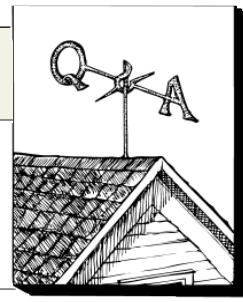


Splashback Causes Deck Decay

Q. *I am having a problem that's not uncommon in my area (north-central Florida). I recently built a nice custom deck for a customer who wouldn't accept pressure-treated wood because of its appearance. I used kiln-dried southern pine 5/4x6. We primed all sides of the boards with oil-based primer before installation, then applied three coats of oil-based enamel when the deck was in place. We ran the boards perpendicular to the house, and sloped the deck so that water would drain away from the building.*

Still, some boards are rotting at the ends, where stairs join the deck (there's a decorative bullnose nailed to the edge of the deck there). What's causing the problem?

A. *Paul Fisette responds:* I understand your client's reluctance to use treated boards in a beautiful custom project. But the problem is caused by using untreated wood in an exposed location.

Your choices for installing and finishing the deck boards were sound ones. But the end grain of the wood is absorptive, like a sponge. Water is splashing off the stairs onto the ends of the boards, soaking in, and encouraging rot. Unfortunately, no paint job can stop that.

The bullnose over the ends of the boards makes matters worse: It lets water seep in, but then blocks it from evaporating out.

The only thing you should have done differently is to use *pressure-treated* southern pine. To prevent shrinking, cracking, and cupping, use "kiln-dried after treatment" (KDAT) deck boards and have the boards additionally treated with a water repellent at the treating facility.

You could also use a naturally decay-resistant wood species (redwood or cedar), if you can accept the fact that those are relatively soft woods for decking.

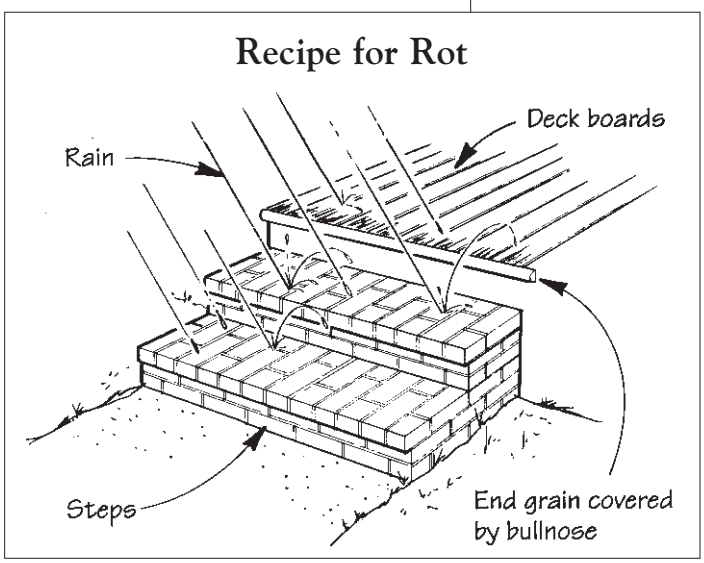
Paul Fisette teaches wood science at the University of Massachusetts (Amherst).

Insulation Won't Trigger Asthma

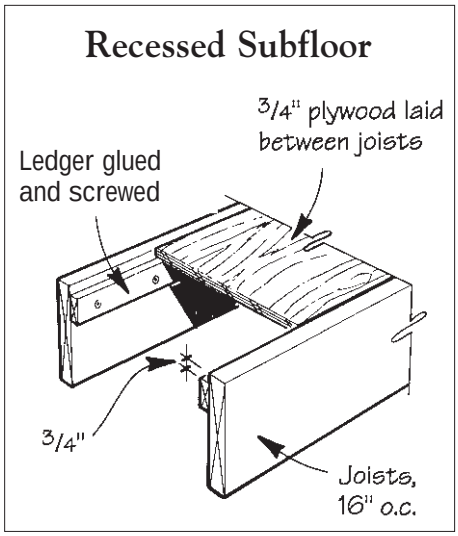
Q. *I'm working on a beautiful old stone farmhouse. Inside, the house has wood-framed walls with the original lath-and-plaster finish. The owners would like to cut their heating bills, and we're considering blowing insulation into the 4-inch voids between the plaster and the stone.*

The problem is, my customers have asthma and they're concerned about the health effects of fiber insulation. Got any advice?

A. *Ted Cushman responds:* I called Dr. Harold Friedman, an asthma spe-



Splashing rainwater soaks into the end grain of deck boards, allowing rot to set in. Use "kiln-dried after treatment" (KDAT) pressure-treated deck boards for a good finish appearance and protection from rot.



Where floor height is an issue, remove the existing subfloor and install plywood between the joists, supported by ledger strips. This makes room for full-thickness hardwood strip flooring.

cialist at the Dartmouth Hitchcock Medical Center, an Ivy League teaching hospital in Hanover, N.H. Dr. Friedman explained that asthma is caused by an allergic reaction in the airways. A few common allergens are usually to blame: the droppings of cockroaches or microscopic dust mites, and animal dander. In general, Dr. Friedman tells asthmatic patients to avoid carpets and to keep their homes clean and well-ventilated. Pets, unfortunately, have to go. But Dr. Friedman told me that to the best of his knowledge, neither fiberglass nor cellulose should trigger your clients' asthma unless it's mixed with something like cat fur or bug feces.

Blown cellulose is usually the best choice for old-house retrofits because it blocks airflow and insulates at the same time. Insulation placed within the walls is unlikely to get into the air in the living space, but while the job's in progress, things could get dusty, and insulation fibers can irritate your customers' breathing passages just as they do anyone else's. Have the homeowners move out while you're insulating, and hire a professional cleaning crew to vacuum and mop before they move back in.

A Thin-Profile Floor

Q. *I'm near the end of building a custom mudroom entryway, and my customer has changed her mind about the floor: She wants wood instead of tile. But that will raise the height of the floor, and I don't even want to think about raising up the beautiful door I just put in. Where can I get low-profile hardwood strip flooring (less than 1/2 inch thick)?*

A. *Howard Brickman responds:* I know only one manufacturer of thin hardwood strip flooring: Firebird of New Orleans, La. (504/733-8204). Firebird doesn't sell direct to the contractor, but if your local supplier doesn't stock the brand, call the manufacturer and ask where to get it.

I wouldn't recommend thin-profile strip flooring for a mudroom, though — it could be vulnerable to water soaking between the cracks. A better choice would be laminated glued-down parquet, the kind that comes in squares. Because laminated parquet is made with 80% quarter-sawn pieces and the wood is laid out in two directions, expansion and contraction are less of a problem. Also, any water-resistant finish you apply will stay intact better. The tiles are only 5/16 inch thick, which solves your door-height problem.

There *is* a way to solve your problem using full-thickness strip flooring, however. Remove the subfloor and attach ledgers to the joists, 3/4 inch down (see illustration, above). I'd use screws and construction adhesive to fasten the ledgers. Then rip 3/4-inch plywood to fit *between* the joists. This gives you a subfloor that's even with the tops of your joists. Nailing 3/4-inch strip flooring on top of that puts you back at the extra space original height. ■

Howard Brickman, of Norwell, Mass., is a master wood flooring installer and consultant to the wood flooring industry worldwide.

Got a question about a building or renovation project? Send it to On the House, *JLC*, RR 2, Box 146, Richmond, VT 05477.