Finish for Bare Slab

Q. *What is a good, durable, transparent finish for a bare radiant slab? I've tried Glitsa over colored concrete. The finish looked great initially, but was not water-resistant. A year later, there was a fair amount of delamination and flaking. How should I refinish the floor? Would a polyurethane finish bond better? Also, for the future, should new concrete be acid-washed before applying a coating?*

A. *Ed McPartland, a Wellfleet, Mass., builder, replies:* Glitsa is a catalyzed varnish designed for wood floors, so it's not surprising that it didn't work well on concrete. To remove it, apply a chemical paint stripper, cover it with wax paper for about 15 minutes to prevent drying, then suck it up with a wet vac. Be very thorough with this process. Get down on your hands and knees and eyeball the floor with the aid of a strong light, to pick up any remnant "flash." Make sure the concrete is completely sponge-clean and dry before refinishing.

I don't use urethane because it doesn't hold up to wear. I have acid-washed concrete in the past but haven't been satisfied with the result, and I don't think it's absolutely necessary.

I recommend finishing the slab with Butcher's Wax. The finish looks great, goes on easy, repels water, and is easy to maintain and renew. Apply the wax with a rag or other recommended applicator.

If you really want a urethane-type finish on the floor, you might consider a clear epoxy. I occasionally use a Sherwin-Williams two-part catalyzed epoxy. It provides a good finish, but scratches tend to show. To minimize this effect, you can apply satin urethane over the epoxy, first sanding the epoxy lightly to provide "tooth" for the urethane bond. Be forewarned that epoxy is extremely difficult to remove if you change your mind.

You might also consider an acrylic sealer. A local colleague uses this product for the concrete countertops he makes and finds it provides a satisfactory finish and is fairly easy to renew.

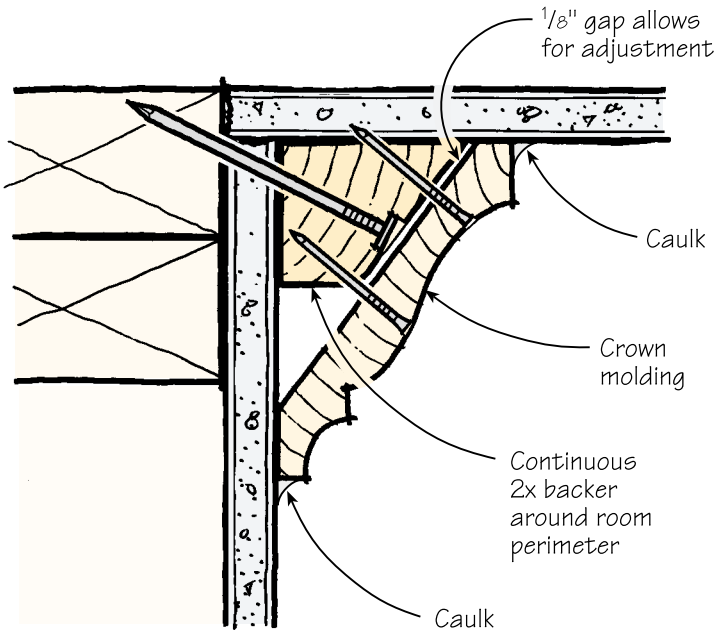
Installing Crown in a Finished Room

Q. *I'm installing a lot of crown molding in a finished home, and wondering whether it's better to prepaint the crown and just touch up the nail holes, or paint it once it's in place?*

A. *Robert Sanders, a restoration contractor in Pasadena, Calif., responds:* Prepainting might seem like a good idea at first, but you'll get a better job in the same or less time if you paint the crown in place. The fact is, the walls and ceiling always have some irregularities and the crown may be warped or cupped. Inevitably there will be gaps where the crown meets the walls and ceiling, and for a professional-looking job, these gaps must be caulked. The caulking, plus any spackling at nail holes and joints, must be painted. You might try cutting in just the caulk lines and touching up the spackling, but since neither latex nor alkyd enamel patches well, the areas you painted in place would likely show up.

I would prime and sand the crown, then install it. Spackle, then sand smooth all nail holes, corners, and joints. Spot-prime all spackling. Fill any gaps behind or above the crown that are larger than 1/16 inch. Caulk the entire length of the crown, at both ceiling and walls. Top coat with two coats of enamel, then cut into the crown with the appropriate ceiling or wall paint. Make sure your customer understands that all newly applied paints will not exactly match the color of the existing paints, and may visibly affect the texture of the existing walls.

Backer for Crown Molding



By the way, whenever I install crown molding, I rip a backer out of dimensional lumber and run it around the perimeter of the room, mitering the inside corners. I then nail the crown to the backer (see illustration, previous page). Both MDF and finger-jointed pine are assured a long-lasting, trouble-free installation using this technique, and I consider it a must for any material in earthquake country. I used this method on a now 14-year-old installation that has survived two earthquakes with no more than hairline cracks at the joints.

Moldy Basement Room

Q. *I was hired to refinish a basement game room built in 1936 in a house on the shores of Lake Michigan. The T&G paneling in the room was badly warped and the bottom 3 feet were moldy and partly rotted. I removed the paneling to find that it had been installed directly over the poured foundation on furring strips embedded in the concrete. On hot, humid days the bare concrete sweated so much that water trickled down the wall. I checked during a rainy period to establish that there were no foundation leaks. Then I proceeded to insulate the wall and the floor, installing 2x2 pressure-treated furring to the concrete with 1 1/2-inch rigid foam placed tightly in between. I sprayed foam in all cracks and at wall-to-wall and wall-to-floor corners. I stapled up a 6-mil plastic vapor barrier, then installed drywall. I also installed a high-volume exhaust fan controlled by a humidistat.*

Now, three years later, there's a new problem: mold growing on the drywall at the base of the walls and in the corners of the room. What should I do? The owners want a 4-foot-tall pony wall with a display shelf on top. I plan to stud-frame this and fill the stud cavities with insulation, hoping that will help. I also wonder if I should have killed the preexisiting mold with bleach before insulating the room. I would appreciate any ideas on how to cure this problem.

A. *Henri de Marne, a Waitsfield, Vt., consultant on wood-frame construction problems, responds:* The reason that the new mold is at the base of the walls and in the corners is because these are the coldest areas and because the air is stagnant in spite of the fan you installed. There is basically nothing wrong with what you did, and not killing the mold on the masonry walls is not what caused the new mold on the drywall; the mold on the concrete could not grow through the fiberglass insulation and the plastic vapor retarder.

However, I think it was a mistake to install a fan. This obviously requires an air inlet (generally on an opposite wall) and both are most likely in window openings high up on the wall. This has the effect of bringing in a fresh supply of warm, moist air without creating air movement where you need it most — at the base of the walls and in the corners of the room.

It would be better to close all windows and doors to the basement during the hot, muggy summer months and run a dehumidifier with a humidistat. This will remove unwanted moisture from the air. There is no harm in circulating air within the room with a fan, and the owners can still open the windows for natural ventilation on dry, breezy days if they wish. You should kill the mold either by spraying the moldy areas lightly with a mixture of equal parts water and fresh Clorox bleach or by rubbing them gently with a sponge dampened with the same solution.

It would have been better to adhere rigid insulation over the entire concrete wall surface, then install the furring strips, to avoid the thermal short circuits now happening through the wood strips.

For the pony wall, instead of using studs and fiberglass, why not fasten a layer of 2-inch rigid insulation over the existing drywall as a wainscoting, then cover it with drywall or paneling and top it off with a display shelf?

GOT A QUESTION? Send it to On the House, *JLC*, 932 West Main St., Richmond, VT 05477; or e-mail to *jlc@bginet.com*.