Q&A

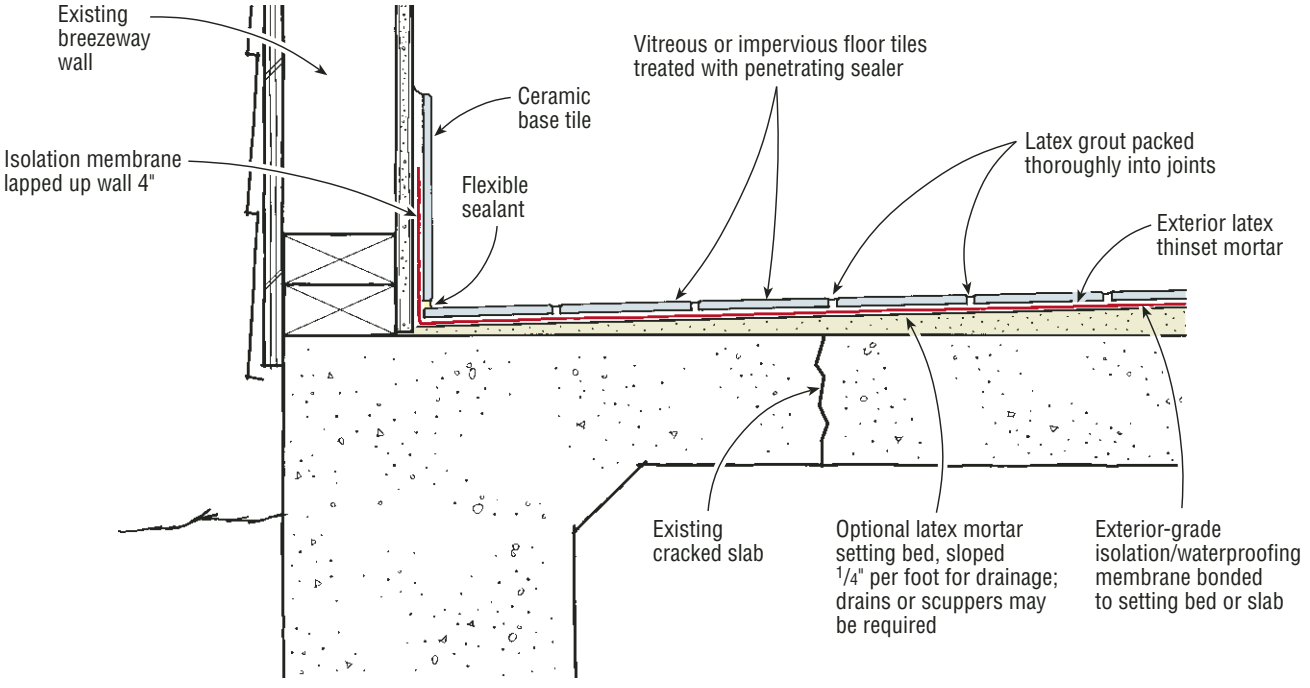
Tiling a Breezeway

Q. *I've been asked to tile the floor of an enclosed breezeway that gets tracked with a lot of dirt, leaves, and snow. Besides being subject to the temperature extremes found in Ohio, the existing concrete slab has a crack running across its width. Is porcelain tile the best option in this situation, and how should it be installed?*

A. *Contributing editor Michael Byrne, an expert tile setter and consultant in Los Olivos, Calif., responds:* While breezeway enclosures are good because they help shield walkways from precipitation and temperature extremes, they can also trap moisture. A floor that puddles is a nuisance and a safety hazard, and in the environment of an enclosed breezeway, chronic excess moisture can lead to mold and wood rot. So, depending on your breezeway's design and exposure, you may have to slope the walkway prior to tiling and provide a method of draining off excess water. And even without the need for a slope, scuppers, or a drain, retrofitting this installation for tiling will still require a waterproofing/crack-isolation membrane applied to the slab. Finally, if the crack in the concrete exceeds 1/8 inch wide or results in uneven concrete surfaces, the walkway should not be tiled at all.

Flat or sloped, all exterior tiled walkways need a waterproofing membrane. If sloped, the slope should allow the walkway to self-drain. I prefer to float a crowned, bonded latex mortar fill over a concrete slab, but many walkways are finished with the tiles sloped to one side only. Drainage is needed in either case; I recommend fitting the enclosing walls with scuppers large enough to allow for the free flow of excess water, leaves, and whatever else is going to be tracked in.

The crack is a serious problem requiring careful membrane detailing to limit tile damage and prevent water from getting between the membrane and the setting bed, which could damage the surrounding structure. Many isolation membranes aren't suitable for exterior use. I use Noble Deck, a sheet membrane made specifically for this purpose (The Noble Co., 800/878-5788, www.noblecompany.com). I lap the membrane about 4 inches up the wall and use the company's shower-pan dam corners to detail the membrane around scuppers and openings (an exterior floor membrane has much in common with a shower pan). Regardless of the membrane system you install, make certain that the perimeter joints are filled with an approved sealant and not hard grout,



which can damage the tiles and render the membrane useless.

Porcelain tiles are highly resistant to moisture penetration, but not all porcelain tiles work well in breezeways. Some have a coarse surface finish that helps reduce slips and falls but also makes the tiles ideal dirt magnets. Dirt lodged in the surface pores can be very difficult to remove, so make sure your tile dealer directs you to a tile made specifically for use outdoors: It should be both freeze/thaw stable and easy to maintain.

I also recommend using high-quality latex thinset mortars and grouts that are approved for exterior use; follow manufacturer instructions and wet/dry mixing ratios to the letter. For spreading uniform layers of latex thinset mortar, a notched trowel should be used to achieve the industry-standard 95 percent adhesive coverage. Any less and moisture is likely to pool in the voids, expand when it freezes, and pop tiles off the surface. To achieve 95 percent minimum coverage, the tile industry recommends the use of a 1/4-by-1/2-by-1/4-inch U-notch trowel for 12-inch tiles, but only on-site experimentation will reveal the right trowel. It isn't the size of the trowel or the notch profile that is important; it's the coverage.

When grouting, make sure that all the grout joints are thoroughly packed. Water can easily fill voids in the grout, and on freezing cause significant damage to the installation. All membrane systems require that any joints abutting restraining walls, plumbing, or other penetrations be filled with a flexible sealant — not caulk — rated for exterior use.

Vitreous or impervious tiles, latex thinsets and grouts, an exterior waterproofing/crack-isolation membrane system, a sloped setting bed when needed, and regular applications of a penetrating sealer will get you a simple-to-maintain tile walkway. Anything less and your customer isn't going to be happy.

Painting Cedar Shutters

Q. *What's the best way to prep and paint new cedar shutters?*

A. *Jon Tobey, a painting contractor in Monroe, Wash., responds:* Cedar — and red cedar in particular — has the reputation of being a wood that doesn't hold paint well. When red cedar is milled, the wood fibers at the surface get burnished and can form a resinous "mill glaze" that resists paint penetration. To remove it, use a garden sprayer to spray on a deck wash, then hose off the residue with fresh water. Be sure to clean both sides of each shutter, because if paint starts peeling on the back, it will eventually work its way to the front.

After the shutters have thoroughly dried, prime them with a high-quality latex primer. Next, if you're top-coating in a light color, spray a very light fog coat of a stain-blocking alkyd primer on the front of the shutters. This extra step prevents any remaining tannins in the cedar (which are water-activated) from bleeding through light-colored paints. Then finish up with a top-quality, 100 percent acrylic latex paint (I recommend Sherwin-Williams' Duration), probably in a semigloss to make the shutters really pop.

If you have a lot of shutters to paint, three coats may seem like an excessive amount of work. But with an airless sprayer (available at most rental stores), you can spray three coats on 50 shutters in a day. In any case, you definitely want to spray — rather than brush on — the alkyd primer, because if you apply anything more than a slight fog, the brittleness will lead to cracking and create problems that far outweigh any benefits.

If spray equipment isn't available, buy a few rattle cans of the alkyd primer and just lightly dust the shutters for this step, even if you're brushing the other coats. With modern paints, if you prep and paint right the first time, you'll never have to do it again.

Refinishing Faded Wood Floors

Q. *My 7-year-old hardwood floor needs to be refinished because the stain faded from the sun. I was hoping to restain it with a product that could withstand direct sunlight. Do you have any recommendations?*

A. *Michael Purser, a second-generation wood-flooring contractor in Atlanta, responds:* While it's true that floor finishes with UV inhibitors and stains with pigments (as opposed to dyes) will slow down color degradation in both the finish itself and the underlying wood, manufacturers of these products don't claim to be able to stop the problem. And UV light (from the sun and from other sources) isn't the only cause of fading and discoloration; heat and moisture can also be factors. To slow down — notice I didn't say "prevent" — fading and deterioration, you'll have to manage all three causes. The key is to avoid extremes of exposure to sunlight and humidity.

If you are building a new house or adding on and have any input in the selection of new windows, you would be wise to consider low-E glass. Made of transparent metallic oxides, low-E coatings can reflect up to 90 percent of long-wave IR light, the kind that creates the heat that accelerates oxidation in wood. But low-E glass doesn't stop a lot of UV light, the most damaging type. For that, you'll need to choose windows that feature glass with a UV-blocking coating. If you have to work with older existing windows, you might want to investigate window films. Often applied to the interior glass of historic properties — where protecting wood floors, old rugs, and expensive fabrics is a high priority — these thin, multilayered film products have various coatings that can

selectively reduce UV, IR, and visible light, all of which contribute to fading.

Finally, there's a low-tech solution: window coverings. Drapes, shutters, and blinds may not be what you had in mind when you bought or built your home, but this is an approach previous generations put to good use. Compared with refinishing your floor or retrofitting new windows, window coverings are also fairly cheap. The bottom line is that sunlight is very destructive to wood, as well as to the various finishes used to protect it; you can slow fading down, but you can't stop it. So your focus should be on the light entering the room and how to reduce its intensity.

Got a question? Send it to Q&A, *JLC*, 186 Allen Brook Lane, Williston, VT 05495; or e-mail to jlceditorial@hanleywood.com.