



replacement windows and doors
with advanced thermal technology

 **wiegan**

timeless style and elegance

The Wiegan is powered by Kensington HPP using Heat Mirror® technology.

This thermal performance window is the affordable, energy efficient option for enhancing the appearance of your home. It is designed using premium vinyl lineals which require virtually no maintenance, painting, or staining and are easy to clean with soap and water. The combination of ecoclean foam-filled frames and fusion-welded sashes provide a better thermal performance that's strong and long-lasting.

SUNSHIELD PVC

Rather than settle with using a "pure" vinyl extrusion in our frames and sashes, for strength and longevity of your investment, we take it a step further. Our formula is enhanced with Titanium Dioxide to shelter your home from damaging Ultraviolet rays that would otherwise destroy an exterior building material.

BREATHE EASY

Our extrusions ensure the health and wellbeing of your home. SunShield PVC was engineered to be phthalate free, meaning The Wiegan Windows and Doors will never emit toxic off-gasses.

ECOCLEAN FOAM

EcoClean Foam is the first polyurethane window foam that has achieved certification as a BioPreferred® product from the United States Department of Agriculture (USDA) for its renewable content. This injection foam filling process provides your home with better thermal performance, greater energy efficiency and reduced condensation.

FUSION LINKED WELDS

A lifetime-backed product needs the assurance of an unbreakable design. Each corner undergoes four-point computerized welding to seal the unit. This heated process bonds the joints permanently together; a manufacturing capability unavailable from any wood, composite, aluminum or fiberglass product.



Heat Mirror® Technology suspends a lightweight polyethylene terephthalate (PET) film inside the airspace of a dual pane insulating glass unit to create multiple super-insulating cavities.

Benefits:

- Provides center glass insulation performance to R-5.6
- Offers superior winter heating and summer cooling due to its multi-cavity design
- Improves the insulating performance of dual pane glass by up to 500 percent
- Blocks 99.5% of harmful UV rays
- Reduces condensation buildup on glass during winter
- Weighs about 33% less than triple-pane glass

Popular Science listed Heat Mirror Technology as one of the top 100 inventions of the millennium.

security and safety

FRONTLINE STS INTERLOCK: Successfully integrating moving to non-moving components of a window determines if it will stand the test of time. Our unique Frontline STS Interlock securely connects the bottom sash to the frame to ensure wind, moisture and intruders stay where they belong: outside.

FORTRESS MR INTERLOCK: The center point of a window can be its most vulnerable element. Inadequate designs allow for air movement or worse, burglars, to easily penetrate the heart of the window. The Fortress MR Interlock joins the moving sashes together with deep interconnecting pockets that block the wind and prevent exterior access to the locking mechanism.

ANTI-MICROBIAL TRIPLE WEATHER-STRIPPING: Block your home from dust and allergens with the added protection of weather-stripping that prevents the growth of mold and mildew.

SURELIFT BALANCES: If your home currently has builder-grade vinyl, aluminum or wood windows, you already know the deficiencies of spiral or block and tackle balances. For a lifetime of smooth operation, trust the strength and longevity of stainless-steel constant force balances selected for the exact size and weight of your new windows.

DP 50 RATING: Your home's strength is determined by the quality of the materials you build it from. Thankfully, replacement windows have a measurement to determine that level of strength. Design Pressure (DP) is the amount of forced air or water a window can withstand before failing. The greater the capacity, the stronger the unit.

	Minimum Performance Allowed	The Wiegan
Design Pressure (psf)	15	50
Structural Test (psf)	22.5	75
Water Resistance (psf)	2.9	7.5
Wind Speed (mph)	77	141

*According to the American Architectural Manufacturers Association (AAMA)





insulated seats for comfort

If you currently have a focal point window in your home that is either a bay, bow or garden window unit, you already know that these units can become very cold or very warm if they are not properly constructed. While the industry relies on a ¾" plywood seat board for insulation, we go far beyond that.



STANDARD R9 INSULATED SEAT: building upon the industry standard of the ¾" plywood, The Wiegand bay or bow window unit adds 1" of high-density foam along with a 1¼" hardwood veneer top cap.



DELUXE R21 INSULATED SEAT: for ultimate performance, our deluxe offering adds two more inches of high-density foam for a total seat depth of 5".

create panoramic views with bay, bow, and garden windows

Our bay and bow design feature a unique overlap mullion design that improves water drainage versus a flat horizontal surface that collects moisture. Cozy onto the window seat as the turnbuckle chain hanging system is engineered to carry 800 lbs. per support. The PVC panning system prevents water infiltration around the window frame from the day of installation through the life of your home.

BAY AND BOW WINDOW FEATURES:

- Bow windows available in 3-, 4-, and 5-lite layout
- Bay windows available with casements or double-hung window styles
- Internal, concealed turnbuckle chain hanging system for superior structural integrity
- Windows are mounted to structural wood support (timberstrand) providing superior strength
- All exposed exterior wood members protected by rigid vinyl capping system
- Roof and other exterior support accessories available



GARDEN WINDOW FEATURES:

- 1-1/8" premium grade, cabinetmaker quality oak and birch veneer for superior quality and aesthetics



sliding and swing doors

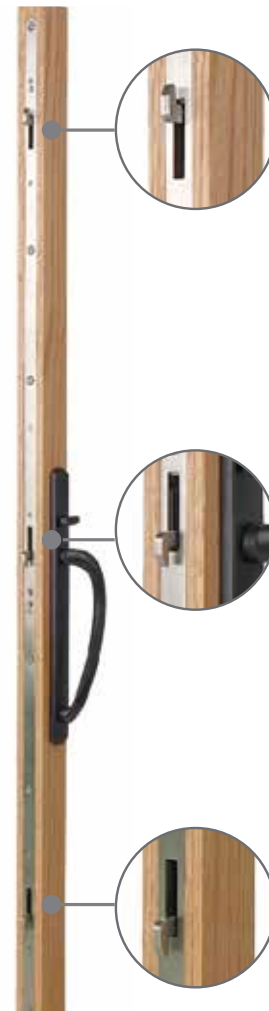
The sliding patio door is designed for optimum performance as well as lasting, weather-resistant beauty. All doors are engineered with a continuous interlock and multi-point locking mechanism for enhanced security. The elegant hardwood styles are available in finishes that will enhance any style door.



TWO, THREE, AND FOUR PANEL SLIDING DOORS

- Fusion-welded sash panels
- Elegantly sculpted frame and sash
- Optional matching transoms and sidelites available
- Raised, gliding monorail system with high-quality solid steel tandem rollers for easy opening and closing
- Sash is structurally reinforced with aluminum bars for maximum strength
- Rugged extruded aluminum sill designed to resist heavy traffic
- Multi-point, continuous interlock system
- Meets or exceeds the standards of the American Architectural and Manufacturers Association (AAMA)

MULTI-LOCK SECURITY



RAISED MONORAIL SYSTEM



SINGLE AND DOUBLE IN-SWING AND OUT-SWING DOORS

The Wiegand doors utilize a full-length piano hinge for an airtight fit while allowing for adjustment as the home ages. The multi-point locking system anchors the door at three separate contact points for maximum security.

- 1" insulated tempered glass system for superior insulation and sound-deadening properties
- Fusion welded panel and frame corners create a strong unitized components that prevent air and water infiltration
- 4-9/6" frame with aluminum reinforced frame, sash, astragal and mulls creates rigid high-performance weather seals
- Stiles are fully reinforced with engineered box beams for stability and a lifetime of durability
- Multi-point lock gives you the ultimate security and weather resistance. Side adjust tandem rollers feature radial ball bearings that provide the highest quality corrosion resistant steel.

ADJUSTABLE HINGES WITH A LIFETIME GUARANTEE



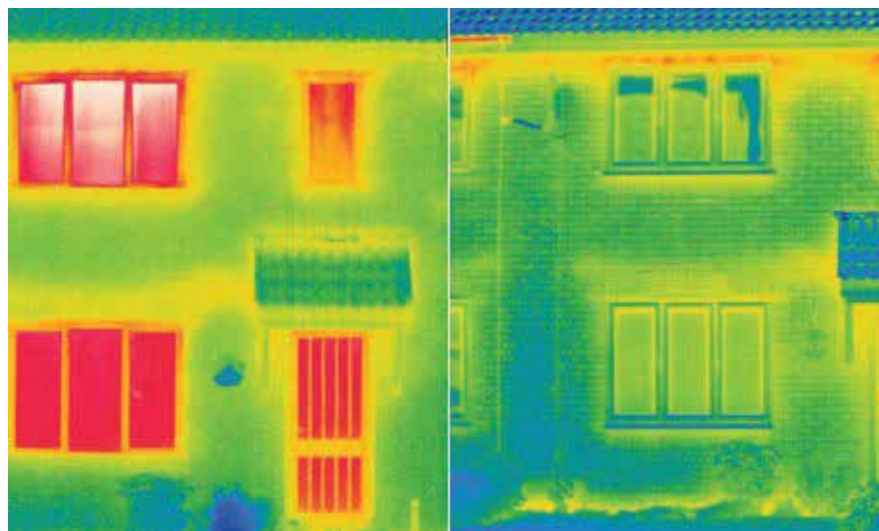
create a barrier between your home and the elements

In 1865, Thomas Stetson patented the insulated glass unit. Today, we commonly refer to it as double pane windows. Stetson was praised for the insulating capabilities they produced compared to a single pane of glass. Advancing on that same idea, Stetson's next patent was for triple pane insulated glass units that further improved insulation. Surprisingly, more than 150 years later, all other window manufacturers believe innovation stopped there.

At Windows of Richmond we have lofty goals for the energy efficiency of your home. In the scorching days of summer, we want the interior of your windows to be cooler than the walls supporting them. Conversely, in the middle of winter, we want your interior glass to be as warm as your walls. What others cannot offer, we call Heat Mirror Technology.

As housing designs have changed to incorporate the use of more windows, our desire to use less energy to heat and cool the home has increased as well. In 1974, the Massachusetts Institute of Technology (MIT) began development of a new glass system that would reduce energy consumption and associated carbon emissions as part of a research program funded by the U.S. Department of Energy. Ultimately, the group of engineers utilized a suspension system that eliminated the need for heavy, outdated triple pane glass systems or overly dark window tints. The invention became known as Heat Mirror Technology and quickly became the standard of high-performance glass systems around the world.

FLIR THERMAL IMAGING BEFORE AND AFTER WINDOW REPLACEMENT

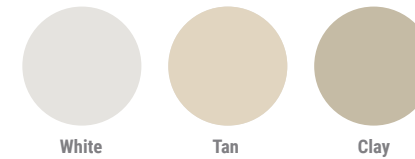


THE WIEGAN FEATURES

- Custom designed glass package for utilizing Heat Mirror® technology
- Double strength glass
- EcoClean Foam filled frames and sashes
- Solid vinyl lineal that never needs painting
- Fusion-welded frames and sashes for air and water-tight, unitized construction
- Multi-chambered construction and injection foam-filled frames and sash increase thermal performance
- Slim interior sash design allows for greater glass area
- Sloped sill helps with water run-off on all double hung windows
- Combination lock and tilt latch for double hung windows only
- Tilt or lift inward for easy cleaning inside your home
- Full flex screen with BetterVue® screen mesh
- Deluxe weather-stripping on sashes and frames provides added resistance to air, water, dust, and noise
- Weep gate system on sliding and picture windows allows water to drain and prevents air and insects from entering
- High-impact nylon color-matched sash retainers lock sashes securely into the jambs
- Deep receiver head pocket greatly reduces the possibility of air/water infiltration and sash bowing
- Constant Force Balance system for easy sash operation
- Limitless color options inside and out
- Limited lifetime warranty

custom made for your style

EXTRUDED COLORS



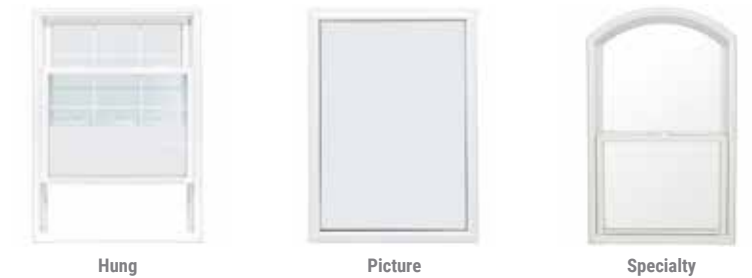
WOODGRAIN INTERIOR OPTIONS



EXTERIOR AND INTERIOR COATING OPTIONS



OPERATION



GRID STYLES



GRID CONFIGURATION



wiegan 20 years in the making

In 1989 Bruce Wiegan, owner of Windows of Richmond started selling Kensington windows. In 2008 Jancor, the parent company of Kensington lost its financing and shut Kensington down. At that time Chuck Wetmore had been the vice president of operations for the last eleven years. In 2009 Serious Energy bought the company and started up production again and put Chuck in the position of plant manager. Bruce continued to purchase windows from Serious while under the guidance of Chuck. Then in 2013, a new ownership group led by Chuck purchased Kensington back from Serious Energy. After a few years and with Chuck's new position as CEO, Bruce asked Chuck if he could make a window specifically for him and in 2017 The Wiegan was born.



Visit windowsofrichmond.com for more information.

Call **804.346.3300** today for a free in-home consultation or email us at info@bnwbuilders.com

