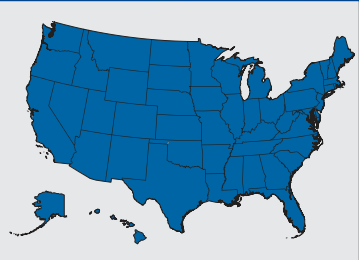




Guardian Laminated Glass

Safety, sound reduction, protection from storms and fading



Safety, comfort and fade protection, all in an invisible layer.

Windows and doors with Guardian Laminated Glass are specially designed to protect homeowners and their belongings. Now, everything from small accent windows to entire window walls can invite in the sunlight and provide added safety, increased noise reduction and elimination of UV rays. All because of a feature you'll never see.

An invisible protective shield.

Two or more panes of glass are bonded together by a durable plastic interlayer, which enables the glass to strongly resist penetration by impacting objects - you can't see it, but the benefits are clear. If it should break, the glass will tend to remain in its frame, minimizing the risk of injury from sharp edges and flying or falling glass particles.

Benefits that satisfy consumer's needs.

Safety, noise reduction and fade protection were ranked as essential factors for replacement windows by surveyed homeowners. That's where laminated glass stands strong. Meeting these needs is why over 50% of surveyed homeowners say they would purchase windows with laminated glass.

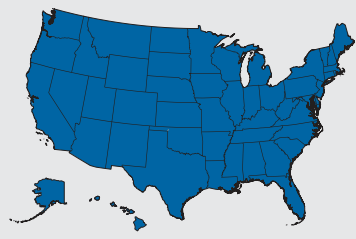
Guardian Laminated Glass at a glance

- Meets CPSC Category II and ANSI Z91.1 safety standards.
- Reduces perceived noise by 50%.
- Blocks over 99% of harmful UV rays.
- Withstands high winds, flying debris and weather-related impact.
- Increases intruder resistance.
- Reduces solar heat gain when used with ClimaGuard low-E products.
- Available in full truckloads, partial truckloads, case quantities and make-to-order.



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Have it both ways: protection AND efficiency.

Guardian Laminated Glass is also available with a full range of low-E coatings to increase energy efficiency as well as cost savings for the homeowner. Coatings can be embedded or exposed in a laminated unit to configure a glazing system that provides maximum thermal efficiency. Glazing systems can also be configured to deliver safety from impact, fade resistance and acoustical dampening year-round.

Insist on Guardian Laminated Glass for your next project.

We take the complexity out of laminated glass and even offer make-to-order and high-volume custom sizes. Guardian laminated glass can be used in many configurations to meet the needs of regional climates and local codes.

Double Glazed Lami Inboard	Visible Light			UV Trans	SHGC	U-Factor	
	Trans	Reflect Out	Reflect In			Argon	Air
71/38(#2) + Laminated Glass	70%	10%	11%	0%	0.384	0.241	0.288
70/36(#2) + Laminated Glass	68%	11%	12%	0%	0.359	0.245	0.291
63/31(#2) + Laminated Glass	62%	12%	14%	0%	0.310	0.241	0.287
62/27(#2) + Laminated Glass	61%	13%	13%	0%	0.264	0.240	0.287
55/27(#2) + Laminated Glass	54%	12%	17%	0%	0.273	0.240	0.286

Double glazed laminated inboard:

3.0mm Clr, 1/2" Gap, 3.0mm Clr, .030 Clr PVB, 3.0mm Clr

All units: Air and 90% Argon/10% Air Filled. Primary low-E coating on the #2 surface.

Performance data calculated using LBNL Window 6, IGDB v.39.0.

Guardian ClimaGuard glass products can be used to construct ENERGY STAR® qualified windows.

ClimaGuard Product Information

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