# PRECISION WELD



*400 Series by OKNA Windows*

OKNA

# DOUBLE HUNG



## Engineered for Performance...

- **HeatSeal® Warm Edge Spacer System**
  Provides excellent thermal efficiency and a drastic reduction in the possibility of condensation on the inside of the window.
- **Full Integral Interlock with Double Weatherstripping**
- **All Sash Styles with Triple Weatherstripping**
- **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.
- **Available in Replacement Application Only**



**Full 3¼" Depth Welded uPVC Frame and Sashes**
Features colonial beveled exterior curves that not only have a modern day look, but also allows for maximum welded surfaces. This gives our window outstanding strength and years of long-lasting performance.



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



**One-Piece Sloped Sill**
Allows for proper water drainage without leaks.



**Standard Slim Profile Sash Lock with Tamper-Proof Cam**
Ensures a much smoother turn and increases the life cycle over traditional locks.



**Fully Integrated Lift Rail**
Gives the window a neat, clean appearance.




***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.**




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

# SLIDER

Engineered for Performance...

- **Full 3¼" Depth Welded uPVC Frame and Sashes**
  Features colonial beveled exterior 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 Weatherstripping**
- **Fully Integrated Lift Rail**
  Gives the window a neat, clean appearance and easy operation.
- **Fiberglass Mesh Half Screens**
  Standard on all windows.
- **Available in Replacement Application Only**



**Standard Brass Wheels**
Allows for easy opening and a smooth glide across the tracks.



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

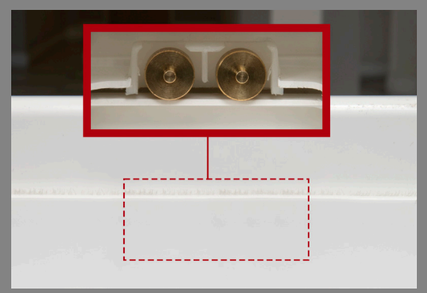


**Standard Factory Bumpers**
Installed discreetly on the frame wall for a quieter operation.

## Smooth Glide System

*Standard*

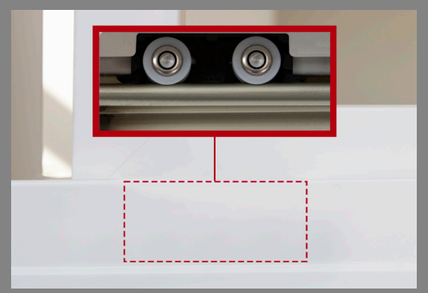
High quality brass wheels allow the slider to smoothly glide across its track.



## EZ Glide System

*Optional*

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



# 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.

## Hardware and Interior Colors

*All colors options other than Standard  Euro-White are available at an additional charge.*



**Standard Euro-White Finish with Standard Euro-White Lock**



**Optional Almond Finish with Optional Almond Lock**

## Exterior Colors

OKNA 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 finish.



| **Almond** | **Sandstone** | **Terra Brown** | **Cocoa** | **Basic Brown** | **Bronze** | **Nicol's Black** | **Custom Colors** |
|---|---|---|---|---|---|---|---|
| *Optional* | *Optional** | *Optional** | *Optional* | *Optional** | *Optional* | *Optional** | *Optional* |

** Surcharge applied for painted screens.*

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

## Optional WOCD Latches

(Window Opening Control Device)

As of 2018, more states are adapting this feature into their window manufacturing and installation regulations. When activated, the device will allow the window to be opened no more than four inches. If you would like to open the window fully, you can deactivate the device and when you close the window the device automatically reactivates.

*Available in White and Almond.*

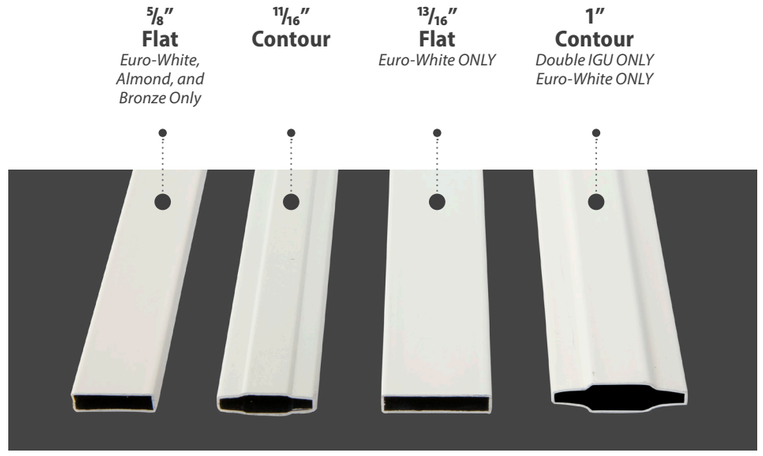


## Grids

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*.

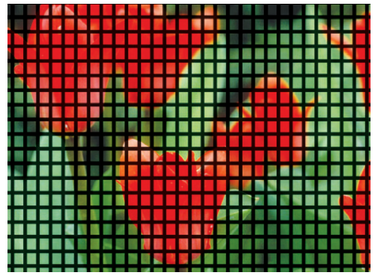
**Custom Colors are not available on GBG.*




## 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.

*ThruVision Plus® is standard on all OKNA Products.*



**Industry Average Screen**



**ThruVison PLUS®**

## Specialty 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. Shown here is our Obscure glass. Other available glass options are tempered, laminated, and custom configuration. With a range of options at your fingertips, you can find a standard glass texture for virtually every application and aesthetic, from traditional to modern.



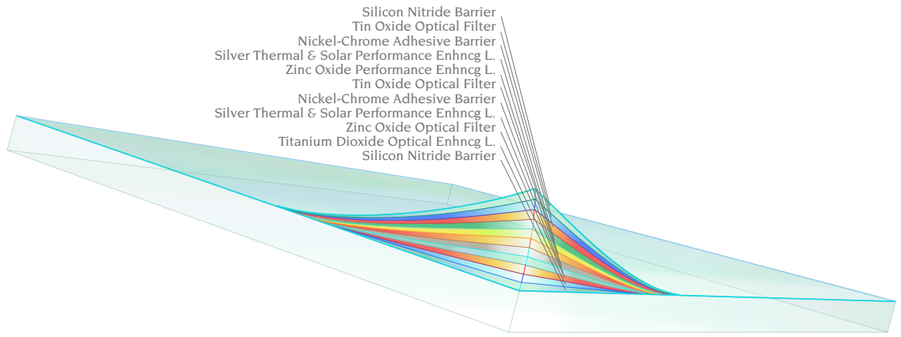
**Obscure**

# The Glass Unit

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 affect your living comfort and expenses for many years.

## High Performance Reflective Glass Coatings

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



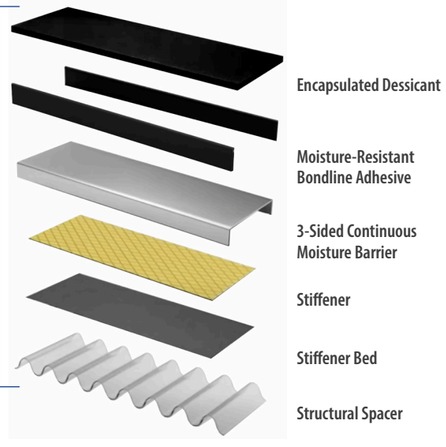

## High Performance HeatSeal® Spacer

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, our spacer is applied with 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.

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






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

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



**Metal Spacer**



**Warm Edge Spacer**

## Glass Options

When deciding on what glass package to choose, keep your environment in mind. Do you live in an area that it is mainly sunny and warm or one that has cold and warm weather? No matter what the answer is, we have a glass coating available to fit your needs. Our HeatSeal® glass is perfect for areas that tend to have fluctuating temperatures in the seasons. It helps to keep the warm air in during the winter and protect your home from the heat of the sun in the summer. For those who deal with warmer climates throughout the year, our SunSeal® glass will help block the heat from sunlight to keep your house cooler.

**Clear Glass**

**HeatSeal® Coated Glass**

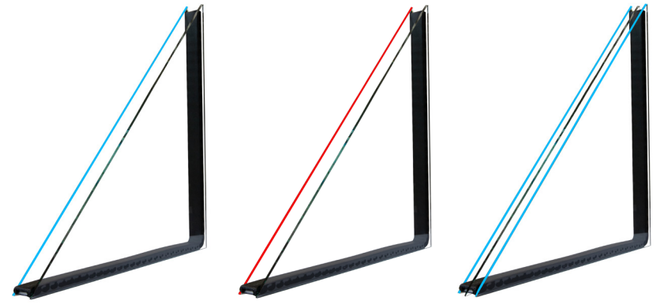
**SunSeal® Coated Glass**

**(AR)** *Argon Gas*

**(KR)** *Krypton Gas*

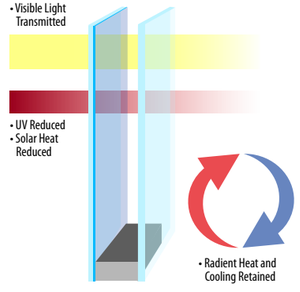
**(DP)** *Double Pane*

**(TP)** *Triple Pane*

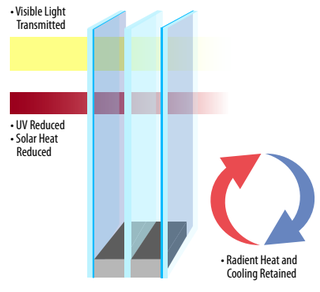


| | Clear | HeatSeal® *(DP) (AR)* | SunSeal® *(DP) (AR)* | HeatSeal® Triple Glass *(TP) (AR)* | HeatSeal® Triple Glass *(TP) (KR)* |
|---|---|---|---|---|---|
| **U-Factor** Measures the rate of heat transfer and tells you how well a window insulates. | √ | √√√ | √√√ | √√√√ | √√√√√ |
| **Solar Heat Gain Coefficient** How well a window blocks heat from the sun. | √ | √√√ | √√√√√ | √√√√ | √√√√ |
| **Visible Light Transmittance** The amount of visible light that comes through a window. | √√√√√ | √√√√ | √√√ | √√√ | √√√ |
| **UV Protection** How well a window protects against ultraviolet rays. | √ | √√√ | √√√√ | √√√√√ | √√√√√ |

### HeatSeal® Glass

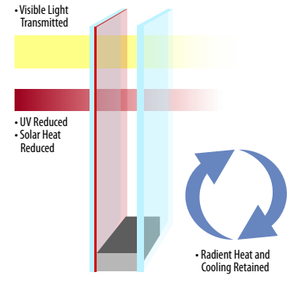



### HeatSeal® Triple Glass



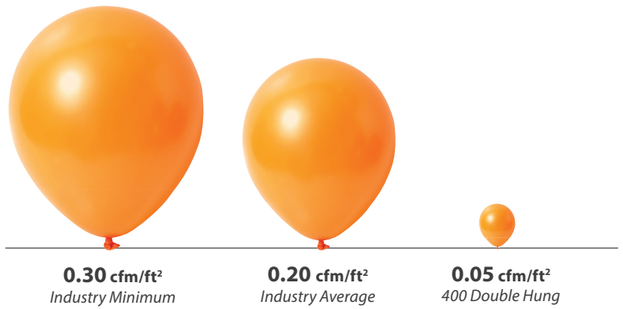

In climates where heating and cooling are the primary concern, HeatSeal® Glass products are designed to take advantage of free solar heat, resulting in higher inside glass temperature. Passive solar and thermal insulation reduce the draft sensation caused by cold glass surfaces, providing windows that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

### SunSeal® Glass




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.

## 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."*

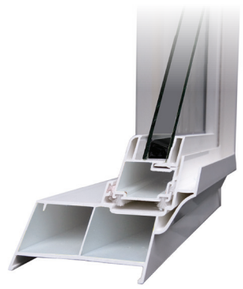
** US Department of Energy*
*www.energystar.gov/index.cfm?c=new_homes_features.hm_f_reduced_air_infiltration*

*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 psf) 25 mph.*

## Energy Saving Packages

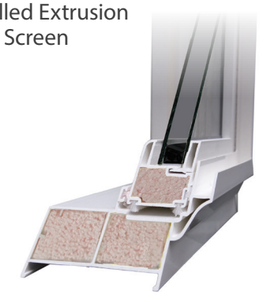
**HEATSEAL®**

- Double Pane Glass Unit
- Low-E Glass
- Argon Gas



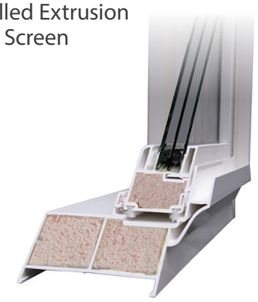
**HEATSEAL® DELUXE**

- Double Pane Glass Unit
- Low-E Glass
- Argon Gas
- Foam Filled Extrusion
- Locking Screen



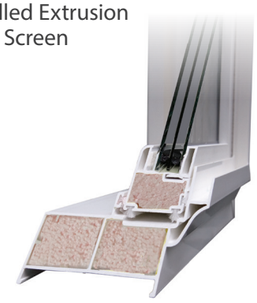
**HEATSEAL® TRIPLE DELUXE XR9**

- Triple Pane Glass Unit
- Low-E Glass
- Argon Gas
- Foam Filled Extrusion
- Locking Screen



**HEATSEAL® TRIPLE DELUXE XR10**

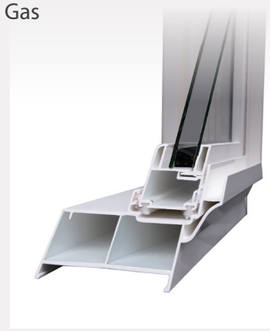
- Triple Pane Glass Unit
- Low-E Glass
- Krypton Gas
- Foam Filled Extrusion
- Locking Screen



*SunSeal Glass is specifically designed for homes in the southern climate.*

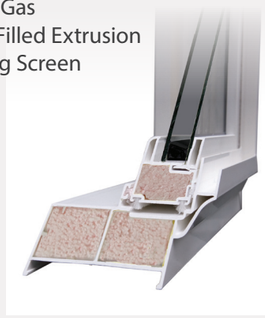
**SUNSEAL®**

- Double Pane Glass Unit
- High Performance Glass
- Argon Gas



**SUNSEAL® DELUXE**

- Double Pane Glass Unit
- Low-E Glass
- Argon Gas
- 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

Please use the QR code or the text link to access the most up-to-date thermal performance numbers for the 400 series.

*Numbers are based off of windows tested without grids.*

DH400 Double Hung

SL420 Slider

PW410 Picture Window

## 400 SERIES STRUCTURAL PERFORMANCE

| *Numbers are subject to change depending on size of window.* | Double Hung (38x63) | Slider (63x44) | Industry Minimum |
|---|---|---|---|
| Dual Glazed | | | |
| NAFS Rating | R50 | R35 | R15 |
| Air Infiltration (CAM/FT2 ) | 0.05 | 0.01 | 0.3 |
| Water Penetration (MPH) | 56 | 59 | 33 |
| Structural Integrity (MPH) | 171 | 143 | 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.*



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ENERGY STAR

MANUFACTURED PROUDLY IN ★AMERICA★

NFRC National Fenestration Rating Council®

11/2023

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