



# PRECISION WELD





## Engineered for Performance...

Full 3¼" Depth Welded Mainframe that features beveled exterior curves that not only has a modern day look, but also allows for maximum weld surface resulting in outstanding strength and years of long lasting performance.



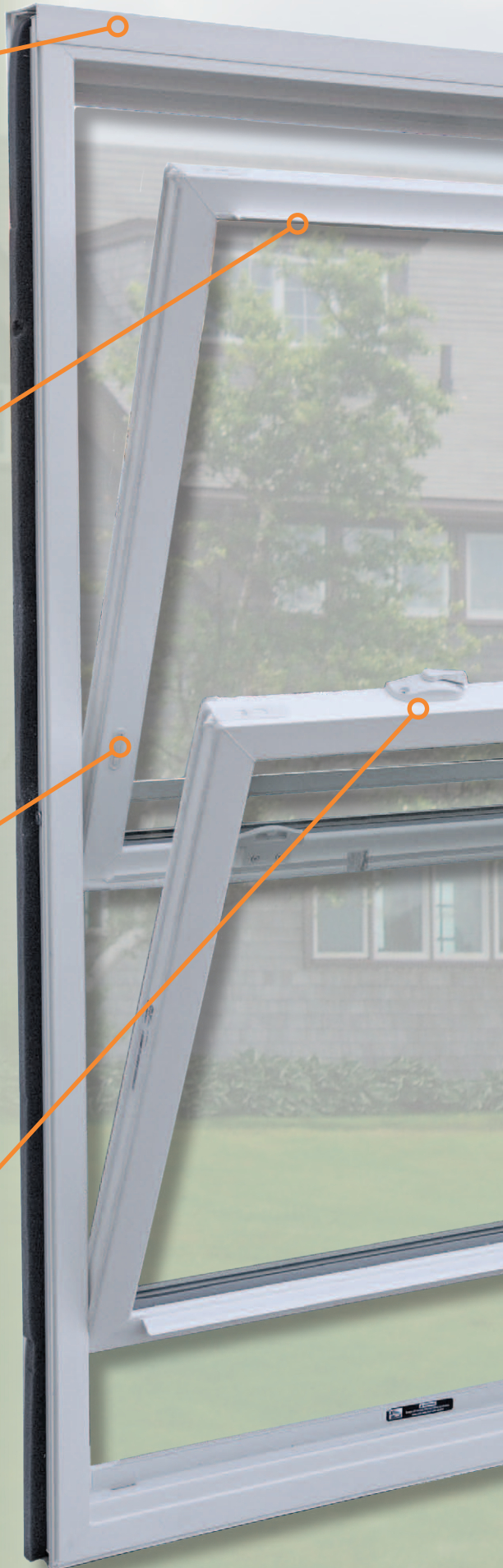
The 400 Series offers a fully integrated lift rail giving the window a neat, clean appearance .



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



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



## Precision Weld - Double Hung

- Heatseal® warm edge spacer system for excellent thermal efficiency and drastic reduction in the possibility of condensation on the inside of the window.
- Full integral interlock with double weather-stripping.
- Insulated Extra Strength Glass increases strength and sound reduction.
- Heavy gauge fully extruded handles on both sashes.
- Fiberglass mesh half screens standard on all windows.
- Power Lift balance system allows smooth window operation.



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



A one piece sloped sill allows for proper water drainage without leaks.



## Engineered for Performance...



1. The window opens easily because it is mounted on brass wheels which allows the slider to smoothly glide across its track.
2. Push Button Spring-Loaded Vent Latches allow both window sashes to remain partially open for ventilation.



## Precision Weld- Slider

- Full 3¼" 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.
- Heatseal® warm edge spacer system for excellent thermal efficiency and drastic reduction in the possibility of condensation on the inside of the window.
- Full integral interlock with double weather-stripping.
- The optional Auto-Lock features an exclusive automatic locking system which is easy to engage.
- Heavy gauge fully extruded handles on both sashes.
- Fiberglass mesh half screens standard on all windows.



3. Standard factory bumpers are installed for a quieter operation.
4. Optional Auto-Lock features an exclusive automatic locking system which is easy to engage.



# Options

We know that you want to make your visions come to life while enhancing your home's curb appeal. That's why we offer a myriad of special order color options in addition to the standard Euro-White. Our paints are environmentally safe and durable, giving you many years of enjoyment.

## Interior Options



Standard Euro-White finish and  
Standard Euro-White Lock



Optional Almond frame  
and Optional Almond lock

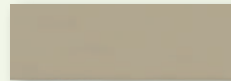


Optional Cocoa frame  
and Optional Cocoa lock

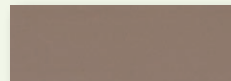
## Exterior Colors



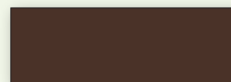
Euro-White



Almond



Cocoa



Bronze



*All colors except Euro-White are available at an additional charge.  
Printed colors may not match the product's actual color.  
Please visit a local dealer to view actual color samples.*

## Optional Auto-Locks



White

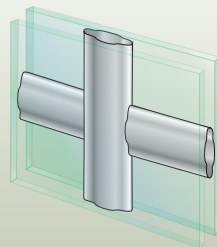
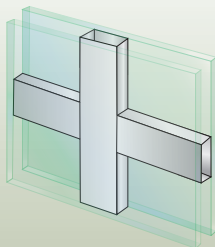


Almond



Cocoa

## Grids

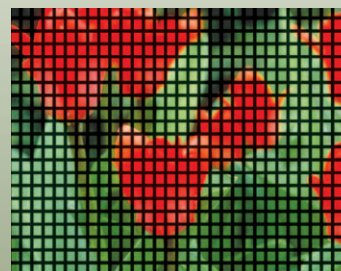


### Flat Grids Between Glass    Contour Grids Between Glass

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.

## 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



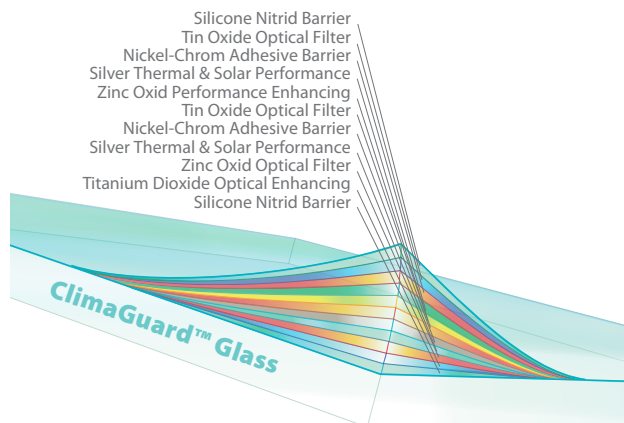
**ThruVison PLUS®**  
Standard with Precision Weld  
Windows



# Engineered for Comfort

## Reflective Coatings

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



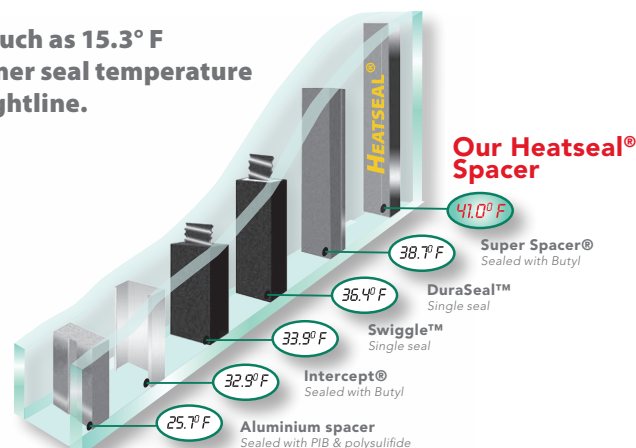
ClimaGuard™ is a trademark of Guardian Industries Corp.

## Spacers

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

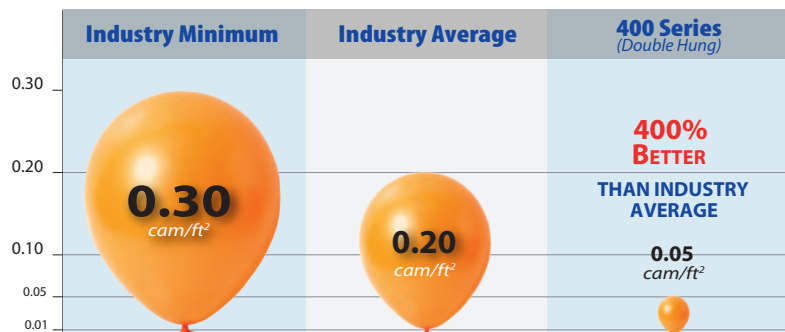
Temperature  
Outside - 0° F  
Temperature  
Inside - 70° F

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



Super Spacer® is a registered trademark of Edgetech I.G., Inc. • Intercept® is a registered trademark of PPG Industries, Inc. DuraSeal is a registered trademark of TruSeal Technologies, Inc. • Swiggle is a registered trademark of TruSeal Technologies, Inc. Simulation performed by Enermodal engineering, Ltd. using Window 5.2. All air spaces are 0.562" wide 0.033 emittance low-E glass.

## Air Infiltration



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 & Method: Air Infiltration - ASTM E 283 75 PA - (1.6 psf) 25 mph.

"Reduced air infiltration combined with proper ventilation can not only reduce your energy bills but it can also improve the quality of your indoor air. Outdoor air that leaks indoors makes it difficult to maintain comfort and energy efficiency. In addition, air leakage accounts for 25–40% of the energy used for heating and cooling in a typical home."\*

\* US Department of Energy - [www.energystar.gov/index.cfm?c=new\\_homes\\_features.hm\\_f\\_reduced\\_air\\_infiltration](http://www.energystar.gov/index.cfm?c=new_homes_features.hm_f_reduced_air_infiltration)

## Energy Saving Packages

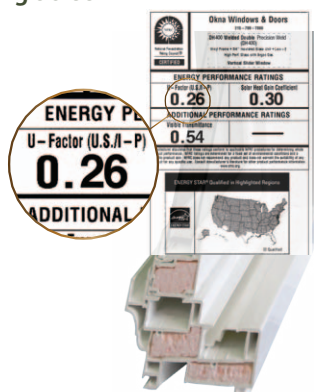
### BASIC ENERGY SAVING PACKAGE

- Heat Seal® Glass System  
Double Pane Glass Unit



### DELUXE ENERGY SAVING PACKAGE

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



### SUPER DELUXE ENERGY SAVING PACKAGE

- Heat Seal® SUPER Glass System  
Triple Pane Glass Unit
- Foam Filled Extrusion
- Locking Screen



# Outstanding Performance

**U-factor** measures how well a product prevents heat from escaping. The rate of heat loss is indicated in terms of the **U-factor** (U-value) of a window assembly. **U-Factor** ratings generally fall between 0.20 and 1.20. **The lower the U-value, the greater a window's resistance to heat flow and the better its insulating value.** Please check the **National Fenestration Rating Council (NFRC)** at [www.NFRC.org](http://www.NFRC.org) to compare energy performance values. By using this information, builders and homeowners can reliably compare one product with another and make more informed decisions about the windows they buy.



**DOUBLE HUNG**

**SLIDER**

**PICTURE**

## THERMAL PERFORMANCE

	Double Hung U-Value	Slider U-Value	Picture U-Value	Energy Star Minimum Northern Climate Zone
<b>DUAL GLAZED</b>				
Energy Saving Package	<b>0.28</b>	<b>0.28</b>	<b>0.27</b>	<b>0.30</b>
Deluxe Package	<b>0.26</b>	<b>0.27</b>	<b>0.26</b>	<b>0.30</b>
<b>TRIPLE GLAZED</b>				
Energy Saving Package	<b>0.22</b>	<b>0.22</b>	<b>0.20</b>	<b>0.30</b>
Deluxe Package	<b>0.20</b>	<b>0.21</b>	<b>0.20</b>	<b>0.30</b>

## STRUCTURAL PERFORMANCE

	Double Hung (38x63)	Slider (63x44)	Picture (48x48)	Industry Minimum
<b>DUAL GLAZED</b>				
AAMA Rating	<b>R 50</b>	<b>R35</b>	<b>R 75</b>	<b>R15</b>
Air Infiltration (CAM/FT2)	<b>0.05</b>	<b>0.01</b>	<b>&lt; 0.01</b>	<b>0.3</b>
Water Penetration (MPH)	<b>56</b>	<b>59</b>	<b>66</b>	<b>33</b>
Structural Integrity (MPH)	<b>171</b>	<b>143</b>	<b>210</b>	<b>94</b>

U-Value, SHGC, VT, CR values may slightly change 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.