

# This Old House

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## Front and Center

A custom entry door can transform the look of your house

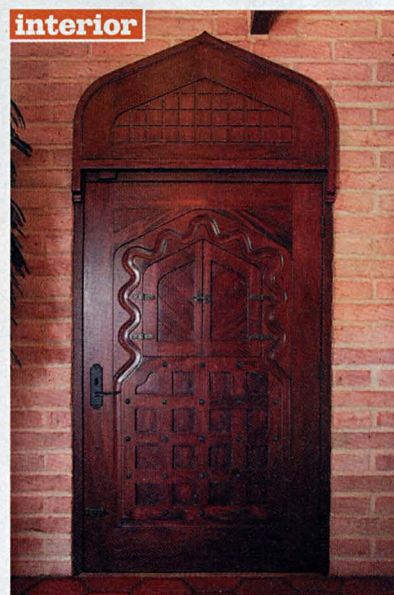
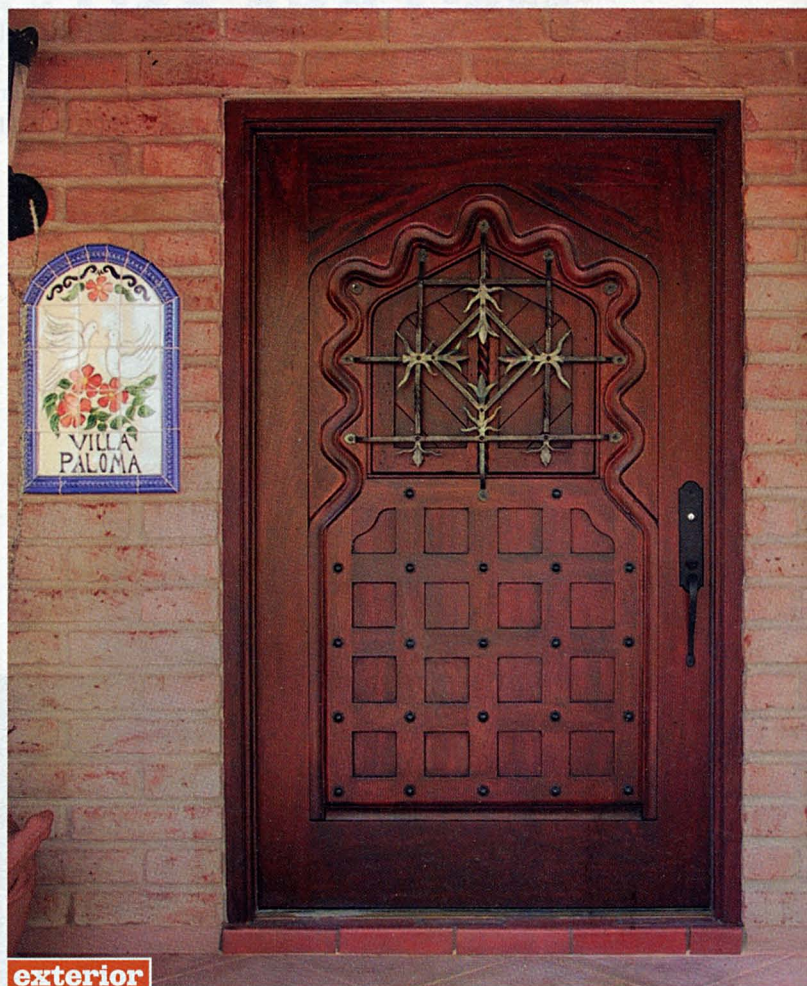
by Jonathan Binzen

**A** front door can make a powerful statement. On a street of similar houses, a distinctive entry can set a place apart. In an area of period homes, a door with the right proportions and moldings can cap a restoration. And that's just from the outside. For those who enter, a solid door with the right heft and hardware can make the whole house feel safe and secure.

You can buy a wood entry door at a home center, but you'll have to take what you can get: usually a slab door in pine, fir, or hemlock, with generic patterns and moldings. Or you can spend a bit more money (in some cases, a lot more) on a door from a custom craftsman and get one with superior frame-and-panel construction in the material, style, and even size of your choice.

"Designing a door is a reciprocal involvement" between client and craftsman, says Scott Hahn, whose New Jersey shop has turned out custom doors for *This Old House* TV project houses, including the current one in Winchester, Massachusetts. Hahn has based designs on everything from an antique door to a homeowner's rough idea sketched on a napkin. "Customers often want to match another door in their house," he says. "We ask them for a piece of the original molding or a paper template of it."

Custom door making used to be a local business, but these days many craftsmen are easily accessible through Web sites; Hahn Woodworking has made doors for clients in 40 states. Type "custom door maker" into a search engine and you'll have plenty to choose from, including those whose work is featured on the following pages. Another source for doors is custom furniture makers. A good door is built with many of the same materials and techniques as fine furniture.



*A Moorish-style door with a decorative grille and interior transom by Tucson, Arizona, craftsman Wayne Hausknecht is made of Honduras mahogany.*



**DOOR CONSTRUCTION**

Entry doors take a beating, slammed by the elements as well as by a home's occupants. So strength in a door is as important as style.

The best doors are made with frame-and-panel construction. This infinitely adaptable style has its form firmly rooted in function. A frame-and-panel door—made up of vertical members called stiles and horizontal ones called rails, with panels in between—won't shrink, swell, or warp the way a solid slab of wood can. Fitted into grooves in the frame, the panels are free to expand and contract with the seasons.

How the frame is joined is another important consideration. Traditional joinery is mortise and tenon, which provides maximum strength and durability. It makes sense to insist on it for your custom door, unless the craftsman can convince you that an alternate system is just as strong. Dowels, for instance, widely used in factory-made doors, are considered inferior by many woodworkers. But some fine craftsmen use the technique, turning their own large-diameter dowels from rot-resistant wood and inserting several in each major joint of the door.

Even the most robust joinery can fail, however, if a door's glue and finish can't stand up to the weather. Make sure your custom door is glued and finished with rugged materials, such as waterproof epoxy or urea resin and tough exterior enamel paint, oil varnish, or marine varnish. A good custom maker will be forthcoming about these important details.

*Door makers at Hahn's Woodworking Company fit together the stiles and rails of a panel door. Mortise-and-tenon joinery is the most common method used on custom doors, because of its strength and durability.*

**CHOICE OF MATERIALS**

One of the chief enticements to getting a custom door is the rich variety of woods available, many of them rarely used by commercial manufacturers. Mahogany and Spanish cedar, both excellent in their natural resistance to rot, are big favorites. In South Berwick, Maine, Fred Wildnauer builds exterior doors almost exclusively in mahogany. "Even if the finish were to fail, the wood holds up," he says. Brian Lee, who makes doors in a shop he built on his property on California's Mendocino coast, favors redwood, another stalwart against the weather, but he also builds with Honduras mahogany, white oak, and other attractive woods. At the moment he's got a flitch of curly western black walnut on his drying rack, waiting for a customer with a yen for something spectacular.

The upper panels of an entry door are often filled with glass, but that's not the only option. Lee has built everything from unglazed doors with tongue-and-groove mahogany paneling that imparts the feel of wainscoting to a recent pair of towering mahogany doors that contain 64 pieces of 3/4-inch-thick hand-beveled glass. Other options for personalizing a door include relief carving, stained glass, copper paneling, and custom grilles and other hardware.

**INSTALLATION AND COST**

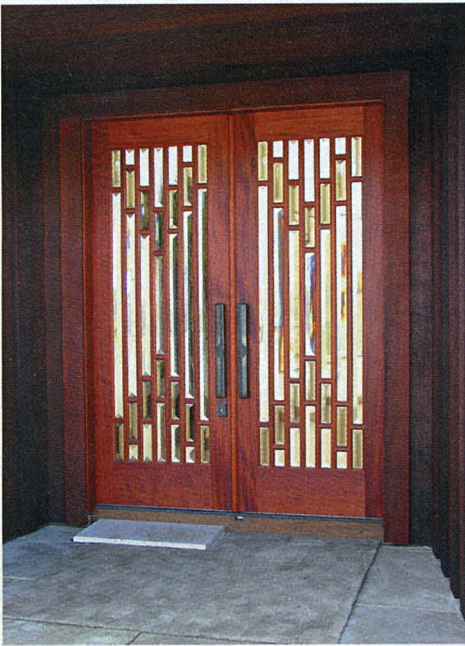
Custom doors typically arrive prehung—that is, already fitted with a matching sill and jambs. The door maker supplies and sets the hinges, but he doesn't usually provide or install the lock and handles, a job best left to the person who installs the door. Most custom door makers prefer ball-bearing butt hinges, which cost about twice as much as ordinary hinges but provide smoother operation and longer service.

The cost of a custom door varies with its complexity. "The busier the door, the higher the price," Hahn says. His solid mahogany entry doors, sold prehung and coated with a weather-sealing primer, range from a bit over \$2,000 for a simple door to about \$4,000 for something with a complex configuration of panels. Add windows above or on the sides, and the cost goes up. A custom door with a transom and sidelights—an "entry system," in the parlance of the trade—generally costs several thousand dollars more than a door alone. At the lower end of the price scale are interior doors, which typically cost between \$500 and \$1,000. Because they are thinner, lighter, and smaller than exterior doors they require less material, but offer the same opportunity for creative expression.

To protect your investment, it's a good idea to shelter the entry from direct exposure to sun and rain. A door that stands under some kind of overhang, pent-eaves, or porch roof will retain its strength and its luster far longer than one that's left fully exposed. ▶

**For a guide to locksets for your new door**  
Go to [www.thisoldhouse.com](http://www.thisoldhouse.com)  
(AOL keyword: This Old House)  
and type "get a lock on it" in the search box.

Doors of Distinction



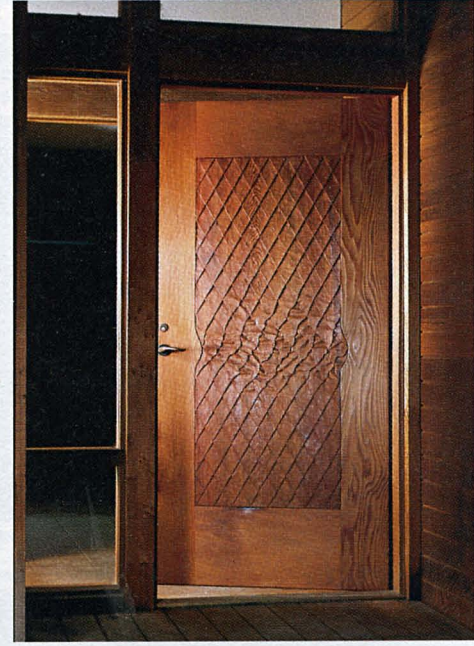
**BEVELED GLASS**

Brian Lee's Honduras mahogany doors feature 64 hand-beveled glass lights and oil-rubbed bronze pulls ([MendocinoDoors.com](http://MendocinoDoors.com)).



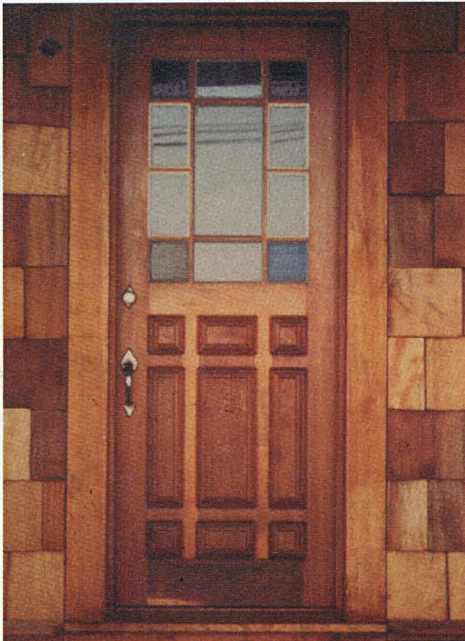
**MEXICAN STYLE**

Made of 3-inch-thick alder, these rustic doors by Wayne Hausknecht have hinged wrought-iron grille and raised panels ([wghwoodworking.com](http://wghwoodworking.com)).



**CUSTOM CARVED**

A redwood door by California craftsman Miles Karpilow features carving that "ripples" across its surface. The design took shape when he varied the pattern to accommodate a knot in the wood.



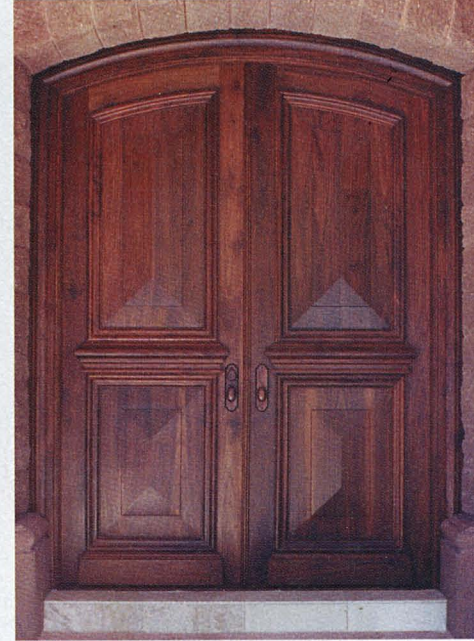
**TRADITIONAL**

Raised-panel doors by Brian Lee are made of redwood and fitted on top with glass panes that echo the panel design.



**CONTEMPORARY**

A mahogany double door has tall, narrow panels flanked by inset rows of small square lights ([molyneuxdesigns.com](http://molyneuxdesigns.com)).



**OLD WORLD**

Beveled panels and heavy molding make these antique-walnut doors by Wayne Hausknecht look like they've been in place forever.