

## TOP-NOTCH ENTRY & STORM DOORS

# MAKING A GRAND ENTRANCE

The latest fiberglass entry doors use new techniques to replicate better than ever the look of real wood. But paying extra to add more-energy-efficient glass to a door that you purchase might not be a bright idea.

By Drew Vass

**T**he next time that you hear a knock on your new fiberglass entry door, it might be a woodpecker, because even those birds could be fooled into thinking that the latest fiberglass doors are made of wood. Manufacturers use new technologies that help them to better replicate the look of wood doors on fiberglass-door skins. That's good news for anyone who wants real-wood aesthetics but fewer maintenance worries and better energy efficiency than what wood doors deliver.

But if energy efficiency is your main goal, don't be swayed by the fact that more manufacturers offer triple-pane glass as an option on entry doors that have windows. In most cases, upgrading to the more expensive glass won't deliver any significant benefits.

**PINE CLONES.** The look of the latest fiberglass doors is nearly indistinguishable from doors that are made of real wood, such as mahogany, oak or pine. We say that based on hands-on evaluations and based on interviews with architects and materials experts. Manufacturers have made this happen by apply-



## ✓ Best Buys in Storm Doors

### Best Buy Categories

- [P]=Premium selection  
[M]=Midrange selection  
[E]=Economy selection



Best Buys in aluminum storm doors were selected based on materials, quality of construction and warranty.

We considered only manufacturers that have national distribution.

All prices for Best Buy selections are based on an 80-by-36-inch door and include a matching frame and standard handle and lock hardware. All prices reflect the range for a series, because storm doors come in a variety of styles and configurations. All Best Buy selections have removable or retractable screens.

*Best Price* is a reflection of the lowest retail price that was available at press time and is subject to change.

### ALUMINUM STORM DOORS

[P] *MasterGrain*  
MSRP: \$300-\$350; *Best Price*: \$300

>> The *MasterGrain* series has the thickest frame of any storm door that's on the market at 1-7/8 inches. It's the least expensive series that has built-in, retractable screens as a standard feature and the only series that offers models that have electronic, keyless locks

(available on nine models). And no other storm-door series has more combinations of styles and options than this one has.

#### Features:

- \* Styles: 29
- \* Colors: 7
- \* Warranty: Lifetime door; 1 yr. hardware

[M] *ProVia*

MSRP: \$200-\$220;  
*Best Price*: \$187

>> The *ProVia* series is constructed as well as any other 1-1/4-inch storm-door series, and it has the best warranty of any series that's in this price range, including lifetime coverage for retractable screens and 15 years for all other screens. This series also has the most style options of any series that's in this price range.

#### Features:

- \* Styles: 5
- \* Colors: 4
- \* Warranty: Lifetime transferable door, finish; lifetime hardware finish; 15 yrs. screens; 1 yr. hardware



[E] *AccuGrain*  
MSRP: \$75-\$109;  
*Best Price*: \$72

>> The *AccuGrain* is the least expensive storm-door series that has a lifetime warranty. Comparably priced models that are from other manufacturers have no better than a 5-year warranty. This series also is the only series that's in this price range that has both full-view and half-view door styles.

#### Features:

- \* Styles: 6
- \* Colors: 3
- \* Warranty: Lifetime door; 1 yr. paint, hardware, components

For more information about the above Best Buys, contact the manufacturers directly. See page 71.

ing one of two new techniques to their doors. One technique uses a detailed mold to create the door skin, while the other applies the latest printing technology to replicate a wood finish.

The detailed-mold technique, which is called nickel vapor deposition (NVD), isn't new, but it's available on more doors than ever before. Therma-Tru has used it on some of its doors since 1994 and refers to it as AccuGrain technology. But since 2007 (when Therma-Tru's exclusive rights to the technology expired), a few doors that are branded MasterGrain, ProVia Door and Tru Tech Doors also are made by using NVD technology.

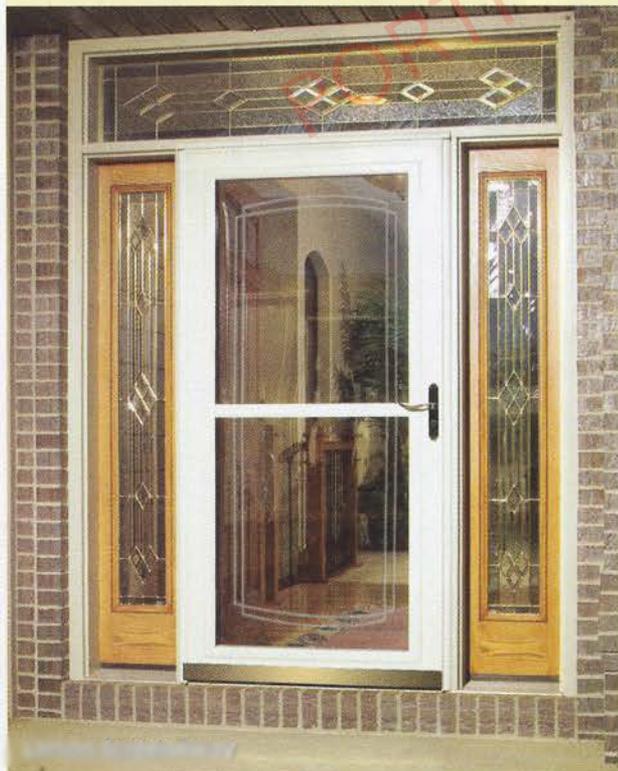
NVD replicates the texture and detail of wood by depositing tiny molecules of vaporized nickel into a mold that's made from a real wood door. That mold is used to produce fiberglass skins that have the look of the original wood door. Door skins that are made through NVD replicate wood-grain detail as finite as a human fingerprint, according to Weber Manufacturing Technologies, which is the door-skin fabricating company that uses the NVD technique.

Independent experts confirm the legitimacy of this claim. Those experts also agree with door manufacturers that say traditional mold-making methods fail to capture detail as well as NVD does. In traditional methods, manufacturers add faux grain patterns to the door skin. This doesn't produce as authentic of a look as does NVD technology, experts say.

You'll pay at least \$575 for six-panel entry doors that use NVD technology. A comparable wood door would cost you at least \$900.

And you'll pay at least \$1,200 for a fiberglass entry door that uses the latest wood-reproduction technique. Masonite introduced a method in 2008 that involves scanning a high-resolution image of real wood, then printing it onto the surface of a fiberglass door skin, in much the same way that an ink-jet printer works. Masonite refers to this technology as AvantGuard, and in June 2010, it began national distribution of doors that are made by using this technique.

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# Best Buys in Entry Doors

## Best Buy Categories

- [P]=Premium selection
- [M]=Midrange selection
- [E]=Economy selection



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Best Buys in fiberglass and steel entry doors were selected based on materials, quality of construction and warranty.

We limited our Best Buy selections to fiberglass and steel units, because they account for about 85 percent of the U.S. entry-door market. We considered only manufacturers that have national distribution.

Best Buy selections are for a series. Prices represent the base configuration for an 80-by-36-inch six-panel door that's prehung in a frame.

All Best Buy selections come in a variety of styles that will affect the price of the door. Glass is an optional upgrade for each Best Buy selection. Handle, lockset and deadbolt hardware aren't included in the price, unless otherwise noted.

**Best Price** is a reflection of the lowest retail price that was available at press time and is subject to change.

## STEEL ENTRY DOORS

**[P]** *MSRP: \$1,203; Best Price: \$700*

>> You'd have to pay twice as much to get a door that has thicker steel than the series models have. This series has the least expensive doors that use 20-gauge



steel, which is some of the thickest steel that's used among all models. In addition, the lifetime transferable warranty for this series beats that of all other steel doors that are on the market. Prices include hardware and a factory-applied paint finish, which are standard features on all models.

### Features:

- \* Core materials: Polyurethane foam fill; steel frame
- \* Styles: 22
- \* Weight: 180 lbs.
- \* Warranty: Lifetime transferable door slab, frame, components; 7 yrs. finish

**[M]** *MSRP: \$226; Best Price: \$226*

>> No standard configuration of doors that are in this price range has a better warranty or better energy-efficiency ratings than does the 24-gauge-steel series. Comparable doors from other manufacturers have a fiberglass sill, which is more prone to cracking than the aluminum sills that are on the doors that are in this series.

### Features:

- \* Core materials: Polyurethane foam fill; laminated veneer lumber and pine stiles, rails; composite bottom rail
- \* Styles: 12
- \* Weight: 100 lbs.
- \* Warranty: 20 yrs. door slab, frame, components; 5 yrs. finish

**[E]** *MSRP: \$150; Best Price: \$139*

>> The doors that are in the series are the lowest priced of all 24-gauge steel models that we found. And this is the only series that's in this price range that uses steel bottom rails (instead of wood or composite rails), which means that the rail won't rot. It's also the least expensive series that comes with a 10-year warranty.

### Features:

- \* Core materials: Expanded polystyrene foam fill; laminated veneer lumber stiles, rails; steel bottom rail
- \* Styles: 16



- \* Weight: 60 lbs.
- \* Warranty: 10 yrs. door slab; 1 yr. frame

## FIBERGLASS ENTRY DOORS

**[P]** *MSRP: \$1,200; Best Price: \$1,092*

>> The doors that have the finish are the least expensive doors that combine premium construction and the most authentic wood replication. You'd have to pay an extra \$350 to get a door that's as well-constructed that looks as authentic and also has a lifetime warranty. These doors come in Spanish cedar or black walnut wood grains.

### Features:

- \* Core materials: Polyurethane foam fill; laminated veneer lumber stiles, rails; composite bottom rail
- \* Finish: Prefinished in stain and top coat
- \* Styles: 10
- \* Weight: 100 lbs.
- \* Warranty: Lifetime door; 5 yrs. finish

**[M]** *MSRP: \$575; Best Price: \$550*

>> No other door that's in this price range replicates the look of a wood door better than the series does. It's the least expensive fiberglass series that best replicates the look of real wood, and no other door that's in this price range has a better warranty. Oak

wood grain is standard; a mahogany wood grain also is available, for \$59 extra.

### Features:

- \* Core materials: Polyurethane foam fill; composite top, bottom rails; engineered-wood stiles
- \* Finish: Paint, stain ready
- \* Styles: 13
- \* Weight: 57 lbs.
- \* Warranty: Lifetime door, frame, components

**[E]** *MSRP: \$200; Best Price: \$218*

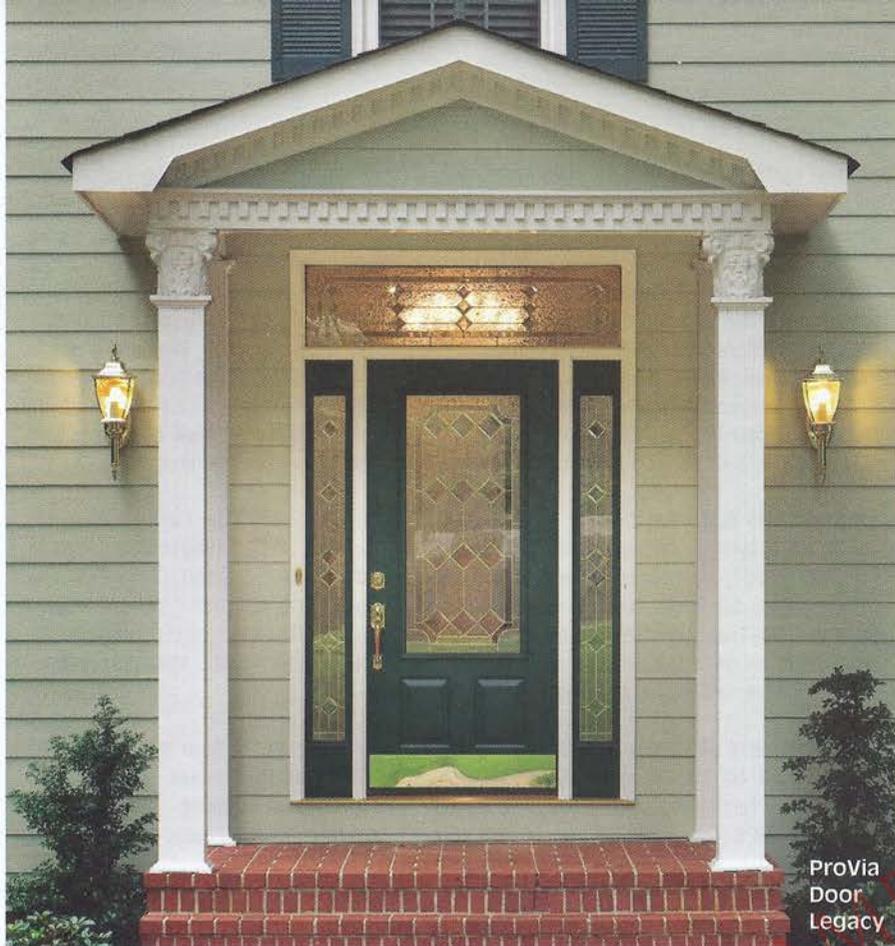
>> The series has the least expensive fiberglass door that has laminated veneer lumber stiles and rails, which make the door stronger and less prone to warping than are doors that use plain wood for stiles and rails. This series also has twice as many style options as do others that are in this price range, including the choice of a smooth or a wood-grain finish.

### Features:

- \* Core materials: Polyurethane foam fill; composite-capped laminated veneer lumber stiles, rails; composite bottom rail
- \* Finish: Paint, stain ready
- \* Styles: 18
- \* Weight: 55 lbs.
- \* Warranty: Lifetime door, components; 1 yr. frame

For more information about the above Best Buys, contact the manufacturers directly. See page 71.





## ENTRY DOORS

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AvantGuard captures the look of wood grain in a different way than what NVD or traditional molded methods do, but independent experts tell us that after you add a top clear coat of varnish to fiberglass doors that have NVD skins or AvantGuard skins, you can't tell the difference between the look of those doors and wood doors.

At this point, there's no indication when—or if—you'll see AvantGuard or NVD products trickle down to economy doors. But there's little doubt that you'll continue to see more fiberglass doors, period. Since 2000, fiberglass doors have expanded to become 34 percent of the market, which is up from just 9 percent.

**TOUCH OF GLASS.** Meanwhile, the number of national manufacturers who offer triple-pane glass in entry doors of all material categories—fiberglass, steel and wood—has increased. At press time, six national manufacturers offered triple-pane glass as an option in their doors; just two manufacturers offered it 5 years ago.

But before you shell out the extra 10 percent to 20 percent that triple-pane glass adds to the cost of a door that uses double-pane glass, you should know that triple-pane glass won't make the door significantly more energy-efficient. Unless you have an all-glass entry door, or one that has single-pane glass, no entry door allows much energy to escape anyway.

Triple-pane glass has efficiency ratings that are notably better than those of double-pane glass in some (but not in all) cases. But that degree of benefit is significant only if you're replacing, say, 20 windows, because windows take up a much larger amount of wall space. In other words, the effect of triple-pane glass is negligible when it comes to most entry doors. We'd say that's quite a knock against the value of triple-pane glass in doors. ◀

*Drew Vass also has written about replacement windows for Consumers Digest. He has covered the glass industry and window and door products as an editor and writer for several magazines, including Door and Window Manufacturer, Window Film, US Glass and Shelter.*

## What Is A Best Buy?

A CONSUMERS DIGEST Best Buy is defined as a product that offers the most value for a given amount of money.

That doesn't mean it is the least expensive product in its category, nor does it mean it is the best-known brand. A Consumers Digest Best Buy is a nationally available product we've identified as one that merits special attention from consumers based on its combination of performance, ease-of-use, features, durability, warranty, efficiency, styling, and maintenance and servicing requirements. Of course, every product category includes many worthwhile purchases that didn't make our list of Best Buys. Some will be very satisfactory in use; others are excellent products but, because of their premium prices, not exceptional values. For us, value is defined as a simple equation: perceived quality divided by cost. Consequently, price is an important factor in naming our Best Buys.



As always, the sources for all Consumers Digest Best Buy recommendations are based on criteria derived from at least three of the following: **1.** Personal (hands-on) product evaluations by the authors and researchers; **2.** Independent testing and research facilities, including colleges and universities, technical schools and independent labs; **3.** Reports from federal, state and other governmental agencies; **4.** Other independent technical experts; **5.** Retail establishments; **6.** Service outlets; **7.** Consumers Digest reader and other consumer surveys; **8.** Previously published evaluations in books, magazines, newspapers, websites, etc.

Because different people have different price levels at which they define value, Consumers Digest Best Buys are further refined as follows: [**P**] *Premium Selection* denoting that the product is full-featured and priced accordingly; [**M**] *Midrange Selection* denoting that the product offers many popular features and good performance at a price below the top-of-the-line for the product category; and [**E**] *Economy Selection* denoting that the product offers satisfactory performance with basic features only, at an advantageous price for cost-conscious purchasers.