A Privacy Fence With Appeal

A little extra effort gives this fence character

BY MICHAEL CROW

Most privacy fences are unimaginative, solid expanses of cedar or pressure-treated slats attached to rails, perhaps with a strip of premade lattice at the top. These fences are functional, but they do little to add character to the landscape or to complement the home. When replacing my old chain-link fence, I wanted something that would suit my Craftsman bungalow without overwhelming its small yard. I knew that a little forethought and extra effort during construction could make a world of difference, transforming a fence into a feature that would fit the home and its setting.

I began by defining functional goals: I wanted a fence that would suit the style of my home and site, that would be easily repairable, and that would look good from both sides. I looked at scores of fences online and in the neighborhood, seeking ways to go from simply functional to spectacular.

Typical fence design places 4x4 posts 8 ft. on center. This makes good use of 8-ft. stock, but choosing a different distance between posts allows you to tailor a fence to the size of the yard—for example, to use tighter post spacing in a smaller yard. It also provides the chance to change the ratio of panel width to panel height for a different appearance or to accommodate changes in grade. My fence uses two widths of board arranged in a repeating pattern. That feature and the lattice at the top repeat some of the details on my bungalow.

When a project calls for digging, be sure to call 811 a week or so ahead to have the underground utilities located. It's free, required by law, and can save you from putting a shovel through a buried gas or electrical line.

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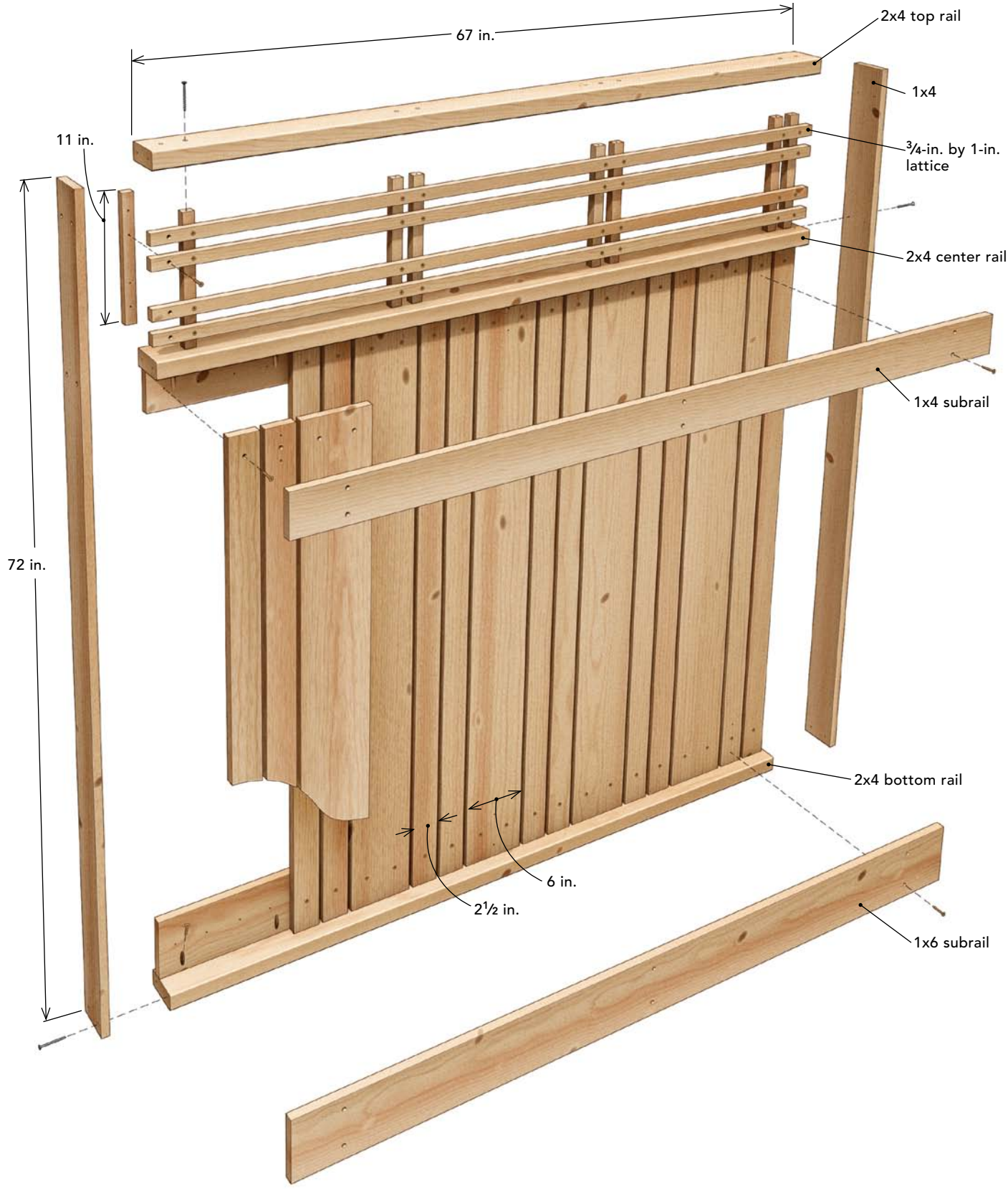
Photo this page: Michael Crow. Drawings: Christopher Mills.

THE PARTS AND PIECES

Pressure-treated posts sunk in the ground support the 6-ft.-long sections of this #2 cedar fence. On the side of the fence that faces the yard, rails attach to subrails with hidden pocket screws. The vertical boards are screwed to these subrails, and the remaining subrails are face-screwed to the vertical boards. A lattice infill breaks up the monotony of a solid board fence, while the vertical 1x4s on the end screw to the rails and in turn screw to the posts, connecting the entire assembly.



JOIN THE RAILS

The framework of the fence is the bottom- and center-rail assemblies. Each is composed of one 67-in. 2x4 fastened to a pair of boards: 1x4s for the top and 1x6s for the bottom. Initially, only one board is fastened to the 2x4, making an L-shaped assembly. This 1x4 or 1x6 will be on the show side of the fence. The boards are screwed together using corrosion-resistant fasteners.

A pocket-hole jig creates angled screw holes. *Clamp the jig (kregtool.com) onto the 1x4 or 1x6 subrail that will be on the fence's show side. A special bit with a collar drills perfectly angled, stopped screw holes in the subrail's hidden face.*

Spacer creates an even reveal. *Place the 2x4 center rail on its edge atop sawhorses with a 1x spacer next to it. Align the ends of the subrail with the ends of the center rail.*

Fasten the subrail to the center rail. *Drive 1¼-in. corrosion-resistant decking screws into the pocket holes to draw the subrail tight to the center rail's bottom.*

BUILD THE PANELS

Screwed to the subrails, a combination of narrow and wide 54½-in.-long boards make up the panels. The 2½-in.-wide boards were ripped from 1x6 stock. The 6-in.-wide boards were ripped from 1x8 stock, with the scrap being used to make the lattice.

Use a gauge stick to get the spacing right. *With 17 boards comprising each panel, a repeated spacing error of only 1/16 in. would compound into a 1-in. error across the panel. To ensure accuracy, use a gauge stick ripped to about ¼ in. thick to space the boards. Do a dry assembly of the panel before fastening.*

Angle the screws. *With a narrow panel board spaced from its neighbor with the gauge stick, drive in a single 1¼-in. screw (two screws for the wide boards). Angling the screws helps to drive the panel boards tight to the 2x4 rail.*

Make it square. *Before screwing the other ends of the panel boards to their rail assembly, be sure the panel's diagonals are equal. If they're not, nudge the free rail assembly one way or the other until each diagonal measures the same.*

Fasten the final board. *Before screwing the last few boards home, verify that their spacing is equal. If it's off a bit, slightly widening or narrowing three or four spaces will be less noticeable than having the last space vary significantly.*

ASSEMBLE THE LATTICE

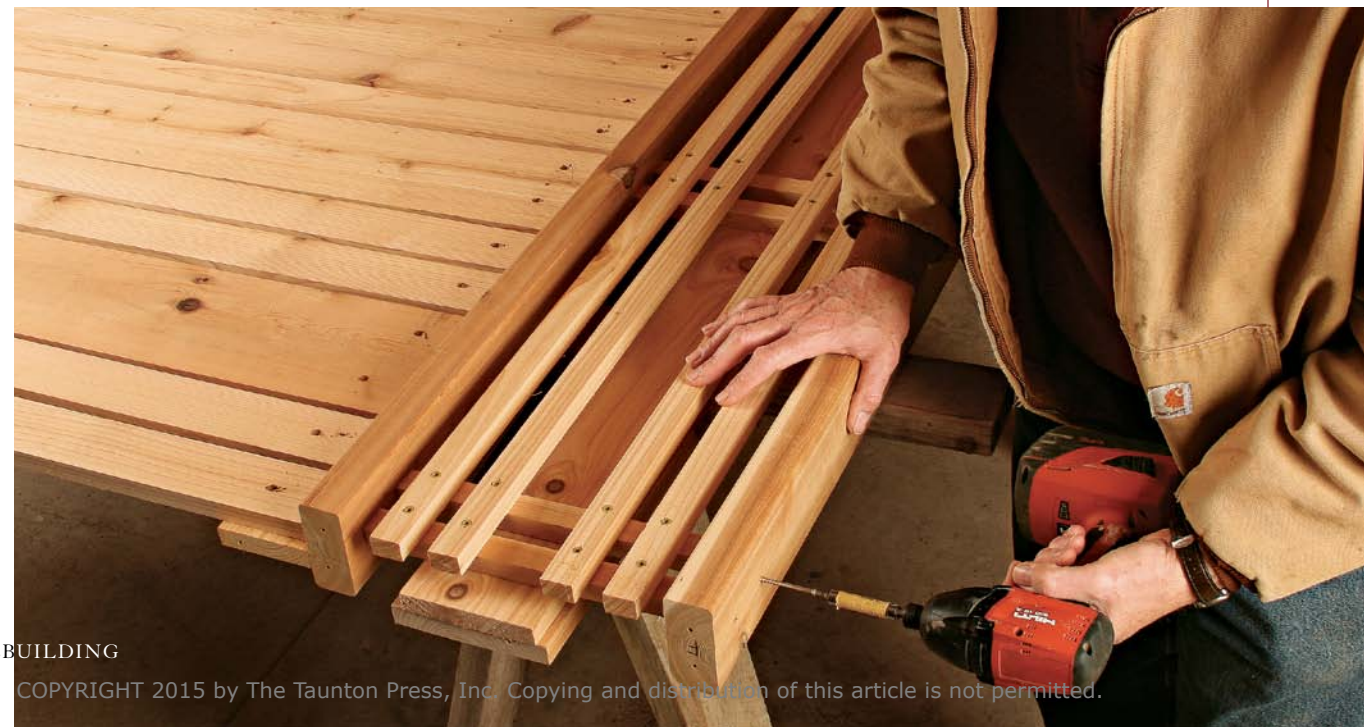
Scraps left from ripping the wider fence-panel boards are ripped to a 1 in. width and then cut to eight 11-in. lengths and four 67-in. lengths per lattice panel. Even spacing is crucial to the design of the lattice, and spacer blocks are used for both consistency and speed. Nonsplitting, 1¼-in. deck screws are driven from one face to hold the lattice together.

Space the end pieces first. *Use 1-in.-wide gauge blocks to space the two long pieces apart. Each outer pair of 11-in. uprights is spaced 1 in. from the ends of its crosspieces and is fastened with the show side down.*

Space the center uprights after assembling the ends. *Cut a 17⅝-in.-long gauge block to set the next pair of uprights relative to the first pair. Again, use the small gauge blocks to create a 1-in. gap between the pair of uprights.*

Place the lattice panel. *With the screws facing upward, lay the lattice assembly atop a 1x placed on the sawhorses to align the face of the lattice panel with the faces of the panel boards.*

Fasten into the end grain. *Align the end of the lattice panel with the end of the center rail assembly, and then drive 2½-in. stainless-steel screws through the 2x4 into the end grain of the lattice uprights.*



Cap the section. *After lining up the ends of the 2x4 top rail with the ends of the lattice and of the center rail, attach the top rail to the lattice uprights with 2½-in. stainless-steel screws.*

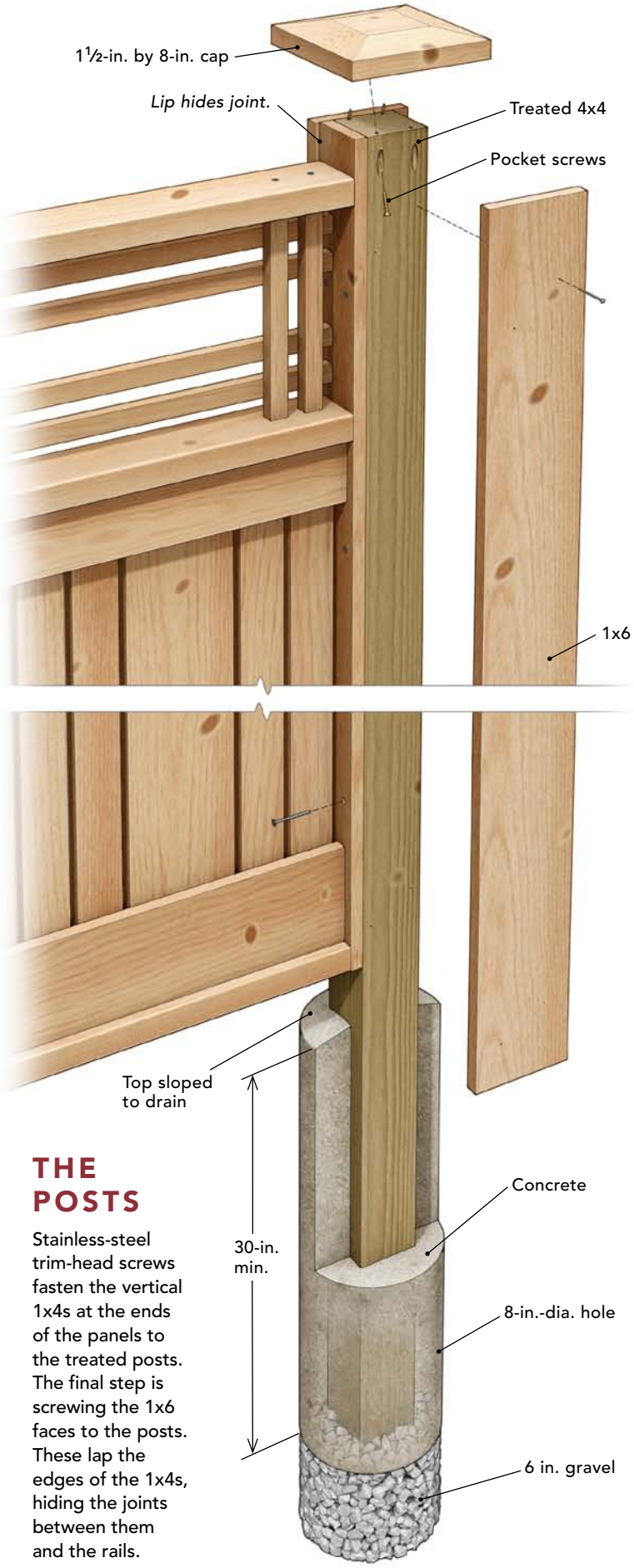
FINISH THE PANEL

There are only a few pieces left to assemble in creating this fence panel. The panel is complete when the remaining 1x4 and 1x6 subrails and the two 1x4s for the sides of the panel are attached. The lower rails are designed with drainage in mind.

Screw on the subrails. *Drive 2¼-in. stainless-steel trim-head screws through the faces of the 1x4 and 1x6 subrails. Angling the screws matters here; not only does it tighten the subrails to the 2x4s, but it prevents the screws from running out the opposite face.*

Attach the side pieces. *These 1x4s will be the anchor point between the panels and the posts and will transfer the weight of the panel, as well as any side loads from wind, to the 4x4 posts. Attach them with a pair of 2¼-in. stainless-steel screws driven through each rail and subrail.*

Let it drain. *Eyeball the placement of a drainage hole (the pocket hole bit works fine) between each of the panel boards. Drill a series of holes through the bottom 2x4 rail to allow water to run through the panel.*



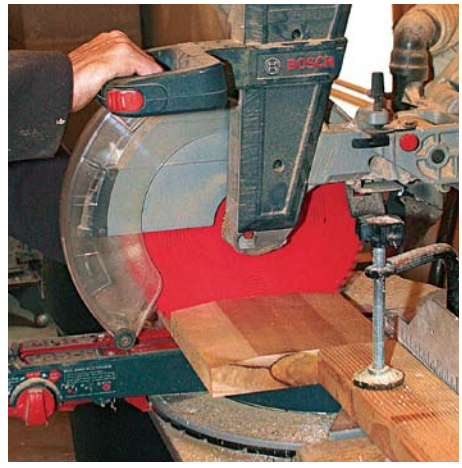
THE POSTS

Stainless-steel trim-head screws fasten the vertical 1x4s at the ends of the panels to the treated posts. The final step is screwing the 1x6 faces to the posts. These lap the edges of the 1x4s, hiding the joints between them and the rails.

MAKE THE POST CAPS

The post caps are 8-in. squares cut from 2x10 cedar, with tops beveled at 7° to shed water. Cutting the bevels requires the use of a tablesaw, so safety is paramount.

Bevel a full board. *Rip the stock to 8 in. wide, and then cut the bevels along the two long edges of the board. This saw's blade tilts right, so the cuts had to be made with the fence to the left of the blade.*



Cut the caps to length. *Using a stop to ensure consistency, cut the board into 8-in. caps on a miter saw. Do not raise the blade after finishing the cut until it has stopped completely. Otherwise, the blade is likely to jam on the cut cap.*

Gang-cut the end-grain bevels. *Rip a long scrap of plywood to the same width as the caps. Secure the caps to the plywood with screws driven through the back side. Position the tablesaw fence to match the thickness of the plywood, and run the whole setup through the saw to bevel the end grain of the caps.*

INSTALL THE PANELS

Using a string to keep the fence straight, dig the post holes 6 ft. on center. Set the first post plumb, and let its concrete set. (Fast-setting concrete takes less than an hour to stiffen.) Once the first post is secure, install the next panel and post, and continue down the line.

Screw the panel to the post. *Drive four 2½-in. stainless-steel screws through both the front and back sides of the panel to attach it to the first post. Set the panel on blocks so that it's level, drop the second post in its hole, and fasten the panel to the second post. Holding the post plumb, fill the hole with gravel and concrete.*

Fasten the cap. *You can use pocket holes and screws to attach the cap to the post, or you can bed the cap in silicone caulk.*

Fasten the facing. *Attach the 1x cedar with stainless-steel 6d siding nails or stainless trim-head screws, which cost more but make it easier to remove the facing for repairs.*