

JELD WEN[®]

WINDOWS & DOORS

CUSTOM WOOD
Windows & Patio Doors


ImpactGard[™]



RELIABILITY *for real life[®]*



With ImpactGard™ protection is reliable

Custom Wood windows and patio doors with ImpactGard protection are ideal for homes in areas prone to hurricanes and other extreme conditions. In fact, they're designed to meet the strictest building codes. Benefits include:

- Impact resistance from wind-borne debris
- Laminated glass with an interlayer 100 times more rigid than the industry standard*
- Forced-entry resistance for increased safety
- Increased UV protection to reduce interior fading
- Decreased sound transmission
- 10-year glass warranty

**Industry standard is based on .090 PVB*

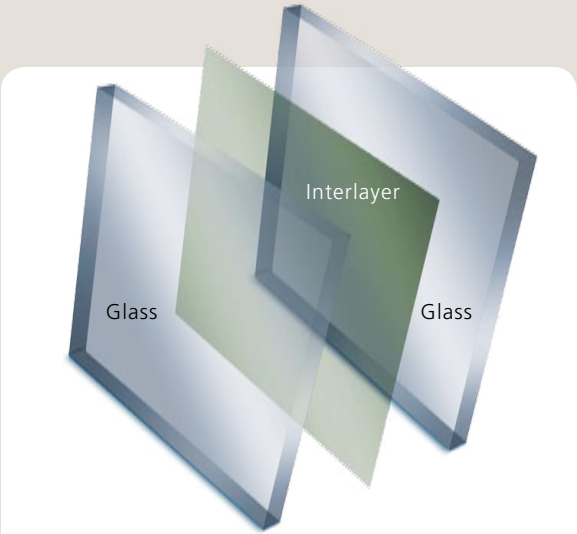


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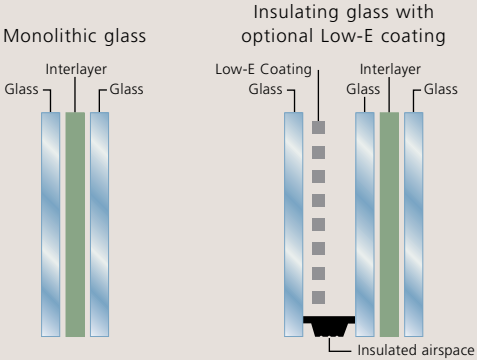


ImpactGard™ glass construction

Our monolithic laminated glass is constructed by placing a plastic interlayer between two panels of glass (see illustration). Our insulated laminated glass includes the same components, plus an additional pane of glass on the exterior with a sealed airspace. The extra glass pane is available with an optional Low-E coating for greater energy efficiency and year-round comfort. Other glass options include tinted and obscure.



JELD-WEN uses a superior interlayer, which is 100 times more rigid than the industry standard and delivers five times its tear strength.



Impact resistance

During a severe storm, a broken window can affect a home's structural integrity (see illustrations). That's why windows and patio doors with ImpactGard protection are designed to resist impacts. Even if the glass cracks under pressure, the fragments will adhere to the interlayer, so the shards remain within the frame. That means the danger of falling or flying glass is minimized.

Windows with ImpactGard protection also meet the nation's toughest building codes. These codes specify that windows must withstand a nine-pound 2x4 traveling at 50 feet per second (34 miles per hour). Homes with ImpactGard protection will not require storm panels or shutters.

When strong winds enter a home through a broken window or door, the increased pressure can lift the roof and push walls outward.

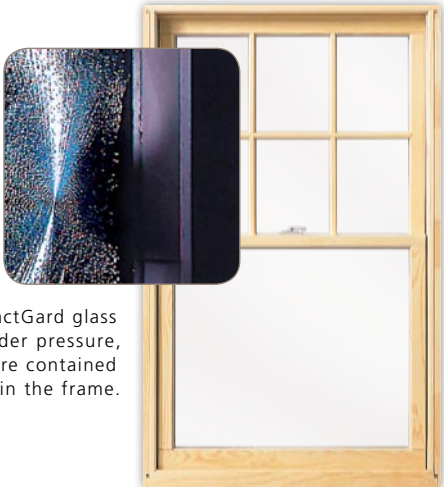


ImpactGard protection helps prevent this by resisting impacts from wind-borne debris.



Forced-entry resistance

Windows and patio doors with ImpactGard™ protection resist forced entry because the glass cannot be cut or broken by an intruder. In fact, the interlayer separating the panes of glass makes a potential intruder's glass cutter useless. That means break-ins are less likely. These products passed the American Society for Testing and Materials standards for preventing forced entry (ASTM F842-97 and ASTM F588-97). The glass alone passed similar tests (ASTM F1233), as well as the Underwriters Laboratories burglary resistance guidelines (UL 972).



Even if ImpactGard glass cracks under pressure, shards are contained within the frame.

Reduced fading

Furniture, fabrics and other materials in a home can fade or discolor over time due to ultraviolet (UV) exposure. ImpactGard glass can block over 95 percent of harmful UV rays. This benefit not only considerably reduces fading, it also keeps homes more comfortable.

Decreased sound transmission

Unwanted outdoor noise is noticeably dampened with ImpactGard glass. To compare, a single pane of glass generally has an STC rating around 27, a typical insulating glass unit has an improved STC rating of 31 and a laminated insulated glass unit can achieve an STC rating up to 35. The higher the STC rating, the better the sound-dampening effects.

The art of strength

Features like ImpactGard protection keep our Custom Wood windows and patio doors strong to preserve their beauty. This is no ordinary beauty, either. With our custom capabilities and vast array of design options, you can create a look like no other. Options include 39 color finishes and three copper clad finishes for metal-clad exteriors; three optional interior wood species (plus standard AuraLast® wood) and four types of divided lites.

To learn more about all the styles and options we offer, review our 20-year warranty and get care and maintenance information, please visit www.jeld-wen.com.





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The JELD-WEN Web site is your ultimate resource for learning about our reliable windows and doors. It has all the product information and design advice you need. Visit us at www.jeld-wen.com today.

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