replacement windows with
advanced thermal technology

THE Wiegan

The Wiegan 20 years in the making

In 1989 Bruce Wiegan, owner of BNW Builders 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.

timeless style and elegance

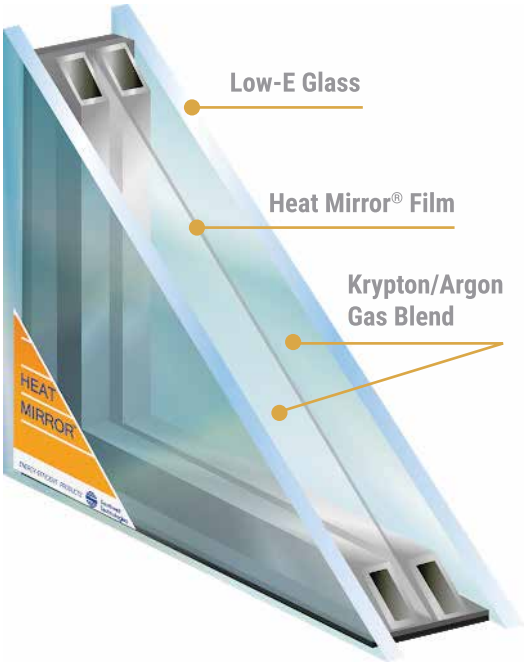
The Wiegan is powered by Kensington HPP using Heat Mirror® technology.
This thermal performance window is the affordable, energy efficient option for enhancing the appearance of your home. It is designed using premium vinyl lineals which require virtually no maintenance, painting, or staining and are 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-gases.

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 it's 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.

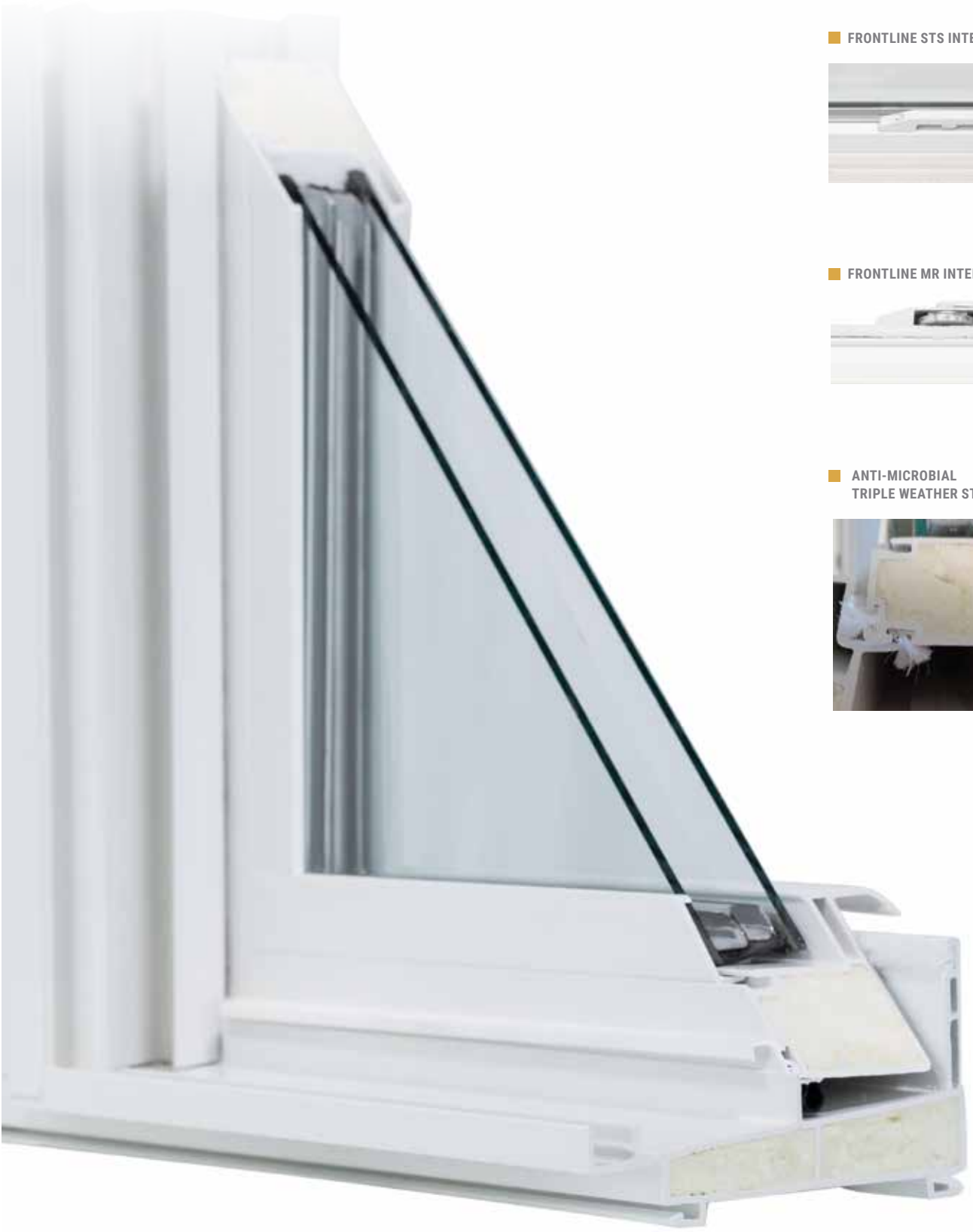
ANTI-MICROBIAL TRIPLE WEATHER-STRIPPING: Block your home from dust and allergens with the added protection of weather-stripping that prevents the growth of mold and mildew.

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)



FRONTLINE STS INTERLOCK

FRONTLINE MR INTERLOCK

ANTI-MICROBIAL
TRIPLE WEATHER STRIPPING

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

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 Wiegan 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".

custom made for your style

EXTRUDED COLORS

White | Tan | Clay

WOODGRAIN INTERIOR OPTIONS

Light Oak | Pecan | Cherry

THE NATIONAL FENESTRATION RATING COUNCIL (NFRC)

Requires all window and door manufacturers to include this label on their products. Below is a label for The Wiegan double hung.

KHPP WINDOWS AND DOORS
CALL 1-866-318-6628
674977 - 4 MU#: 2
KHI-M-24-00247-00001
ASCENT DH
WWW.KHPP.US

CERTIFIED

ENERGY PERFORMANCE RATINGS

U-Factor (U.S./I-P)	Solar Heat Gain Coefficient
0.20	0.26

ADDITIONAL PERFORMANCE RATINGS

Visible Transmittance	Air Leakage (U.S./I-P)
0.48	≤ 0.3
Condensation Resistance	
62	–

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 size. NFRC does not recommend any product and does not warrant the suitability of any product for any specific use. Consult manufacturer's literature for other product performance information.
www.nfrc.org

OPERATION

Hung | Picture | Specialty

Silder | Casement | Awning

GRID STYLES

Flat | Contoured

OBSCURE GLASS

Pattern 62

GRID CONFIGURATION

Colonial | Prairie | Queen Anne

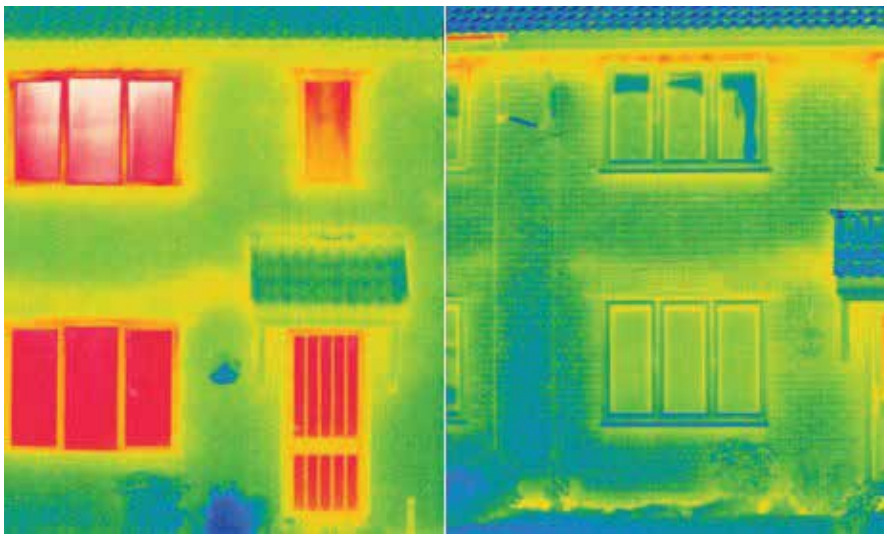
create a barrier between your home and the elements

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 BNW Builders 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
- 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
- Double locks on all double hung or slider windows wider than 27"
- 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
- Limited lifetime warranty

the world's first "super-glass": one of the most advanced insulating glass systems on the market today

MONUMENT TO SAVINGS: THE EMPIRE STATE BUILDING

This American iconic building in New York City had an energy usage problem. In 1991 they attempted to remedy the situation by replacing the original 1931 windows with new double pane units. The result was an improvement of a R1 rated window to R2. Dissatisfied with the first attempt, they turned to Heat Mirror Technology. The results were beyond impressive. Upon replacement of the 6,514 double pane windows, Heat Mirror Technology reduced emissions of the skyscraper by 38% with the R8 rated system. The calculated annual energy savings is $339,000 with a return on investment of just under four years.

PERSERVING HISTORY: THE MUSEUM OF FLIGHT

America has a rich history of pushing the limits of science and technology. Our pursuit of flying encompasses this unwavering spirit and The Museum of Flight in Seattle, WA is tasked with preserving 175 different aircraft that document its evolution. When designing a building that will protect the likes of the B-17, B-29, B-52, M-21, the inaugural Air Force One, the Concorde, F-14 and F/A-18, you need an expansive space that protects items from the sun's damaging ultraviolet (UV) rays. Architects of the largest air and space museum in the world chose Heat Mirror Technology for its unbeatable resilience to UV, providing 99.7% protection from the damaging light.

LEED PLATINUM, NET ZERO BUILDING: DAVID AND LUCILE PACKARD FOUNDATION HEADQUARTERS

As the Packard Foundation laid out plans for their new headquarters in Los Altos, California, they wished to construct a building that embodied the work of their foundation. They desired that the design minimize the use of natural resources for heating and cooling while not sacrificing the comfort of their employee's workspace. Their independent study found that the use of Heat Mirror Technology allowed the final design at 343 Second Street to have more windows than typical office spaces but performed so well that the building could forego the normal need for supplementary perimeter heating. Upon completion, the Packard Foundation Headquarters is the largest Net Zero energy certified building in the world.

PUSHING THE LIMITS OF DESIGN: SOBEK GLASS HOUSE

In 2000, Architect Werner Sobek completed a four-story housing structure in Stuttgart, Germany. While the structure was built of completely recyclable materials producing zero emissions and is self-sufficient in terms of heating energy requirements, the most astonishing fact is that all the exterior walls were made of glass. Sobek's design tested the long-touted claim of Heat Mirror Technology that windows could insulate as well as walls. While this house may not offer the privacy you want, it boasts energy efficiency that any homeowner would enjoy.

EXTREME CONDITIONS, EXTREME PERFORMANCE: PRINCESS ELISABETH RESEARCH STATION

When building in Antarctica you leave nothing to chance. With the most extreme meteorological conditions known to man, air temperatures of -58°F to 23°F, and maximum wind speeds of 155 mph, the International Polar Foundation faced monumental challenges in choosing appropriate materials for construction. Naturally when it came to the windows for the facility, Heat Mirror Technology was the only option to meet the demands. Upon completion in 2009, the Princess Elisabeth became the world's first zero emission research station to run entirely on renewable energies.

let us serve you

WE'VE BECOME THE MOST TRUSTED PROVIDER OF TOP-QUALITY HOME IMPROVEMENT SERVICES IN RICHMOND AND THE CENTRAL VIRGINIA AREA.

Bruce Wiegan launched BNW Builders in 2004 after fifteen years as Vice President of one of the largest replacement window companies in Virginia. Bruce's goal was to take everything he learned about home improvement and assemble a team of passionate, experienced experts who could help him build the finest home improvement company in Richmond and the Central Virginia area. Since 2004, BNW Builders has grown to be one of the highest rated full-service home improvement companies in the United States. BNW Builders has been earned many National Awards. We've been inducted into Remodeling Magazines exclusive Big 50 Remodelers list, earned the GAF Roofing Installation Excellence Award every year since 2008, and were selected by Professional Remodeler Magazine as one of their market leaders just to name a few.

OUR SERVICES

- Windows
- Doors
- Gutter Protection
- Roofing
- Siding
- Screened Porches
- Decks
- Railings

locally owned and operated

UNDERSTANDING CUSTOMER LOYALTY

As the owner of BNW Builders, I believe in earning customer loyalty through our unwavering commitment to quality, backed by our Lifetime Workmanship Warranty. I take pride in our transparent approach to advertising, setting the standard for integrity in the home improvement industry.

When you work with us, we use a consultative approach—making sure we understand what your goals are so that we can offer you solutions that best fit your needs. In addition, our **Everyday Best Price Guarantee**[SM] ensures that you receive the most competitive pricing from the start, without any gimmicks or inflated initial costs.

Our commitment to honesty and quality speaks volumes, as evidenced by the fact that over twenty-five percent of our customers have chosen to use our services more than once. Join the many homeowners who have experienced the BNW Builders difference—where integrity, quality, and customer satisfaction reign supreme.

Bruce Wiegan, Owner

Let Us Serve You.
BNW BUILDERS

Visit **bnwbuilders.com** for more information.

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

KHPP WINDOWS AND DOORS PINNACLE DEALER 2024

ENERGY STAR Most Efficient 2023

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