



Architectural Window and Door Systems
European Engineering. Unmatched Performance.



TRIFECT WINDOW STORY

The New Standard for the American Home.

Living in the Midwest means your home must withstand extreme shifts from heavy, humid 90-degree summers to sub-zero winter winds. At Trifect Windows, we believe your windows should be a lifelong investment rather than a recurring expense.

For too long, the American market has been forced to choose between overpriced premium brands or builder-grade windows designed for low cost rather than longevity. These standard products often succumb to the elements; this leads to drafts, thermal leaks, and structural failure within just a few years. Trifect was founded to bridge this gap. As professionals with a background in construction and general contracting, we are establishing a new standard by bringing the European philosophy of generational assets to every project we touch.

The Trifect Difference: High-End Performance Without the Premium Markup

We believe that world-class engineering should be accessible. By partnering directly with European manufacturers and focusing on modern innovation, we provide a best-in-class product at a price that often beats the mid-tier offerings of domestic competitors. You no longer have to settle for "good enough" windows just to stay within your budget. With Trifect, you are making the smart investment. You are obtaining a superior, long-lasting product at an unmatched value that traditional domestic brands simply cannot replicate.

Engineering Meets Elegance: The NEO Line

The NEO Window and Smart Slide systems represent a leap forward in engineering. While many domestic options use thin-walled frames that can warp under stress, NEO is built for maximum structural integrity with a clean, modern aesthetic. The real performance advantage is our center seal system. This specialized third barrier inside the frame blocks wind, cold, and humidity far more effectively than standard double-pane products. This extra layer also provides a more secure locking mechanism to protect your home. The result is a line of windows that are up to 40% more energy efficient and a home environment that is 50% quieter.

Your Partner in Performance

Whether you are a homeowner looking for a common-sense upgrade to your energy bills or a professional builder seeking a reliable partner, Trifect is your guide. From initial planning and professional design guidance to seamless product supply, we are here to ensure your project is built for the long haul. We don't just sell windows; we provide the expertise and support needed to transform your home into a high-performance sanctuary.



TILT & TURN

A Smarter Standard

While the majority of windows in the United States rely on decades-old sliding or cranking mechanisms that often degrade over time, Trifect Windows introduces a far more versatile and sophisticated alternative. Our Tilt and Turn system represents the gold standard of European architecture and engineering. This innovative design offers a level of functionality and security that standard domestic products simply cannot match. By combining two distinct ways to open into one sleek and durable frame, you achieve precise control over your indoor environment.

The tilt function allows for safe and consistent airflow while the turn function provides full interior access for easy maintenance and emergency egress. This system delivers superior ventilation without ever compromising on your home's energy efficiency or structural integrity. It is a common sense upgrade that optimizes your home's natural ventilation and daily functionality. This results in a quieter and more comfortable living space that stands the test of time and weather. By choosing Trifect, you are upgrading to a superior mechanical system that was historically reserved for the most exclusive high-end homes. We are proud to make this premium technology accessible for the modern American homeowner at an attainable mid-tier price point.



THE TILT FUNCTION

By rotating the handle to the upward position, the window tilts inward from the top to provide secure, all-weather ventilation. This position allows fresh air to circulate throughout your home while keeping rain out and maintaining a high level of security against intruders. This versatility ensures that your home remains comfortable and protected regardless of the season. It is the ideal solution for consistent airflow without compromising safety or energy efficiency. By utilizing the tilt function, you can enjoy a fresh breeze even during a light rain or while you are away from home, knowing the window remains locked in a secure, stable position.



THE TURN FUNCTION

When the handle is placed in the horizontal position, the window swings inward like a door. This position allows for maximum ventilation and makes cleaning the exterior glass safe and effortless from inside your home. No more climbing ladders or paying for professional window services. Beyond convenience, the turn function highlights the structural integrity of our hardware. Every window features a sophisticated multi-point locking system. When the handle is returned to the closed position, the sash is pulled tightly against the frame gaskets at multiple points around the entire perimeter; this ensures your home remains more energy efficient and provides a significantly quieter indoor environment.

INSIDE THE NEO 3.0:

Built to Outperform

The NEO 3.0 system brings the forefront of European window technology directly to your home. We redefine modern comfort with a 50% reduction in noise and a 40% increase in energy efficiency. This performance is achieved by pairing premium French glass with precision German hardware to create unmatched protection against the elements. Our use of heavy-duty materials ensures your windows remain beautiful and durable for decades. Trifect delivers this world-class innovation with a focus on quality at a price point that remains competitive with standard mid-tier brands.

PREMIUM TRIPLE-PANE GLASS

We utilize world-leading glass from Saint-Gobain, featuring triple panes filled with 95% Argon gas. This high-definition glass provides crystal-clear views with up to 20% more light transmission than standard high-performance windows. This creates a heavy-duty barrier against extreme temperature shifts and intrusive outside noise while maintaining the exception visual clarity your home deserves.

HIGH-PERFORMANCE UPVC & FOILS

Rooted in German engineering, our high-grade uPVC has six thermal chambers for maximum thermal efficiency and will not rot or degrade like traditional wood frames. We enhance this material with multi-layered, weather-resistant architectural laminate foils. These advanced surfaces reflect summer heat and resist fading to provide a premium look and lasting colors with virtually zero maintenance for decades.

AIRTIGHT TRIPLE-SEAL SYSTEM

While typical domestic windows rely on one or two basic seals, our NEO 3.0 features a specialized triple-seal system. This creates a completely airtight barrier that ensures your home remains draft-free and comfortable even in the harshest weather. This extra layer is a critical component for long-term energy savings.

INTERNAL STEEL REINFORCEMENT

Unlike the hollow frames of many US brands, our sashes use internal galvanized steel. This allows for larger glass spans and slimmer profiles while preventing the warping or bowing common in casements. This steel skeleton provides a rock-solid foundation, ensuring your windows operate smoothly and close reliably every time.

AMERICAN-READY NAILING FLANGE

To simplify the transition to European standards, we offer an optional nailing flange. This allows for the traditional installation methods used by US builders, ensuring high-performance technology fits perfectly into your project without changing your construction workflow or requiring specialized training



ENERGY PERFORMANCE RATINGS

U-Factor (U.S./I-P)

0.17

Solar Heat Gain Coefficient

0.20

**The lowest coefficients from the tests are given. The coefficients may vary depending on the glazing units used*

PERFORMANCE RATINGS

Visible Transmittance

0.23

Design Pressure (DP)

+45.11 psf

Structural Pressure (STP)

+67.67 psf

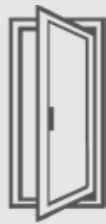
CUSTOM OPTIONS & CONFIGURATIONS

Precision Design Down to the 1/8th Inch

At Trifect, we do not believe in standard sizes that force you to compromise. We build every unit to your exact specifications. Our precision measurements reach down to the 1/8th of an inch to serve your unique architectural vision. This engineering allows for larger spans of glass with less visible structure while ensuring a perfect fit for every opening. This allows us to seamlessly combine world-class performance with your design requirements. Whether you are working on a precise historical restoration or a cutting-edge modern build, we provide the flexibility your project demands. We offer this level of customization without the premium upcharges typically found with standard domestic products.



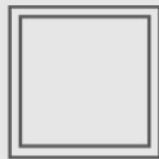
Tilt & Turn



Balcony Door



Hopper



Fixed

OPERATION TYPES

While we are specialists in Tilt and Turn technology, Trifect offers a full range of operational styles to suit every room in your home. Our Balcony Doors provide a seamless transition to outdoor living spaces with the same high-performance seals as our windows. For areas where maximum light is the priority, our Fixed architectural panes offer expansive views with no visible hardware. For specialized ventilation needs, we offer Hopper windows that tilt inward from the top. Every unit is custom-built to ensure a cohesive look and superior function across your entire project.

CONSTRUCTION TYPES

Your home's layout is unique, which is why we offer versatile construction configurations to match your specific needs. Whether your design requires a clean Single Sash, a balanced Double Sash, or an expansive Multi-Sash configuration, we build to suit your aesthetic. Our internal steel reinforcement ensures that even the largest multi-sash designs maintain their structural integrity and operational smoothness. We provide a perfect blend of high-end style and high-performance functionality regardless of the scale of your windows.



1 Sash



2 Sashes



Multi-Sash



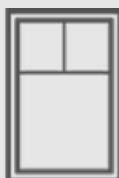
Colonial



Prairie



Elegant



Heritage



Diamond



Classic



Traditional



Victorian

ARCHITECTURAL DIVIDER TYPES

The right details define a home's character and we use premium muntins to help you achieve the exact look you desire. These narrow strips divide individual panes of glass and are available in various custom configurations on the interior, exterior, or both. Our muntins offer total design freedom. You can choose from modern minimalist grids for a contemporary feel or more complex patterns to match a traditional Victorian or Farmhouse style. We ensure your windows provide a unique, high-end finish that complements the architecture of your home.

OPTIONS CONTINUED

Custom Screen Solutions

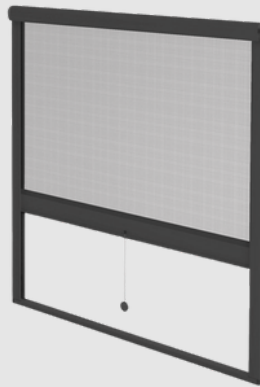
Protect your home from pests without sacrificing your view. We offer a versatile range of screens including fixed, sliding, retractable, and pleated designs. Whether you prefer a permanent solution or one that disappears when not in use, our screens provide effortless protection while maintaining the modern look of your German-engineered windows.



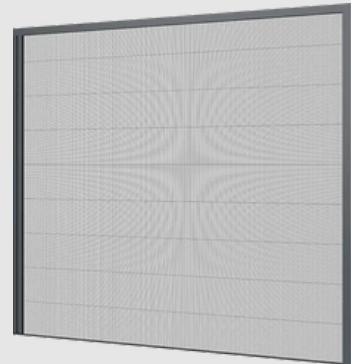
Fixed



Sliding



Retractable



Pleated

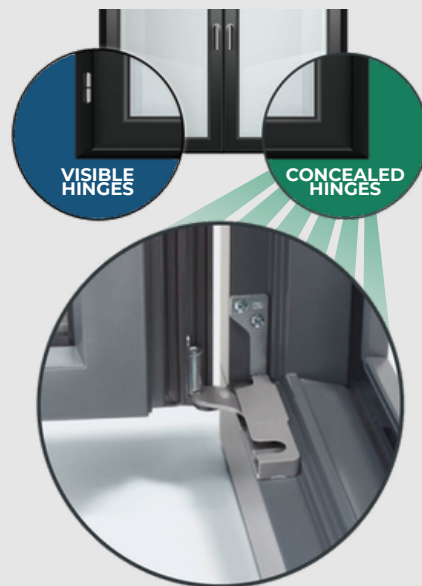
Precision Window Limiters

Safety is never an afterthought. Our window limiters allow you to control exactly how far a sash opens, which is vital for child safety and meeting building code requirements. These restrictors provide fresh air while reducing the risk of falls and improving security. They are available in surface-mounted or concealed styles.



High-Performance Hinges

Quality hardware is the backbone of a reliable window. We offer high-quality aluminum hinges in both exterior and concealed configurations. While exterior hinges provide a classic look, our concealed options offer a sleek and modern aesthetic. Both designs are engineered for smooth operation, ensuring your windows remain stable and secure for decades.





NEO SMART SLIDE: ARCHITECTURAL SLIDING DOORS

Panoramic Views, Effortless Performance

The NEO Smart Slide brings a minimalist and modern design directly into your home. While standard domestic sliding doors often rely on bulky frames that obstruct your view, our NEO series utilizes a low-profile design to ensure your surroundings remain the primary focus. By minimizing the frame and maximizing the premium glass, we provide the expansive views that modern architecture demands.

This high-performance solution meets the expectations of the most discerning homeowners. It offers a sophisticated alternative to the traditional patio door at a price point that remains attainable for any custom project. This system is not just about aesthetics. It is a complete structural overhaul of the sliding door concept. We utilize precision engineering to create a frame that is both thinner and stronger than traditional vinyl. This ensures that your view remains the primary focus while the engineering works silently in the background to provide world-class insulation and security for your family.

Our specialized technology is engineered for impressive scale. It allows for massive panoramic views reaching up to 20 feet wide to bridge the gap between your interior and the outdoors. Even with individual sliding sashes spanning 8 feet across, our hardware ensures a smooth glide. This system outperforms the high-friction operation and heavy feel of traditional sliding doors. By utilizing precision-fit rollers, we ensure your doors remain responsive for a generation.

Available in single or double-sided openings, the NEO Smart Slide fits your unique floor plan perfectly. It is the ideal low maintenance choice for balconies and terraces. This system provides a secure connection to the outdoors while maintaining an airtight seal against the elements.

You get beautiful architectural design combined with the durability required for the toughest environments. It is a world-class solution that enhances the value of your home without constant maintenance.

EFFORTLESS OPERATION

Experience a new standard of convenience with our innovative hardware designed for feather-light ease during both opening and closing. While bulky domestic sliding doors often require significant physical effort to move, the NEO Smart Slide offers a simple and intuitive operation for every member of the family. Once unlocked, our specialized hardware allows the sash to glide freely without the slightest resistance. High-precision rollers ensure the panels move smoothly to provide an effortless feel that persists for years of daily use. When closing, the locking mechanism gently pulls the sash into the frame to create a secure and completely airtight seal. This advanced engineering allows our system to significantly outperform standard sliding doors in both energy efficiency and noise reduction. Our superior performance data is backed by official NFRC certification to ensure your home remains quiet and comfortable. It is sophisticated engineering you can feel in every movement.



SEAMLESS SCALE AND VERSATILITY

Our Smart-slide technology is built for an impressive scale that redefines the modern living space. While standard windows might have smaller profiles, the true advantage of our system is revealed in larger architectural openings. Traditional sliding doors often require frequent vertical supports and heavy pillars that break up your view. Because of our internal steel reinforcement and superior engineering, we can eliminate these intrusive pillars to offer massive panoramic views reaching up to 20 feet wide. This allows for significantly more glass and less structural obstruction than standard domestic sliders. Our German-engineered hardware ensures a smooth and effortless glide even with individual sliding sashes reaching 8 feet across. We provide the total flexibility of symmetrical or asymmetrical configurations to fit your specific architectural vision. It is the perfect low-maintenance choice for balconies and terraces. This system provides a seamless and secure connection to your outdoor space by maximizing the glass and minimizing the need for visible structural support.

UNIVERSAL OPTIONS

GLAZING

UNIT TYPES



TRIPLE GLASS



DOUBLE GLASS

GLASS TYPES

ANNEALED
TEMPERED

LOW-E COATING

PREMIUM
SUNGUARD®
CLIMAGUARD®

EXTRAS

LAMINATED SOUND GLAZING
BIRD SAFE GLAZING
FROSTED
ORNAMENTAL

HANDLES

HANDLE OPTIONS

STANDARD
BUTTON
KEYED

TOULON



ATLANTA SECUSTIC



VICTORY



WOODEC & ALUDEC

Woodec: Inspired by Nature

Our Woodec surface offers the faithfully preserved look of real wood without the constant maintenance. By using deep embossing and a matte top layer, it captures the organic texture and warmth of natural timber.

Unlike traditional foils that can appear flat, Woodec provides a tactile and authentic feel that enhances your home's character. It offers the superior durability of high-grade uPVC while remaining virtually indistinguishable from genuine wood.

Aludec: Inspired by Design

For a sleek and modern aesthetic, Aludec features a unique fine-grained matte finish that mimics powder-coated aluminum. This architectural surface is perfect for minimalist designs and comes in seven sophisticated shades.

Options range from white and gray to deep black and metallic Alux. It provides the high-end look of metal windows with the advanced thermal performance of German engineering, ensuring your home remains stylish and energy efficient for decades.

Color Choices

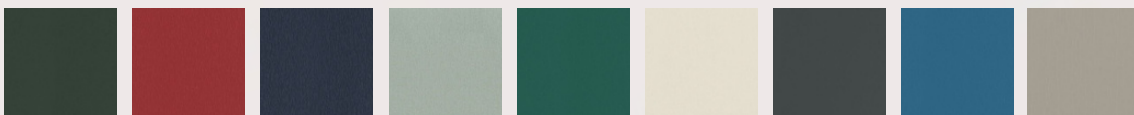
WOODEC COLORS



ALUDEC COLORS



SIGNATURE COLORS



PERFORMANCE & TECHNICAL SPECIFICATIONS

Nearly 40% more efficient than leading US brands with expansive views and verified precision.

Choosing the right windows shouldn't feel like a complex math test. At Trifect, we simplify the decision: **our systems are nearly 40% more efficient** than the leading US premium brands. This performance isn't just marketing, it is independently verified by the NFRC and Keystone Certifications to meet the most rigorous American industry standards.

To you, this means a home filled with natural light and total comfort during extreme weather. While US competitors often rely on heavy coatings that darken your view just to meet building codes, our German-engineered triple-pane glass keeps your space bright and your energy bills low.

Superiority also comes in scale. We offer massive architectural spans, including heights up to 98" for windows and an expansive 236" width for our sliding doors, all while maintaining exceptional thermal integrity. With Trifect, you aren't just buying a window, you are securing verified, commercial-grade precision and a clearer, larger view of your world.



Trifect Neo 3.0

US Brands

Install Depth	3"
Maximum Glazing Depth	2 1/8"
Frame/Sash Width	4 5/16"
Number of Seals	3
Number of Chambers	6
Profile Material	Multi-Chamber uPVC
Reinforcement System	Steel
Uf heat transfer coefficient	0.23 BTU/h-ft ² ·°F
Ug heat transfer coefficient	0.11 BTU/h-ft ² ·°F
Uw heat transfer coefficient*	0.17 BTU/h-ft ² ·°F
Condensation Resistance	76
Solar Heat Gain (SHGC)	0.23
Visible Transmittance (VT)	0.42
Design Pressure (DP)	50 psf
Structural Pressure	75 psf

Clad Wood, Vinyl, or Fiberglass
Structural Core or Minimal
0.44 BTU/h-ft ² ·°F
0.20 BTU/h-ft ² ·°F
0.27 BTU/h-ft ² ·°F
61
0.19
0.38
40 psf
60 psf

*Value estimated for a window of 48" x 58"

Max Height	98"
Max Width	63"

Neo Smart Slide

US Brands

Install Depth	6"
Sash Installation Depth	3"
Maximum Glazing Depth	2 1/8"
Profile Material	Multi-Chamber uPVC
Reinforcement System	Steel
Uf heat transfer coefficient	0.23 BTU/h-ft ² ·°F
Ug heat transfer coefficient	0.11 BTU/h-ft ² ·°F
Uw heat transfer coefficient*	0.17 BTU/h-ft ² ·°F
Condensation Resistance	73
Solar Heat Gain (SHGC)	0.29
Visible Transmittance (VT)	0.44
Design Pressure (DP)	50 psf
Structural Pressure	75 psf

Clad Wood, Vinyl, or Fiberglass
Structural Core or Minimal
0.45 BTU/h-ft ² ·°F
0.20 BTU/h-ft ² ·°F
0.28 BTU/h-ft ² ·°F
44
0.17
0.35
40 psf
60 psf

Max Height	98"
Max Width	236"



Trifect Window systems are NFRC certified and Keystone validated, ensuring legal compliance and rated accuracy. Don't risk your project with unverified products. We deliver American-verified precision that satisfies inspectors and protects your investment.

Common Performance Measures

U-Factor: Measures heat transfer rate. Lower numbers mean better insulation and less heat loss from your home.

Solar Heat Gain Coefficient (SHGC): Measures solar heat entry. Trifect provides a balanced rating that prevents summer overheating while allowing for beneficial passive solar warming during winter months.

Visible Transmittance (VT): Measures natural light through the glass. Higher values provide a brighter interior and clearer views without the need for dark, heavy tints.

Condensation Resistance: Measures the ability to resist moisture buildup. Higher numbers reduce the risk of interior fogging, moisture damage, and mold growth.

Design Pressure (DP): Measures wind and weather loads a window can withstand. Higher ratings indicate a stronger, more durable product built for extreme conditions.

Structural Pressure (SP): Represents the maximum safety burst capacity. Higher values ensure a larger safety margin and better protection during severe storms or high winds.

Component Ratings (Uw, Uf, Ug): These values break down performance for the total unit, frame, and glass to prove every part of the system meets high efficiency standards.

TRIFECT WINDOWS



European Engineering. Unmatched Performance.

Trifect Windows is the premier provider of European engineered window and door systems. We bring the precision of German innovation directly to the United States to establish a new standard for the American home. Our team delivers high performance solutions that are 50% quieter and 40% more energy efficient than standard domestic windows. We believe your windows should be a lifelong investment rather than a recurring expense. By bridging the gap between engineering and elegance, we provide generational assets that improve the value and comfort of your property for decades.

Driven by a passion for quality and custom precision, Trifect offers architectural systems ranging from our signature NEO Tilt and Turn windows to our expansive Neo Smart Slide architectural doors. We are trusted by architects and professional builders because we represent the new standard in style and durability. Every project we touch benefits from our commitment to world class materials and airtight performance. We offer a superior alternative to the status quo by delivering comfort without compromise.



Learn more at www.trifectwindows.com

