

Siding With Cedar Shingles

Woven corners are a good-looking and low-maintenance alternative to corner boards

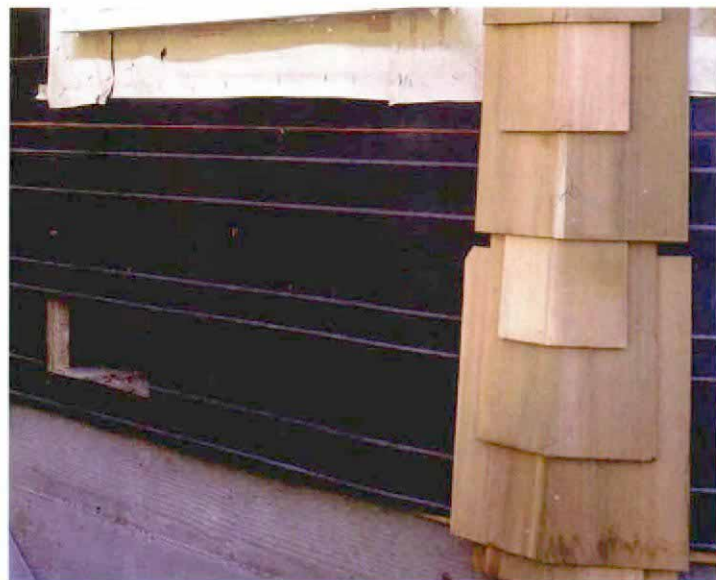
by Oliver Govers

On one of my first siding jobs, a retired and very persuasive reverend had convinced me that his house could be sided with cedar shingles for only a little bit more than his neighbor's, a house that my helper and I had just completed. Newly self-employed and eager for work, it hadn't occurred to me that the reverend's house was half-again as large as his neighbor's. And all of the little extras that he wanted—at little or no extra charge—kept adding up. Only two days into the job, we were already 35% over budget.

That was several years ago, and I lost a lot of money and a bit of confidence on that job. But the reverend was pleased, and the house came out well. I'm better with estimating now, and despite the rough start, I'm still siding houses with shingles. Cedar is wonderful material to work with, has a lot of curb appeal and is a practical siding choice.

When I side a house with shingles, I like to wrap the corners. I know that many East Coast houses with cedar-shingle siding are traditionally trimmed out with corner boards, but I'm not particularly fond of them. To me they seem like a shortcut, breaking up into many separate sec-





Siding with shingles requires just a few basic hand tools. Although a pneumatic stapler can speed things up, most shingling can be done with only a hammer, a utility knife, a few levels, a chalkline and a block plane.

Choose corner shingles carefully. Although both shingles came from the same bundle, the tight, straight grain of the shingle on the left will make it much easier to trim with a utility knife or a block plane.



Felt paper makes a good underlayment. Economical #15 asphalt-saturated felt comes in easily managed sizes, shows chalklines well and helps keep moisture out of the sheathing.

tions what should be continuous siding wrapping around the house. So I generally wrap my siding with woven corners (photo facing page), a practice that seems more common here in California; I think this style leaves a cleaner look and a more craftsmanly finish. But whether you weave your corners or butt your shingles into corner boards, cedar-shingle siding is a rewarding and low-tech approach to a traditional, high-quality exterior finish.

One thing that I like about siding with cedar is that it doesn't require an armory of specialized tools (photo top left). A hammer, a utility knife, a tape measure, a chalkline, a block plane, a drill and some levels are all I need. I'll occasionally use a table saw or a jigsaw, but I don't consider them to be necessities. A compressor and a pneumatic stapler can speed up work but also are optional.

Of course, unless you are shingling up only 5 ft. or 6 ft. on the wall, you'll also need scaffolding. On an extensive job I usually use the pipe scaffolding already set up on the site, or I'll rent from a supplier. Ladders and ladder jacks also work well in certain situations, as do pump jacks. Whatever type of scaffolding you choose,

though, make sure that it is safe. Siding work can take you to high places, and serious injury or death is a distinct possibility if unstable or makeshift scaffolding fails.

Buy good shingles—Lousy shingles in the bundle are still going to look lousy on the house, so it's important to pay attention when selecting shingles at the lumberyard. I look for shingles with uniformly thick—about $\frac{3}{8}$ in.—butts. Then I check the exposed faces of the shingles on both sides of the bundles to see that the grain is reasonably tight and as straight as possible, with no knots. These characteristics make hand-cutting and planing of the shingles more predictable and accurate (bottom photo). I also like to check the shingles for square. A good bundle of shingles will have a variety of widths: plenty of bed sheets (12-in. wide shingles), 6-in. and 9-in. shingles, and not too many narrow ones.

Red-cedar shingles are generally used here on the West Coast, and they typically weather to a fairly dark reddish-brown color. White cedar is less common here; it generally weathers to a silvery-gray. In my region the best-quality shingles are called #1 grade, and they are the ones I gen-

erally use because they are free of knots and have a much smoother surface than lower grades. I'm not shy about sending bundles back to the lumberyard that aren't up to snuff.

As I would do with any type of siding, I install a weather-resistant building paper over the sheathing. In the San Francisco Bay area where I work, which has mild to average year-round weather, #15 asphalt-saturated felt has always worked well (photo top right).

I also verify that all windows and doors are properly flashed (see *FHB* #100, pp. 58-63). When installing the building paper, I pay particular attention to inside and outside corners. I find that creasing the felt before installing it makes for tight corners that won't be damaged when they are shingled.

Choose the right fasteners—I like to use either stainless-steel or brass ring-shank nails for all shingles that will have exposed fasteners, such as the last courses of shingles under windows or eaves, or on corners. Otherwise, in unexposed locations I use standard galvanized nails or staples. Fasteners should be long enough to penetrate at least $\frac{3}{4}$ in. into the wall. If I'm shin-

gling over sheathing, 4d nails or $\frac{7}{16}$ -in. crown, staples $1\frac{1}{2}$ in. in length work well. If I am shingling over gypsum board (required by some local building codes for fire protection), I have to use longer fasteners.

When I'm doing different applications, I prefer using different fastening methods. When I want to accomplish volume production on wide-open sections, I often use a pneumatic stapler. When I'm shingling small areas, working on inside and outside corners, and installing specially cut shingles, I prefer to nail by hand. In any case, two fasteners should be used per shingle, placed about $\frac{3}{4}$ in. in from either edge and about 1 in. above where the butt ends of the following course will be.

Careful layout keeps the shingles on course—On a typical two story house, I will usually mark three level reference lines all the way around the house: one in the middle, one about 5 ft. up from grade and one about 5 ft. down from the soffit. Before I mark these lines, though, I need to determine exactly where I want the courses to be, which depends in part on shingle exposure. For example, when shingling a house using a 5-in. exposure, I might want the last course of shingles underneath the soffit to be a

full 5 in. To do this layout, I need to measure down from the soffit and mark the reference line on a multiple of five. If I want the first course all the way around the house (providing that it's on a relatively level grade) to be 5 in., I need to measure up from where the first course will be and mark all of my reference lines on multiples of five.

Once I've determined my layout and made reference marks on one corner, I generally use my trusted 6-ft. level to transfer these marks around the building. Another quick way to transfer these level marks from corner to corner is with a builder's transit or a water level. If you are confident that the building has level soffits, you could also use a story pole that has all of the course reference lines marked on it. Because these level lines dictate the layout of the job and help to ensure that the courses are going to end in the same place where they started, I pay particular attention to marking them and chalking them accurately.

I usually base my layout decisions on the house's most prominent facade, typically the front. I take into consideration such factors as the visibility of the first and last courses, the relative height of doors and windows, and complicating factors such as porches or decks. Ideally,

I like the bottoms of courses to line up evenly with the windowsill, the head casings and the frieze, but this situation doesn't always happen. And when tying into another building, the shingle layout is predetermined by existing courses.

Of course, shingle siding can be installed using different exposures. Although the typical exposure is 5 in., I've seen houses with 7-in. exposures. I don't recommend that an exposure exceeds 6 in. because it is important to get at least double-layer coverage. A typical shingle is roughly 16 in. long, so using a 6-in. exposure will provide double-layer coverage; using a 5-in. exposure will provide triple-layer coverage; and so forth. With a 5-in. exposure I can usually plan on about four bundles of shingles per square (100 sq. ft.) of coverage.

Installing the starter course—A typical overhang below the sheathing for the first course of shingles is $1\frac{1}{2}$ in., but this overhang can be adjusted slightly to keep the starter-course exposure close to the exposure of shingles in the field. In some cases, however, the layout will leave no option except to have a short starter course (photo bottom right).

The starter course is typically built up from two layers of shingles, one on top of the other. The



After the corners are built, fill in the field. A level can be used to mark the layout when the distance between corners is short; otherwise, a chalkline works well.

Start at the corners. The starter course for woven shingles begins at the corners. The shingles are usually doubled, have vertical joints staggered by at least $1\frac{1}{2}$ in. to prevent water penetration and hang below the sheathing another $1\frac{1}{2}$ in.



A woven corner makes a weatherproof joint. While the upper part of the corner shingle is trimmed past flush with a utility knife, the exposed edge is trimmed just barely proud with a block plane.

Sometimes shingles need to step up. Where there is a set of steps or a foundation on a slope, shingles should be stepped up and over. Remember to maintain a double layer on the bottom course and a consistent vertical and horizontal overlap of the foundation.



butt ends of both layers are flush with each other, and the sides (or vertical edges) of the second layer of shingles are offset from the sides of the first by at least 1½ in. The double layer of shingles on the first course prevents water from seeping underneath and into the sheathing. The double layer also builds up the proper thickness at the base so that the second course of shingles lies properly.

Although the starter course usually consists of a double layer of shingles, there can be exceptions. Sometimes three or more layers are used to flare the starter course. In other cases, more than two layers of shingles may be installed in a starter course to compensate for an out-of-plumb wall. Sometimes I have to experiment a little to find the right built-up thickness to produce a suitable starter course.

Because the starter course hangs below the sheathing, I can't snap a chalkline to mark its location. Instead, I stretch a Stringline to keep the row of shingles on course. This Stringline runs taut between nails driven into the butt ends of the first starter shingles on opposite corners of a section, or it is run between the corner boards and at the right elevation for the layout. I take care to install the shingles on this starter course so that they are just above this string and not resting on the string, which will keep them from deflecting the line and cause the course of shingles to sag.

Weave the corners first, then fill in between—I've met a few shinglers who prefer to build woven corners a course at a time as they shingle a section. Although there is nothing wrong with doing it this way, I think that building all of the corners of a section at once and then shingling everything in between is much more efficient. This way I already know where all of the courses will be, and all I have to do is chalk a line from one corner to another. Essentially, the layout work is done before I start shingling the field. I've always done inside and outside corners this way, but occasionally I'll do them a course at a time if both ends of a section are within arm's length or so.

Weaving a corner simply means installing the corner shingles so that the exposed edges face the same way on every other course (photo left). Alternating the butted and exposed edges of shingles on each course creates a tighter and more weatherproof joint. I choose potential corner shingles carefully, making sure that they are uniform in thickness and have a relatively straight grain, which will make cutting and planing them easier.

The first corner shingles on either end of a section are also part of the starter course and are installed in a double layer (photo left, facing page). The next course begins on the predetermined exposure pattern, and this layout is then repeated right on up the corner. Remember,

where the corner shingles are placed determines the exposure and the location of the courses in the field, so they must be installed with accuracy and with an eye toward the resolution of any anticipated layout problems.

I nail the first shingle to the wall with about 1 in. of the shingle extending past the corner. I use a torpedo level to check for level and fasten the shingle with three or four nails. Although the other shingles on the house will be installed using two fasteners per shingle, the extra fasteners on the top portion of the corner shingles will keep them from pivoting when they are either cut or planed.

Once the first shingle is installed, I use a sharp utility knife to trim back the excess, still leaving between ¼ in. to ½ in. of shingle to be trimmed. Starting at about 1 in. above the exposure line, however, I trim the shingle back past the corner slightly so that it's not flush with the corner. If I don't trim the shingle, the corners will start to bulge outward slightly, and this problem will compound itself with every successive course of shingles. I then use my block plane to plane the exposed edge of the shingle so that it's flush with the corner, being careful not to bevel the edge or to plane past flush.

Then I face-nail the shingle about 1½ in. up from the butt end and about the same distance in from the edge with a ring-shank, stainless-steel or brass nail. Face-nailing will keep the exposed

part of the shingle tightly fastened to the wall so that it doesn't warp or curl later on.

After the first shingle has been leveled, fastened, cut, planed and face-nailed, I can then install the second shingle, or the other half of the corner. I place the shingle against the wall just like the first, check it for level, make sure there is enough overlap at the corner and then nail it home. I again use my utility knife to trim the shingle roughly to size, then finish it with my block plane. It's better to be one stroke of the plane shy of flush than it is to be one stroke past flush.

After planing the edge flush, I drill a pilot hole about 2 in. up from the butt end of the shingle and only about 1/4 in. in from the edge and into the first shingle. I'm careful to drill the hole at a square or slight inward angle so that the nail won't emerge from the face of the first shingle. Nailing the shingles together in this way creates a waterproof corner that will remain tight over the years. Then I continue on up the corner, installing the shingles at the proper exposure and alternating the exposed edges so that the corner is woven.

Woven inside corners are built essentially the same way as outside corners, with a few minor variations. No face-nailing is necessary because the second shingle installed on an inside corner presses the first shingle tight into the wall. When cutting and planing the shingles on inside corners, I trim more material off the bottom than the top edge, which is just the opposite of outside corners. On both types of corners, I try to achieve a tight joint while I keep the butt ends of the shingles level.

Shingling the field—With prebuilt corners or with corner boards, filling in the field is pretty straightforward. A chalkline snapped from corner to corner at each course will ensure that the courses remain nice and straight. I like to place the butt ends of the shingles so that they are just covering the chalkline, which helps to conceal the chalk. Another option is to tack a straight 1x guide strip to the wall to mark the course.

Whether you run the courses from left to right or vice versa doesn't really matter. Also, I've found that leaving a gap between shingles, as is sometimes recommended, is unnecessary. The shingles I get from my local suppliers are always fresh and still contain a fair amount of moisture. The resulting shrinkage of the shingles after they're installed creates a slight gap, usually about 1/16 in. to 1/8 in., which is plenty. If the shingles you're working with are bone dry, you may want to space them about 1/16 in. to 1/8 in. apart, which would allow them to expand with moisture. The only time that I install shingles with a gap is when I'm trying to match the gap of any existing shingling.

Choosing which shingle follows which when shingling the field is largely a matter of taste, as long as you remain within a few broad guidelines. First, you should avoid aligning joints vertically and try to maintain at least a 1 1/2-in. overlap between joints. Second, try to vary shingle widths so that the shingles on the wall look random. And as my old boss used to say, "Never put a fat next to a skinny." At first I thought he was referring to the width of the shingles, and in a way he was. But what he was really talking about was the thickness at the butt of the shingle because this dimension can vary considerably from the nominal 3/8 in.

I'll occasionally have to trim a bad edge on a field shingle with my utility knife or smooth it with my block plane. Usually the last shingle in a course wants trimming to size, too, which is also easily done with the knife and the plane.

Starting a course on an uneven grade—Not all houses are built on level lots, so sometimes a starter course will have to follow a significant grade. Starter courses on a grade can be installed one of two ways: by stepping the courses up the grade or by running the shingles "into

the ground" and then cutting them parallel to the grade.

If the foundation of a house adjusts to the grade by having a series of steps running up the grade, I'll simply step the courses up the grade, overlapping the foundation horizontally and vertically by about 1 1/2 in. (photo right, p. 57). If the foundation of a house runs up the grade continuously without stepping, then it will be necessary to cut the courses of shingles parallel to the grade.

After the courses have run up the grade and I'm able to run courses from end to end of a section, I'm ready to trim off the excess shingles. I'll snap a chalkline roughly parallel with the grade, being careful that the shingles overlap the foundation by about 1 1/2 in. With a circular saw set just deep enough, I'll then trim the courses to the chalkline.

Adjusting the exposure—As I'm shingling the field between the corners, sometimes I'll need to adjust the shingles' course exposure. Out-of-level windows or doors may cause problems. Do you keep the courses of shingles level or run them parallel to the out-of-level windows or

Notch the shingles around windows and doors. Because water tends to penetrate vertical seams, shingles around casings should be cut in an "L" shape to overlap this vulnerable joint.





Shingling up a slope. When shingling a dormer or around a bay-window roof, the author precuts a number of shingles to the same pitch as the roof slope, but in a variety of lengths. These shingles can then be used to maintain the proper built-up thickness for succeeding courses.

doors? I've found that it is usually best to split the difference and run a slightly out-of-level course to minimize the height discrepancy of the course of shingles.

Whether the courses go slightly off intentionally in situations as I just described or whether I discover that they are off by double-checking the courses to reference lines, they need to be made up. Depending on the length of the course, irregularities of more than $\frac{1}{4}$ in. should be made up in small increments. For example, if one end is $\frac{3}{4}$ in. low, make it up over the next six courses, if possible, adding $\frac{1}{8}$ in. to every course on the side that is low, rather than all at once. The idea is to make adjustments gradually so that the eye cannot pick them up.

Shingling around windows and doors is pretty straightforward with only a few things to keep in mind. The shingles on the last course under any windows or doors should be cut with a saw, rather than a utility knife, in order to keep a true edge and maintain a clean look. If the window or door is out of level at all, adjust the courses slightly to stay parallel with the head casing.

The shingles at the bottom and top corners of windows and doors need to be cut around these corners so that there is no joint in vertical alignment with the edge of the trim. This process is referred to as notching, or "L"-ing, which describes

the shape of the shingle after it has been cut to fit the corners (photo facing page). And filler shingles need to be installed above the casing to build out this area to the proper thickness. There will usually be some shingle tops left over from cuts I've already made on the table saw, and these scraps are useful for this purpose because it makes use of wood that might otherwise be thrown away. Once again, the idea is that the proper built-up thickness is maintained wherever a course is started or, in this case, stopped underneath or above a window or door.

Dormer shingles can be precut—Shingling a dormer or a wall over a roofed bay window is similar to running shingles up a grade with one exception: The shingles need to be precut to match the pitch of the roof before they're installed, rather than cut in place afterward. First I make sure that the cut angle accurately matches the pitch of the roof. After verifying this, I set my miter gauge on my table saw and precut a series of shingles at three different points so that I'm left with three different shingle sizes: short, medium and tall.

When I run a course from the corner and back toward the roof and begin to need angled shingles, I use the tallest ones first followed by the medium and then shortest ones. The last angled

shingle on a course should end up being about 4 in. tall or so, which will maintain the proper built-up thickness and help prevent any depressions or humps in the wall (photo above).

Finishing up—I need to take a few measurements when I get close to installing the last couple of courses. Sometimes I find that the eaves or soffit is out of level, so I need to adjust slightly the last few courses to look parallel and level. For example, a soffit that is out of level 1 in. over 20 ft. will be noticeable if the shingle courses remain level. By dropping the low side $\frac{1}{8}$ in. over the final eight courses, that discrepancy can be made to disappear. Of course, when I start shingling the section on the other side of that corner, I need to make a corresponding adjustment to the courses on that side as well.

Provided that the eaves or soffit is level, I can save time and create smoothly cut shingles by cutting the last two courses on a table saw. In some cases, the trim will be packed out so that the cut ends of the shingles tuck underneath. I use stainless-steel or brass nails for the exposed nailing on the last courses, and I locate the nails consistently because they will be visible. □

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