

# VIRTUS

WINDOW & DOOR SYSTEMS

**TOMORROW'S TECHNOLOGY TODAY**



# X5 Double Hung

The secret behind this window's performance is its exceptionally low air infiltration ratings which can lower the energy consumption of a typical home by 25-40%. This unique feature, combined with our Heat Seal® Glass System or Heat Seal® Super Glass System, offers outstanding thermal performance and exceeds the most rigorous Energy Star Requirements.

## PowerLift

(Block-and-Tackle) balance system used in our windows can achieve life cycles as high as 28,000 cycles. Constant Force commonly used by other window manufacturers only achieves 5,000 cycles.\*

Power Lift 28,000

## Constant Force

5,000

\*Based on test performed by BSI Hardware-Amesbury Group

- **Fully Welded Frame and Sash** with an exceptional thermal efficiency and outstanding strength.
- **Optional Foam-Filled Insulated Extrusions** for energy efficiency.
- **Insulated Extra-Strength Glass** increases strength and sound reduction.
- **Heat Seal® Glass System** offers thermal efficiency for fuel cost savings in any season.
- **Power Lift™ Balance System** allows smooth window operation.
- **Full Interlock with Triple Weather-Stripping** provides low air infiltration for increased comfort.
- **One Piece Sloped Sill** helps eliminate clogged and frozen weep holes as well as reducing air infiltration and chimney effect drafts.
- **Heatseal® Warm Edge Spacer System** for excellent thermal efficiency and drastic reduction in the possibility of condensation on the inside of the window.
- *Available in Replacement and New Construction applications.*

Stylish Full 3/4" Depth Welded Mainframe with a beveled colonial exterior curves that are not only beautiful, but also allow for maximum weld surface resulting in outstanding strength and years of long lasting performance.

Standard Slim Profile Sash lock with tamper-proof cam ensures a much smoother turn and increases the life cycle over traditional locks.

Our Insul-Tec Window offers a fully integrated lift rail giving the window a nice, contemporary look.

The sill dam wall is mortised into the jamb adding strength and lowering the possibility of leaks that may occur at corner seals.

Push Button Spring-Loaded Vent Latches allow both window sashes to remain partially open for ventilation.

## WARRANTY

All of our windows and doors are manufactured from high quality materials and are backed by a Transferable Lifetime Limited Warranty.

**VIRTUS**  
WINDOW & DOOR SYSTEMS  
TOMORROW'S TECHNOLOGY TODAY

# X5 Slider



- **Full 3 1/4" Depth Welded Mainframe** with beveled colonial exterior features curves that are not only beautiful, but also allow for maximum weld surface resulting in exceptional strength and years of long lasting performance.
- **Heat Seal® Glass System** offers thermal efficiency for fuel cost savings in any season.
- **Full Integral Interlock** with double weather-stripping.
- **The Optional Auto-Lock** locking system which is easy to engage.
- **Heavy Gauge Fully Extruded Handles** on both sashes.
- **Fiberglass Mesh Half Screens** standard on all windows.
- *Available in Replacement and New Construction applications.*

## SCREEN

ThruVision Plus® is our fiberglass improved visibility screen. This product does for windows and doors what high-definition technology has done for television viewing: it improves the view by making it sharper and more vivid.



Industry Average Screen



ThruVision PLUS®  
Standard with Insul-Tec Windows

**VIRTUS**  
WINDOW & DOOR SYSTEMS  
TOMORROW'S TECHNOLOGY TODAY



Virtus Windows offers 2-lite and 3-lite (shown) sliding windows.



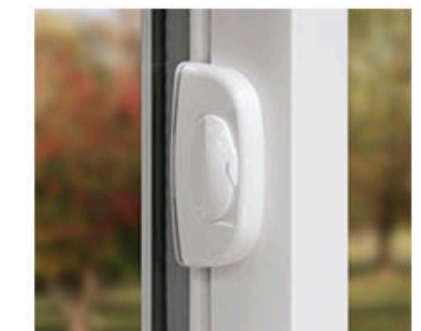
The window opens easily because it's mounted on brass wheels which allows the slider to smoothly glide across its track.



Push Button Spring-Loaded Vent Latches allow both window sashes to remain partially open for ventilation.



Standard factory bumpers are installed for a quieter operation.



Optional Auto-Lock features an exclusive automatic locking system which is easy to engage

Virtus Windows offers many color selections in addition to the standard Euro-White to give your home a distinct look and enhance its curb appeal. You can special order custom exterior colors from a virtually unlimited selection of paints. Our paints are environmentally safe and durable giving your exterior a vibrant and long-lasting color finish. All colors except Euro-White are available at an additional charge.

## INTERIOR COLOR



Standard Euro-White finish and Standard Euro-White Lock



Optional Almond frame and Optional Almond lock



Optional Cocoa frame and Optional Cocoa lock

## EXTERIOR COLORS



Euro-White  
(Standard)



Almond  
(Optional)



Cocoa  
(Optional)



Sandstone  
(Optional)



Bronze  
(Optional)



Printed colors may not match the product's actual color. Please visit a local dealer to view actual color samples.

## OPTIONAL AUTO-LOCKS



White



Almond



Cocoa

## GRIDS



Flat Grids  
Between Glass



Contour Grids  
Between Glass

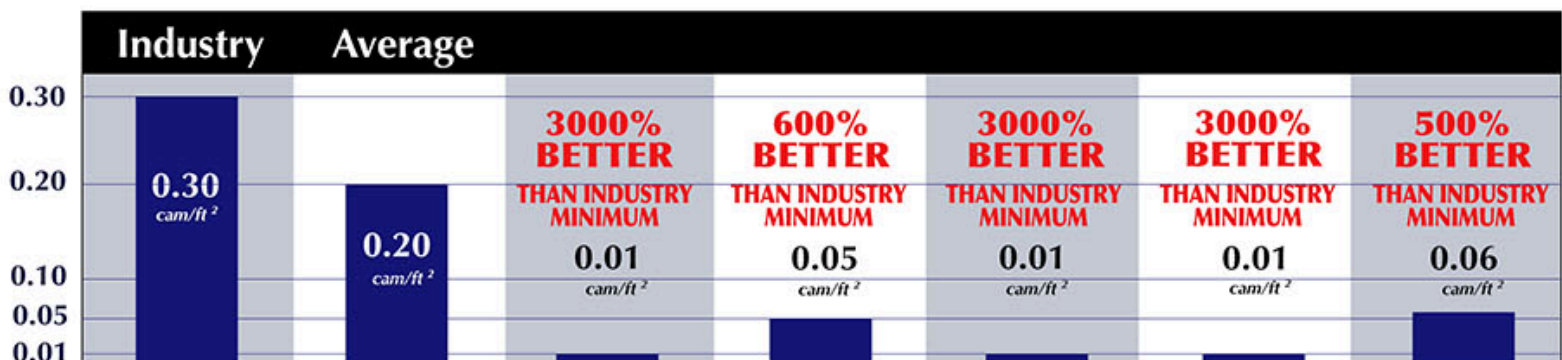
Looking for a stunning design to instantly set your home apart both inside and out. A choice of decorative grids can highlight the architectural style that speaks to you.

GBG (Grids Between Glass) consist of aluminum bars sealed in the insulating airspace between the two panes of glass. Because the interior and exterior glass surfaces are not affected, cleaning your windows is a much easier task.

GBG grids on two tone windows are available with matching interior and exterior colors.

## AIR INFILTRATION

Air infiltration/drafts is a term used to describe the air leaking into or out of your home through the window frames. The graph shows the amount of air in cubic feet that may come through the window at speeds of 25mph.

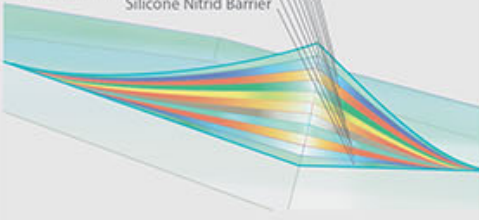


The results are based on a tested window sample by AAMA testing window guidelines. Title of Test and Method: Air Infiltration-ASTME28375PA-(1.6psf)25mph

# HEAT SEAL® GLASS SYSTEM

## High Performance Reflective Coatings Glass

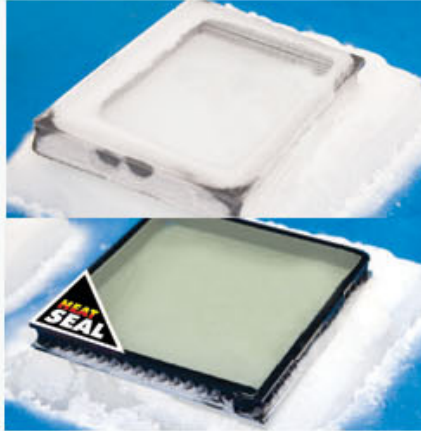
Silicone Nitrid Barrier  
Tin Oxide Optical Filter  
Nickel-Chrom Adhesive Barrier  
Silver Thermal & Solar Performance  
Zinc Oxid Performance Enhancing  
Tin Oxide Optical Filter  
Nickel-Chrom Adhesive Barrier  
Silver Thermal & Solar Performance  
Zinc Oxid Optical Filter  
Titanium Dioxide Optical Enhancing  
Silicone Nitrid Barrier



*HeatSeal™ heat reflective coatings are microscopically thin layers of metal & metal oxide that act like a filter – some energy is transmitted, some energy is reflected.*

## High Performance Glass Unit Spacer

Most windows are manufactured with a metal spacer in between the glass which causes excessive condensation and heat loss.



*Our HeatSeal® non-metal spacer creates an excellent thermal barrier and reduces the transfer of heat and cold into the home.*

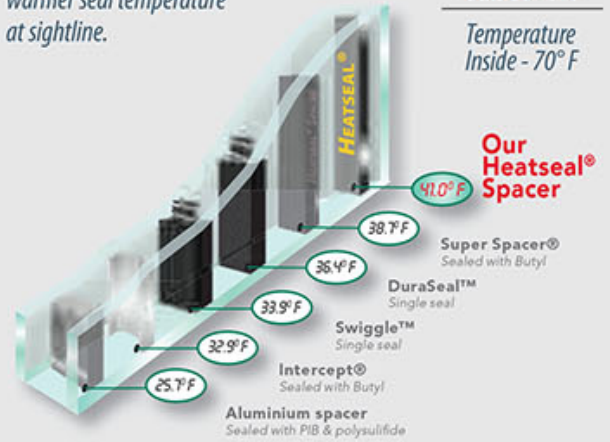
## Spacers

*Our Heatseal® Spacer gives your home excellent thermal efficiency and drastic reduction of condensation.*

*As much as 15.3° F warmer seal temperature at sightline.*

*Temperature Outside - 0° F*

*Temperature Inside - 70° F*



Super Spacer® is a registered trademark of Ignorant, U.S. Inc. • Intercept® is a registered trademark of PPS Industries, Inc. DuraSeal is a registered trademark of InCoat Technology, Inc. • Swiggle is a registered trademark of InCoat Technology, Inc. Sealed with PIB & polysulfide. All seal temperatures are in degrees Fahrenheit.

## BASIC ENERGY SAVING PACKAGE

- Heat Seal® Glass System  
Double Pane Glass Unit

U-Value **0.27**  
SHGC **0.30**  
VT **0.55**  
CR **62**



## DELUXE ENERGY SAVING PACKAGE

- Heat Seal® Glass System  
Double Pane Glass Unit
- Foam Filled Extrusions
- Locking Screen

U-Value **0.25**  
SHGC **0.30**  
VT **0.55**  
CR **62**



## SUPER DELUXE ENERGY SAVING PACKAGE

- Heat Seal® Super Glass System  
Triple Pane Glass Unit
- Foam Filled Extrusions
- Locking Screen

U-Value **0.19**  
SHGC **0.26**  
VT **0.45**  
CR **72**



## SUPER DELUXE ENERGY SAVING PACKAGE with KRYPTON GAS

- Heat Seal® Super Glass System  
Triple Pane Glass Unit - **KRYPTON** Gas
- Foam Filled Extrusions
- Locking Screen

U-Value **0.15**  
SHGC **0.26**  
VT **0.43**  
CR **75**



## SUNSEAL BASIC

- SunSeal® Glass System  
Double Pane Glass Unit

U-Value **0.27**  
SHGC **0.21**  
VT **0.42**  
CR **62**



## SUNSEAL DELUXE

- SunSeal® Double Pane Glass Unit
- Foam Filled Extrusions
- Locking Screen

U-Value **0.25**  
SHGC **0.21**  
VT **0.42**  
CR **62**



## SUNSEAL SUPER DELUXE

- SunSeal® Triple Pane Glass Unit
- Foam Filled Extrusions
- Locking Screen

U-Value **0.19**  
SHGC **0.17**  
VT **0.26**  
CR **72**



## SUNSEAL SUPER DELUXE with KRYPTON GAS

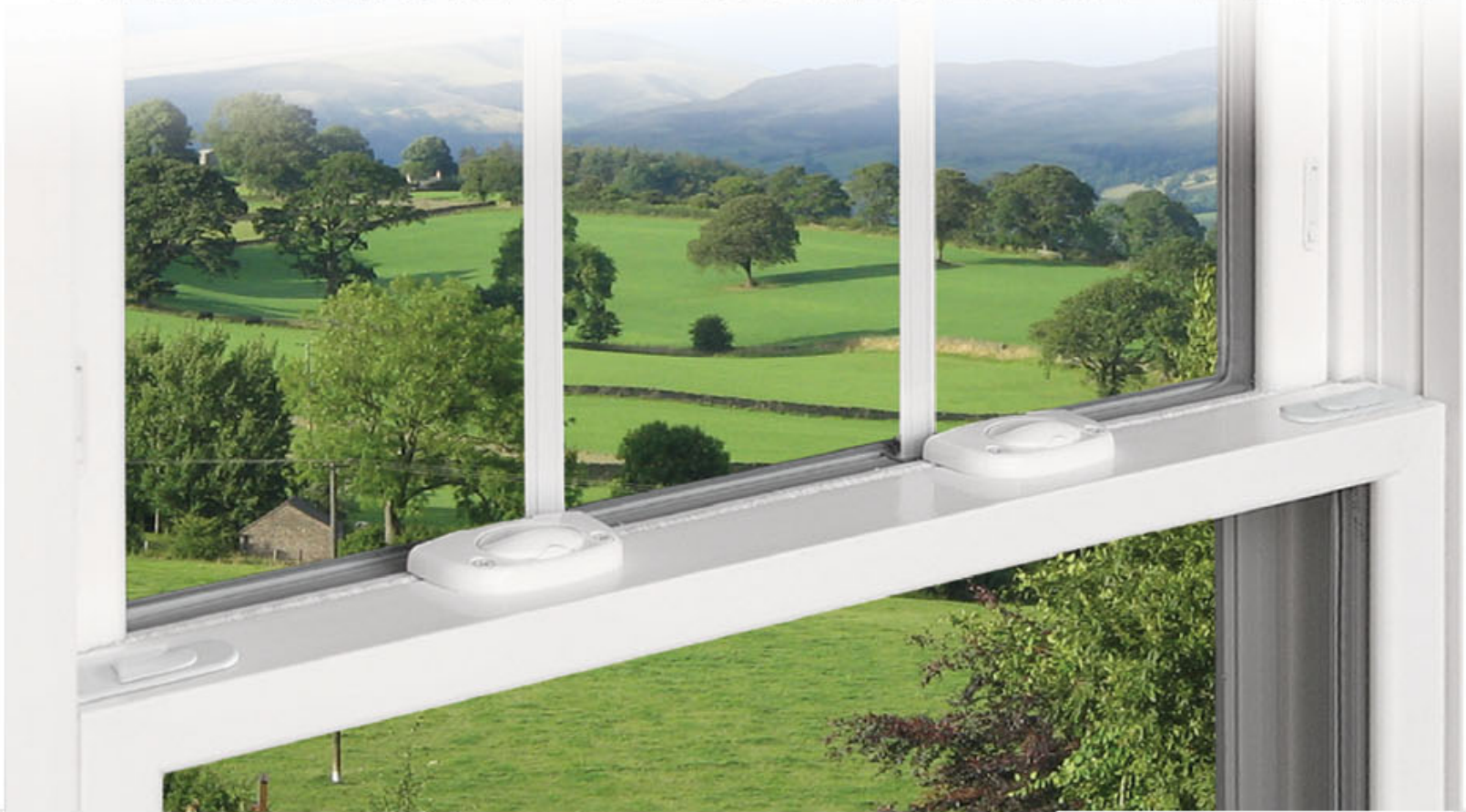
- SunSeal® Triple Pane Glass Unit
- Foam Filled Extrusions
- Locking Screen

U-Value **0.15**  
SHGC **0.17**  
VT **0.26**  
CR **75**



*All U Values based on tested double hung window without grids.*

# TOMORROW'S TECHNOLOGY TODAY



## THERMAL PERFORMANCE (WITHOUT GRIDS)

	Double Hung U-Value	Slider U-Value	Picture U-Value	Energy Star Minimum Northern Climate Zone
<b>HEATSEAL GLASS PACKAGE</b>				
Energy Saving Package	<b>0.27</b>	<b>0.27</b>	<b>0.27</b>	<b>0.30</b>
Deluxe Package	<b>0.25</b>	<b>0.26</b>	<b>0.24</b>	<b>0.30</b>
<b>HEATSEAL SUPER GLASS PACKAGE</b>				
Energy Saving Package	<b>0.21</b>	<b>0.21</b>	<b>0.20</b>	<b>0.30</b>
Deluxe Package	<b>0.19</b>	<b>0.20</b>	<b>0.18</b>	<b>0.30</b>
Deluxe Package - Krypton Gas	<b>0.15</b>	<b>0.16</b>	<b>0.14</b>	<b>0.30</b>

## STRUCTURAL PERFORMANCE

	Double Hung (40x63)	Slider (63x44)	Picture (48x48)	Industry Minimum
<b>DUAL GLAZED</b>				
AAMA Rating	<b>R 50</b>	<b>R 40</b>	<b>R 75</b>	<b>R15</b>
Air Infiltration (CFM/FT <sup>2</sup> )	<b>0.02</b>	<b>0.09</b>	<b>&lt; 0.01</b>	<b>0.3</b>
Water Penetration (MPH)	<b>54</b>	<b>59</b>	<b>66</b>	<b>33</b>
Structural Integrity (MPH)	<b>171</b>	<b>153</b>	<b>210</b>	<b>94</b>

**U-VALUE** result are based on tested window sample without grids by NFRC. U-Value, SHGC, VT, CR values may change slightly for windows made with **GBG** (Grids Between Glass).

**WATER PENETRATION mph** - Specifies wind load pressure in mph a window can withstand without leaking, under rain equivalent to 8" per hour.

**STRUCTURAL INTEGRITY mph** - Wind load in mph the window can withstand before breaking.

All result numbers are based on tested window sample by NFRC and AAMA testing window guidelines. Use for comparison purposes only. Actual values may vary depending on installation, size of the window, and other conditions.

All illustrations, photographs, and specifications in this publication are based on the latest product information available at the time of printing. Some windows shown with optional features. See the actual product for complete accuracy. The manufacturer reserves the right to alter or discontinue any model or specification without notice.