QUESTION & ANSWER

Deck Outlets

I hear that the 2012 NEC will require at least one outlet on all decks and patios, while the version we're working under now requires an outlet only on decks or patios measuring more than 20 square feet. Does this mean that even small landings and step platforms will now need to have an outlet?

Harlan Madsen, an electrical contractor in Bloomington, Minn., responds: The answer to this question depends on whether or not the landing or platform is also large enough to be used as a deck, which will depend on your building inspector's interpretation. I don't think that a 3-foot by 3-foot landing would require a receptacle, but if an area is large enough to accommodate a chair or two, most inspectors would probably consider it to be a deck and require an outlet.

In any case, when not sure whether or not an outlet is required, go ahead and install it. It's not worth a debate with an inspector if you guess wrong.

Alternatives to 6x6 Deck Posts

Instead of supporting decks with treated 6x6 posts, is it okay to assemble support columns using four treated 2x6s instead?

Dick Hackbarth, P.E., a structural engineer in St. Paul, Minn., responds: There's nothing inherently wrong with building up a 6x6 column out of four 2x6s, as long as you can keep water out. In fact, there may be a few advantages. You can select the 2x6s for strength and straightness, then use the bestlooking ones on the outside and cut the inner two short to provide a bearing and connection pocket for a double 2-by beam member (though don't hide inferior lumber in there; as compression members, the inner plies have to be as strong as the outer plies). You could also easily cut a bevel on the top of the two outer plies so they drain outward. An option for the two sides of the column that show the four plies could be to cover them with 1-by finish pieces, for appearance and to prevent water from penetrating between the plies (self-adhering flashing tape is good for protecting the tops of columns and built-up beams). As long as plies are properly connected together with construction adhesive and fasteners to act as a unit, and accurately cut so they're all end bearing, they should make a fine deck post. In fact, there are suppliers that offer vertical laminated post members for use in post-framed buildings. Made with three or four 2x6s, the posts' bottom 6 or 8 feet are treated for ground contact and then finger-jointed to the upper parts.

Though IRC prescriptive requirements for PT 6x6 posts are much more than adequate for most deck locations, your columns will still probably need a structural engineer's stamp to satisfy your local inspector. The process is a little more complicated than just nailing four 2x6s together. Framing members that are likely to be used as bending members—2x4s, 2x6s, 2x8s, and the like-are graded slightly differently than framing members that are going to be used in compression, such as stud grade 2x4s and 2x6s. Each grade has slightly different allowable stresses, and slightly different defects and material characteristics that control its grading. Since bending members are loaded and tend to fail differently than column members do, a local structural engineer will need to develop a procedure for making your own posts. This will include a few pages of calculations, guidance on which grades to use, a schedule for fasteners and glue to assemble the posts, and connection details.

Best Bending Stock?

I have a customer who wants to top off her new composite deck with a curved bench seat. I am familiar with the heat-forming process and have no problem making the heating tube, but can the same boards used for the decking be used for the bench?

A Jason Russell, owner of Dr. Decks in Tacoma, Wash., responds: Unless you want to end up with an expensive pile of misshapen scrap boards, I wouldn't bother trying to

heat-bend any composite product—especially capped composites. Of all the composite and plastic decking that I've tried to bend with heat, I've had the best success with cellular PVC decking. I haven't tried every PVC product, but Azek has consistently outperformed the ones that I have tried, with fewer blemishes, tighter curves, and a lower bending temperature, which seems to be safer for the board. Of course, the warranty is void after manipulation, but that hasn't seemed to deter my customers. ❖