

# *the* BELMONT



## **The American Window Alliance**

We are a national network of independent manufacturers who are responding to the regional demands of our customers, using our strengths as local suppliers.

This alliance gives you the strength of a large national supplier, along with the flexibility of a local organization.

Using the unique talents of each member of *The American Window Alliance*, we have realized our goal: providing a revolutionary family of window and door systems, assuring you of the strongest, most attractive products available.

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



*the* BELMONT



ALLIANCE WINDOW SYSTEMS

# New Windows: Improving Your Lifestyle



The *Belmont*™ series from The American Window Alliance has been designed with features and benefits normally available only in the most expensive windows.

## FEATURE RICH

The *Belmont* series boasts such standard features as constant force balances for a lifetime of trouble free service, tilt in sash to make window cleaning a snap, warm edge insulating glass for improved thermal efficiency, a sloped sill to assure effective water runoff, interlocking sash for security, and is made from

SunShield® vinyl, a highly refined PVC compound that is guaranteed for life.

## EXCEPTIONAL VALUE

Although we have packed a lot of features into the *Belmont*, it remains one of the most competitively priced windows available.

Meticulous engineering and efficient manufacturing technology help to make the *Belmont* an exceptional value.

For a window to be an exceptional value it should offer proven reliability in its framing material, its hardware components, and its insulating

glass system. Typically, this is where so called "bargain" windows fail to measure up.

## IMPROVING YOUR LIFESTYLE

With the *Belmont*, you'll get a window that is thermally efficient, is easy to clean and to operate, is maintenance free and is backed by one of the strongest warranties in the industry, our exclusive Assurance Plus™ warranty.\*

The windows you choose should last you a lifetime. And, since they'll be with you a long time, you'll want to consider your choices carefully.

The *Belmont* series is available in a full range of styles including: double hung, single hung, glider window, fixed window, a variety of geometric shapes and casement windows, to allow you a wide range of choices when remodeling your home.

You can be secure in knowing that *Belmont* by the American Window Alliance will complement your home's beauty and styling.

\*See AWA Warranty for details.



*With a wide variety of window styles to choose from, Belmont has become the natural choice for most homeowners. Choose from single or double hung, horizontal glider, fixed, geometric or casement windows.*

# Quality: An Affordable Option

*Belmont* windows feature a rugged stainless-steel constant force coil balance system. Using seatbelt like engineering, it uncoils then retracts. The balance never needs adjusting, requires no maintenance and allows the sash to glide smoothly and evenly throughout its travel.



Constant force balances have been in use in better windows for over 20 years and have stood the test of time. They are recognized as the most reliable balance system available.

The key to the reliability of the balance lay in the simplicity of its design.

Unlike block-and-tackle balances that use strings that can break, or spiral balances that require adjustment from time to time, coil balances have fewer moving parts, and require no adjustment. Just one more feature that makes *Belmont* windows your best choice.

In a window, quality is determined by three factors: product design, materials and craftsmanship in assembly.

### Product Design

The manufacturers of the AWA took their 150+ years of combined manufacturing expertise, and worked with Dayton Technologies, America's leading extruder of PVC profiles. Together, they developed Alliance Windows - a family of vinyl windows and doors.

*Belmont* represents the result of those efforts, and includes such features as a deeply pocketed head to resist air infiltration, integral sash interlock for security, as well as recessed tilt latches for improved aesthetics.

### All Vinyls are Not Created Equal

In order to produce a window with lasting strength and outstanding overall performance, you must start with material components of



superior quality.

*Belmont* is made from SunShield® vinyl, the highest quality vinyl available today. No vinyl undergoes a more rigid formulation process than SunShield vinyl.

All individual hardware components have been chosen for their durability and superior quality.

### When Craftsmanship Meets Technology

We use the experience and knowledge we've gained over the years, along with computer aided manufacturing equipment. The result is a window which offers you something rare these days: peace of mind.

Whatever style you choose, *Belmont* windows are custom made to fit the existing openings in your home, assuring you of a precise fit.

\* See AWA Warranty for details

| 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" Warm edge non-conductive spacer with optional InnovativE Low E glass |
| 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"                                      | "Toggle out", (has passed AAMA Forced Entry Resistance Test)              |
| 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                                 |

# Glass: Your Invisible Barrier

When you consider energy efficiency, perhaps the most critical part of any window is its 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 *Belmont* windows is made from vinyl, a natural insulator. To prevent energy loss through conduction, all units are made with "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 *Belmont's* 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 optional 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.

### Solar Gain vs. Heat Loss

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

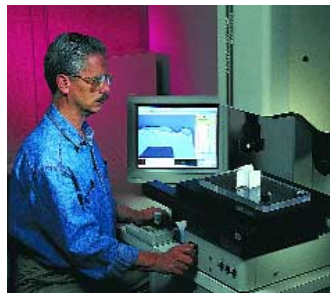
In the North where heating is a concern, glass must allow maximum solar gain, while preventing heat loss.

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



We make sure our windows stand up to the forces of nature.



sense that the insulating glass system should be manufactured to address these concerns.

That's why *Belmont's* 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



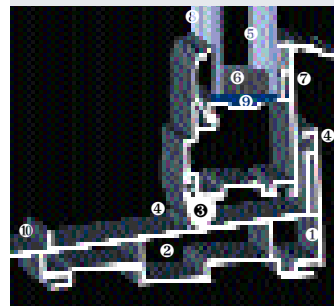
window you want, *Belmont* can fill your request.

And, since all *Belmont* 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 Belmont windows provide an effective barrier to any weather condition**

(1) Heavy Walled (0.065") PVC framing acts as natural insulator (2) Dead Air spaces within the frame and sash profiles further resist energy flow (3) Closed cell compression seal at sloped sill resists air and water penetration (4) Two layers of weather stripping at sill further reduce air infiltration (5) 3/4" Insulating glass provides optimum energy efficiency (6) "Warm edge"



low conductance spacer resists energy flow through the edge of glass (7) Dual hollows at lift rail add strength and insulation (8) Optional InnovativE High Performance Glass utilizes low 'E' coating specifically engineered for local requirements (9) Direct set back bedding bonds glass to sash, reducing air and water infiltration potential (10) Rigid leg on sill reduces "screen rattle", even on windy days

## Belmont Double Hung Window Features and Benefits

**Deeply Pocketed Head:** With weatherstripping to resist air infiltration

**Warm Edge Technology:** Non-Conductive spacer provides barrier to heat transfer in insulating Glass unit

**Routered-in Tilt Latches:** Color matched low profile latches for a neat appearance

**Non-Corrosive Hardware:** Years 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

**3/4" Insulating Glass:** with optional InnovativE glass system utilizing low 'E' coating specifically chosen for maximum regional thermal efficiency

**Positive Sloped Sill:** Provides water runoff, even in driving rain

**Heavy Walled Construction:** 0.065" thick walls

**Fusion Welded Frame and Sash:** The utmost in strength and integrity

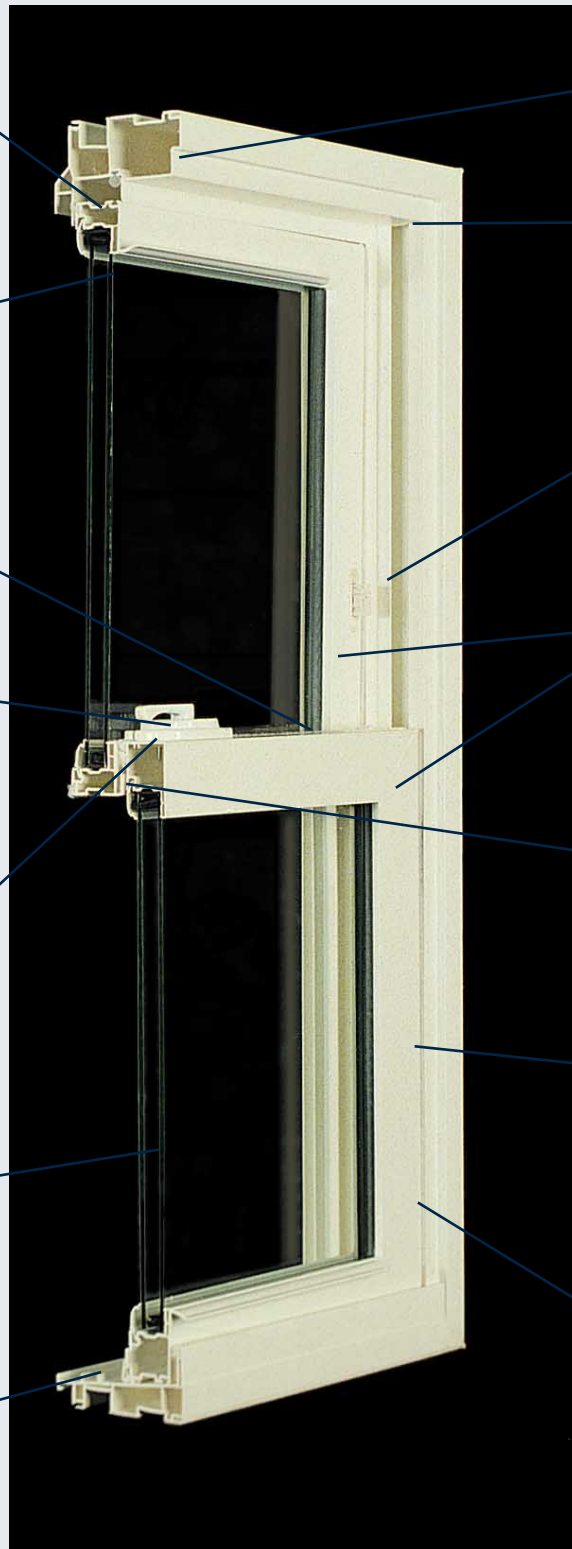
**Night Vent Latch:** Allows for ventilation with security. Have passed AAMA Forced Entry Resistance Testing\*

**Dual Tilt In Sashes:** Both sashes tilt in for easy cleaning

**Interlocking Meeting Rail:** Integral interlock provides additional security and has passed AAMA Forced Entry Resistance Test

**Stainless Steel Constant Force Balance:** Trouble free, maintenance free. Provides smooth operation

**Two Layers of Weather Stripping:** With double mylar fins for resistance to air and water infiltration



\* See test report for specifics

## Belmont Single Hung Window Features and Benefits

### ADDITIONAL FEATURES OF BELMONT STYLES

#### 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
- Unique mulling system allows casements to be mulled with other Belmont units for a variety of window systems

#### GLIDERS

- Adjustable brass wheeled 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 mulled to any other window
- Equal sight lines assure uniform exterior appearance of all units

#### BAY AND BOW UNITS

- Choose from 10; 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

**Heavy Walled Construction:** 0.065" thick walls

**Warm Edge Technology:** Non-Conductive spacer provides barrier to heat transfer in insulating Glass unit

**Non-Corrosive Hardware:** Years 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

**3/4" Insulating Glass:** with optional Innovative glass system utilizing low 'E' coating specifically chosen for maximum regional thermal efficiency

**Positive Sloped Sill:** Provides water runoff, even in driving rain\*

**Fusion Welded Frame and Sash:** The utmost in strength and integrity

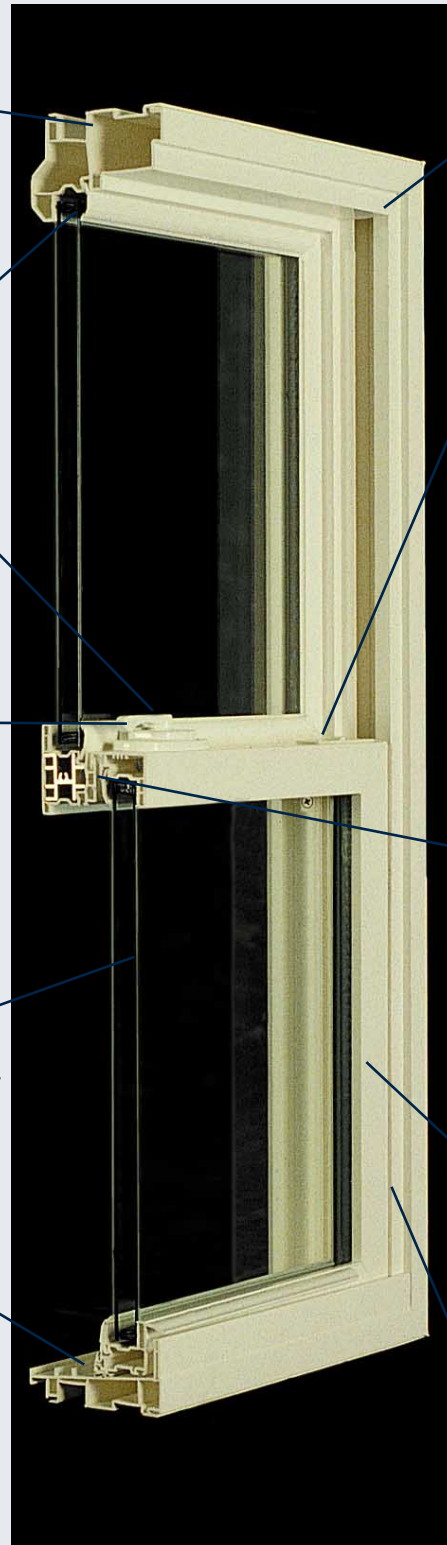
**Routed-in Tilt Latches:** Color matched low profile latches for a neat appearance

**Stainless Steel Constant Force Balance:** Trouble free, maintenance free. Provides years of smooth operation

**Interlocking Meeting Rail:** Integral interlock provides additional security and has passed AAMA Forced Entry Resistance Test

**Bottom Sash Tilts In:** For convenience in cleaning from the inside of your home

**Two Layers of Weather Stripping:** With double mylar fins for resistance to air and water infiltration



\* See test report for specifics

# Belmont-We Fit Your Style



**Single-hung** adds a traditional style coupled with strength and efficiency.



**Double-hung and transom windows** bring added height and light to any room setting.



**Glider windows** are a great choice when space is at a premium.



**Casement windows** offer maximum ventilation and viewing area.



**Bay windows** add architectural interest and light, to your living space.



**Combination windows** dramatically emphasize the space.



**Fixed windows** are an effective way to add light to any room.



**Fixed window walls** offers a maximum viewing area and opens the room to the beauty outside.



**Architectural and geometric windows** create a custom look for any special room.