

# PRECISION WELD



# **Engineered for Performance...**



# **DOUBLE HUNG**



 HeatSeal® Warm Edge Spacer System
 Provides excellent thermal at

Provides excellent thermal efficiency and a drastic reduction in the possibility of condensation on the inside of the window.

- Full Integral Interlock with Double Weather-Stripping.
- All Sash Stiles with Triple Weather-Stripping.
- Insulated Extra Strength Glass Increases strength and sound reduction.
- Fiberglass Mesh Half Screens standard on all windows.
- Power Lift Balance System Allows for smooth window operation.



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.\*

#### Constant Force



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





1. Our Sliding Window comes standard with brass wheels to allow for easy opening and a smooth glide across the tracks.



2. Push button springloaded vent latches allow both window sashes to remain partially open for ventilation.



3. Standard factory bumpers are installed for a quieter operation.



## **Engineered for Performance...**

- Full 31/4" Depth Welded Mainframe
  Beveled colonial exterior features curves that are
  not only beautiful, but also allows for maximum
  welded surfaces, resulting in exceptional strength
  and years of long lasting performance.
- HeatSeal® Warm Edge Spacer System
   Excellent thermal efficiency and drastic reduction in the possibility of condensation on the inside of the window.
- Full Integral Interlock With Bulb Gasket Seal
- All Sash Stiles With Triple Weather-Stripping.
- Fully Integrated Lift Rail
  Gives the window a neat, clean appearance and
  easy operation.
- Fiberglass Mesh Half Screens Standard on all windows.

## Glide Systems

#### **Smooth Glide System**

(Standard)

#### **EzGlide System**

(Optional)



High quality brass wheels allow the slider to smoothly glide across its track.





This system contains an anodized aluminum track and precision ball bearing wheels for smoother glide and operation especially with oversized and triple pane units.



# Hardware



White (Standard)



Almond (Optional)



Cocoa (Optional)



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 Colors**

Standard Euro-White Frame



**Optional Almond Frame** 



Optional Cocoa Frame

#### **Exterior Colors**



Euro-White (Standard)



Almond (Optional)



Sandstone (Optional)



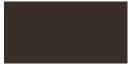
Cocoa (Optional)



Terra Brown (Optional)



Basic Brown (Optional)



Bronze (Optional)



Custom Colors (Optional)

# **OPTIONS**

#### **Textured Glass**

OKNA Windows offers textured glass in a variety of distinctive choices that add visual interest to any design while offering variability in light control. Our Regular Obscure glass will be satisfying to those looking for a more traditional look with obscure glass. The Niagara offers a modern feel giving the look of a waterfall. Both options are great for bathroom windows.



Regular Obscure



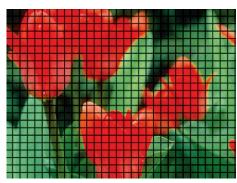
Niagara

#### Screens

**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



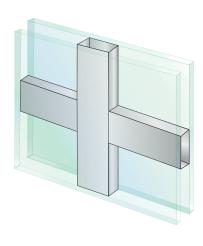
ThruVison PLUS® Standard on all OKNA Products

#### **Grids**

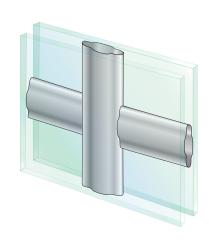
Looking for a stunning design to instantly set your home apart both inside and out. A choice of decorative grids can highlight the architectural style that speaks to you.

Grids Between Glass (GBG) 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\*.

\*Custom Colors are not available on GBG.



Flat Grids Between Glass



Contour Grids Between Glass

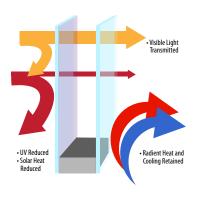
#### Glass

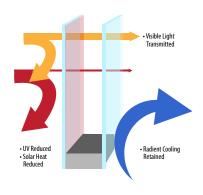
The glass unit is one of the most important elements of your new window. It is about 90% of the whole window. Your decision will dramatically effect your living comfort and expenses for many years.

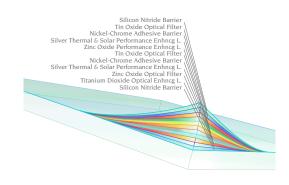
#### **Heatseal Glass**

#### **Sunseal Glass**

#### High Performance Reflective Glass Coatings







In climates where heating and cooling are the primary concern, HeatSeal Glass products are designed to take advantage of free solar heat, resulting in higher inside glass temperature. Passive solar and thermal insulation reduce the draft sensation caused by cold glass surfaces, providing windows that reduce heating costs.

In climates where cooling is your main concern, SunSeal Glass products are designed to reduce solar heat while still providing color-neutrality. This solar control property, combined with thermal insulating benefits, results in beautiful, natural-looking glass that helps keep air conditioning costs low.

HeatSeal™ heat reflective coatings are eleven (11) microscopically thin layers of metal & metal oxide that act like a filter – some energy is transmitted, some energy is reflected.

Temperature Outside - 0° F

Our HeatSeal®

38.7° F

76 4º 8

33.9° F

22 g0 g

#### High Performance HeatSeal Spacer

The glass panes are separated by a "spacer". A spacer is the piece that is located between panels of glass in an insulating glass system. Its main function is to seal the gas space between them. Majority of windows, unlike Okna Windows, are made with metal spacers. The main disadvantage to metal spacers is energy loss and condensation.

Our HeatSeal® Spacer and sealant system is made with six individual non-metallic components. Produced in a controlled factory setting and comes ready to use, out of the box: no assembly and no adding other components. Used in Okna's state-of-the -art robotic assembly line using a one-step process where units are sealed using heat and compression. Our HeatSeal® Spacer guarantees your home the warmest glass and least condensation possible.



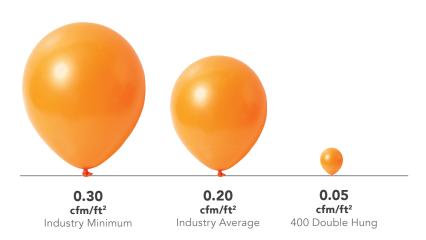
# Warm Edge Spacer

#### Examples of Condensation:

A good quality spacer can significantly reduce condensation in comfortable humidity levels. Water and ice forming can lead to mold growth.

# Our HeatSeal® Spacer guarantees your home the warmest glass and least condensation possible. As much as 15.3° F warmer sill temperature at sightline.

#### Air Infiltration



"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

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 osf) 2.5 moh.

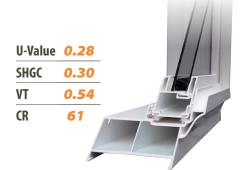
## **Energy Saving Packages**

#### **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

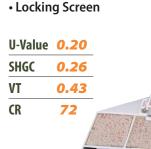
Locking Screen



#### **SUPER DELUXE**

**ENERGY SAVING PACKAGE** 

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

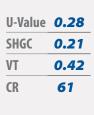


SUNSEAL GLASS is specifically designed for homes in the southern climate.

#### **SUNSEAL** BASIC

• SunSeal® Glass System

Double Pane Glass Unit

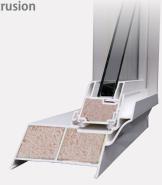




#### **SUNSEAL** DELUXE

- SunSeal® Glass System

  Double 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 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

400 Series Thermal Performance						
	Double Hung U-Value	Slider U-Value	Picture U-Value	Energy Star Requirement*		
Dual Glazed						
Energy Saving Package	0.28	0.28	0.27	0.27		
Deluxe Package	0.26	0.26	0.25	0.27		
Triple Glazed		•••••				
Energy Saving Package	0.22	0.22	0.20	0.27		
Deluxe Package	0.20	0.20	0.18	0.27		
		_	•			

400 SERIES STRUCTURAL PERFORMANCE							
	Double Hung (38x63)	Slider (63x44)	Picture (48x48)	Industry Minimum			
Dual Glazed							
AAMA Rating	R50	R35	R75	R15			
Air Infiltration (CAM/FT <sup>2</sup> )	0.05	0.01	< 0.01	0.3			
Water Penetration (MPH)	56	59	66	33			
Structural Integrity (MPH)	171	143	210	94			

**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 Grids Between Glass (GBG)

**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.









