

INSUL-TEC

500 Series

By OKNA Windows

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 HeatSeal® Glass System or SunSeal® Glass System, offers outstanding thermal performance and exceeds the most rigorous Energy Star Requirements.



Stylish full 3¼” depth uPVC fusion welded frame and sashes with 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-resistant cam ensures a much smoother turn and increases the life cycle over traditional locks. Push button spring-loaded vent latches allow both window sashes to remain partially open for ventilation. Decorative tilt latch for easy tilting. WOCD now available as an upgrade. Please see WOCD Latches (pg 9) for more information.



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



Fully integrated lift rail gives this window a nice, contemporary look and ease of operation.

Slider Window



Other Features

- Full 3¼” depth uPVC fusion welded frame and sashes 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® Glass System offers thermal efficiency for fuel cost savings in any season.
- Heavy gauge fully extruded handles on both sashes.
- Standard slim profile sash lock with tamper-resistant cam ensures a much smoother turn and increases the life cycle over traditional locks.
- Our standard Smooth Glide System contains high quality brass wheels to allow the slider to smoothly glide across it’s tracks.
- Full integral interlock with double weather-stripping.
- Air Infiltration for the sliding window is 0.09 cfm/ft²; 222% better than Industry Average. *(See Air Infiltration Chart for average)*
- Available in Double and Triple panel configurations
- Available in Replacement and New Construction applications.



Fiberglass mesh half screens standard on all windows. All painted exterior windows come standard with a full screen.

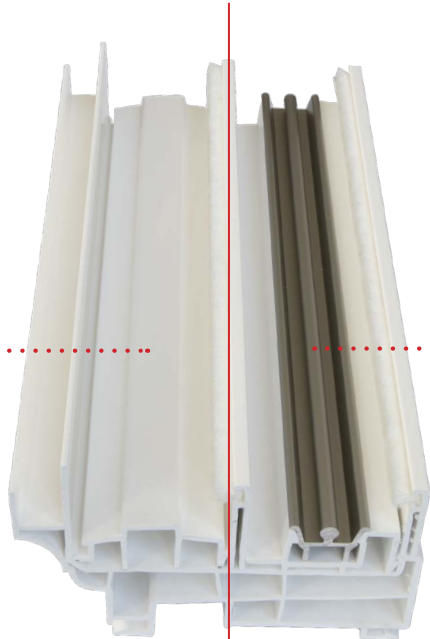


Push button spring-loaded vent latches allow both window sashes to remain partially open for ventilation.

Smooth Glide System *(Standard)*



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



EzGlide System *(Optional)*



Anodized aluminum track and precision ball bearing wheels for a smoother glide and operation especially with oversized and triple pane units.



Options

Hardware and Interior Colors

All colors except Euro-White are available at an additional charge.



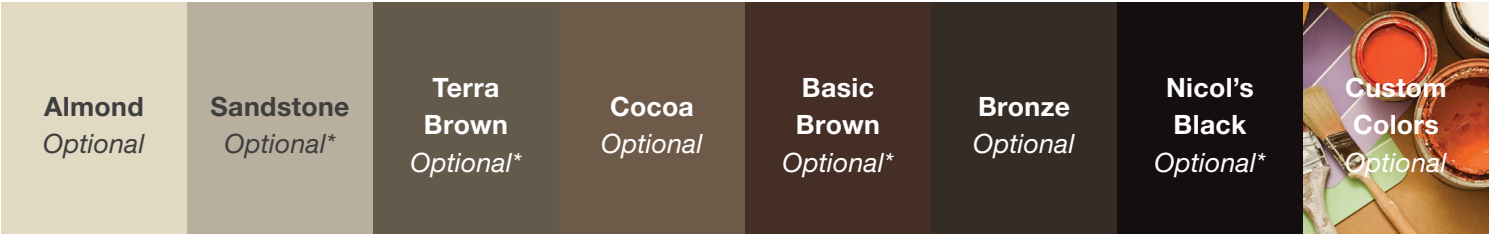
Standard Euro-White Finish with
Standard Euro-White Lock



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.

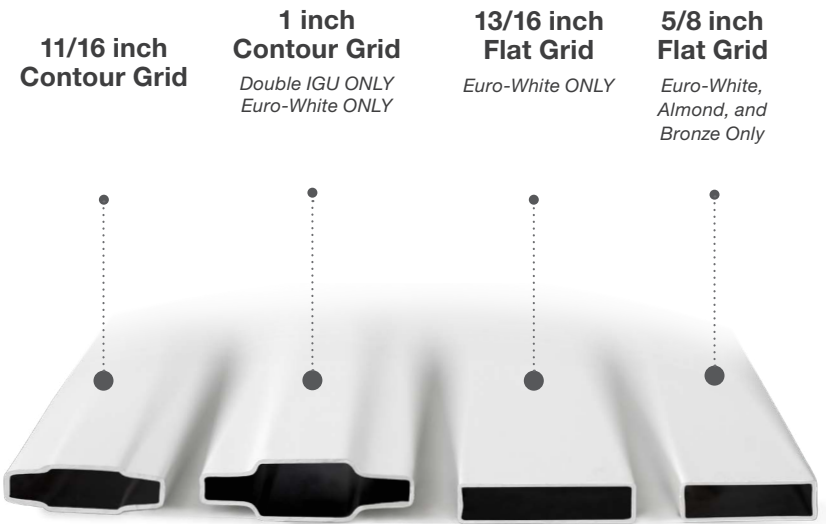


* Surcharge applied for painted screens.
All colors except Euro-White are available at an additional charge.
Printed colors may not match the product's color. Please visit a local dealer to view color samples.

Grids

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*.

*Nicol's Black available on Euro-White two-tone 11/16 inch Contour Grid ONLY. Custom Colors are not available on GBG.

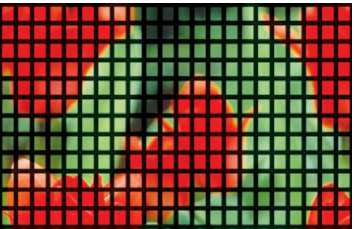


Screens

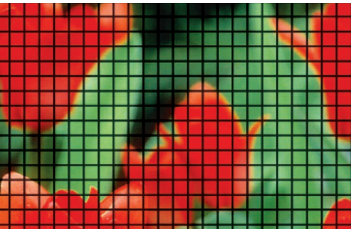
ThruVision Plus® is our fiberglass improved visibility screen. This product does for windows and doors what high-definition technology has done for television viewing: it improves the view by making it sharper and more vivid.

OKNA Windows offers a standard half screen with a heavy duty handle for easy operation. We also offer an optional locking half screen, which has the benefit of always keeping your screen locked in place. A full screen is also available.

All exterior painted windows must have full screens.



Industry
Average Screen



ThruVison PLUS®
Standard on all
OKNA Products



Standard Half Screen
Standard on all
OKNA Products



Locking Half Screen
Optional

Specialty Glass

OKNA Windows offers specialty glass in a variety of distinctive choices that add visual interest to any design while offering variability in light control. Our Regular Obscure glass for example, will be satisfying to those looking for a more traditional look with obscure glass. This option is great for bathroom windows. 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.



Regular Obscure
(Optional)

NEW! WOCD Latches

(Window Opening Control Device)

As of 2018, more states are adapting this feature into their window manufacturing and installation regulations. The benefit of the WOCD latches is the safety it gives you and your family. When activated, the device will allow the window to be opened no more than 4 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.



Balance System

PowerLift™ balance system allows smooth window operation. The 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

Constant
Force

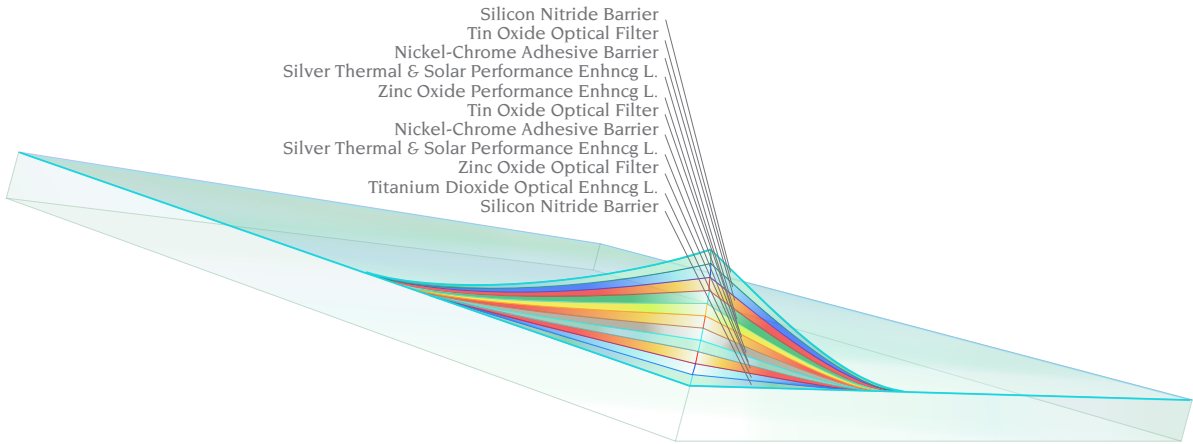


The Glass Unit

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

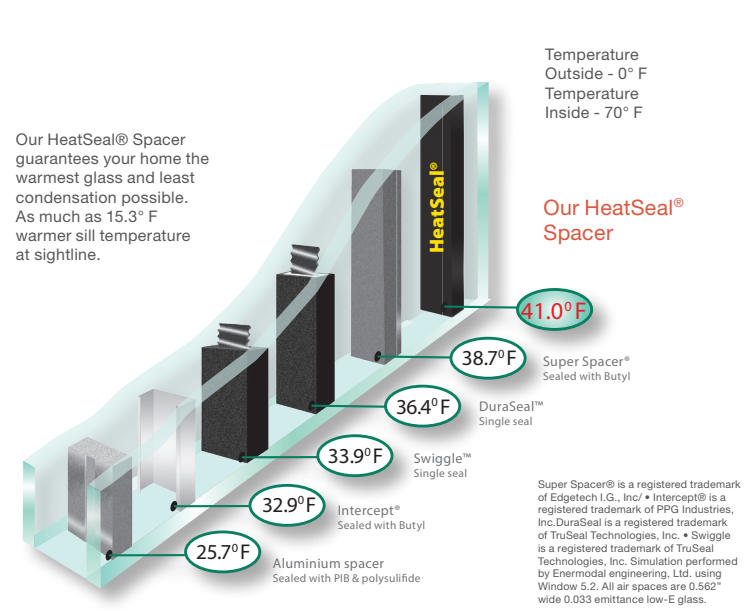
HeatSeal® heat reflective coatings are microscopically thin layers of metal & metal oxide that act like a filter – some energy is transmitted, some energy is reflected.



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.



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



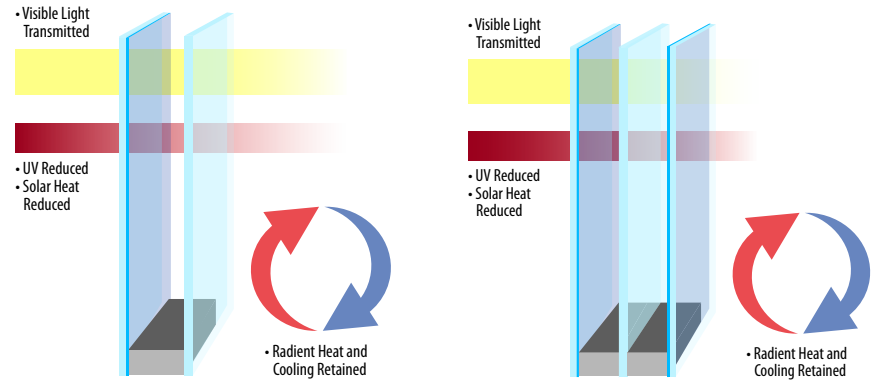
Glass Options

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.



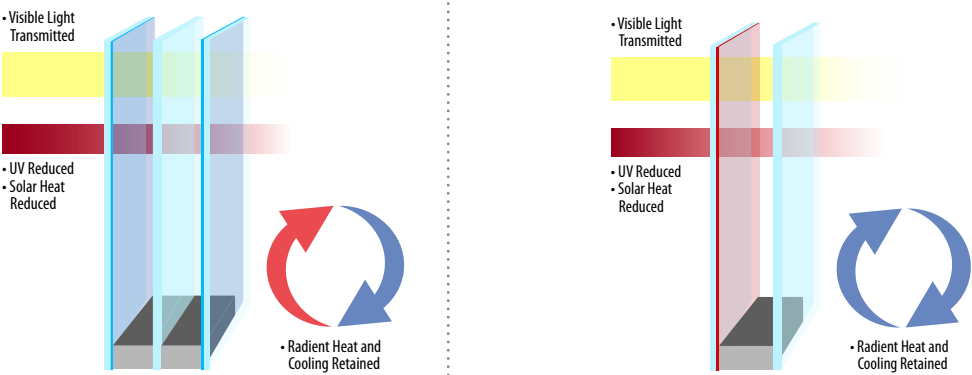
	Clear (Argon Gas)	HeatSeal® (Argon Gas)	SunSeal® (Argon Gas)	HeatSeal® Super Glass (Argon Gas)	HeatSeal® Super Glass (Krypton Blend)
U-Factor <i>Measures the rate of heat transfer and tells you how well a window insulates.</i>	✓	✓✓✓	✓✓✓	✓✓✓✓	✓✓✓✓✓
Solar Heat Gain Coefficient <i>How well a window blocks heat from the sun.</i>	✓	✓✓✓	✓✓✓✓✓	✓✓✓✓	✓✓✓✓
Visible Light Transmittance <i>The amount of visible light that comes through a window.</i>	✓✓✓✓✓	✓✓✓✓	✓✓✓	✓✓✓	✓✓✓
UV Protection <i>How well a window protects against ultraviolet rays.</i>	✓	✓✓✓	✓✓✓✓	✓✓✓✓✓	✓✓✓✓✓

HeatSeal® Glass

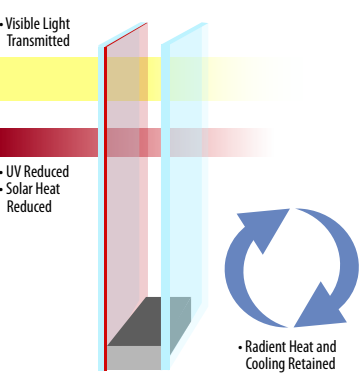


In climates where heating and cooling are the primary concern, HeatSeal® Glass products are designed to take advantage of free solar heat, resulting in higher inside glass temperature. Passive solar and thermal insulation reduce the draft sensation caused by cold glass surfaces, providing windows that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

HeatSeal® Super Glass



SunSeal® Glass



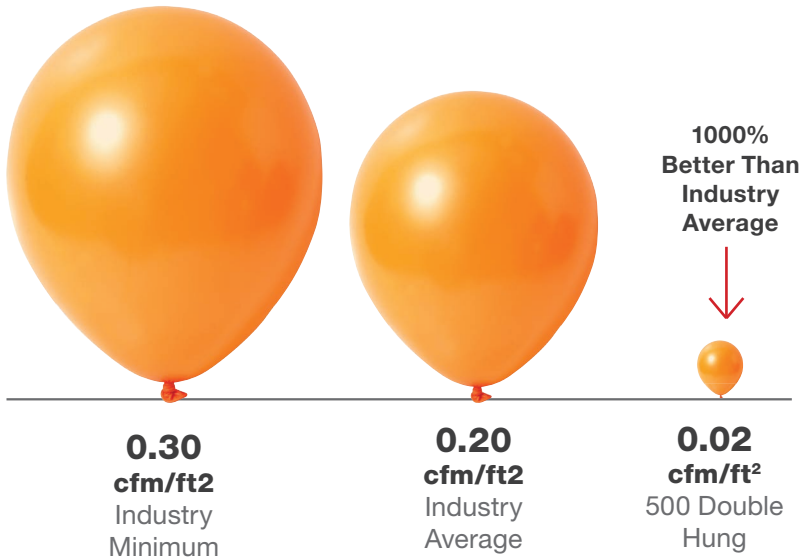
In climates where cooling is your main concern, SunSeal® Glass products are designed to reduce solar heat while still providing color-neutrality. This solar control property, combined with thermal insulating benefits, results in beautiful, natural-looking glass that helps keep air conditioning costs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

When you purchase a window that is advertised as the most energy efficient, you want to be sure the claims are based on facts, certified by a truly independent and objective authority. Their unbiased test results educate purchasers allowing them to make a more educated choice.

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



The **ENERGY STAR® Most Efficient** designation is an extension of the ENERGY STAR® brand and is designed to recognize and advance the most efficient products among those that qualify for the ENERGY STAR®. This recognition is offered for specific categories and awarded for a specific year. The goal of this effort is to encourage new, more energy-efficient products into the market more quickly by targeting early adopters. Each year, EPA will establish criteria for specific product categories to earn Most Efficient recognition. Products that are recognized as ENERGY STAR® Most Efficient must already qualify for the ENERGY STAR® label.

OKNA Windows proudly displays ENERGY STAR MOST EFFICIENT on our products.



All OKNA windows and doors meet rigorous North American Fenestration Standard (NAFS). Certification is performed by **The Keystone Certification Program** that is ANSI-accredited to ensure that our products are manufactured as represented by their certifications, which are based on tests performed by accredited laboratories in accordance with the AAMA/WDMA/CSA 101/IS2/A440 – North American Fenestration Standard (NAFS). The NAFS standard defines a rating scale for fenestration product performance, and requires that components used in window & door assemblies also meet stringent component standards. Certification includes annual inspections to ensure the factory quality management system also meets rigid standards - that translates to homeowner peace of mind.

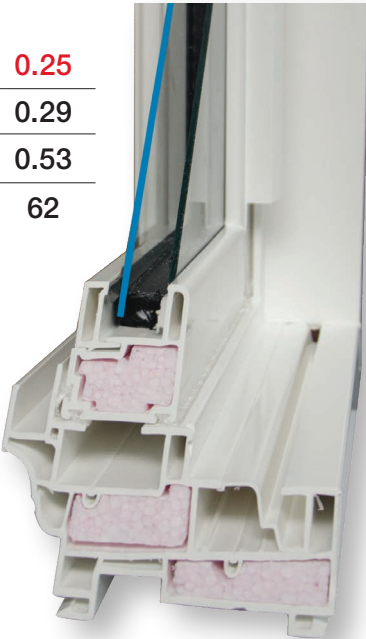
Look for the OKNA Window’s Gold Keystone Certification Label



DELUXE Energy Saving Package with Argon Gas

- HeatSeal® Glass System Double Pane Glass Unit
- Foam Filled Extrusions
- Locking Screen
- Without grids

U-Value	0.25
SHGC	0.29
VT	0.53
CR	62



BASIC Energy Saving Package with Argon Gas

- HeatSeal® Glass System Double Pane Glass Unit
- No Foam
- Without grids

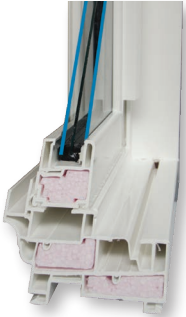
U-Value	0.27
SHGC	0.29
VT	0.53
CR	62



SUPER DELUXE Energy Saving Package with Argon Gas

- HeatSeal® Super Glass System Triple Pane Glass Unit
- Foam Filled Extrusions
- Locking Screen
- Without grids

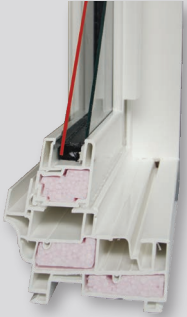
U-Value	0.19
SHGC	0.25
VT	0.42
CR	73



SUNSEAL® DELUXE Energy Saving Package with Argon Gas

- SunSeal® Glass System Double Pane Glass Unit
- Foam Filled Extrusions
- Locking Screen
- Without grids

U-Value	0.25
SHGC	0.21
VT	0.42
CR	62



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

Thermal Performance

Double Hung (DH 500)				
	U-Value	SHGC	VT	CR
HeatSeal® Glass Package				
Energy Saving Package - AG	0.27	0.29	0.53	62
Deluxe Package - AG	0.25	0.29	0.53	62
SunSeal® Glass Package For Southern Climate				
Energy Saving Package - AG	0.27	0.21	0.42	62
Deluxe Package - AG	0.25	0.21	0.42	62
HeatSeal® Super Glass Package				
Deluxe Package - AG (XR9)	0.19	0.25	0.42	73
Deluxe Package - KR (XR10)	0.15	0.25	0.42	77

XR9: Triple pane glass, 15/16" XR10: Triple pane glass, 15/16" AG: Argon Gas KR: Krypton Gas

Numbers are based off of windows tested without grids.

Sliding Window (SL 500)				
	U-Value	SHGC	VT	CR
HeatSeal® Glass Package				
Energy Saving Package - AG	0.27	0.29	0.53	62
Deluxe Package - AG	0.25	0.29	0.53	62
SunSeal® Glass Package For Southern Climate				
Energy Saving Package - AG	0.27	0.21	0.42	62
Deluxe Package - AG	0.25	0.21	0.42	62
HeatSeal® Super Glass Package				
Deluxe Package - AG (XR9)	0.19	0.25	0.42	73
Deluxe Package - KR (XR10)	0.15	0.25	0.42	77

XR9: Triple pane glass, 15/16" XR10: Triple pane glass, 15/16" AG: Argon Gas KR: Krypton Gas

Structural Performance

Double Hung (DH 500) & Sliding Window (SL500)					
	Industry Minimum	500 DH	Comparison to Industry Minimum	500 SL	Comparison to Industry Minimum
NAFS Rating	R15	R50		R40	
Air Infiltration (cfm/ft2) at speed of 25 mph	0.3	0.02	1000% better	0.09	333% better
Water Penetration (mph) 8" per hour	33	54	64% better	59	79% better
Structural Integrity (mph) Wind Load	94	171	82% better	153	63% better

Numbers are subject to change depending on size of window.

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.

Tomorrow's Windows...Today!



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 and colors. 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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