Q&A

Painting Popcorn Ceilings

Q. *Several of my customers have "popcorn" ceilings that are old and dirty. Is there any way of painting them short of spray-painting?*

A. *Dan Greenough, a painting and finishing contractor in the San Francisco Bay area, responds:* I always spray-paint popcorn — or blown-on acoustic — ceilings. When you roll them, the material breaks loose and clogs the roller.

If you have to roll them, look for a special textured foam roller cover designed for acoustic ceilings. These covers have slits and cross-hatchings that allow the foam to better conform to the irregular ceiling surface. The idea is to apply the paint with the least possible pressure to prevent the ceiling material from breaking loose.

Cutting in the corners can also be tricky. If you try to cut in with a brush, you will have to work hard to avoid lap marks. It may be faster to mask the walls and roll right up to the edge.

It will take several coats of paint on the entire ceiling to produce an even finish. Be advised that the water in the paint will wet the popcorn surface, causing it to roll off with the roller. Apply the first coat and allow it to dry thoroughly before you try to backroll or apply additional coats.

One reason people often want to repaint acoustic ceiling is to hide water stains caused by plumbing or roof leaks. But those stains are water soluble and will telegraph through new paint. To prevent that, always use several coats of a shellac primer to lock in the stain and prevent it from bleeding through.

While you're at the paint store, inquire about ceiling paints that are engineered especially for acoustic ceilings. Such paints have less resin density than standard smooth-wall paints and will help maintain the acoustic qualities of the rough, textured surface.

Wood Floors in the Kitchen

Q. *I have a customer who insists on having red oak strip flooring in her kitchen. I've tried to talk her into a more durable, scrubbable flooring, but she won't hear it. Is there anything that the floor finisher should do differently to protect the oak floor?*

A. *Wood flooring contractor and consultant Howard Brickman responds:* I'm assuming that the objection is to a wood floor in the kitchen regardless of the species. Without a doubt, the kitchen is the most demanding area in the house for wear and appearance. Traffic patterns tend to concentrate around islands and work stations. Yet we have installed over 100 kitchen floors with excellent long-term results.

A wood kitchen floor requires durable finishes as well as careful maintenance for good long-term performance. The floor should be installed at a low moisture content (you'll have to use a moisture meter). This will minimize spaces between boards. Also, using narrower floor boards will further lessen shrinkage.

To create an easily cleanable floor, the finished surface should be as smooth as possible, with all defects properly filled before finishing. You should also apply additional coats of finish to ensure that the finish film is thick enough to stand up to spills and normal cleaning.

Finally, some clients are just not suited to living with a wood floor in their kitchen. If the customers' current kitchen floor is showing signs of wear though it's relatively new, they will probably wear out just about anything.

Long-Span Floor Joists

Q. *Would floor trusses or wood I-joists be stronger over a 26-foot span?*

A. *Frank Woeste, a professor of wood construction and engineering at Virginia Tech in Blacksburg, responds:* There's really no difference between the two products, assuming both are designed and manufactured properly. The design system used by the entire lumber industry is based on rules that are believed to produce the same safety factor for the same application, regardless of the product selected. However, for a given condition, you would still expect slight differences in the actual safety factors of the two products.

For example, assume that floor trusses and I-joists were designed for a certain span and spacing and the total design load was 55 psf. If you took a sample of five floor trusses and five I-joists from production and tested them to failure, the average failure load might be 100 psf for one product and 120 psf for the other. No one could predict which of the two products would have the higher strength from the samples tested. In one case, the test safety factor (SF) would be 100/55, or 1.8; in the other case, the test SF would be 2.2. Slight differences in the test SF might result from sampling error, differences in materials used to build the products, and the fact that engineering models aren't perfect.

Strength is seldom an issue in residential floor joist products. Stiffness is more of an issue, because the lack of stiffness increases the chances for annoying vibration in the floor system (see *Practical Engineering*, "Beyond Code: Preventing Floor Vibration," 11/98).

continued on next page

CAD Question

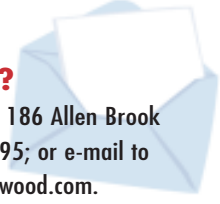
Q. *I'm looking for a CAD program that can produce 3-D drawings of a feature like a custom soffit that incorporates arches. I would also like to do standard house drawings. If I could take a digital photo of a project and make changes to the existing house for presentation, that would be perfect.*

A. *Technology consultant Joe Stoddard (stoddard@epix.net) responds:* I know of no single piece of software that will do everything you're asking for, so you're going to have to combine some tools. SoftPlan Pro (www.softplan.com) will let you model the arched soffits and will allow you to apply existing textures to the CAD model. It will also produce good working drawings. Chief Architect (www.chiefarchitect.com) will allow you to render a CAD model and produce drawings, but you'll need a separate application like SketchUp from @Last Software (www.sketchup.com) to create the curved soffit model for import into Chief. ArchiCAD (www.graphisoft.com), VectorWorks (www.vectorworks.com), and Cadsoft Build! (www.cadsoft.com) are three more CAD programs that can create and render (with add-ins) those kinds of custom features.

That kind of modeling is a very advanced application of any CAD program, though; it's not something a beginner would be able to do right off the bat with any of them.

Entry cost for the software is going to be $2,000 or more. I'm basing that on current versions of Chief Architect plus SketchUp, or VectorWorks plus RenderWorks. SoftPlan Pro starts at $2,190, Build! is $2,999, and ArchiCAD starts at around $4,000.

Modifying existing digital photos to show new textures for your clients is a different issue. For that, you're going to need a presentation product. One that many contractors use is called VisualPhile (www.visapp.com), which ranges from $400 to $1,000 depending on features purchased. Another option is an online system such as ChameleonPower (www.chameleonpower.com), which will set up its visualization system on your website for a monthly fee.



Got a question?

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