameter. They also must be long enough to penetrate at least 1/2 inch into the sheathing (see Properly Driven Nails, page 12). Place nails 3/4 inch in from each edge and 1 inch above the exposure line for the next course, as shown in the illustration at right.

As you pull shingles from a box or bundle, try to use them as randomly as they were packed. A common mistake is to grab the largest shingles first to cover as much area as quickly as you can. This strategy will leave you with a bunch of smaller shingles at the end. It's much better to use the smaller shingles as you pull them out to keep the gaps random and evenly distributed over the wall. Plus, as tempting as it is to use wide shingles (10 inches or greater), they have a tendency to buckle and eventually split over time. Put the widest shingles to one side, and use these in areas such as the rakes or dormer cheeks where wider shingles work better for creating the angles (see "Wide Shingles," Oct/17).

Sidewall Shingle Installation Detail



Always establish a drainage plane using drainage mat or furring strips between the shingles and the WRB. Double the bottom course of shingles to maintain the proper angle of that course. The bottom course must be at least 1 inch below the top of the foundation. Let the outer layer of the first course hang 1/4 to 1/2 inch below the inner layer to shed water properly. Drive nails within 1 inch of the exposure line and 3/4 inch from the edges of the shingle. Be sure to leave at least 1 1/2 inches between the gaps on successive courses.

For a more detailed discussion on installing cedar shingles, go to **jlconline.com/training-the-trades/installing-cedar-shingles**.