



Glass Options





For over 75 years, Kolbe has been known for innovative products that push the boundaries and defy the limits of function, performance and style. Exceptional design, quality craftsmanship, endless options and custom solutions allow Kolbe to personalize your design experience with distinctive windows and doors. With multiple product lines designed to meet specific architectural and aesthetic goals, each offers distinct advantages, while remaining vastly customizable.

Why Consider Glass?

Because windows and doors greatly affect the interior environment through lighting, thermal performance, acoustics and air quality, choosing the right type of glass is paramount to creating your ideal living space. When considered holistically, windows and doors can help provide comfortable spaces that offer a sense of well-being and a connection to nature.

Select from Glass Options that provide:

- Enhanced energy efficiency to reduce heating and cooling costs
- High performance and impact performance options to meet climate demands
- Low-E coatings to protect against fading of furniture, fabrics and carpeting
- Surface treatments allowing you to spend less time cleaning
- Specialty glass for texture, color, or decorative details
- Smart glass for various levels of privacy on-demand
- Improved interior acoustics & sound buffering
- Maximum daylighting, views & ventilation



Our standard glass contains
25-30% recycled content.

Energy Efficiency

Kolbe participates in the Window & Door Manufacturers Association (WDMA) Hallmark Certification and ENERGY STAR® programs to ensure that our products are tested to industry standards, which are created to meet today's strict building codes.

Many of Kolbe's products can also meet California's Title 24 Building Energy Efficiency Standards, as well as Passive House Institute US (PHIUS) verification.

See kolbewindows.com/solutions/energy-efficiency for energy performance data and climate zone maps



Acoustics

Kolbe offers windows and doors with laminated dual and triple pane insulated glass that helps reduce outside noise to create quiet, comfortable spaces. Select sizes are tested to meet Sound Transmission Class (STC) and Outdoor-Indoor Transmission Class (OITC) values, with use of dissimilar glass thicknesses (including laminated glass) to further increase the acoustic performance for a more relaxing interior environment.

See kolbewindows.com/resources/professional-tools/acoustic for acoustic data and sound transmission ratings



Wellness

Because windows and doors are instrumental in creating and maintaining a sense of well-being and ideal living conditions, Kolbe offers holistic solutions for adding visual comfort to interior environments. Large expanses of glass with narrow frames maximize daylighting for well-illuminated spaces with views of the outdoors and exposure to natural light. The connection between our indoor space and the world outside helps enhance concentration, creativity, mood and energy.



Glass Capabilities

There is so much more to glass than visibility. It can add to the aesthetic, enhance indoor comfort and acoustics, or provide privacy, security, and impact resistance. From smart coatings to smart glass, Kolbe's numerous glass options provide optimum energy efficiency, beauty and performance – to enhance your design as well as your lifestyle.



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Impact Performance*

Kolbe's impact performance products are specially designed to withstand hurricane force winds and flying debris, and are independently tested to meet or exceed the strict building codes of the coastal regions. Impact-rated windows and doors utilize laminated glass with different interlayer levels that are unit specific so that each window or door will perform as tested.

Laminated

Benefits include safety, security, sound control, and the ultimate in UV blockage. Designed to stay intact if the glass is broken, laminated glass acts as a durable shield. Upon impact, most broken glass fragments adhere to the interlayer, keeping the window or door intact and prohibiting debris from entering the opening.

Tempered

Standard in Kolbe doors to address safety concerns. Also available in window units to meet specific building codes.

Triple Pane

Provides a greater energy performing window that keeps indoor air warm and comfortable, prevents heat loss, and can lower your heating bills. It is constructed with three panes of glass, thermal spacer bars, and is available in Solar Gain Low-E, Solar Low-E, Solar Control Low-E, and Solar Advanced Control Low-E glass.

*Not all products are available with impact capabilities. For full impact product listing, see kolbewindows.com/solutions/impact-resistance
Not all glass options listed have the same glass warranty. See your Kolbe dealer for details.
NOTE: All Forgent Series impact-rated products are glazed with structural silicone.

Low-E Coatings

Kolbe offers glazing options to provide optimum energy efficiency for the geographic region in which you live. Low-E is a “smart” coating that reduces energy transfer through the insulating glass unit, resulting in reduced heating and cooling costs throughout the year. Low-E coatings also reduce the potential for condensation, as well as provide protection against fading of furniture, fabrics and carpeting.

Solar Gain Low-E

When the weather turns frigid, Solar Gain Low-E glass is the perfect cold remedy. It keeps homes warmer and more comfortable by blocking heat loss to the outside and letting the sun’s heat stream in to increase solar heat gain.

Solar Low-E (Kolbe’s standard)

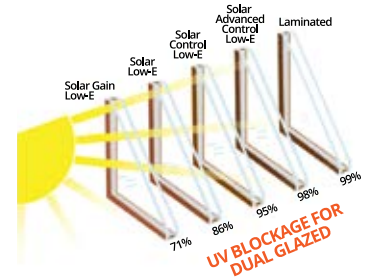
Suitable for most climates and meets most energy zone requirements. Solar Low-E glass is designed to reflect room-side heat back into the room during winter months. In summer, visible sunlight is allowed in while blocking most of the sun’s infrared heat energy.

Solar Control Low-E

Offers an ideal balance of solar control and high visibility by blocking 95% of UV rays while maintaining the interior temperature.

Solar Advanced Control Low-E

A tinted glass recommended for warm climates that achieves greater solar control over a wide range of the spectrum, while also helping to reduce glare.



ThermaPlus™ Low-E

An additional Low-E coating which helps to meet the strictest energy requirements by providing protection against heat loss and UV damage. Available with dual pane versions of Solar Gain Low-E, Solar Low-E, Solar Control Low-E, and Solar Advanced Control Low-E glass.

Specialty Glass + Additional Options

Kolbe also offers additional glass options for uniquely decorative windows and doors, including custom solutions and special surface treatments.



Turtle Glass

Achieves turtle code lighting ordinance enforcement while meeting all other NFRC thermal performance standards.*

Please check your local building code ordinances for specific values.

Bird-Safe Glass

Has a pattern or design on the exterior surface of the glass so birds can see the solid barrier. The patterns can range in visibility to humans so the view is not obstructed. Contact your local dealer to request samples and select the best solution for your project.

Tinted, Colored or Patterned

Provides shading, privacy or visual interest.

Finely Crafted

Includes stained, leaded, beveled glass, and more.

Preserve® Film

Where applied to glass surfaces, this film helps protect against scratches during transit and construction. Also helps reduce the time involved in job site clean-up.

Neat+™

Harnesses the sun’s UV rays to break down greenhouse gases, other pollutants, and loosens dirt so water can rinse it away, leaving windows cleaner, longer. A special sputter-coating process makes the glass ultra smooth, so the water “sheets off” more readily than it would on uncoated glass, allowing you to spend less time cleaning.

Not all glass is available for all products.
Please contact your Kolbe dealer for product specifics.
*Visible Transmittance at or below .45.
Neat+ and Preserve are trademarks of Cardinal IG.

Smart Glass

Enhance indoor spaces with a unique option that brings comfort and luxury to any design. Kolbe offers a selection of windows and doors with smart glass that can switch from transparent to obscure on demand – for various levels of privacy when and where you need it.



Easily integrated with smart home and lighting systems, this switchable glass provides modern versatility and dynamic shading – whether ‘on’, ‘off’ or anywhere in between.

Smart glass solutions offer:

- Obscure to transparent glass on demand
- Alternative to fabric, blinds, or other privacy options
- Adjustable shading without obstructing views
- Cooler, more comfortable interiors
- Reduced UV rays, glare & solar reflection
- Extended glass functionality as HD projection surface

Controllers allow customized experiences:

- Control of single or multiple glass units
- Wall-mounted touch panels & remotes
- WiFi enabled for syncing with home automation systems
- Remotes with long-range RF control
- On/off + dimming capabilities

Scan the QR code to
learn more about Kolbe's
smart glass options





How LCG[®] (Light Control Glass) Works

Premium Polymer Dispersed Liquid Crystal (PDLC) films are laminated between two pieces of glass to create switchable smart glass. To switch glass from obscure to transparent, electricity is applied to the PDLC films with controllers located within the building structure. When the glass is turned 'on', the liquid crystals align to allow light to pass through for transparency. When the glass is turned 'off', the liquid crystals scatter, partially blocking or obscuring the light. Dimming capabilities are an option to allow various degrees of light and visibility.



Smart Glass Color Options

Create the atmosphere you desire while complementing your décor. For further personalization of interior spaces, you can choose from White or Gray smart glass in your windows or doors.



White

Gray

The Kolbe products listed below are available with the Gauzy LCG[®] Smart Glass option:

Ultra Series

- Crank-out casements
- Crank-out awnings
- Direct sets* (ogee, beveled, geometric, radius)
- Corner direct sets
- Swinging doors**

VistaLuxe WD LINE

- Direct sets* (rectangular, geometric, radius)
- Corner direct sets

Forgent[®] Series (All Glastra)

- Crank-out casements
- Crank-out awnings
- Direct sets* (rectangular, geometric, radius)

NOTES:

Not all available products are listed. Impact performance products are not available with Gauzy smart glass options.

White and Gray tint options will vary in size availability. Please see your dealer for more information.

* Limitations apply; not all shapes are available. Factory approval required. Please consult your local Kolbe dealer for product specifics.

** Door products are available with 4.5" x 4.5" Brushed Chrome commercial grade hinges only.

LCG[®] is a registered trademark of Gauzy Ltd.



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KOLBE

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We're for the visionaries.®

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