

Q. Hidden Hinge Options

We have a client who would like interior door hinges that are totally hidden when the door is closed. Are there any hidden hinges available that are relatively easy to install and have some adjustability?

A. Gary Katz, a finish carpenter in Reseda, Calif., and moderator of the JLC Online finish-carpentry forum, responds: Most carpenters and cabinetmakers are familiar with Soss hinges (800/922-6957, www.soss.com), probably the best-known hidden hinges on the market (see photo, left). But I've found that their small hinge backset results in poor frame clearance, which causes problems when applying moldings or mirrors above doors. Moreover, they bind if the door on the hinge side is beveled, or if they haven't been perfectly mortised at the exact same depth. They require very deep mortises, too, making the risk of running into nails while cutting with your router bit or paddle bits all too real. Also, they can't be adjusted after installation.



Soss 212

Because of these problems, many carpenters prefer to use Sugatsune hinges (800/562-5267, www.sugatsune.com). They have a larger hinge backset and more frame

clearance (see photo, right), so small moldings and mirrors can be applied to the door with fewer problems. Also, Sugatsune hinges aren't nearly as deep as Soss hinges, so cutting the mortises is less complicated. Their new concealed hinge, the HES3D-190, is probably the easiest concealed hinge to install — and it's adjustable.



Sugatsune HES3D-190

However, when I apply baseboard or wainscoting or a similar type of molding to the door, I prefer to use pivot hinges, such as those made by Rixson (877/631-9411, www.rixsonpivot.com; see photo, below). With the proper layout, a pivot hinge will allow almost any thickness of applied molding. In my opinion, pivot hinges are simple to install (for a professional with a router and the proper homemade hinge templates, at least), and they make it especially easy to remove and install the door. And since the clearance gaps required for a pivot hinge can be really tight, the door becomes virtually invisible.



Rixson 370

Q. Modified vs. Unmodified Mortar With Kerdi Membranes

When installing stone tiles over Schluter's Kerdi waterproofing membrane, is it okay to use modified thinset mortar? I know that Schluter recommends unmodified thinset mortar, but my supplier suggests that the large and heavy tiles will be easier to install with a polymer-modified no-sag mortar.

A. Sean Gerolimos, technical services manager for Schluter Systems, responds: With a few exceptions, unmodified thinset mortar is required for setting ceramic and stone tile over Kerdi membranes (800/472-4588, www.schluter.com), as well as for bonding overlapped seams and connections to Kerdi drains. A blend of portland cement, sand, and water-retention agents, this type of mortar — sometimes referred to as dry-set mortar —

is simply mixed with water (look for the ANSI A118.1 standard on the packaging).

Modified thinset mortars are similar but include additional polymers — such as latex — which are introduced in either liquid or powder form. For the liquid form, an unmodified or dry-set mortar powder is mixed with a liquid polymer additive instead of with water. For the powder form, the manufacturer adds powdered polymers to the dry blend, and this is mixed with water (look for ANSI A118.4 and ANSI A118.11 standards on the packaging).

Modified thinset mortars aren't recommended for use with Kerdi because they must dry out to gain strength, whereas the membrane inhibits drying, which can lead

to unpredictable results. For example, if a shower is used before the mortar has cured properly, leaks and polymer leaching can occur. Unmodified thinset mortars, on the other hand, depend on the presence of moisture to gain strength, and therefore they are well-suited for these curing conditions.

Schluter's recommendation is to use unmodified thinset mortar when installing Kerdi over most shower substrates. In principle, modified mortars also could be used over water-absorbing substrates such as drywall, cement backerboard, or dry-pack mortar — but seams and connections to the Kerdi drain would still need to be constructed using unmodified thinset mortar. Frankly, working with more than one type of mortar seems unnecessarily complicated.

Q. Connecting Gutter Downspouts to Footing Drains

Can gutter downspouts be connected to 4-inch pipes that lead to footing drains? The footing drains eventually terminate at daylight, away from the house.

A. *Paul Fissette, director of Building Materials and Wood Technology at the University of Massachusetts Amherst and a JLC contributing editor, responds:* Surprisingly, there is nothing in most building codes that prevents downspouts from being connected to a foundation's perimeter drainage system. But there should be, because this is a bad idea. Pipes used for perimeter drainage typically are perforated so that water can be carried away from the founda-

tion. Additional water from a connected downspout would likely leak from the perforated pipe, saturating the soil near the footing. Also, if the perimeter footing drain ever fails or gets blocked, you run the risk of flooding the subsoil area.

Instead, downspouts should feed into a solid, nonperforated pipe that directs roof water far away from the house. This pipe should run independently from the footing drain.

GOT A QUESTION?

Send it to Q&A,
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