

WINDGATE



New Construction Vinyl Window Systems



ALLIANCE
WINDOW SYSTEMS

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Windgate Introduction

Introduction

Windgate New Construction series windows are specifically designed to meet the discerning needs of architects, builders, homeowners, and the changing needs of the residential building industry. The result is a high-performance series of vinyl windows that feature aesthetically integrated window styles, strength and durability.

All Windgate New Construction Windows feature:

- Fusion-welded frames and sashes for extra strength and durability
- 3/4" insulated glass for superior thermal performance
- Optional InnovativE™ (Low E) coating system with Warm Edge spacer technology, reducing utility costs
- SunShield quality vinyl for a lifetime of trouble-free performance

- Full 3 1/4" jamb depth chambered frame for maximum structural integrity

Windgate New Construction Window Systems

- Single-hung, double-hung, glider, and fixed windows come with a double-wall, integral "J" channel designed into the frame, *eliminating the cost of an add-on "J" channel while providing a pleasing "beveled" exterior look*
- Two and three lite casement units can be built within a single main frame, *allowing for maximum glass area and the greatest structural integrity*
- Glider models feature a lift-out sash with heavy-duty brass rollers, *allowing for even large sashes to glide easily without tipping or sticking*
- Transoms can be integrated into the frame creating a single unit, for greater strength and sturdiness

Window Features	Poor Solution	Minimum Solution	Optimum Solution
Interlocking Sash	No weather stripping or interlock at meeting rail	Weather stripping at meeting rail, no interlock	Weather stripped interlocking sashes
Glass Package	Single glazed, possibly with storm windows	1/2" Clear Insulating Glass, inefficient metal spacer	3/4" InnovativE, warm edge non-conductive spacer
Glass Spacer	None	Heat conductive metal	Low-Conductive Butyl
Locks/Keepers	Single "sweep arm" lock, keeper is part of frame	Pop-riveted "sweep arm" lock, keeper attached to rail	Screwed in "Cam-Action" lock, keeper screwed to rail
Vent Latch	None	Single "pry out"	Double "toggle out"
Frame/Sash Material	Screwed together wood or aluminum	Screwed together vinyl or clad wood	Fusion-Welded Vinyl for maximum strength and integrity
Warranty	None or limited	20 years, but for parts only	Lifetime, with initial coverage for labor

Windgate™ Window Styles – *Get more than a window!*

ASSURANCE plus™ Lifetime Window Warranty

The ASSURANCE plus Lifetime Warranty applies to any manufacturing defects and/or component failures. As one customer stated, "It's as good as it gets." ASSURANCE plus:

- Covers labor for five years and materials for a lifetime.
- Is transferable to a second owner up to 20 years.
- Features a standard commercial warranty of 20 years.
- Is the best warranty in the business.

Remember, the only reason our warranty can be this good is because of the quality windows it covers.

Specify Alliance Window Systems Today

Quality materials and exceptional design set Alliance Windows apart from the competition. The value, appearance, convenience, service, security, and peace of mind, combined with our incredible warranty, make Alliance Windows an exceptional investment.

Specify Alliance Windows through your contractor or builder.

The American Window Alliance (AWA)

We are a national network of independent manufacturers responding to regional customer demands, using our strength as high-quality, regional window suppliers.

The AWA offers customers the strength of a large national supplier, and the flexibility of a local organization.

Using the unique talents of each member, the AWA has created a line of window and door systems that present customers with the opportunity to obtain the strongest, most attractive products available.

The American Window Alliance: the power of a national network, the service of a regional supplier, and the support of local people.



InnovativE™ Energy Management System: Your Invisible Barrier

When you consider energy efficiency, perhaps the most critical part of any window is the insulating glass unit. It only makes sense: the glass has the largest surface.

Windows Can Help

To understand how windows can help, you must first understand that energy is lost through windows in three major ways: conduction, convection and radiation.

Conduction

The framing of all Windgate windows is made from vinyl, a natural insulator. To prevent energy loss through conduction, all insulated glass units utilize "warm edge" technology. Using a low-conductance spacer, this method assures maximum resistance to energy flow.

Convection

Energy can also be lost through natural convection currents that can form within the insulating glass. That's why Windgate glass is 3/4" thick, shown by government testing to be the optimum dimension to prevent these convection currents.

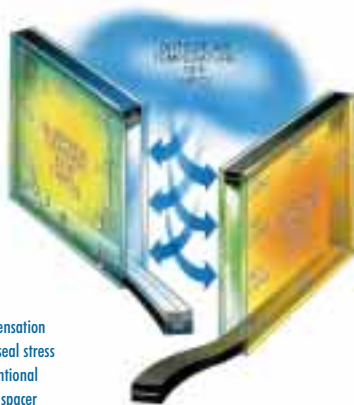
Radiation

Radiation occurs when long wave heat energy moves toward cold areas.

The most effective barrier to radiation is an optimal special low "E" coating, a standard part of InnovativE glass.

This special coating actually reflects the long wave radiation back to its source.

This is important to understand, as radiation affects energy consumption, no matter what part of the country you call home.



More condensation and more seal stress with conventional Aluminum spacer

Warmer inside glass temperature, and reduced condensation with Swiggle® Seal

INSIDE AIR TEMPERATURE 70°F (21°C)

Solar Gain vs. Heat Loss

The concerns of home owners in the North are quite different than those in the South.

In the North, where heating is a concern, glass must allow maximum solar gain, while preventing heat loss.

Conversely, Southern home owners are concerned with unwanted solar heat gain, when long wave radiation raises cooling costs.

When you understand these regional differences, it makes sense that the insulating glass system should be manufactured to address those concerns.

That's why Windgate glass systems are tailored by each regional manufacturer for maximum energy efficiency in the climates each serves.

We produce each of our insulating glass units to be specifically engineered to lower your energy bills, and reduce noise transmission.

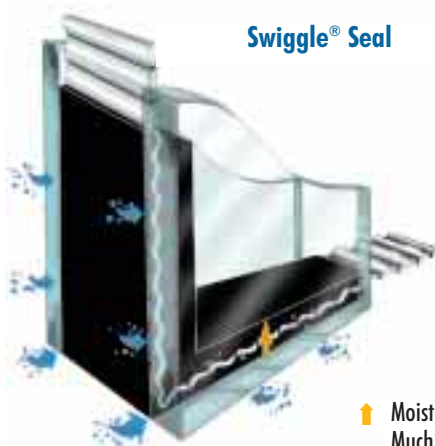
What's your style?

No matter what style home you have, or what style window you want, Windgate can fill your request.

And, since all Windgate windows are made to your specific dimensions, you know you'll get a window that not only fits your style, but fits your home as well.

Anatomy of Efficiency

Energy efficient Windgate windows provide an effective barrier to any weather condition.



Swiggle® Seal

Moisture Vapor Path = 0.300".
Much higher than most systems.



Swiggle® Seal is a registered trademark of TrueSeal Technologies, Inc.

Windgate Double-Hung & Single-Hung Window Features

Double-wall, Integral "J" Channel:

Designed into the frame, eliminating the cost of an add-on "J" channel while providing a pleasing "beveled" exterior look.

Deep Pocketed Head on Double-Hung:

With compression weather stripping to resist air infiltration

Non-corrosive Hardware:

A lifetime of trouble-free performance, no matter what the environment

Die Cast Cam Lock and Keeper:

Cam action actually draws sash closer together for positive lock

Interlocking Meeting Rail:

Integral interlock provides additional security

Fusion Welded Frame and Sash:

The utmost in strength and integrity

Flush-Mount Tilt Latches:

Color matched low profile latches for a neat appearance

Constant Force Balance:

Trouble free, maintenance free. Provides a lifetime of smooth operation

Operable Sash Tilts In for Easy Cleaning

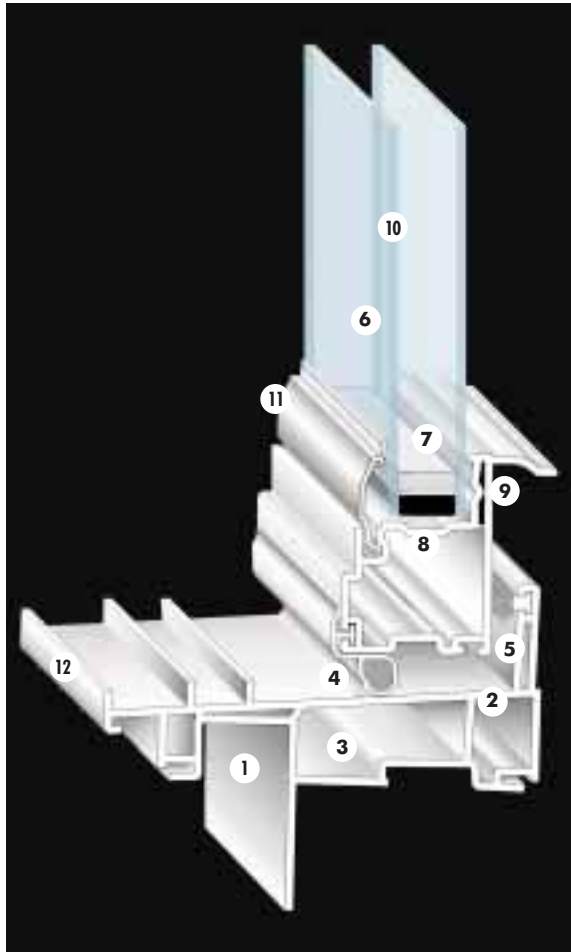
Two Layers of Weather Stripping:

With double mylar fins for resistance to air and water infiltration



* See test report for specifics

Windgate Window Features



- 1 Double-wall, Integral "J" Channel: Designed into the frame, eliminating the cost of an add-on "J" channel while providing a pleasing "beveled" exterior look.
- 2 Heavy Walled PVC framing acts as a natural insulator.
- 3 Dead Air spaces within the frame and sash profiles further resist energy flow.
- 4 Closed cell compression seal at sloped sill resists air and water penetration.
- 5 Fin seal weather stripping at sill further reduces air infiltration.
- 6 3/4" Insulating glass provides optimum energy efficiency.
- 7 "Warm edge" low conductance spacer resists energy flow through the edge of glass.
- 8 Water management grooves channel moisture away from insulated glass sealant.
- 9 Dual hollows at lift rail add strength and insulation.
- 10 Optional InnovativE™ High Performance Glass utilizes Low E coating specifically engineered for local requirements.
- 11 Direct set back bedding bonds glass to sash, reducing air and water infiltration potential.
- 12 Rigid screen pocket on sill reduces "screen rattle," even on windy days.

Casements

- Sash opens completely, so windows can be cleaned easily from inside your home
- All components are corrosion resistant, providing years of trouble free performance
- Multi-Point Locking System locks sash at multiple points, for utmost security
- Three layers of weather stripping assure effective barrier to air and water penetration
- Multiple units made with single frame construction

Gliders

- Heavy duty brass rollers assure effortless sash travel
- Roller housing transfers weight of glass directly to frame, reducing stress on sash members
- Independent weep chambers on frame assure effective water runoff
- Stylish beveled exterior matches look of double-hung and casement, to provide a uniform exterior appearance

Fixed Units

- Mulling system allows fixed units to be mullied to any other window
- Equal sight lines assure uniform exterior appearance of all units

Bay and Bow Units

- Choose from 10° and 15° bow, or 30° and 45° bay units, with casement or double-hung flankers
- Headboard and seatboard are paintable and stainable
- Headboard and seatboard are insulated for comfort
- All exterior wood surfaces are enclosed in vinyl providing a complete moisture barrier



