On the House

Filling Nail Holes

Q. Is there an easy way to get a good color match when filling nail holes in natural or stained trim? The filler we use looks fine until the stain or clear finish is applied.

A. Carl Hagstrom responds: When nail holes are filled prior to staining or clear coating, it's difficult to get a good match. The filler will always absorb stain or finish at a different rate from the wood, and it typically ends up darker. Preparing a test board and filling holes with different blends of filler will help, but it's a timeconsuming process.

A much simpler (and practically foolproof) method is to use a product called Color Putty (Color Putty Co., 121 W. Seventh St., Monroe, WI 53566; 608/325-6033). This linseedoil-based putty is about the consistency of Play-Doh, and it's available in more than a dozen wood-tone colors. For best results, first apply any stain and all finish coats and allow them to dry, then fill the nail holes with the Color Putty. Use your thumb to push the putty into the holes, and wipe off any excess with a paper towel dampened with denatured alcohol. I wear a pair of latex gloves to prevent the color pigment from working into my skin.

The directions on the container recommend applying the final finish coat after filling the nail holes, but this can cause problems. If excess putty isn't completely removed by the denatured alcohol, the residual putty haze will show through the finish coat.

By kneading two or more colors together, a wide range of color variations are possible, and with a little patience, you can achieve a perfect match. One caution: Never use denatured alcohol to wipe down an alcohol-based shellac finish. Most other finishes will not be harmed by denatured alcohol, but it's always a good idea to test the finish in an inconspicuous area.

Carl Hagstrom is an associate editor of the Journal of Light Construction.

Plastic Pressure-Relief Piping

Q. Is it acceptable to use plastic piping for the pressure-relief discharge on a domestic water heater? The BOCA code in my area requires that the discharge piping be rated at or above the temperature of the system, but it's not clear whether that refers to the temperature of the water in the tank or the temperature setting of the relief valve.

A. Redwood Kardon responds: Without protection, a domestic water heater whose thermostat has failed would see a continuous rise in temperature and pressure. When the water pressure exceeded the capacity of the tank (typically 300 psi), the tank would burst with enough force to send an average-size car 125 feet in the air (see "Exploding Water Heater," Eight-Penny News, 9/93).

A temperature- and pressure-relief valve is designed to prevent such catastrophic failures. In my area, we follow the IAPMO (International Association of Plumbing and Mechanical Officials) *Uniform Plumbing Code*, which allows the use of galvanized steel, hard-drawn copper, chlorinated polyvinylchloride (CPVC), polybutylene (PB), or codelisted straight sections of relief-valve drain tube.

It's true that the temperature ratings for CPVC and PB are well under the

settings (210°F or less) for most relief valves. The consensus among inspectors I've talked to, however, is that the relief cycle for an excessively high-temperature or high-pressure condition is so intermittent and short-term that CPVC or PB are acceptable materials for this application.

Redwood Kardon is a building inspector for the City of Oakland, Calif., and author of Code Check: A Field Guide to Building a Safe Home. An online version of Code Check can be found on the Web at www.codecheck.com.

Attaching to Granite

Q. What's the best way to attach a dishwasher to a granite countertop?

A. Randy Palumbo responds: When faced with a granite countertop, the trick is to provide a wood base to accept the ³/4-inch-long screws I typically use. Most granite countertops have a ³/4-inch buildup on the edge. When the buildup is not too wide I attach a strip of ³/4-inch cabinet-grade plywood behind this edge, using silicone as the adhesive.

When the buildup is too wide, I have no choice but to drill small holes into the underside of the granite. I then insert plastic anchors, secured with epoxy, to accept the screws.

There's another technique I came across after tearing out a number of older kitchens: It seems that many builders rely on their good friend gravity and simply jack up the front legs of the dishwasher as high as they can. The top is then squeezed so tight against the stone counter that the dishwasher can't budge. Seems feasible, but I use fasteners just in case.

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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*.