

VWF

VINYL WINDOWS FASHION INC.

WINDOWS | DOORS | SHUTTERS | BLINDS



About Us

Welcome to Vinyl Windows Fashion Inc., your trusted source for premium, energy-efficient window solutions. As a reputable custom window manufacturer with years of industry experience, we are committed to crafting products that not only elevate the aesthetic appeal of your space but also enhance durability and performance.

At Vinyl Windows Fashion Inc., we combine innovative design with advanced manufacturing techniques to deliver windows that meet the highest standards of quality and efficiency. Whether you're building new, renovating, or replacing, our wide range of customizable options ensures the perfect fit for every project.

We take pride in offering outstanding craftsmanship, reliable service, and long-lasting value—helping homeowners and professionals alike create beautiful, comfortable, and sustainable environments.



Built to Weld. Engineered to Last

Our cutting, welding and corner cleaning machinery is designed for precision, durability, and performance in the toughest industrial environments. From fabrication shops to large-scale manufacturing, every piece of equipment is crafted to deliver consistent results, reduce downtime, and stand the test of time. When reliability matters, we build machines that work as hard as you do.



TABLE OF CONTENTS

05

Our Commitment

26

Architectural Shapes

28

Cross Section

34

Custom Colors

44

Manufacturer's Warranty

06

Window Profiles

27

Double Pane and Triple Pane Glass

30

Hardware Systems

35

Glass Options

OUR COMMITMENT

Quality Assurance:

We understand that investing in windows is a significant decision for our customers, which is why we place a strong emphasis on ensuring the quality of every product that leaves our facility. Our window frames are crafted using PVC, with a guarantee that our vinyl extrusions are made from 100% virgin PVC powder. Our commitment to excellence is evident in the meticulous attention to detail and precision that goes into every step of the manufacturing process.

Design and Personalization Options:

We offer a wide array of customization options to cater to your individual style and preferences. We believe that your home should reflect your unique personality, which is why we offer various styles of window profiles, grills, colors, hardware, glass, and more. Our expert team will work closely with you to provide flexibility in creating windows that bring your vision to life, ensuring that they seamlessly fit into your space.

Exceptional Customer Service:

We recognize that exceptional customer service is crucial for a successful partnership. At VWF, we strive to provide you with the best experience possible. From your initial contact with us, our knowledgeable team will guide you through the entire process, address your queries, offer expert advice, and ensure that your experience with us is smooth and enjoyable. Customer satisfaction is our utmost priority.

Energy Efficiency:

In today's competitive world, we recognize the significance of energy efficient products. That's why our windows are manufactured and constructed to maximize thermal performance, reduced energy consumption, maximize airtightness and lower utility costs. Our windows have better insulation properties, low-emissivity glass, and weather-resistant seals to keep your space comfortable year-round.

Connect With Us:

We invite you to connect with our knowledgeable team to discuss your window requirements, request a quote, or schedule a consultation. We look forward to partnering with you to bring your vision to life and provide you with exceptional products that enhance the beauty and functionality of your space.



Casement



Our casement windows stand out for their exceptional energy performance, thanks to their construction using 100% virgin PVC compound and an innovative multi-chamber design that enhances thermal efficiency. Also known as crank windows, this style is highly favored by homeowners throughout Canada. Casement profile windows feature a hinge on one side and open outward using a crank mechanism. Not only are they known for their aesthetic appeal and versatility, but they can also be tailored to suit a variety of architectural styles.

Key Features:

Maximum Energy Efficiency

Casement offers maximum energy efficiency through multiple weatherstripping and sealing points helping to prevent cold drafts and saves energy costs.

Excellent ventilation

Casement windows open outward at 90-degree angle allowing maximum airflow and improved indoor air quality.

Enhanced Security

Premium multi-point locking systems, makes them more secure compared to other types of windows.

Noise reduction

Reduce outside noise infiltration due to their tight seals and insulation properties creating a quieter and more peaceful indoor environment.

Thermal efficiency

All sealed units come with standard Low E coating, filled with argon gas for better thermal efficiency, keeping you cool in summer and warm in winter.

Design Versatility

Casement windows are available in a variety of combinations, colors, grills, and finishes, allowing you to choose options that match your home's style.

Customization Options

Customized painting, glass, and grill options are available to suit your specific design preferences.

Casement





Awning

With fusion welded corners and an interior multi chamber built, the Awning profile enhances the energy performance of the windows. Triple Weather Sealing System and bulb seals further improve energy efficiency. Awning window is hinged at the top and opens outward from the bottom at 45-degree angle, creating an awning-like effect. This style provides improved airflow in kitchens, bathrooms, and other places prone to elevated humidity levels.

Key Features:

Easy Operation with Crank Mechanism

This window is operated by a crank mechanism that allows you to easily open and close the window with the crank handle typically located at the bottom.

Superior Ventilation and Weather Protection

Awning windows are known for their excellent ventilation capabilities. When opened, they create a slanted opening that allows fresh air to enter while keeping snow and rainwater out - ideal for maintaining airflow even during light rain.

Enhanced Security Features

When closed and locked, the sash presses tightly against the frame, making it difficult to pry open from the outside. These windows also come equipped with multi-point locking systems for added security.

Energy Efficiency and Thermal Performance

All sealed units come with a standard Low-E coating and are filled with argon gas for better thermal efficiency—helping keep your home cool in the summer and warm in the winter.

Design Versatility

Awning windows are available in a variety of combinations, colors, grills, and finishes, allowing you to choose options that match your home's style.

Customization Options

Customized painting, glass, and grill options are available to suit your specific design preferences.

Awning





Fixed Casement

Fixed Casement also known as High Fixed, this profile combines the features of a casement window with the functionality of a fixed window. They give a similar appearance to a casement window with sash, except the sash is not operable. They are designed to be structurally sound and provides superior air tightness to the homeowners.

Key Features:

Superior Energy Efficiency

Fixed windows are known for their excellent energy efficiency. Due to their larger surface area and non-operable design, they often have better energy-saving ratings. Homeowners should look for fixed windows with low U-values and high energy efficiency ratings.

Ideal for Well-Ventilated Spaces

These windows are a perfect choice for rooms that already have proper airflow and ventilation, as they do not open.

Unobstructed Views and Natural Light

With a large fixed glass pane, these windows offer unobstructed views and allow maximum natural light into your home, enhancing both brightness and visibility.

Thermal Efficiency

All sealed units come with a standard Low-E coating and are filled with argon gas for enhanced thermal performance—keeping your home cooler in summer and warmer in winter.

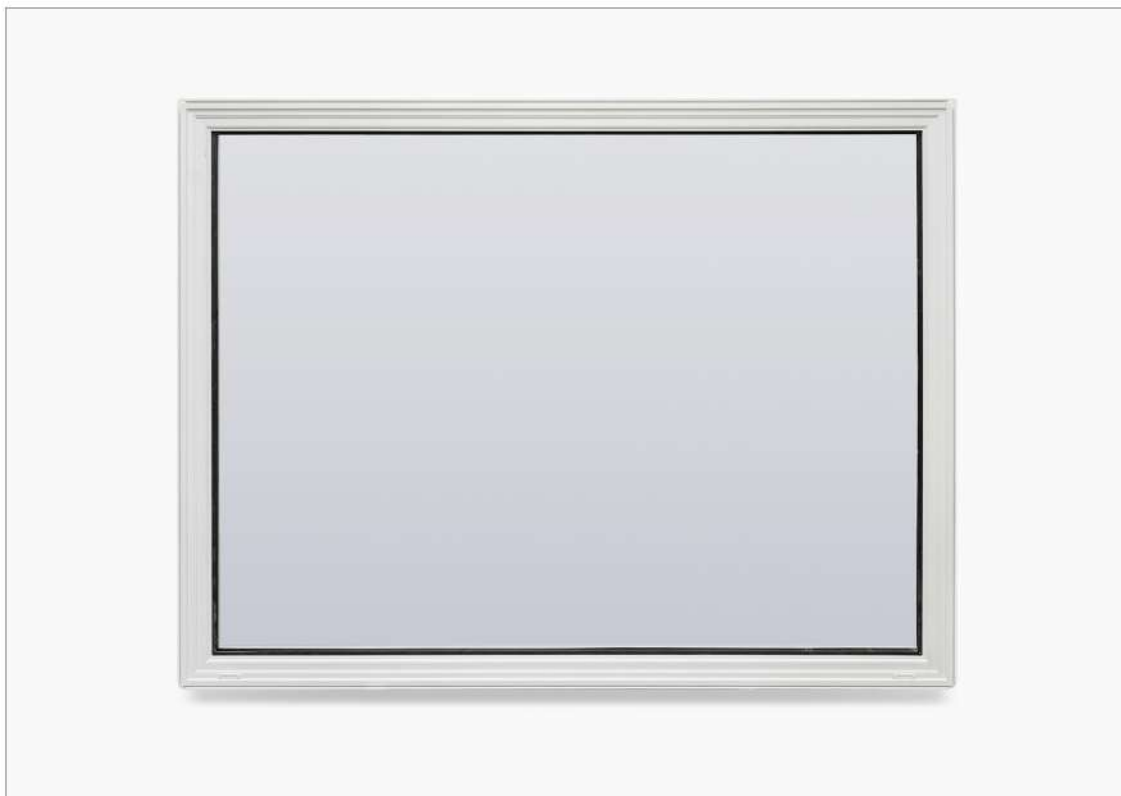
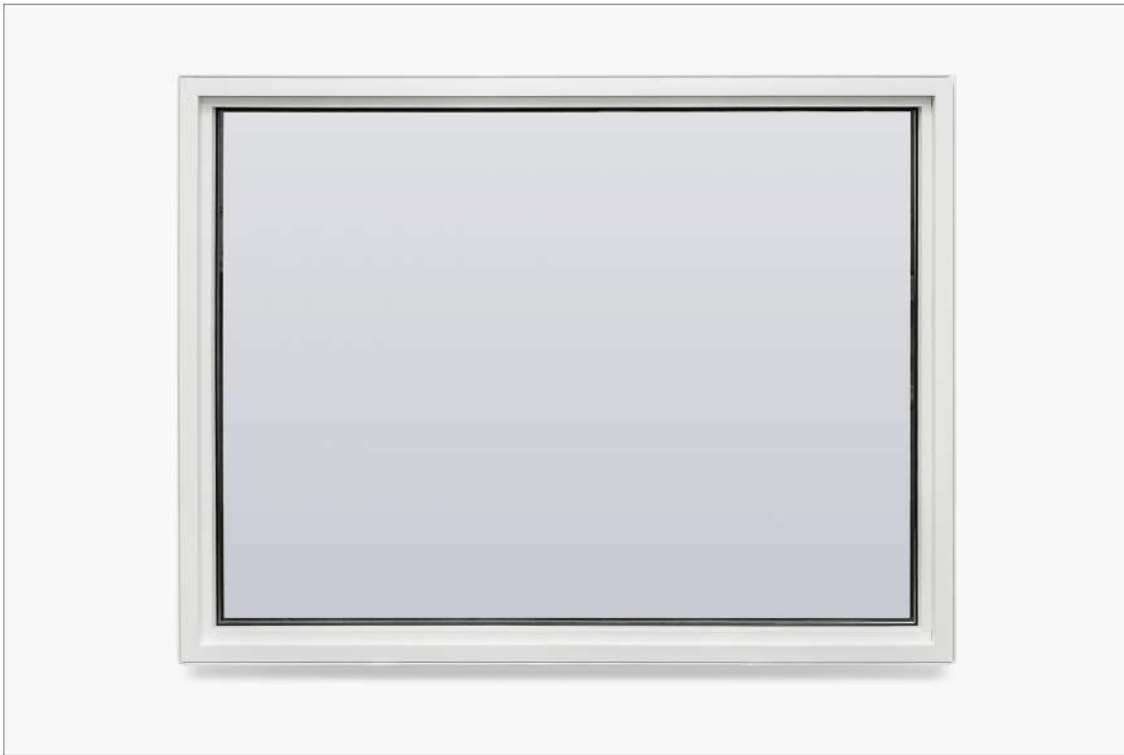
Design Versatility

Fixed Casement windows are available in a variety of combinations, colors, grills, and finishes, so you can choose options that best suit your home's style.

Customization Options

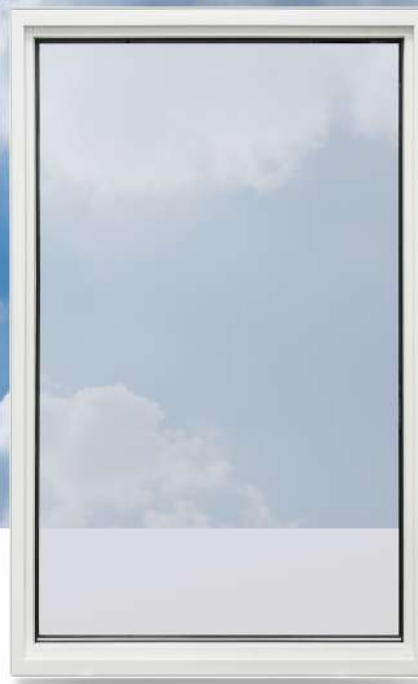
Customized painting, glass, and grill options are available to suit your specific design preferences.

Fixed Casement





Slim Fix



Slim Fix windows, also known as small fix or picture windows, feature a slim frame design that provides a sleek, modern appearance. This window profile is an excellent match for slimmer slider and hung window profiles.

Key Features:

Sleek Design with Maximum Glass Area

Slim Fix windows are characterized by their narrow frame profiles, which allow for a larger glass surface. This results in unobstructed views and more natural light entering the space.

Energy Efficiency

These windows offer good energy efficiency. The vinyl material provides excellent insulation, helping to maintain a comfortable indoor temperature year-round.

Versatile Customization

Despite their slim profile, vinyl slim fix windows can be customized to fit various shapes and sizes. You can choose this profile to fit distinctive styles or combinations depending on your preferences and the needs of your space.

Thermal Efficiency

All sealed units come with a standard Low-E coating and are filled with argon gas to improve thermal performance—keeping your home cool in the summer and warm in the winter.

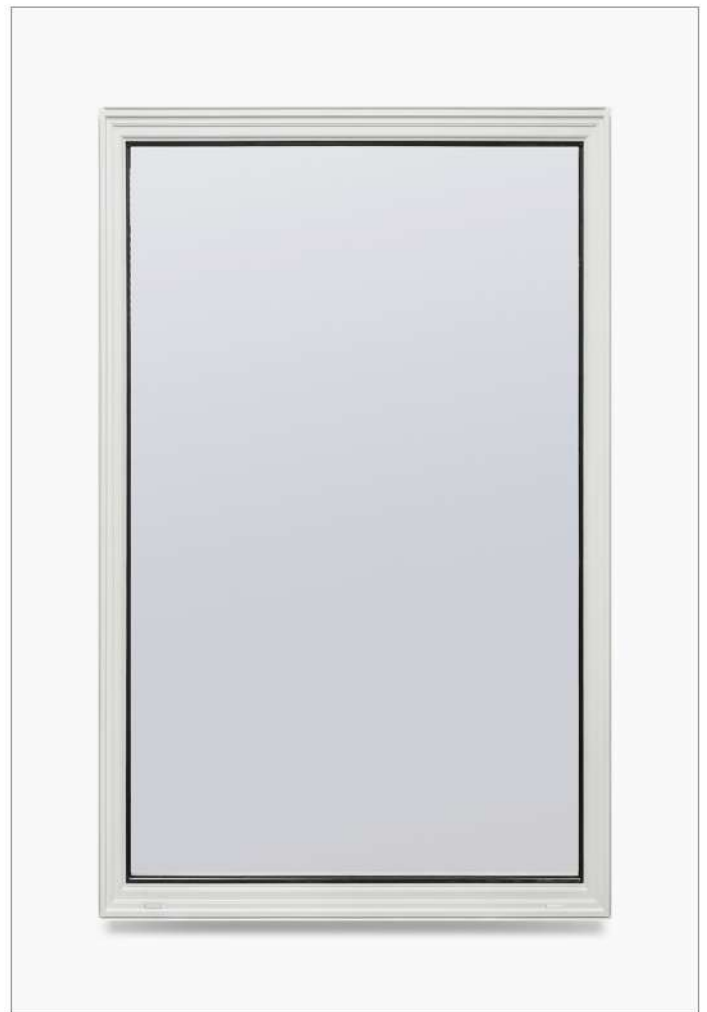
Design Versatility

Slim Fix windows are available in a variety of combinations, colors, grills, and finishes, allowing you to choose options that match your home's style.

Customization Options

Customized painting, glass, and grill options are available to suit your specific design preferences.

Slim Fix





Single Slider

This window style is a popular choice among homeowners due to its swing-in shoe mechanism, which allows the sash to slide smoothly and let fresh air in. This profile offers a tilt-in or lift-out option, making maintenance and cleaning easy and convenient.

Key Features:

Smooth Horizontal Operation

Single slider windows feature a horizontally sliding sash that glides smoothly on a track, allowing for easy opening and closing with minimal effort.

Weather-Resistant and Durable

These windows are known for their durability and resistance to extreme weather conditions. They are designed to withstand rain, wind, and prolonged sun exposure.

Noise Reduction

The multi-chambered frames, integrated weatherstripping, and double-pane glass contribute to sound insulation, creating a quieter and more comfortable indoor environment.

Cost-Effective Solution

Single slider windows are generally more affordable than other window styles, making them a budget-friendly option for homeowners looking to replace multiple windows or retrofit their entire home.

Thermal Efficiency

All sealed units come with a standard Low-E coating and are filled with argon gas to enhance thermal performance—keeping your home cooler in summer and warmer in winter.

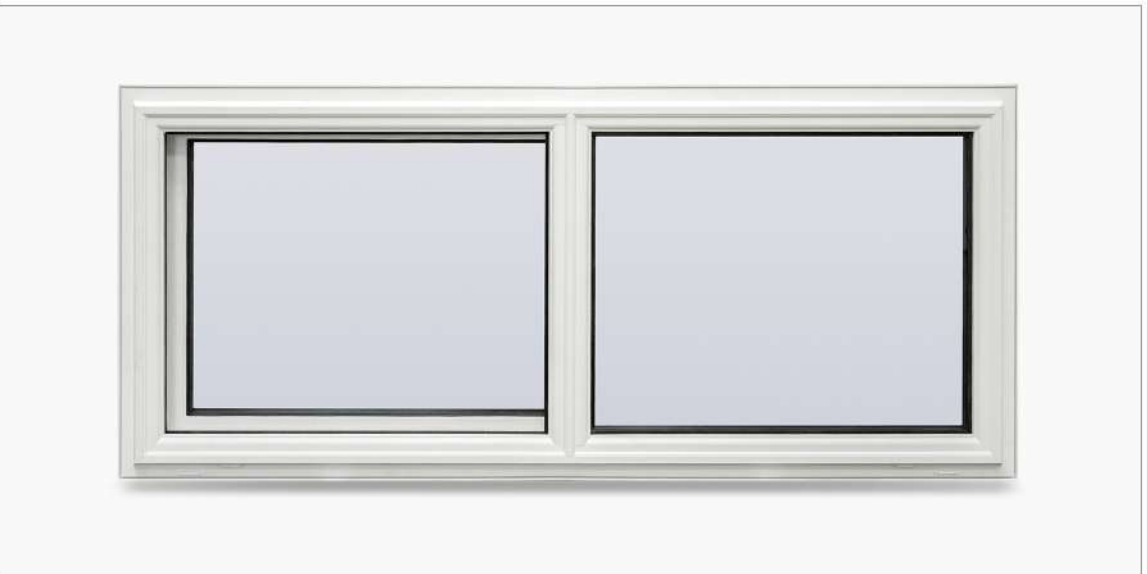
Design Versatility

Single Slider windows are available in a variety of combinations, colors, grills, and finishes, allowing you to choose options that match your home's style.

Customization Options

Customized painting, glass, and grill options are available to suit your specific design preferences.

Single Slider





Single Hung



Single Hung also known as vertical sliders, offer a traditional look that enhances the overall appeal of a home. They are a popular choice for homeowners who wish to preserve the classic beauty of their homes.

Key Features:

Classic and Timeless Design

This profile features two sashes: the bottom sash is operable, while the top sash remains fixed. The design brings a timeless elegance to any space.

Controlled Ventilation

The operable bottom sash allows for upward sliding to let in fresh air, while maintaining security and energy efficiency—even when partially open.

Insulated Frame with Handcrafted Appearance

The multi-chambered frame and sash design improves insulation, helps prevent condensation, and delivers a handcrafted look thanks to its exclusive contoured profile.

Easy Maintenance

Cleaning and maintaining single hung windows is simple, as only the bottom sash moves. This makes them easy to operate and upkeep.

Space-Saving Functionality

Because they do not open outward or inward, single hung windows are ideal for areas with limited exterior clearance, such as walkways, balconies, or patios.

Thermal Efficiency

All sealed units include a standard Low-E coating and are filled with argon gas, enhancing thermal performance and maintaining indoor comfort year-round.

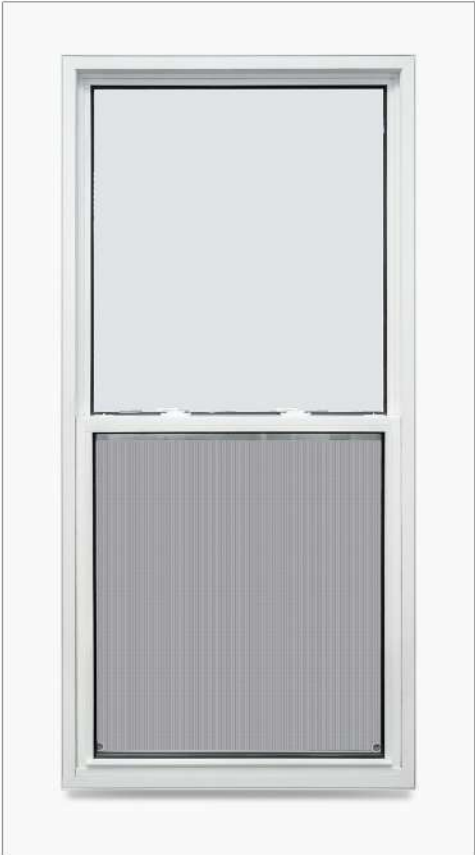
Design Versatility

Single Hung windows are available in a variety of combinations, colors, grills, and finishes, allowing you to choose options that match your home's style.

Customization Options

Customized painting, glass, and grill options are available to suit your specific design preferences.

Single Hung





Double Slider

Double Slider also known as horizontal sliders, these windows are a versatile option that suits a wide range of egress requirements and architectural styles. This window type is especially popular among Canadian homeowners, as both sashes can slide left or right—offering full control over airflow in both small and large spaces. The profile also includes a tilt-in or lift-out feature for easy cleaning and maintenance.

Key Features:

Flexible Ventilation Options

Double slider windows allow you to slide either or both sashes, giving you customizable airflow based on your comfort and ventilation needs.

Unobstructed Views & Natural Light

With no vertical bar dividing the center, these windows provide wide, uninterrupted views of the outdoors while maximizing the amount of natural light entering your space.

Energy Efficiency

Double slider windows can be equipped with energy-efficient components that help reduce heat transfer and enhance insulation contributing to lower energy bills.

Easy Maintenance

Both sashes can tilt inward and can also be removed, making it easy to clean the interior and exterior surfaces from inside your home.

Thermal Performance

All sealed units feature a standard Low-E coating and are filled with argon gas for superior thermal efficiency—keeping your home cool in the summer and warm in the winter.

Design Versatility

Double Slider windows are available in a variety of combinations, colors, grills, and finishes, allowing you to choose options that match your home's style.

Customization Options

Customized painting, glass, and grill options are available to suit your specific design preferences.

Double Slider





Double Hung

Double Hung also known as double vertical slider, this profile consists of a window frame and two sashes; both sashes can move up or down, allowing you full control of the air flow. This variable operation has made the double hung favorite among homeowners.

Key Features:

Dual Operable Sashes

Double hung windows feature two movable sashes—one on the top and one on the bottom. Each can be opened independently, providing excellent ventilation control and airflow customization.

Superior Ventilation Flexibility

By adjusting the position of both sashes, you can create efficient cross-ventilation and better temperature regulation in your living space.

Easy Cleaning & Maintenance

Thanks to the tilt-in or lift-out design, both the interior and exterior glass surfaces can be cleaned easily from inside your home—ideal for upper-storey installations.

Enhanced Security

These windows come with a multipoint locking mechanism that offers increased safety. Optional features such as sash restrictors or night latch locks provide added security, especially for homes with young children or upper-floor windows.

Thermal Efficiency

All sealed units include a standard Low-E coating and are filled with argon gas to boost thermal performance—keeping your home cool in summer and warm in winter.

Design Versatility

Double Hung windows are available in a variety of combinations, colors, grills, and finishes, allowing you to choose options that match your home's style.

Customization Options

Customized painting, glass, and grill options are available to suit your specific design preferences.

Double Hung





End Vent Slider

End vent slider windows are an ideal choice for wide wall openings and rooms that demand expansive views. This design includes three main sections: a fixed center pane and operable sashes on each end. These windows are engineered to be completely watertight and come with fusion-welded frames and a secure locking system.

Key Features:

Optimized Ventilation Design

The operable corner sashes offer excellent airflow, making these windows perfect for rooms where both ventilation and wide views are priorities.

Easy Maintenance

Designed with convenience in mind, the side sashes can be easily accessed and cleaned from inside the home—perfect for upper floors or hard-to-reach areas.

Enhanced Security

End vent slider windows include multi-point locking systems and durable hardware, adding an extra layer of protection to your home and giving you peace of mind.

Ideal for Wide Openings

This window style is especially popular in basements or larger rooms, as the central fixed pane and wide design offer an expansive outdoor view.

Thermal Efficiency

All sealed units are equipped with standard Low-E coatings and filled with argon gas for superior energy performance—keeping your space cooler in summer and warmer in winter.

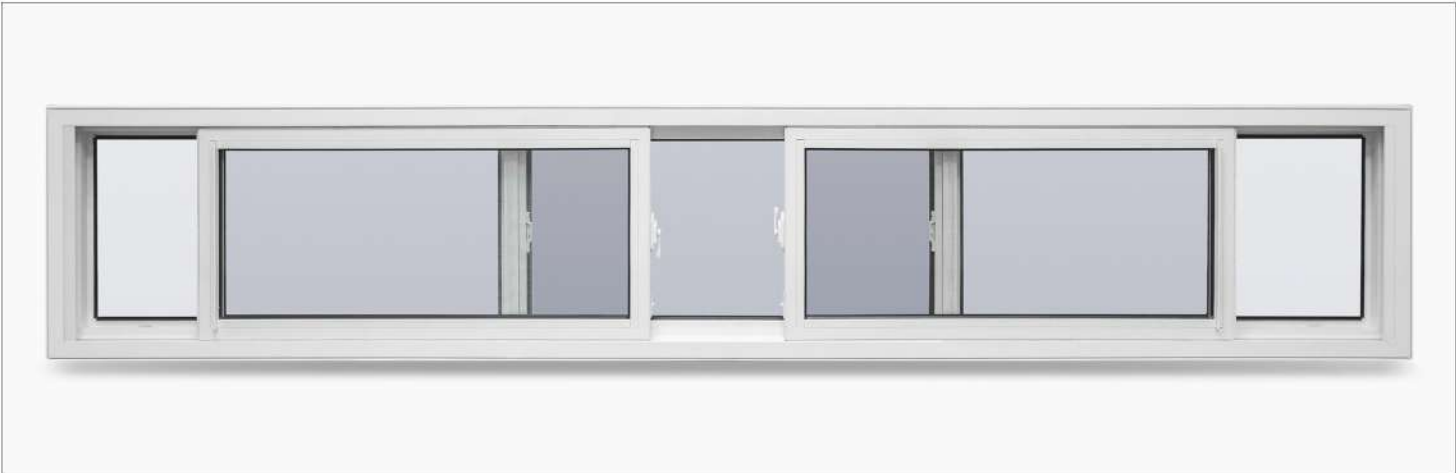
Design Versatility

End Vent Slider windows are available in a variety of combinations, colors, grills, and finishes, allowing you to choose options that match your home's style.

Customization Options

Customized painting, glass, and grill options are available to suit your specific design preferences.

End Vent Slider

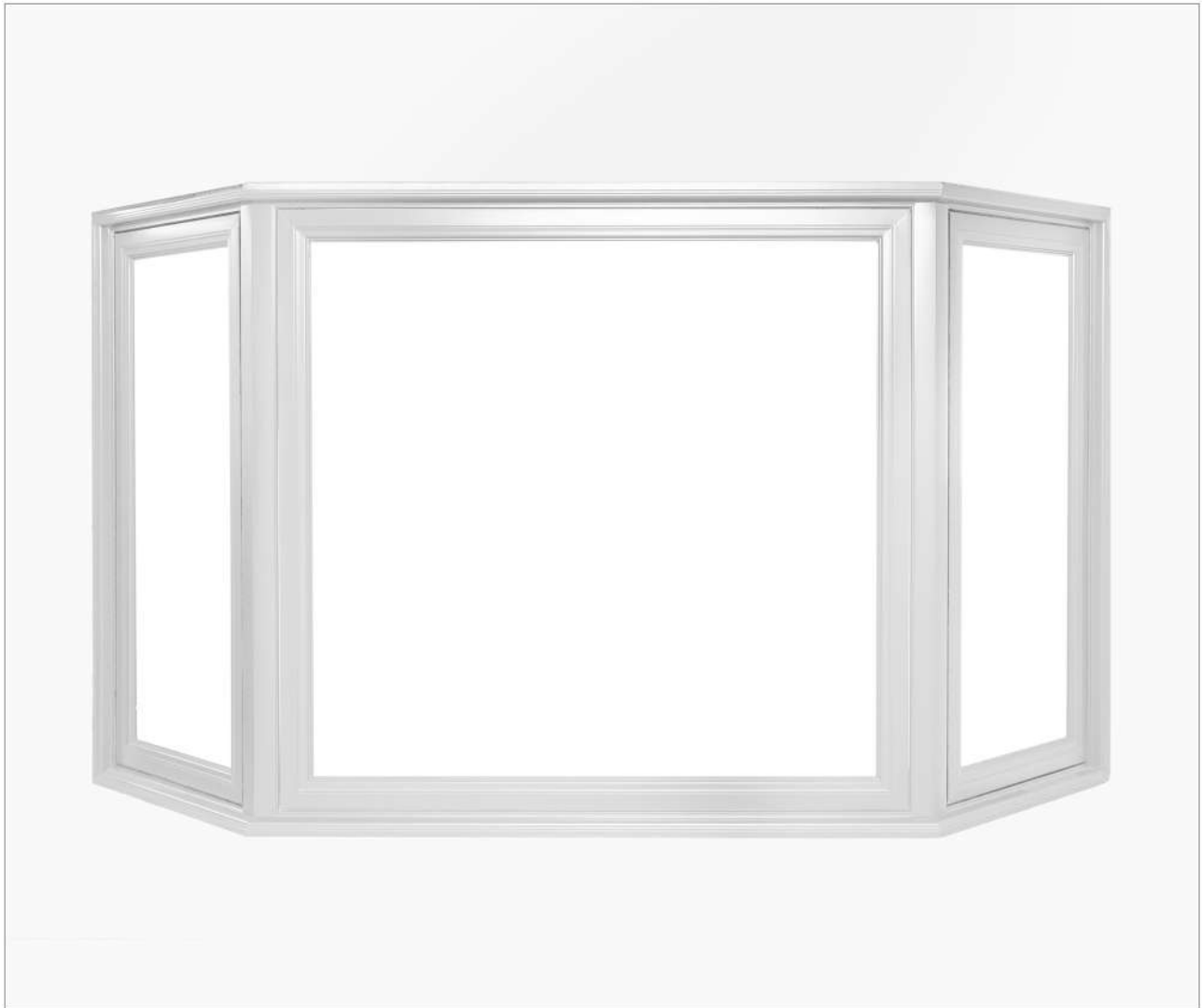


Bay and Bow Windows

Addition of bay and bow windows give homeowners a choice to enhance timeless elegance and beauty to their home. The main idea of these bay and bow windows is to give the illusion that the room is more spacious than it already is, allowing more of natural light to flow in a room while offering the ability to control ventilation as needed.

Bay

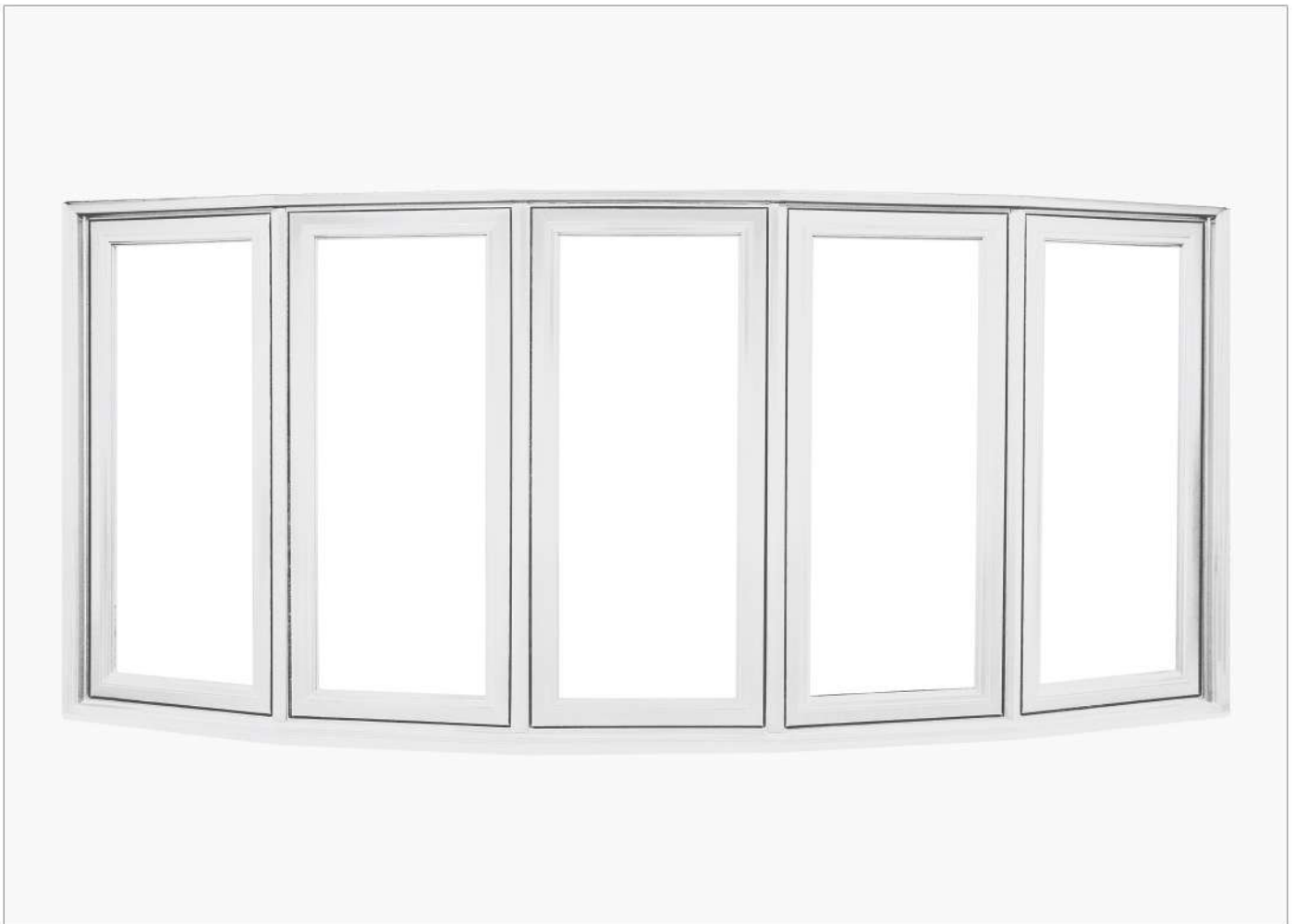
Bay windows are a popular architectural feature that enhances the look and functionality of your home. They usually extend further out compared to bow windows, with a choice to add a unique sitting area in the extra space bay windows provide. These windows offer expansive views, allows abundant natural light in the rooms, excellent flow of natural air, improved ventilation options, added space for in house decorative, advanced insulation features etc.



Bow

Bow windows are another popular option that share some similarities with bay windows but has a distinct design. Unlike bay windows, which have a more angular shape, bow windows have a graceful curve that creates a gentle outward projection from the wall. This curved design adds a unique and elegant aesthetic to both the interior and exterior of your home. These windows typically consist of four or more window panels joined together in a gentle curve, creating a panoramic view and maximizing natural light. These windows allow ample of natural light inside the room, enhances homeowners' beauty, added interior space, improved energy efficiency.

It is crucial to have bow windows installed by professional contractors to ensure structural stability, proper sealing, and weather resistance. Consulting with a reputable window manufacturer or a contractor can help you choose the right bow window design, materials, and features that best suit your needs and preferences while considering factors like orientation, views, privacy, and local building codes.

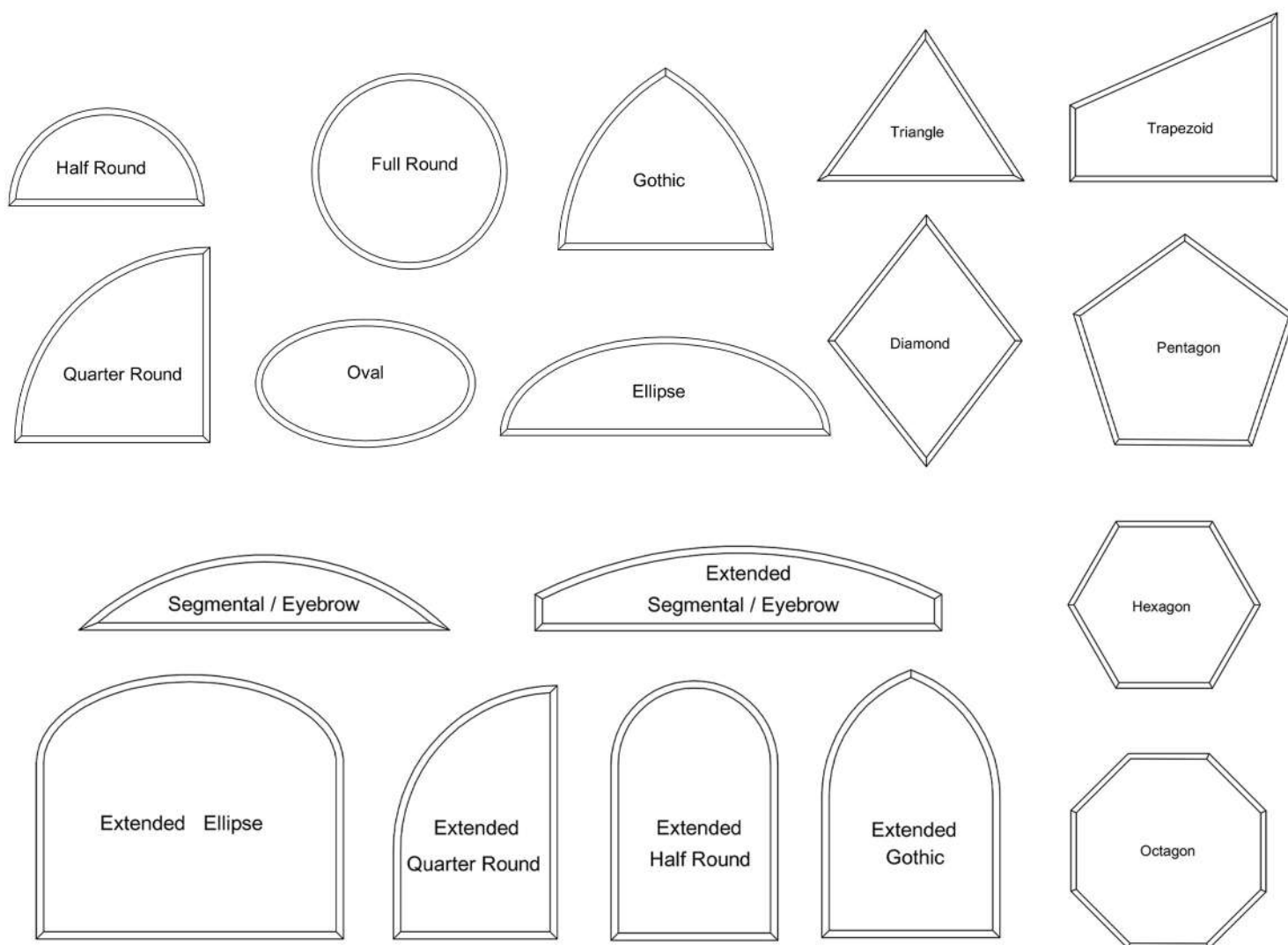


Architectural Shapes

VWF offers a variety of options for architectural shapes with custom window configurations that suit almost all the complex home designs. We manufacture sophisticated curves, ovals, circles, arches and just about any geometric shape that you can imagine. We also have various options for grill types, grill patterns and customized decorative glass that will help you to create your very own unique, distinct window design.

Shapes available

- Half Round, Extended Half Round
- Quarter Round (Left & Right Hand), Extended Quarter Round (Left & Right Hand)
- Chord, Extended Chord (Left & Right Hand)
- Elliptical
- Oval, Circle
- Triangle (Left & Right Hand)
- Trapezoid (Left & Right Hand)
- Pentagon, Octagon, Hexagon



Double Pane and Triple Pane Glass

Double pane IGUs consist of two layers of glass that are separated by a spacer and filled with a layer of insulating gas, such as argon or krypton. Double pane IGUs are effective at reducing heat loss and increasing energy efficiency.

Triple pane IGUs contain three layers of glass that are separated by spacers and filled with insulating gas. Triple pane IGUs offer even greater energy efficiency and noise reduction compared to double pane units. They provide better insulation and can help to improve the overall comfort and energy efficiency of a home.

Overall, triple pane IGUs are more expensive than double pane units but offer superior performance in terms of insulation, soundproofing, and energy efficiency. The choice between double and triple pane IGUs will depend on factors such as budget, climate, and desired level of comfort and efficiency.

Double Pane

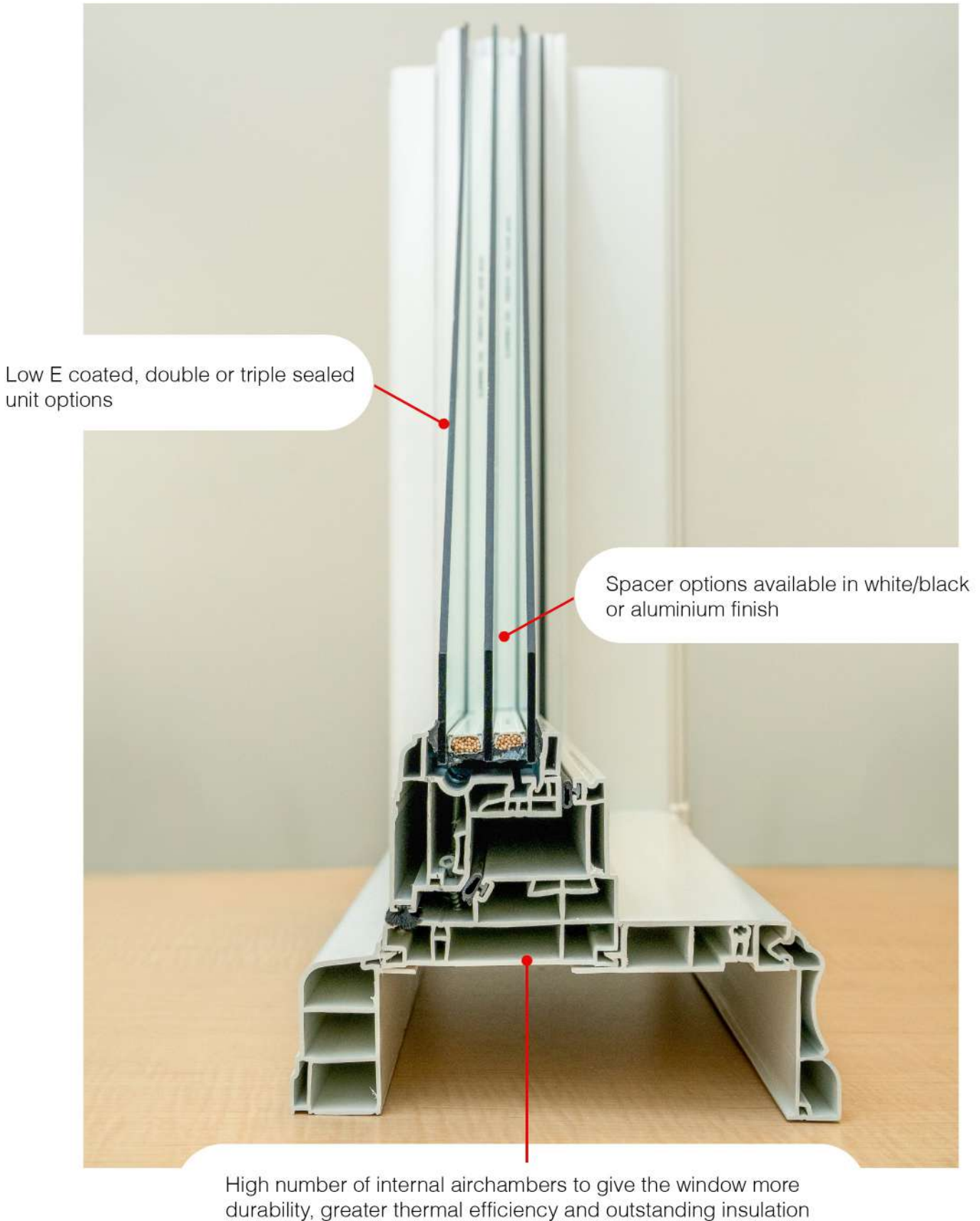


Triple Pane



Cross Section

Made from proprietary, 100% lead free UPVC powder, VWF windows deliver exceptional strength & long term performance. This advanced material resists impact and fading ensuring your windows stay flawless without cracking, blistering or warping. Best of all, they are completely maintenance free-built to look great and last for years.



Inside View

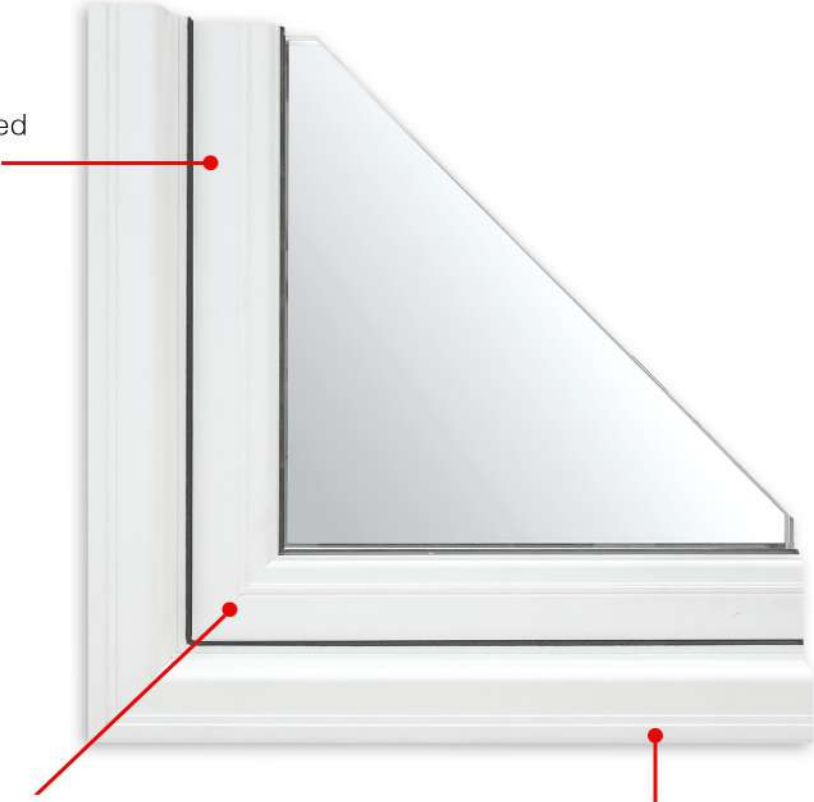
Low E coated, double or triple sealed unit options



Choose from a variety of wood and pvc jamb extensions and trims designed to elevate the look of your windows

Outside View

Vinyl frame customized to fit your homes



Fusion welded corners for the perfect finishing

Exterior brick mould finishes to give a uniform look for all the windows.

Hardware Systems

Our windows are manufactured with durable and good quality locking systems. Our high-performance windows and locking systems ensure exceptional security and protection against the ever-changing elements. With our exacting standards, you can rest assured you are investing in the most secure, energy-efficient and durable hardware in the Canadian window market.

All our windows come with high-pressure die-cast zinc operator, crank handle and knob. These operators provide ease of control and highest strength for hinge-operated windows, such as casement or awning windows. They are designed to deliver perfectly balanced performance and style. Each encore operator is constructed with corrosion resistant hardware.



Casement Operator



Awning Operator

All casement and awning windows are equipped with heavy-duty stainless-steel hinges for smooth and effortless operation. The hinge system comes with adjustable friction screws so you can control the level of effort required to open or close each window. All our hinges are designed with stainless steel reinforcement to provide endless, fluid action with a very solid support.



Stainless Steel Hinges

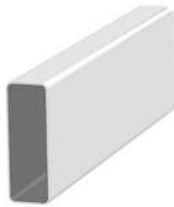
Nesting handle is a snap fit cover that can be easily removed and does not require any fasteners for cover attachment and installation. This nested handle design also allows for the easy removal of window screens, as needed, without any additional tools. This unique feature keeps your windows looking flawless giving your home a timeless design.



Nesting Handle

Interior Grills

Internal built-in grills require zero maintenance and further enhances the appearance of your windows. They are available in Flat, Pencil or Georgian style in various sizes to give your windows both modern and traditional feel. Homeowners can choose interior grills in many different patterns and colors with option available for custom-design for a unique look.



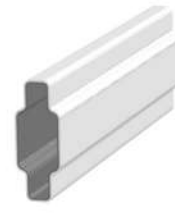
Flat Design



Box Design



Pencil Design



Georgian Design

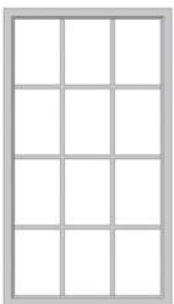
Exterior Simulated Divided Lite (SDL) Grills

To match the architectural style of your home, exterior grills (SDL) are a perfect match to customize any window style. These decorative option gives homeowner's the elegant, traditional true divided lite appearance. They offer illusion of individual paned panels without affecting on thermal energy efficiency. SDL grills give any of our windows a classic design by separating the window into small panes, this can elegantly accentuate the glass and your personal design.

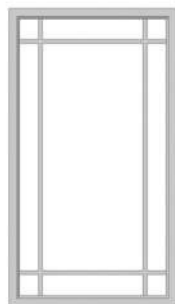


Window Grill Patterns

Variety of patterns are available to meet homeowner's needs, these are just a few of the standard patterns to choose from. Almost any styles, colors, and patterns available for all your custom needs.



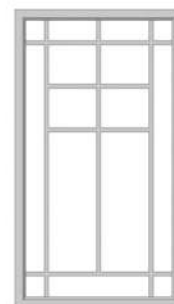
Traditional



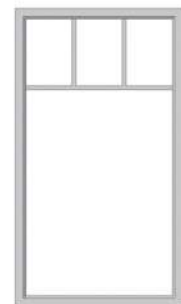
9-Lite Prairie



12-Lite Prairie



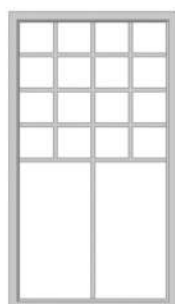
14-Lite Prairie



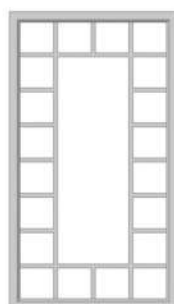
Top Row



Cross



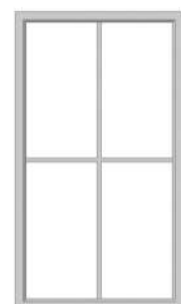
New England



Victorian

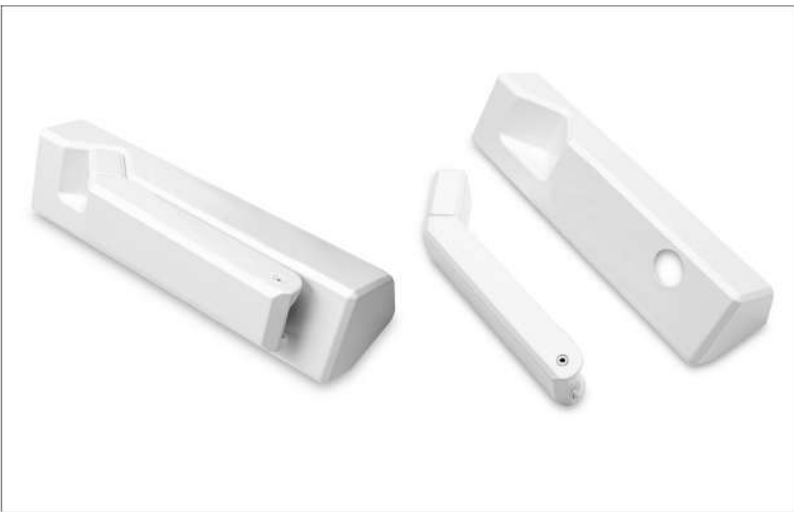


Diamond



Custom

Other Hardware Systems



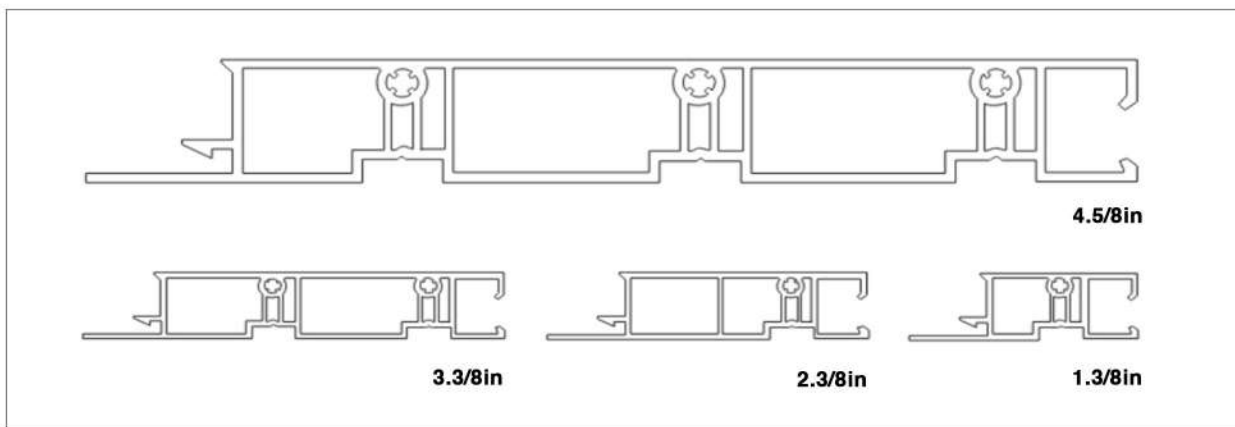
Wood Jamb Extensions

Prime wood jamb extensions are available in 1-1/2", 2-1/2", 3-1/2", 4-9/16", 5-1/2" & 7-1/4". Custom sizes are available upon request.



Vinyl Jamb Extensions

Vinyl jamb extensions are available in 1-3/8", 2-3/8", 3-3/8", 4-5/8",



Interior Vinyl Trims

Interior vinyl trims are custom made to fit every window manufactured in the factory. Customers have the option to choose the trims and corner rosette.



45 Degree Corner



Round Rosette



Shape Rosette



Vinyl Casing

Custom Colors

Any windows can be custom painted to express yourself with beautiful and bold color, we can match any color of your choice, allowing you to achieve a truly upscale appearance for your home.



We offer custom colour match and matte finishes.

Glass Options

Low-E (low emissivity) glass is considered better than clear glass for windows due to its energy-efficient properties. This glass has a microscopically thin, transparent coating that reflects heat while allowing light to pass through. Low-E glass helps to reduce heat transfer through windows, keeping the interior of a building cooler in the summer and warmer in the winter. Overall, low-E glass offers superior thermal performance and energy efficiency compared to clear glass, making it a popular choice for windows in residential and commercial buildings.



Bronze tint



GPW



GPW Frosted



Grey tint



Laminate



Sparkolite



Water



Taffeta



Frosted



Delta Frost



Reeded



Glue chip



Rain



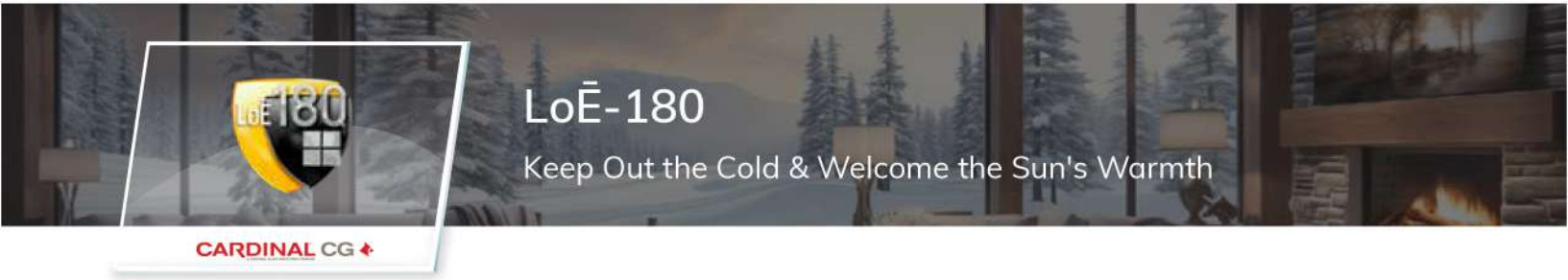
Krinkle



Flemish



Acid



Cardinal LoE-180™ delivers outstanding cold weather performance – its insulation value is excellent with a low 0.26 U-Factor and with an SHGC of 0.69, it lets the winter sun's heat pass into the home. It does all that while blocking 71% of the sun's harmful UV rays. So go ahead and welcome the sun's warmth and light and keep out the cold with this ideal passive solar gain glass.

<p>79% Vis Trans</p>	<p>0.69 SHGC</p>	<p>Coating Position:</p>
<p>0.26 U-Factor</p>	<p>29% UV Transmission</p>	
		<p>* Only if #6 room-side and #2 coatings are present.</p>

Data is produced using LBNL Window 7.8. 2-pane IG units have 13mm airspace and filled to 90% argon.

Benefits of LoE-180

- Highest Visible Light Transmittance**
- Effective for Passive Solar Design**
- Excellent Insulating Capabilities**
- Great for South Facing Windows**

While blocking out the cold and harmful sun rays, LoE-180 lets in more the warmth than ordinary low-e glass. The LoE-180 coating is applied between layers or anti-reflective metal oxide coatings along with a protective layer to ensure the durability and long life of your glass unit.

- Laminated options
- Custom shapes & sizes
- Thicknesses: 2.2 to 6mm
- Max dimensions: 96" x 144"

Note: LoE-180 is available as annealed, heat-strengthened or tempered glass.

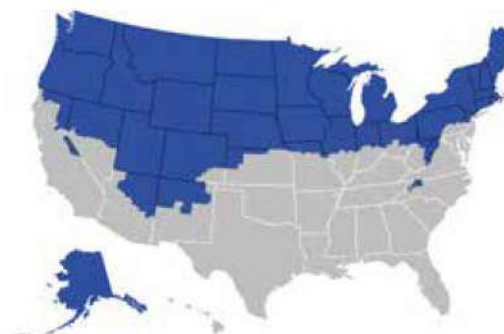
ENERGY STAR 7.0

ENERGY STAR® is a program run by the U.S. Environmental Protection Agency (EPA) that promotes energy efficiency in consumer products, including windows. ENERGY STAR 7.0 is the latest version of the ENERGY STAR program's requirements for windows.

LoE-180 can be used to meet the criteria for the **Northern** climate zone.

Whole-Window Performance Criteria

	U-Factor	SHGC	
▶ Northern	≤0.22	≥0.17	Prescriptive
	=0.23	≥0.35	Equivalent Energy Performance
	=0.24		
	=0.25	≥0.40	
	=0.26		
▶ North-Central	≤0.25	≤0.40	
▶ South-Central	≤0.28	≤0.23	
▶ Southern	≤0.32	≤0.23	



3/4" Dual Pane with 3mm Glass • 1" Triple Pane with 3mm Glass • 90% Argon

Center-of-Glass Performance

Dual Pane

	VISIBLE LIGHT		FADING			U-FACTOR	
	Transmission	Exterior	UV	ISO	SHGC	Air Fill	Argon Fill
						IP / SI	IP / SI
▶ Clear / LoE-180	79%	15%	29%	63%	0.69	0.31 / 1.74	0.26 / 1.49
▶ LoE-180 / LoE-i89	77%	15%	27%	61%	0.62	0.24 / 1.37	0.21 / 1.19

Triple Pane

▶ LoE-180 / Clear / LoE-180	70%	20%	13%	50%	0.56	0.17 / 0.94	0.13 / 0.75
▶ LoE-180 / LoE-180 / LoE-i89	68%	21%	13%	49%	0.53	0.14 / 0.81	0.12 / 0.66

LBNL Window 7 per NFRC100 conditions. LoE-180 is intended for the 3rd surface on a 2-pane insulating glass unit.



ENGINEERING THE FUTURE OF GLASS

Contact Cardinal CG to learn more about LoE-180 and other Cardinal glass products.

📍 775 Prairie Center Drive, Eden Prairie, MN 55344

🌐 www.cardinalcorp.com



LoE²-272

Moderate Solar Control for All Seasons

Cardinal LoE²-272® is a previous-generation glass coating that provides great solar heat gain protection and a low U-Factor, bringing interior comfort for all seasons. It renders a slightly higher visible light transmittance than LoE²-270 glass.



Data is produced using LBNL Window 7.8. 2-pane IG units have 13mm airspace and filled to 90% argon.

Benefits of LoE²-272

- ✓ All-Season Comfort
- ✓ Low U-Factors
- ✓ Neutral Appearance

The LoE² coated glass family delivers year-round comfort in any weather. In summer, it rejects the sun's heat and damaging UV rays. In winter, it reflects heat back into the room.

- Laminated options
- Custom shapes & sizes
- Max dimensions: 96" x 144"
- Thicknesses: 2.2 to 6mm

Note: LoE²-272 is available as annealed, heat-strengthened or tempered glass.

ENERGY STAR 7.0

ENERGY STAR® is a program run by the U.S. Environmental Protection Agency (EPA) that promotes energy efficiency in consumer products, including windows. ENERGY STAR 7.0 is the latest version of the ENERGY STAR program's requirements for windows.

LoE²-272 can be used to meet the criteria for the **Northern** and **North-Central** climate zones. In the Northern climate zone, choose LoE²-272 with a triple pane IG unit.

Whole-Window Performance Criteria

	U-Factor	SHGC	
▶ Northern	≤0.22	≥0.17	Prescriptive
	=0.23	≥0.35	Equivalent Energy Performance
	=0.24		
	=0.25	≥0.40	
	=0.26		
▶ North-Central	≤0.25	≤0.40	
▶ South-Central	≤0.28	≤0.23	
▶ Southern	≤0.32	≤0.23	



3/4" Dual Pane with 3mm Glass • 1" Triple Pane with 3mm Glass • 90% Argon

Center-of-Glass Performance

	VISIBLE LIGHT		FADING			U-FACTOR		
	Transmission	Exterior	UV	ISO	SHGC	Air Fill	Argon Fill	
						IP / SI	IP / SI	
Dual Pane	▶ LoE ² -272 / Clear	72%	11%	16%	55%	0.41	0.30 / 1.69	0.25 / 1.43
	▶ LoE ² -272 / LoE-i89	70%	11%	16%	53%	0.41	0.23 / 1.33	0.20 / 1.15
Triple Pane	▶ LoE ² -272 / Clear / LoE-180	63%	15%	8%	44%	0.37	0.16 / 0.92	0.13 / 0.73
	▶ LoE ² -272 / LoE-180 / LoE-i89	62%	15%	8%	43%	0.36	0.14 / 0.80	0.11 / 0.65

LBNL Window 7 per NFRC100 conditions. LoE²-272 is intended for the 2nd surface on an insulating glass unit.

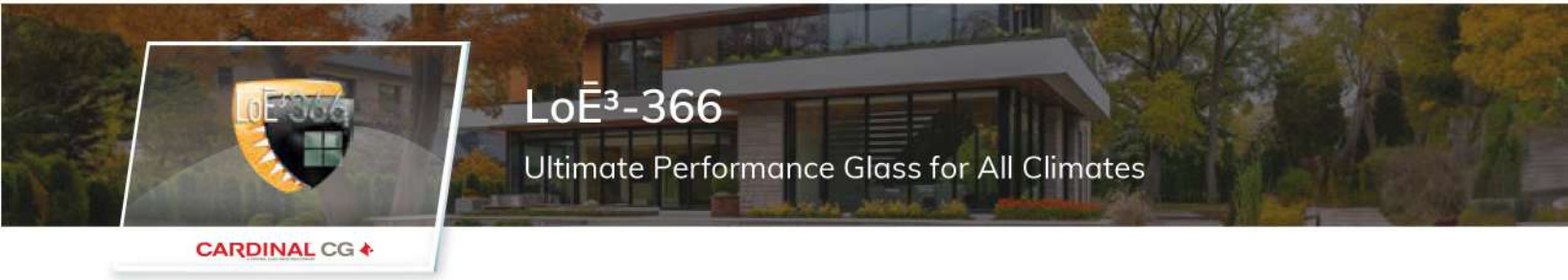


ENGINEERING THE FUTURE OF GLASS

Contact Cardinal CG to learn more about LoE²-272 and other Cardinal glass products.

775 Prairie Center Drive, Eden Prairie, MN 55344

www.cardinalcorp.com



Cardinal LoE³-366® glass offers optimal solar control and high visibility, ensuring year-round comfort and energy savings. Its advanced triple-layer coating provides exceptional heat rejection and fading protection without compromising the view, making it the most popular LoE product.



Data is produced using LBNL Window 7.8. 2-pane IG units have 13mm airspace and filled to 90% argon.

Benefits of LoE³-366

- High Visible Light
w/Solar Heat Gain**
- Excellent
UV blocking**
- All Season
Comfort**
- Enhanced Visual
Comfort**

The superior insulating capability of LoE³-366 is a key factor in the construction of comfortable windows for cold & warm climates. The dramatic comfort improvement from LoE³-366 glass also means the relative humidity of the indoor air can be controlled and maintained properly. It lets more unobstructed light in and protects from unwanted exterior air, keeping your home comfortable.

- | | | |
|------------------------|-------------------------|----------------------------|
| High energy efficiency | Custom shapes & sizes | Neutral color |
| Laminated options | Thicknesses: 2.2 to 6mm | Max dimensions: 96" x 144" |

Note: LoE³-366 is available as annealed, heat-strengthened or tempered glass.

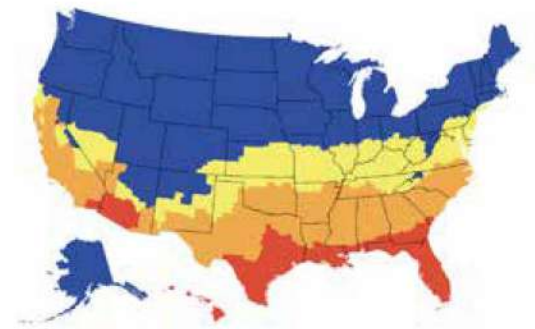
ENERGY STAR 7.0

ENERGY STAR® is a program run by the U.S. Environmental Protection Agency (EPA) that promotes energy efficiency in consumer products, including windows. ENERGY STAR 7.0 is the latest version of the ENERGY STAR program's requirements for windows.

LoE³-366 can be used to meet the criteria for **all four climate zones**. In the **Northern** climate zone, choose LoE³-366 with a triple pane IG unit.

Whole-Window Performance Criteria

	U-Factor	SHGC	
▶ Northern	≤0.22	≥0.17	Prescriptive
	=0.23	≥0.35	Equivalent Energy Performance
	=0.24		
	=0.25	≥0.40	
	=0.26		
▶ North-Central	≤0.25	≤0.40	
▶ South-Central	≤0.28	≤0.23	
▶ Southern	≤0.32	≤0.23	



3/4" Dual Pane with 3mm Glass • 1" Triple Pane with 3mm Glass • 90% Argon

	Center-of-Glass Performance	VISIBLE LIGHT		FADING			U-FACTOR	
		Transmission	Exterior	UV	ISO	SHGC	Air Fill	Argon Fill
							IP / SI	IP / SI
Dual Pane	▶ LoE ³ -366 / Clear	65%	11%	5%	43%	0.27	0.29 / 1.65	0.24 / 1.37
	▶ LoE ³ -366 / LoE-i89	63%	11%	5%	42%	0.27	0.23 / 1.30	0.20 / 1.11
Triple Pane	▶ LoE ³ -366 / Clear / LoE-180	57%	15%	2%	36%	0.24	0.16 / 0.90	0.13 / 0.72
	▶ LoE ³ -366 / LoE-180 / LoE-i89	56%	15%	2%	35%	0.24	0.14 / 0.73	0.11 / 0.63

LBNL Window 7 per NFRC100 conditions. LoE³-366 is intended for the 2nd surface on an insulating glass unit.



ENGINEERING THE FUTURE OF GLASS

Contact Cardinal CG to learn more about LoE³-366 and other Cardinal glass products.

775 Prairie Center Drive, Eden Prairie, MN 55344

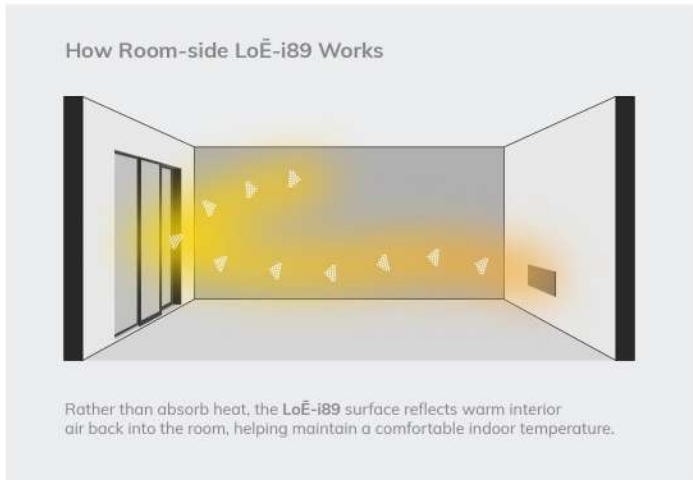
www.cardinalcorp.com



LoE-i89

Enhanced Winter Performance Glass

Cardinal LoE-i89™ is our advanced room-side coated glass offering enhanced energy efficiency. This innovative glass significantly lowers U-Factor, especially when paired with our LoE™ coatings. Its easy-to-clean, haze-free design ensures clear views, reducing the need for triple-pane windows for energy-saving compliance. LoE-i89 reflects internal heat back into the room, optimizing warmth and comfort.



Benefits of LoE-i89

- ✓ Maximum Occupant Comfort
- ✓ Low Visible Reflectivity
- ✓ High Visible Transmittance
- ✓ Enhances Regular LoE Coatings

LoE-i89 is durable, scratch-resistant, and easy to maintain. When installed in a triple-pane unit, it provides the lowest U-factors possible. It is easy to clean with any regular household cleaner.

How does LoE-i89 affect indoor condensation?

If interior humidity is too high, condensation can occur along the bottom edge of the window view area. IG units with a low-E coating and a warm edge spacer greatly reduce the risk of perimeter condensation. While LoE-i89 reflects heat back into the room, the center-of-glass surface temperature will be slightly cooler. However, the windows ability to resist condensation is driven by the indoor/outdoor temperatures and the relative humidity inside.

- Annealed / Tempered
- Custom shapes & sizes
- No Haze
- Thickness: 2.2 to 6mm
- Max dimensions: 96" x 144"
- Laminated options

Note: LoE-i89 is available as annealed, heat-strengthened or tempered glass.

ENERGY STAR 7.0

ENERGY STAR® is a program run by the U.S. Environmental Protection Agency (EPA) that promotes energy efficiency in consumer products, including windows. ENERGY STAR 7.0 is the latest version of the ENERGY STAR program's requirements for windows.

LoE-i89 can be used to meet the criteria for **all four climate zones** in either a dual or triple pane, depending on the criteria.

Whole-Window Performance Criteria

	U-Factor	SHGC	
▶ Northern	≤0.22	≥0.17	Prescriptive
	=0.23	≥0.35	
	=0.24		
	=0.25		
	=0.26		
▶ North-Central	≤0.25	≤0.40	Equivalent Energy Performance
▶ South-Central	≤0.28	≤0.23	
▶ Southern	≤0.32	≤0.23	



3/4" Dual Pane with 3mm Glass • 1" Triple Pane with 3mm Glass • 90% Argon

Center-of-Glass Performance

Dual Pane

Triple Pane

	VISIBLE LIGHT		FADING			U-FACTOR	
	Transmission	Exterior	UV	ISO	SHGC	Air Fill	Argon Fill
						IP / SI	IP / SI
▶ Clear / LoE-180	79%	15%	29%	63%	0.69	0.31 / 1.74	0.26 / 1.49
▶ LoE-180 / LoE-i89	77%	15%	27%	61%	0.62	0.24 / 1.37	0.21 / 1.19
▶ LoE ³ -366 / Clear	65%	11%	5%	43%	0.27	0.29 / 1.65	0.24 / 1.37
▶ LoE ³ -366 / LoE-i89	63%	11%	5%	42%	0.27	0.23 / 1.30	0.20 / 1.11
▶ LoE ³ -366 / Clear / LoE-180	57%	15%	2%	36%	0.24	0.16 / 0.90	0.13 / 0.72
▶ LoE ³ -366 / LoE-180 / LoE-i89	56%	15%	2%	35%	0.24	0.14 / 0.78	0.11 / 0.63

LBNL Window 7 per NFRC100 conditions. LoE-i89 can be combined with any Cardinal LoE product.



ENGINEERING THE FUTURE OF GLASS

Contact Cardinal CG to learn more about LoE-i89 and other Cardinal glass products.

775 Prairie Center Drive, Eden Prairie, MN 55344

www.cardinalcorp.com

Manufacturer's Warranty

25-years Warranty on White Vinyl Frame and Vinyl Sash Members

VWF's Windows are warranted against such defects in material that might result in blistering, peeling, flaking, corroding, and fading of the frame or sash members for the lifetime of the product from the date of installation.

Painted Vinyl Frames and Sashes

VWF provides a 10-years warrant on painted frames and sashes against such defects in material and workmanship that might result from paint peeling, flaking, cracking, and major discoloration that is not caused by exposure to the sunlight, heat, or abrasive materials.

10-years Warranty on Insulating Glass

VWF warrants that the insulating glass units contained in the windows and that under normal conditions there will not be an obvious obstruction of vision, which is the result of film formation or dust collection between the panes of glass surfaces for the life of the window in accordance with all terms specified in this warranty. Glass breakage of any kind is not covered.

Limited Warranty on Hardware

VWF warrants that the hardware shall remain in good operational condition from date of installation, for crank mechanisms on casement and awning windows, over tightening of the mechanism will cause pre-mature failure and is not covered under this warranty.

30 Days Warranty on Screens

Punctures and tears in screens are covered for a period of thirty (30) days. Parts will be provided at no cost F.O.B VWF. Labour is not included.

Exclusions from Warranty Coverage

Any and all labour charges, including the removal, replacement and/or reinstallation of any product that may require service.

Exposure to harmful pollutants, the corrosion of non-vinyl products or components due to the proximity to coastal areas, excessive thermal or physical stress and/ or high humidity levels such as but limited to improper storage.

Any damage to the window or window components due to the settlement of building structure.

Any damage caused by wind, hail, lightning, or other incident of weather, deemed as an act of God.

Minor imperfections in windows and doors that do not affect the product's structural integrity or obscure vision.

Any window which has been repaired or modified by any person other than a factory-trained Service Technician or authorized VWF's representative or any non VWF add-on or replacement parts added to the Window(s).

Any defect, malfunction, or failure to perform, which has occurred because of unreasonable use, improper application, or the failure to perform reasonable or necessary maintenance.

If products with visible defect(s) after goods have been picked up or delivered and are installed with such defects, but not limited to scratches, dents, and cracks and/or damaged components without notifying VWF prior to installation.

Condensation on windows, which may occur as a natural result of humidity within the house or building area. Please refer to: <http://oee.nrcan.gc.ca/> for condensation prevention tips.

Glass breakage or cracking. Orders for sealed units only, are not covered by the warranty.

VWF reserves the right to discontinue or change any design or method of manufacture and reserves the right to substitute part or parts of equal or superior quality at its sole discretion.

Combinations that are not built with Vinyl Windows Fashion Inc's. recommendation for mulling and combination windows.

Products that have not been paid for in full.

Installation Liabilities

VWF is responsible solely for the manufactured product. All installation related claims should be directed to the Distributer/Dealer/Installer. VWF will not be responsible for claims arising between the Distributer/Dealer/Installer and their customers.

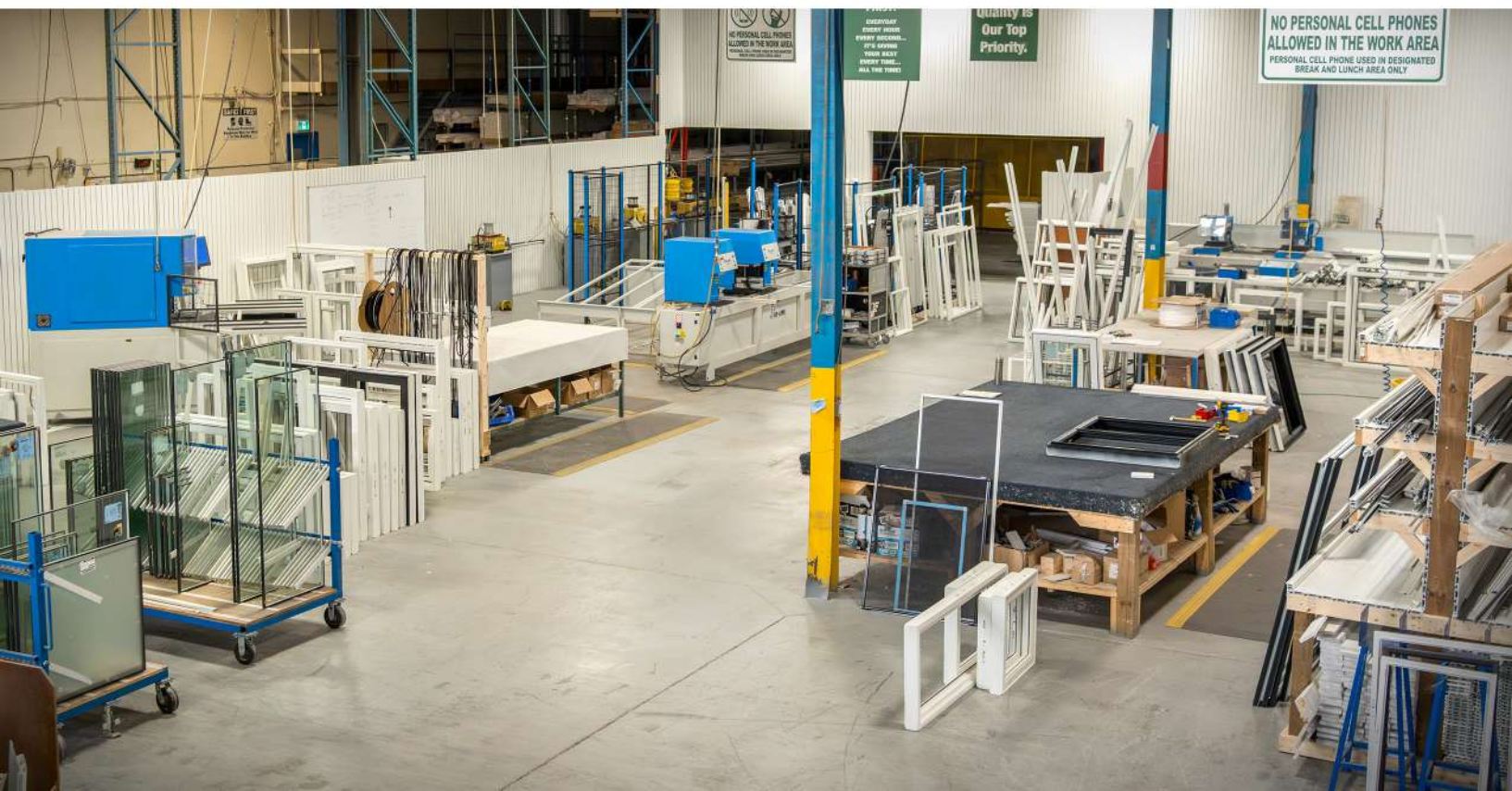
Warranty Registration

This warranty will only come into force if the customer completes the registration form below. VWF will only honour warranties for which VWF has received said form. To be enforceable, said form must be completed within thirty (30) days after installation. For greater certainty of VWF's obligation under this, warranty will only take effect upon confirmation from VWF of the receipt of your completed Warranty Registration Form. Warranty Registration Forms not completed within the deadlines set out herein will result in the termination of the warranty and VWF's obligations hereunder.

Window Ownership Transfer Form

While this Warranty is transferable to future owners of the property, VWF's obligations under the Warranty will only continue if online notice of the transfer in ownership is received by VWF within thirty (30) days of the new owner taking possession of the property in question, where the warranted product is installed, and acknowledgment receipt has been issued by VWF. Should the subsequent owner fail to notify VWF of his intention to continue the Warranty, the Warranty will then expire automatically without the possibility of revival, on the close of business on the thirtieth (30th) day after the owner takes ownership of the said property.

Please contact your dealer for warranty registration form submission.



WWF

VINYL WINDOWS FASHION INC.



Our Partners



Connect With Us

We invite you to connect with our knowledgeable team to discuss your windows requirement, request a quote, or schedule a consultation.

☎ 416-748-5333

📍 60 Baywood Road, Etobicoke

🌐 vinylwindowsfashion.com

