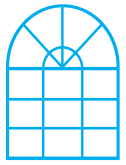




the **Trinity** collection



Performance that
lasts for *generations.*



Joyce Promise

In 1955, our co-founder named his start-up company after his wife Joyce. Her support and commitment to excellence set the foundation for quality products that are crafted to enhance your home for generations.

Today we continue her vision through state-of-the-art-manufacturing facilities that enable us to concentrate on the details that matter. Manufacturing quality products designed to custom fit your home, complement your style, and enhance your living space.



3 Generations Strong



Limited Lifetime
Transferable Warranty



Building Quality Home Improvement
Products Since 1955



99% of Waste is Recyclable



Dealer Network



Windows



Sunrooms



Patio Doors



Premium Vinyl Advantage

All our window and door products are made with a proprietary vinyl formulation to ensure the optimum in product quality, performance, and durability. This formulation includes a special UV inhibitor that helps provide superior weather-resistance to keep the windows installed in your home beautiful year after year. Vinyl is virtually maintenance-free to ensure years of ease. The frames and sashes easily clean with mild detergent and water. Vinyl's thermal and sound insulating properties enhance the energy efficiency of your home while taming outside noises.



Scratch resistant



Color retention



Sound absorption



Strong and durable



Low/no maintenance



Superior thermal efficiency



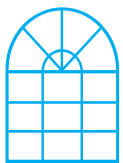
Affordable



Recyclable



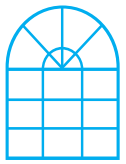
Moisture resistant



Testing and Approval

All of our products have been third-party tested, exceeding industry standards.





Features

Constant Force Balancing

Stainless steel **clock-spring balance system** lets you lift a 20 lb. sash with a single finger.

Lock & Tilt Hardware

Modern recessed tilt latches simplify exterior cleaning. Plus, the color-matched, heavy duty zinc cam locks are **pick-resistant**, providing added safety and security.

Composite Reinforcement

Our **C-Core Technology** has structural performance grades that exceed 200mph winds, 12% more thermal efficient than aluminum, and is completely recyclable.

Fully Fusion Welded

A **four-point welding process** creates one solid cohesive unit that withstands the harshest wind and structural loads.



Multi-Chamber Extrusions

Engineered frames feature **multiple chambers** for structural performance and improved efficient thermal barriers.

Foam-Filled

Optional **high-density foam** in the frame and sash cavities to provide superior energy efficiency.

Completely Weathertight

Double-fin weather stripping at the interior & exterior barriers protect against air/water infiltration, creating a tight seal.

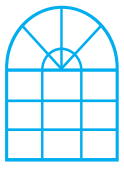
Exceptionally Strong Screens

Standard **extruded aluminum half screen** is 10x stronger than roll form, with optional upgrade to full or FlexScreen.

Superior Sill Design

Truly **sloped sill** design naturally sheds water away from your home. Plus our **weep fortification** system adds extra protection eliminating ice or water backup.





SmartShield Glass Performance

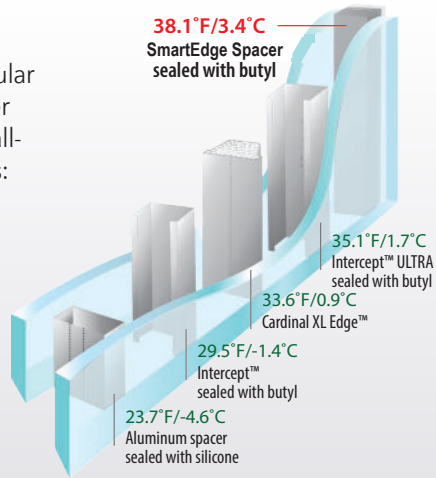


Utilizing our SmartShield technology, we are able to offer you superior glass options, tailored specifically to the area you live in. During cold winter months, low-emissivity (LoE) coatings with SmartEdge Spacer greatly reduce heat loss by reflecting radiant heat back into your home - which helps with comfortable indoor temperatures, and reduces the need for excessive heating. During the summer months, LoE coatings reflect away the sun's heat, keeping your electricity costs lower, and your home cooler.

SmartEdge™ Spacer

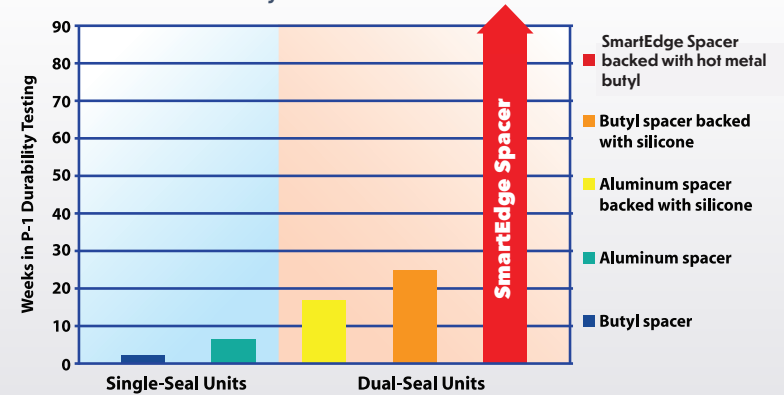
Best in its class, this structural cellular polymer outperforms other spacer systems on the market due to its all-around performance and benefits:

- Multi-layer vapor barrier
- Non-dissipating argon gas
- Sound absorption
- Primary acrylic sealant
- Mold prevention
- Secondary structural sealant



SmartEdge Spacer sealed units have been shown to have up to nine times the life expectancy of single-seal insulating glass systems available on the market today.

The P1 test, the world's toughest insulated glass durability test, exposes units to 140°F (60°C), 95-100% humidity and constant UV bombardment. Each week of testing is approximately equivalent to one year of field use. SmartEdge Spacer units have tested to show a loss of less than 1% argon gas in 5 years of service life simulation.



Cleaner. Greener. Smarter.

Smartshield Glass is formulated with SmartClean, an advanced and permanent coating infused with titanium dioxide (TiO₂). SmartClean helps reduce dirt and debris particles to provide windows with a naturally cleaner view. This anti-static technology delivers up to 40% less buildup of grime and dust without homeowners having to intervene. Water sheets off the surface more quickly, reducing water spots and helping the glass dry faster. By smoothing microscopic imperfections, the TiO₂ layer also makes the glass significantly easier to clean—offering lasting clarity with minimal maintenance. This low impressive coating comes as a standard on all glass packages.

Glass Without Smartshield

Glass With Smartshield



Screen With Water Shed

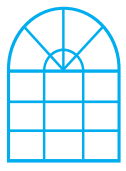
Screen Without Water Shed



Advance The Integral.

We also offer extruded aluminum screens with WaterShed™ Technology, designed to repel water so it beads and rolls off effortlessly—ensuring a crystal-clear view in any weather. Homeowners can enjoy uninterrupted scenery year-round, without the hassle of upkeep.

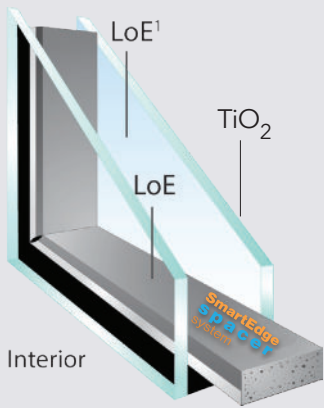
For added convenience and flexibility, FlexScreen™ is available as an upgrade on select window styles. Ask your Joyce representative to learn more.



SmartShield Glass Packages

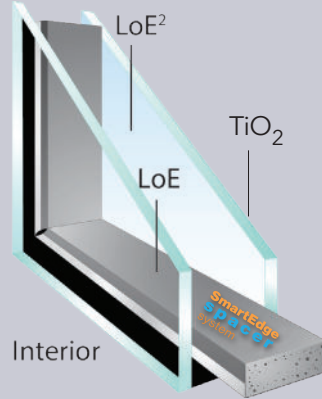
As an ENERGY STAR® partner, we are committed to excellence by producing top-quality, energy-efficient windows and patio doors that surpass their rigorous standards. Our products are independently tested and certified to meet the EPA's strict energy-efficiency criteria. By collaborating with the ENERGY STAR program, our engineers have developed products that not only save energy but also deliver exceptional value to you.

J11 with SmartShield



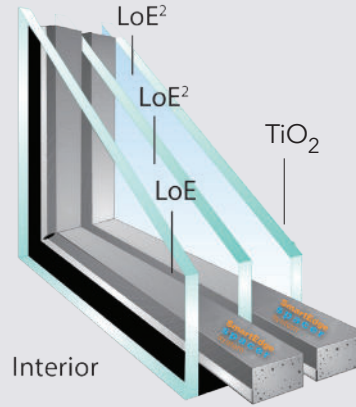
- 56% More Efficient in Winter
- 22% More Efficient in Summer
- 73% UV Rays Blocked

J21 with SmartShield



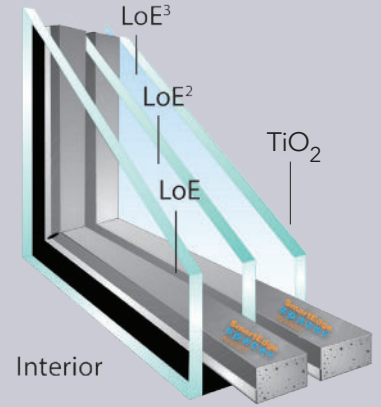
- 59% More Efficient in Winter
- 55% More Efficient in Summer
- 86% UV Rays Blocked

TJ221 with SmartShield



- 68% More Efficient in Winter
 - 55% More Efficient in Summer
 - 94% UV Rays Blocked
- Most Efficient 2025**
ENERGY STAR
www.energystar.gov
- Northern Zone
North-Central Zone
South-Central Zone
Southern Zone

TJ321 with SmartShield

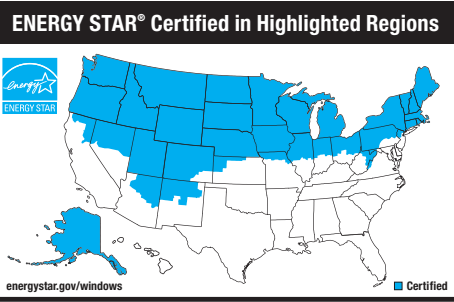


- 70% More Efficient in Winter
 - 69% More Efficient in Summer
 - 98% UV Rays Blocked
- Most Efficient 2025**
ENERGY STAR
www.energystar.gov
- North-Central Zone
South-Central Zone
Southern Zone

J11 with SmartShield Performance Ratings

U-Factor (U.S./I-P)	Solar Heat Gain Coefficient	Visible Transmittance	Air Leakage (U.S./I-P)
0.24	0.48	0.59	≤0.3

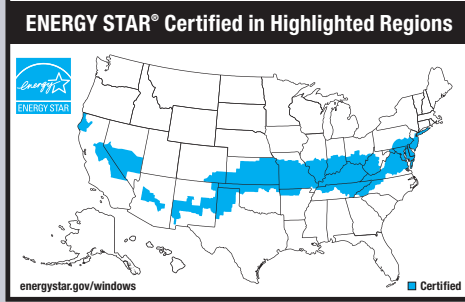
Manufacturer stipulates that these ratings conform to applicable NFRC procedures for determining whole product performance. NFRC ratings are determined for a fixed set of environmental conditions, and a specific product can NFRC document recommended by product and does not warrant the suitability of a product for specific use. Consult manufacturer literature for other product performance information. www.nfrc.org



J21 with SmartShield Performance Ratings

U-Factor (U.S./I-P)	Solar Heat Gain Coefficient	Visible Transmittance	Air Leakage (U.S./I-P)
0.23	0.28	0.52	≤0.3

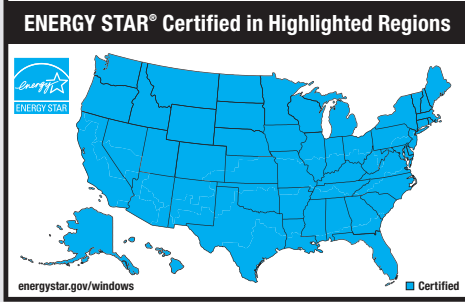
Manufacturer stipulates that these ratings conform to applicable NFRC procedures for determining whole product performance. NFRC ratings are determined for a fixed set of environmental conditions, and a specific product can NFRC document recommended by product and does not warrant the suitability of a product for specific use. Consult manufacturer literature for other product performance information. www.nfrc.org



TJ221 with SmartShield Performance Ratings

U-Factor (U.S./I-P)	Solar Heat Gain Coefficient	Visible Transmittance	Air Leakage (U.S./I-P)
0.20	0.22	0.41	≤0.3

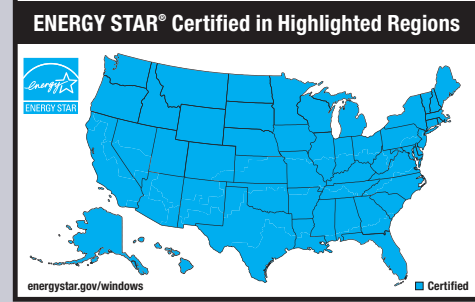
Manufacturer stipulates that these ratings conform to applicable NFRC procedures for determining whole product performance. NFRC ratings are determined for a fixed set of environmental conditions, and a specific product can NFRC document recommended by product and does not warrant the suitability of a product for specific use. Consult manufacturer literature for other product performance information. www.nfrc.org



TJ321 with SmartShield Performance Ratings

U-Factor (U.S./I-P)	Solar Heat Gain Coefficient	Visible Transmittance	Air Leakage (U.S./I-P)
0.19	0.17	0.38	≤0.3

Manufacturer stipulates that these ratings conform to applicable NFRC procedures for determining whole product performance. NFRC ratings are determined for a fixed set of environmental conditions, and a specific product can NFRC document recommended by product and does not warrant the suitability of a product for specific use. Consult manufacturer literature for other product performance information. www.nfrc.org



NFRC values shown above are for double-hung windows with foam filled frame and sash. Performance ratings may vary based on grids, glass strength, or other options. % calculations are compared to a dual insulated clear glass unit. Other glass packs, including triple glaze, are also available.

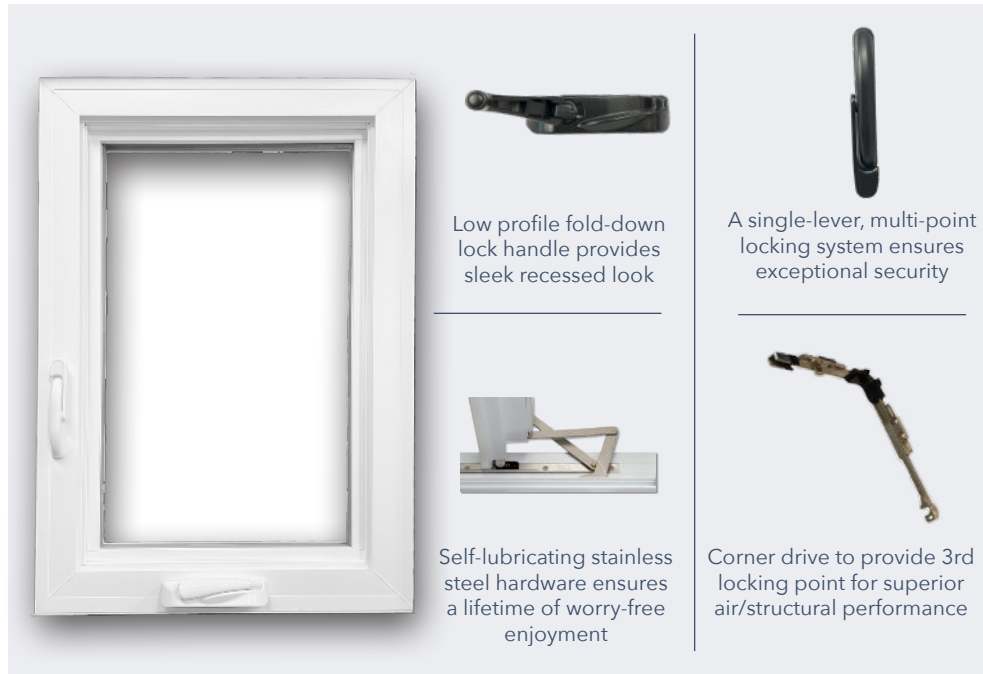


Casement *and* Awning

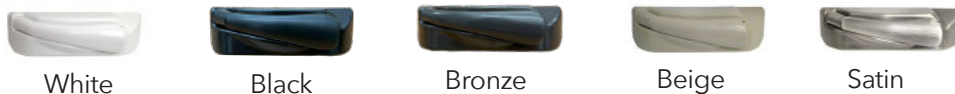
Enjoy the many benefits of our innovative casement design. This style allows for a fuller view from inside the home, all while being extremely easy to operate. With multiple hardware upgrades, this casement is our best version yet.

- Effortless functionality and minimized operating force with ergonomically engineered crank handle and operator system.
- Integrated corner drive delivers seamless additional locking points, enhancing security and structural integrity.
- Adjustable lock pins and operators allow for a precise, tailored fit in every opening.
- Premium engineered hardware designed for long-lasting performance, creating a superior seal that virtually eliminates air and water infiltration.

Features and Benefits



Hardware Color Options



Lockout Crank Handle

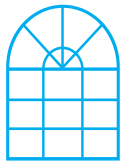
- Locks in place with audible “click” when operating for more stability.
- Made with zinc hardware for extra durability and corrosion resistance.
- Sleek, modern design tucks neatly into cover cap when not in use for a clean, streamlined appearance.

Corner Drive

- Additional head lock bar improves sealing and security at the top of the frame.
- Integrates seamlessly with the full-length lock and tie bar assembly for smooth, reliable operation.
- Boosts structural performance with added locking engagement.
- Positioned opposite of hinge, providing a dedicated locking point 3” from top corner.
- Standard on units over 93 united inches or taller than 60” – available as an optional upgrade on smaller sizes.

Operator

- Bi-directional fastening system (four vertical and two lateral screws) ensures stability and eliminates rocking during operation.
- Smooth, effortless operation with reduced force required at the crank handle.
- Durable powder-coated finish resists corrosion, while low-friction components minimize effort during use.
- Easily adjusts with Allen wrench for convenience and precision.
- Roller sash lift realigns the sash smoothly back into position, ensuring square operation and reducing drag if any misalignment occurs.



Bow & Bay Windows

Add an exceptional architectural focal point to your exterior! Or better yet, expand your interior living space with a bay or bow window.

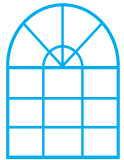
- Hand-selected, furniture-grade oak or birch can be custom finished to match any interior laminate or vinyl color.
- Picture window casing and stops can be pre-mitered and custom finished for the perfect look.
- Internal PVC panning system for protection against ice and water.
- Roof hips, when applicable, can be pre-made and shingled to match.
- Optional recessed LED lights create the perfect ambiance.
- Possibilities are endless with degrees, finishes, window styles, and options.



R9 insulated Super Seat comes standard



- Timberstrand laminated structural mullions provide superior strength and support
- Exterior color-matched cladding comes standard

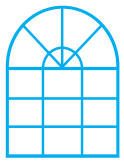


Sliding Windows

Sliding windows are great for openings that are more wide than tall, which can offer an expansive, unobstructed view of the outdoors, while providing plenty of fresh air.

- Fully-welded, multi-chambered construction for superior structural performance.
- Polyurethane foam filled frames and sashes for the best energy efficiency.
- C-Core reinforcement at the meeting rail for superb structural & thermal performance.
- Double-fin weather stripping to create a tight seal against air & water infiltration.
- Color-matched, heavy-duty zinc cam locks offer pick-resistant security.
- Dual brass rollers that ensure decades of smooth, easy operation.
- Lift-out sashes that make cleaning the exterior glass exceptionally easy.
- Extruded aluminum screen frame with fiberglass mesh for 10x more strength.

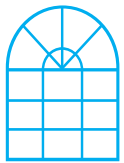




Picture Windows

Enjoy the wide-open, panoramic views and abundance of natural light that picture windows will bring to your home. Picture windows are non-operable and feature a single-frame design that makes them the most airtight window style you can purchase.

- Fusion welded, multi-chamber design for structural and thermal performance.
- Polyurethane foam filled frame for rigidity and enhanced thermal efficiency.
- The superior frame design with a weep fortification system gives you an extra bonus layer of protection against any water or ice infiltration.
- The slimline profile maximizes your viewing area without jeopardizing strength or efficiency for a lifetime of enjoyment.

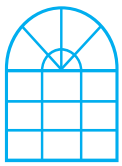


Specialty Shapes

Specialty shape windows are customized in a limitless array of different geometric patterns. They allow you to select a shape that complements the style of your home or to replace an existing specialty window you currently have. They are often used as architectural accents to enhance the visual appeal of your home. When strategically placed, they draw the "Aha!" moment as a focal point, or add a unique touch to your architecture.

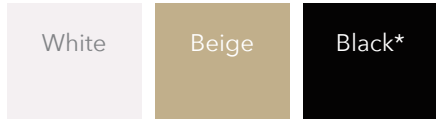
- Full selection of geometric shapes and configurations, including but not limited to: Circle, circle tops, eyebrows, arched, octagons, triangles, pentagons, and more!
- Accessory grooves allow for shape patterns to be mulled to other window styles to give the appearance of a single unit.
- Multiple chamber frame design for better thermal performance.
- The slimline profile maximizes your viewing area without jeopardizing strength or efficiency for a lifetime of enjoyment.





Options *and* Finishes

Interior/Exterior

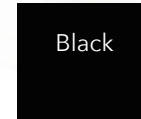


*Acrylic coating.

Interior Woodgrains

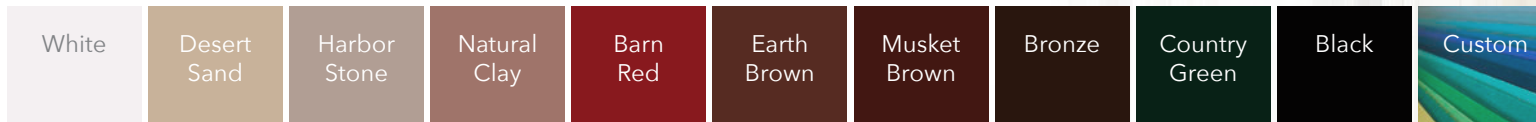


Exterior Laminate



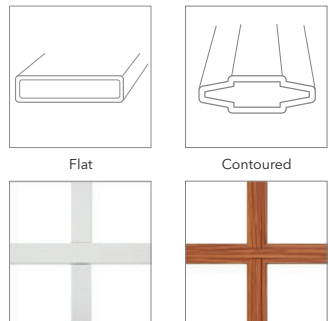
Available on casements and awnings only.

Prizm: Exterior Acrylic Coating



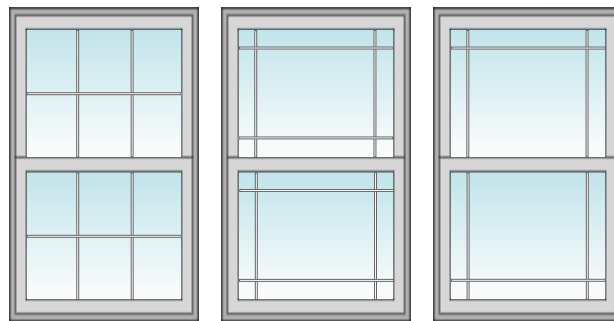
The colors represented in this brochure are for illustrative purposes only and do not reflect the actual colors. Please refer to a certified Joyce color swatch ring for an accurate representation.

Grids



Custom grids and other finishes available.

Window Grid Patterns



Colonial

Prairie

Perimeter Prairie

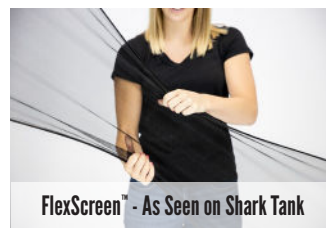
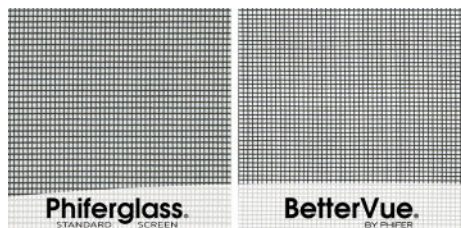
Hardware Upgrades[†]



Black

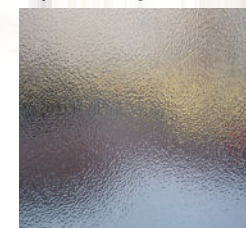
Satin Nickel

Screens

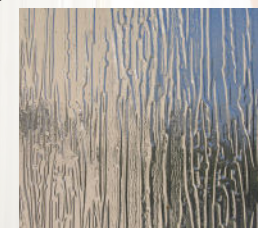


Screens available in half or full window. All screens - including FlexScreen™ - include Water Shed Technology™.

Specialty Glass Options



Obscure



Rain

Tempered and laminated glass available for all glass options.

[†]Black hardware is not available on interior woodgrains. Not all options or finishes are represented. Please see your Joyce dealer for further details.



Warranties We Stand Behind*

- Limited Lifetime Transferable Warranty
- Lifetime Glass Seal Failure
- Supplemental Lifetime Glass Breakage

*Celebrating 70 Years
of Excellence in 2025*



Windows • Patio Doors • Sunrooms

*See actual warranties for full details.



Scan the QR Code to Learn More
About Our Trinity Collection!



Scan to Use Our
3D Window Visualizer

1125 BEREA INDUSTRIAL PARKWAY • BEREA, OH 44017 • (800) 824-7988 • WWW.JOYCEMFG.COM

©2025 Joyce Manufacturing Co., Inc. All rights reserved. We may amend, update, or otherwise make changes without notice. All photos and illustrations are property of Joyce Manufacturing Company, Inc., and approved vendors.

Cardinal Glass: Values are calculated BTU Heat Loss and Gained using Cardinal Glass' Technical Glass Guide 3.0 (p. 12) according to NFRC environmental conditions. Double-pane IG dimensions: 1/2" airspace, 90% argon filled for LoE products. Coatings on #2 and #4. Triple-pane IG construction: 1/2" airspace, 90% argon filled for LoE products. Coatings on #2, #4, and #6. NFRC conditions- 0°F outside, 70°F inside were used for all calculations. All airspaces were 9/16" with 100% argon filling. Super Spacer® and Duralite® are registered trademarks of Quanex Building Products. Source of P1 Test Results: Glass Digest, November 1992, Test RLS08006B. SmartEdge Spacer: Simulations performed by WSP Canada Ltd. using Window 7.4 and Therm 7.4, according to NFRC 100-2014 and NFRC 200-2014. All models were 1200 x 1500 mm (approx. 48" x 60") and NFRC-2010 conditions – 0°F outside, 70°F inside – were used for all simulations. Low-e glass for double-pane IG was Cardinal Low-E³ 270; low-e glass for triple-pane IG was Cardinal Low-E³ 366. All air spaces 0.500" wide, with 90% Argon fill. Doubles were modeled as IG units only and in Mikron 1400 series SSTDH; triples were modeled as IG only and in Mikron 10700 (EnergyQuest) series SSTDH. Secondary sealant materials and depths are as listed. Temperature values shown are from modeling results, and were measured at the sightline (SL) and at 0.5" above the sightline (SL+½"). thick. SmartEdge Spacer®, Duralite® and Durasel® are registered trademarks of Quanex Building Products. XL Edge™. [QBP17M00614] Smartshield: Smartshield is the intellectual property of Joyce Manufacturing Company. Intercept® and Intercept Ultra® is a registered trademark of Vitro® Architectural Glass. Flexscreen™ is a trademark of Reflex Brands. Phiferglass®, Phifer®, and Water Shed Technology™ are registered trademarks of Phifer. Duo Tilt™ is a trademark of Roto Frank of America. 0050625 NORTH