

Q. Exposed I-Joists

A client has asked me to build a practical outbuilding with a wood floor system. For simplicity's sake, I'd like to place it on a Sonotube foundation and use continuous-span wood I-joists. The bottom of the I-joists will be about 16 to 24 inches off the ground, and the perimeter joists will be completely protected from the weather by the siding and water table. Is it okay to use I-joists in this situation?

Jeff Olson, an engineer with Boise Cascade in White City, Idaho, responds: Although it's always best to consult with your local building official, I know of no limitations on the use of I-joists in this application. Many homes

built on pilings in coastal areas have I-joist floor systems; raised pier-and-beam foundations (using either engineered or sawn lumber floor framing) are a popular alternative to concrete slabs all along the Gulf Coast. Keep in mind, however, that floor joists should be no closer than 18 inches to grade, and beams and girders should be no closer than 12 inches to grade. Local jurisdictions may have additional requirements for flood-plain areas.

For more information on raised-floor framing techniques, go to www.raisedfloorliving.com, a Web site sponsored by the Southern Pine Council.

Q. Polyurethane Paints for Wood Windows

My client's old wood windows are badly in need of a new paint job. My client, a sailor, suggested using a high-performance polyurethane enamel boat paint on the windows to cut down on future maintenance. It seems to me that if a finish can adhere to the hull of a wooden boat, it should be able to perform well on a wooden window, but I've never used this paint in this application before. Is it a good idea?

Bill Feist, a former wood-finishes researcher with the Forest Products Laboratory in Madison, Wis., responds: Normally, I encourage people to use boat paints and varnishes for a number of nonmarine uses because of the general high quality of these finishes. But in this case, I think doing so might be a mistake.

Even though polyurethane enamels are made for many different surfaces on boats, polyurethanes in general are known for their brittleness — and enamels are even more brittle than flat or satin paints. This brittleness is okay where there is not a lot of wood movement. But an older wood window — especially the sill — is subject to considerable seasonal shrinking and swelling, which could result in premature cracking and peeling.

The best approach for weathered wood windows is to properly prep the substrate by removing all the old paint and carefully sanding the wood smooth, then cleaning with a detergent and bleach solution followed by a clear-water rinsing. When the wood has thoroughly dried, treat all of the bare surfaces with a paintable water-repellent preservative, such as Wolman's Woodlife Classic Clear Wood Preservative or Woodlife CopperCoat Green Wood Preservative (800/556-7737, www.wolman.com). Be sure to follow the manufacturer's specific directions for using these wood treatments.

After treatment, prime with a quality alkyd primer (I'd even consider using two coats), and top-coat with two coats of 100 percent acrylic satin latex house paint.

GOT A QUESTION?

Send it to Q&A, *JLC*, 186 Allen Brook Lane, Williston, VT 05495; or e-mail to jlc-editorial@hanleywood.com.



Q. Painting DensShield

I'd like to use a coated glass mat tile backerboard like DensShield in a shower stall, but would like to stop the tile about 78 inches above the floor rather than completely covering the walls and ceiling. Is it okay to continue the backerboard all the way up to the 8-foot-high ceiling — which would be covered with the same material — and then simply paint the nontiled areas? If so, how should the textured surface of the tile backer be prepped for a smooth, painted finish?

Charles Young, a technical service representative with Georgia-Pacific Gypsum in Atlanta, responds: In a typical residential shower, it is acceptable to skim-coat DensShield tile backer (Georgia-Pacific Gypsum, 800/225-6119, www.gp.com/build) with a setting-type joint compound — such as Durabond (USG, 800/874-4968, www.usg.com) or Georgia-Pacific's ToughRock 45 or 90 — to get a

smooth, paintable surface in areas that aren't tiled.

Since these compounds set by a chemical reaction and are very hard when they cure, you might be tempted to use a sandable version. But sandable setting compounds are not recommended in this application, because they don't set as hard as regular formulations. Use 2-inch 10x10 glass-fiber mesh tape (not paper tape) at the corners and wherever DensShield butts into regular gypsum board outside the shower. Joints to be covered with tile should be skimmed with the same latexmodified thinset mortar or Type 1 mastic that will be used to set the tile; otherwise, skim the joints with setting compound.

The nontiled areas can be primed and painted with the same finish used on the other walls in the room as long as the primer and paint are suitable for high-moisture areas.