## **READERS'** TIPS

Best techniques from the field

## Stair-Stringer Kits

by Emanuel Silva







Instead of framing stairs one piece at a time, I like to prefabricate stringer "kits." Not only does this technique speed up the job and improve accuracy, it allows me to assemble the components on a work table rather than while kneeling in the dirt.

After determining the stair's rise, run, and width, I lay out and cut the first stringer, then use it as a template to cut the others. At the top of each stringer, I drill pocket holes for the heavyduty pocket screws that I will later use to fasten the assembled stringer kit to the deck framing.

Next, I cut a 2x10 bottom cleat and a 2x6 sub-riser to the width of the stairs, minus 3 inches. The stringers are fastened to these components, which will be used to attach the stair to the landing pad and help strengthen the stringer-to-guard post connection. Before assembly, I trim  $1^1\!/2$  inches from the bases and the ends of the interior stringers, and apply wood preservative to all cuts and holes. I fasten the outer stringers to the ends of the cleat

and sub-riser using 3-inch-long structural screws, then install the remaining stringers (typically 12 inches o.c.) and add a temporary 2-by brace to the top of the assembly to lock everything in place.

When installing the guard post, I reinforce the connection with a pair of 4x4 blocks, but use as few fasteners as possible for now—shimming will be needed around the post and blocks after the stair is installed to make it perfectly plumb. I finish up the prefabrication by installing 2x8 blocking between the stringers.

The stringer kit is pretty heavy, so it takes two of us to lift it and set it into place. After lining the stringers up with our layout marks on the landing and securing them with pocket screws, we fasten the bottom cleat to the landing with three concrete wedge anchors. Then we plumb up the guard post and install the remaining fasteners. ��

Emanuel Silva owns Silva Lightning Builders in North Andover, Mass.

## Send Us Your Tips

We want your best deck-building tips. We're partnering with DeWalt to give away a power tool each issue to the reader who sends the best tip to prodeck@hanleywood.com. The prize for the March 2017 issue is a 20-volt brushless three-speed drill/driver kit. So, write up those tips. Don't sweat the grammar or the spelling—that's what editors get paid for. Take a photo (your camera's best setting, please), or send a sketch on the back of a napkin.

