



## Is Treated Wood Weaker?

**Q.** *Is treated southern pine as strong as untreated southern pine? Can I use joist tables for untreated southern pine lumber to size treated joists?*

**A.** *Jeff Easterling responds:*

The standard CCA treatment process does not weaken southern pine lumber, and span tables for untreated southern pine can be used to size treated joists *provided the in-service moisture content of the lumber will not exceed 19%* for extended periods. When the moisture content exceeds 19% for extended periods (on decks built near grade, for example), allowable spans are reduced by approximately 5%. Typically, outdoor residential deck construction does not require the use of wet service span reductions.

A complete span table for southern pine, including information on wet-service conditions, is available from the Southern Forest Products Association (P.O. Box 641700, Kenner, LA 70064; 504/443-4464) for \$2 plus shipping.

*Jeff Easterling is with the Southern Forest Products Association in Baton Rouge, La.*

## Plaster Efflorescence

**Q.** *My company has done plaster repair work for many years. After repairing water-damaged walls or ceilings, we occasionally get called back to "fix" an unsuccessful repair. Our second repair attempt involves digging out a very bumpy, chalky substance, and more often than not, we have to repeat this process a number of times until the patch finally takes hold. What causes this reaction on some water damage jobs and not others? What is the most efficient way to deal with this problem?*

**A.** *Mel Hines responds:*

The problem you refer to is caused by efflorescence — salts in the plaster are brought to the surface by the intruding water. The water often caus-

es the magnesium in the lime coat to expand and produce the blisterlike effect you refer to.

Assuming that the water intrusion has been stopped, the first step is to chip away the lime coat at the affected area. There is a good chance that the bond between the finish lime coat and the plaster base coat has been weakened.

When faced with this situation, I use a wire brush to scrub away any loose base-coat particles, then apply a coat of Kilz (Masterchem Industries, Inc., P.O. Box 368, Barnhart, MO 63012; 314/942-2510) to the base-coat plaster. Kilz is an alkyd-based sealer, primer, and stain blocker. The plaster base coat must be completely dry before application. Next, I apply a coat of Durabond (United States Gypsum Corp., 125 S. Franklin, Chicago, IL 60606; 800/552-9785). Durabond is a fast-setting, low-shrinkage compound with tenacious bonding qualities and accelerated setting times.

Finally, I apply a skim coat of ready-mixed all-purpose joint compound. After a light sanding, the repair is ready for painting.

*Mel Hines owns Atlanta/Pro-Serve, a ceiling and wall repair service in Atlanta, Ga.*

## Opening Miters

**Q.** *In my area of South Carolina, changes in humidity often cause miter joints to open up over time. I plan to use biscuits to keep my miters tight. Would I be better off using epoxy instead of yellow glue when gluing up the biscuits? Should I check all my lumber with a moisture meter?*

**A.** *Cabinetmaker Michael Poster responds:*

To many carpenters, "moving" miter joints can be a vexing problem. The customer complains about unsightly gaps in trim joints that fit perfectly when they were first installed. While

it's true that open miters (and other defects) can be caused by changes in humidity, other factors also affect joint movement.

As a general rule, the moisture content of trim should be 8%. This figure increases to 11% in damp coastal areas and drops to 6% in arid climates. Variations in desired moisture content of 1% to 2% are acceptable. You should definitely use a moisture meter. I use a no-frills version with a range of 6% to 30%, made by Delmhorst Instrument Co. (51 Indian Lane East, Towaco, NJ 07082; 800/746-7342).

Wood movement is proportionate to board width. Trim wider than 4 inches is more likely to cause problems. Whenever possible, build up wide casings from narrower profiles.

Some wood species are more prone to movement (beech and maple, for example), while woods like cherry, red oak, and white pine are more stable. Quarter-sawn lumber of any species is more stable than flat-sawn, but is often expensive or difficult to find.

Biscuits are an excellent way to ensure that a miter joint "stays put," but they should not be used to compensate for improperly dried lumber. When gluing biscuits, epoxy offers no advantage over yellow (aliphatic resin) glue. The moisture in the yellow glue causes the compressed biscuit to swell, closing the gap between the slot and biscuit, and strengthens the joint.

*Michael Poster operates Michael Poster Woodworking in Montrose, Pa. ■*

Got a question about a building or renovation project? Send it to On the House, JLC, RR 2, Box 146, Richmond, VT 05477; or e-mail to [jlc@bginet.com](mailto:jlc@bginet.com).