# Q&A

## Making a Dutch Door

**Q.** *I'm trying to find plans for cutting a solid door slab and making a Dutch door. Any help would be appreciated.*

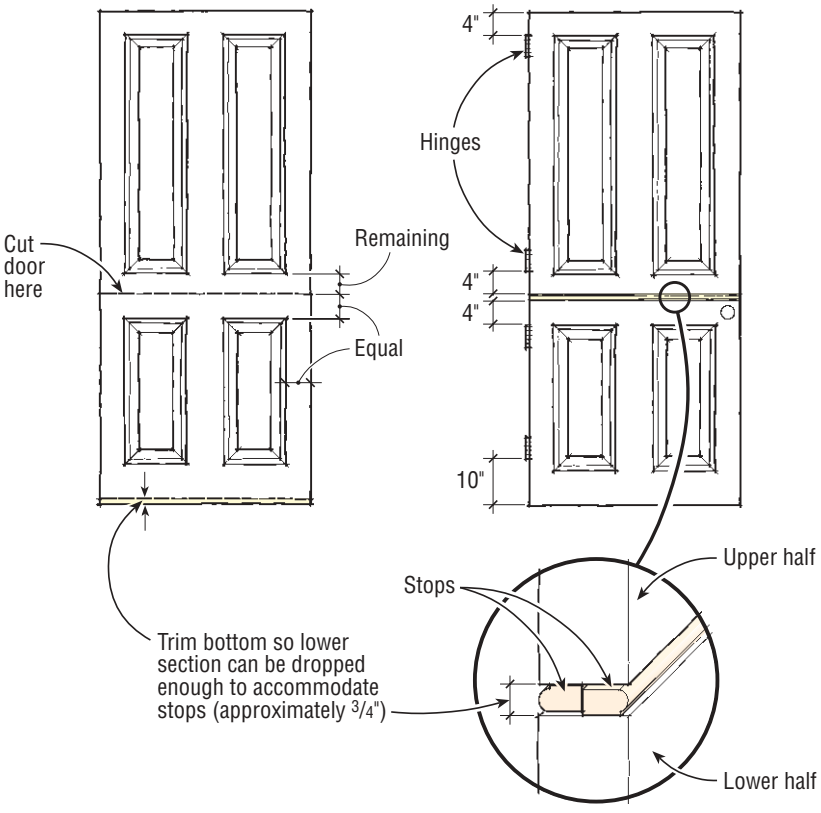
**A.** *Finish carpenter Dave Frane responds:* The upper half of a Dutch door can be operated without opening the lower half. Dutch doors are often seen in barns and greenhouses, but they are also used by people who want to open part of a door without allowing pets or small children to get in or out of the room.

Odds are it's cheaper to buy a ready-made Dutch door than to convert an existing panel on site. But if for some reason you have to convert an existing door, first you'll need to figure out where to split the door. The passage set goes in the lower half, so you should cut the door a couple of inches above the knob. You'll need to trim about 3/4 inch from the height of the door to make room for stops between the halves. The lower stop is mounted near the face that closes against the jamb stops. The upper stop is mounted near the in-swing face.

If it's a solid-core door, you'll have to remove some of the exposed particle-board core and replace it with a wood filler. Ideally, you'd remove about an inch and replace it with a glued-in wood strip. The best way to remove the core is with a router and a straight or rabetting bit. A straight bit will cut deeper, but a rabetting bit is easier to control because there's no need to balance the router on the narrow edge of the door.

You can skip this step if you use a wood panel door. However, you'll have fewer choices about where to split the panel because you have to do it somewhere on the lock rail. Cut too low and you crowd the passage set. Cut too high and the upper half ends up with a skinny lower rail. To maximize the width of the remaining rails, make room for the stops by trimming the bottom of the lower half and dropping it lower in the jamb. This means remortising the existing hinges, but you'd have to do that anyway because the hinges need to be closer to the top and bottom edges than normal. If they aren't, the short wide door halves will sag in the jamb. Each panel will have two hinges, and the halves will be tied together by a slide bolt on the in-swing face of the door.

You should not convert a fire door to a Dutch door. There is such a thing as a fire-rated Dutch door, but it has special gasketing and has been designed and approved for the purpose.




### Felt or Rosin Paper Under Strip Flooring?

**Q.** *I'm using a new floor finisher, who's known as the best in this area. He saw that we had installed oak and ash floors over rosin paper and insisted that we should have used 30-pound felt. He says the rosin paper will degrade over time and won't provide any cushion between the subfloor and the hardwood. Is he right? We only use felt in old houses where the basement is really moist.*

**A.** *Wood flooring contractor and consultant Howard Brickman responds:* Rosin paper, bad; 15- and 30-pound asphalt-saturated felt, good. Installers love red rosin paper because it is really cheap and easily covers up the dusty subfloor, making it easier to slide the wood flooring into position during installation. But those reasons don't have anything to do with the

quality of the completed wood floor.

Asphalt-saturated felt, on the other hand, performs a number of functions: It retards the flow of moisture from the underside; it increases friction between the bottom of the flooring and the surface of the subfloor, resisting lateral movement during shrinking and swelling; and it provides some adhesion between the bottom of the flooring and the surface of the subfloor, helping to eliminate squeaks when the flooring is nailed properly.

And don't forget that many manufacturers and wood flooring trade associations require you to use 15-pound asphalt-saturated felt or building paper; failure to use it may be regarded as a defect if you get a complaint.

Finally, at some point new houses become old houses, and since you can't be certain about long-term moisture conditions, why not build for the long run?

## Shower Pipe Knocking

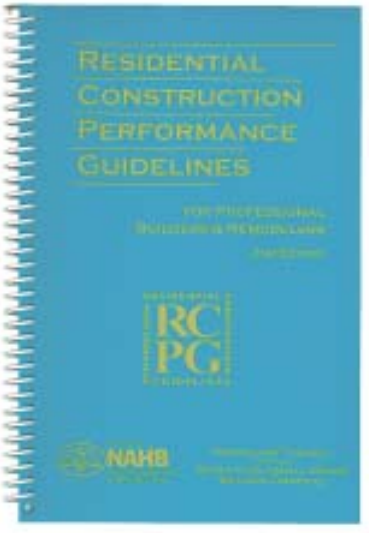
**Q.** *I am having a problem with a shower valve in a bathroom remodeling project. When you turn the water all the way to hot and then back off to around the middle of the temperature range, you get a pulsating water flow from the shower head and severe, loud knocking from the shower pipes in the wall. The problem does not occur when the valve is opened all the way, full hot. We've secured the valve and the piping with clamps. Are you aware of any remedy for this problem short of taking the tiled walls apart to install a water hammer arrester?*

**A.** *Master Plumber Rex Cauldwell responds:* A water hammer arrester won't solve the problem; I think the problem is in the faucet body itself. This type of water pulsation and the associated water hammer are typical of faucets with balancing valve assemblies and check valves. The problem is not limited to one manufacturer; I've experienced it with several brands.

You have a choice of pulling the valve cartridge and checking it for debris or just replacing the faucet. Most of the time, I replace the faucet, because, even with new parts, I often can't fix the problem. I typically switch the faucet to a Moentrol, by Moen (800/289-6636, www.moen.com); I've had the best luck with that brand.

## Construction Performance Guidelines

**Q.** *The article "A Simple Time & Materials Contract" (11/01) mentions the* Residential Construction Performance Guidelines. *I have been unsuccessful in finding this book; where can I get it?*




**A.** You can buy the book from the NAHB Home Builder Bookstore (800/223-2665, www.builderbooks.com) for $31.25. There is also a homeowner's edition, to give to clients, for $62.50 for ten copies.

*— The Editors*

## Durable Exterior Ceilings

**Q.** *Patio covers are standard features of nearly every home built in the Phoenix area. Standard construction is wood frame with a drywall ceiling, taped, textured, and painted. Within ten years, the taping and texturing start to separate from the drywall. Retaping and texturing might make it last a few more years. Is there an economical alternative to drywall that would provide a more permanent and relatively maintenance-free ceiling?*

**A.** *Jim Reicherts of United States Gypsum Company responds:* Drywall is not designed for exterior applications, even in low-moisture desert climates. Although it will cost more, the best solution for the carport is to use a water-resistant cement board (like USG's Durock) or gypsum fiber panel (like USG's Fiberock) instead of the drywall.

After attaching the cement board or gypsum fiber panels to the framing, cover the joints and the panel surface with a latex-modified thinset basecoat. You can then finish the surface with an aggregated acrylic textured finish to provide a stucco look. These basecoat and finish materials are available from manufacturers of exterior insulation and finish systems (EIFS), such as Dryvit, Senergy, Parex, and Sto.

**Got a question?**

Send it to On the House, *JLC*, 186 Allen Brook Ln., Williston, VT 05495; or e-mail to jlc-editorial@hanley-wood.com.