



# *Our energy efficient windows...*

- Reduce your heating and cooling costs.
- Protect your furniture, carpets, and walls.
- Deaden outside sounds.
- Give you a clear and attractive view.

**Thermo-Seal**  
VINYL PRODUCTS LLC

*Quality between you and the elements*

# Energex™ Elite Double Hung

A favorite choice among many homeowners, double hung windows feature two tilting, movable sashes, which make regular cleaning and ventilation a breeze.



## Double Hung Features

- 3 1/4" Frame Depth
- Quanex Super Spacer (pg 11)
- Sloped Sill
- 7/8" Insulating Glass
- High-performance Soft Coat Low-E
- Integrated Lock/Tilt System
- Flush-mounted Tilt Latches
- Extruded Aluminum Screens with Fiberglass Mesh
- Ecoban Triple Fin Weatherstripping
- Fusion Welded Frames and Sashes
- Innergy Reinforcement (pg 10)
- Constant Force Balance System



- Fully welded sash and frame corner joints for structural durability
- Extra heavy (0.065) wall thickness, multi-chambered frame and sash create an insulated air chamber
- Low-profile pocket head maximizes viewing area
- 3-1/4" frame depth increases structural rigidity for a lifetime of performance
- Extruded aluminum screens with fiberglass mesh



- Ecoban triple fin weatherstripping reduces air and water filtration
- Integral interlocking sashes improve security
- Standard integrated lock/tilt system makes the sashes even easier to open, tilt in for cleaning, then close and lock that gives a clean appearance
- Standard top and bottom sashes pivot for easy cleaning
- Extruded ergonomic large lift rail
- Innergy Reinforcement (pg 10)
- Stainless steel constant force balance system for years of operation

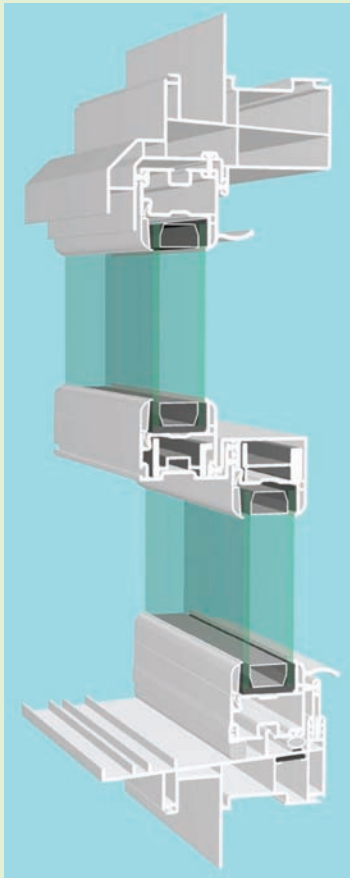


- High performance sloped sill guards against water infiltration
- Patented integral sill interlock design for additional security and performance



Enjoy a brighter life with many windows in one room.





## Glass Features

- Quanex Super Spacer helps protect against harmful condensation
- Double strength glass
- High performance soft coat Low-E
- 7/8" insulating glass



## Performance

The following performance ratings are based on a double hung window with a vinyl frame and sashes.

| Glass                           | Overall IG Thickness | Air Infiltration | Total Product U-Factor | Total Product SHGC | Condensation Resistance |
|---------------------------------|----------------------|------------------|------------------------|--------------------|-------------------------|
| Double Pane Low-E Argon         | 7/8"                 | 0.05 cfm         | 0.28                   | 0.27               | 61                      |
| Triple Pane Low-E Argon         | 7/8"                 | 0.05 cfm         | 0.24                   | 0.23               | 67                      |
| Triple Pane Low-E Argon Grids   | 7/8"                 | 0.05 cfm         | 0.24                   | 0.21               | 67                      |
| Triple Pane Low-E Krypton       | 7/8"                 | 0.05 cfm         | 0.19                   | 0.23               | 69                      |
| Triple Pane Low-E Krypton Grids | 7/8"                 | 0.05 cfm         | 0.20                   | 0.21               | 69                      |



*Our windows protect the interior of your home from 95% of the sun's harmful UV rays.*



# Garden Window

Garden windows bring the outdoors in, showcasing your horticulture skills.

## Garden Window Standard Features

- ComforTech DC Warm Edge Glazing System
- Top Sloped Insulating Glass is Tempered
- Fusion Welded Construction
- Completely assembled with 1¼" Oak Veneer Seat Board
- Snap-in Corner Slope Closure Profile seals tight
- Easy Access Dual-Point Locking operator
- Fold-away Handle

## Available Options

- Insulated Seat Board
- Tempered Glass Shelves



# Energex™ Elite Picture



Frame the beautiful outdoors with an energy efficient picture window for a large and unobstructed view—no sashes or screens and with or without grids—just a gorgeous and wide open view.

## Picture Features

- Fusion Welded Frame
- Quanex Super Spacer (pg 11)
- 1" Insulating Glass
- Interior Glazing



| Glass                             | Overall IG Thickness | Total Product U-Factor | Total Product SHGC | Condensation Resistance |
|-----------------------------------|----------------------|------------------------|--------------------|-------------------------|
| Double Pane Low-E Argon           | 7/8"                 | 0.28                   | 0.29               | 61                      |
| Double Pane Low-E Argon Grids     | 7/8"                 | 0.28                   | 0.26               | 61                      |
| Triple Plane Double Low-E Krypton | 7/8"                 | 0.28                   | 0.23               | 69                      |

# Energex™ Elite Slider



Slider windows combine refreshing breezes with an attractive contemporary style. Two moving sashes with continuous handle rails, slide on brass rollers, making it easy for you to open and close your windows.

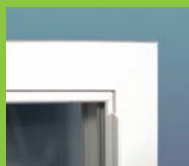
## Slider Features

- 3¼" Frame Depth
- Quanex Super Spacer (pg 11)
- 7/8" Insulating Glass
- Exterior Glazing
- Vinyl Wall Thickness of 0.070
- Lift out sashes for easy cleaning
- Extruded aluminum screen with fiberglass mesh
- Fusion Welded frames and sashes
- Ecoban Triple Fin Weatherstripping
- Inergy Reinforcement (pg10)
- Lifetime Warranty

## Performance

The following performance ratings are based on a 2-lite slider window with a vinyl frame and sashes.

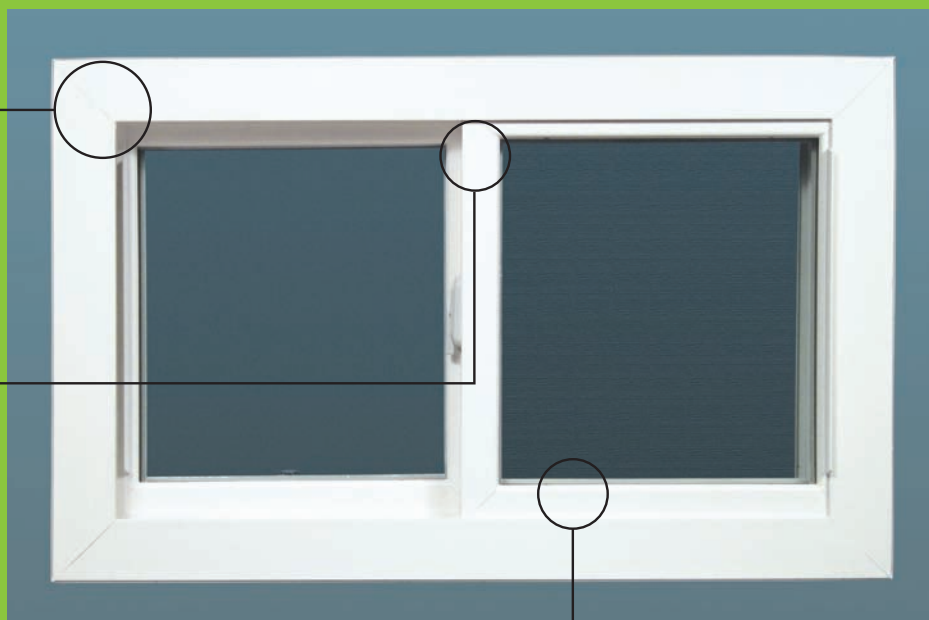
| Glass                             | Overall IG Thickness | Total Product U-Factor | Total Product SHGC | Condensation Resistance |
|-----------------------------------|----------------------|------------------------|--------------------|-------------------------|
| Double Pane Low-E Argon           | 7/8"                 | 0.28                   | 0.26               | 61                      |
| Double Pane Low-E Argon Grids     | 7/8"                 | 0.28                   | 0.23               | 61                      |
| Triple Plane Double Low-E Krypton | 7/8"                 | 0.20                   | 0.23               | 69                      |



- Fully welded frame and sash corner joints for air and water resistance

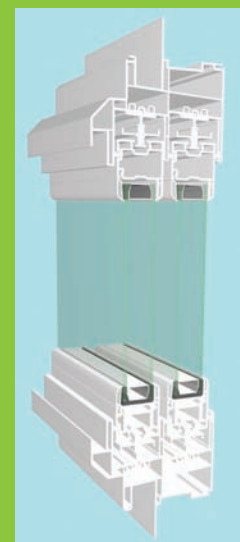


- Frame line exactly matches the design of the Double Hung and Picture Window



- Interlocking Sash to frame feature for added security and improved wind resistance in extreme conditions

- Specially engineered rollers makes sash opening and closing smooth and easy





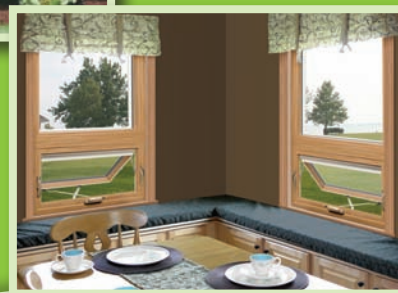
# Casement & Awning

Casement and Awning windows add an old world appearance to your home, while meeting a high standard of energy efficiency and durability. The heavy-duty hardware system secures your window when it is closed, and offers many years of hassle-free operation.

## Casement and Awning Standard Features

- ComforTech DLA Warm Edge Glazing System
- 7/8" Insulating Glass
- Sunshield Vinyl
- 3 1/4" Frame Depth
- Fusion Welded Frame and Sashes
- Aluminum reinforced Sash and Frame
- Exterior Glazing
- Fold-away Handle
- Multi-point Locking Hardware System
- Washability Hinge (Casement only)
- Quick Release dual-arm operator (Awning only)
- Extruded Aluminum Screen with Fiberglass Mesh
- Lifetime warranty

Our Casement windows include a "washability hinge" designed to completely offset the window frame when fully open. Cleaning the outside of your window is easy from the inside of your house!



Enjoy a fresh breeze even during a heavy rain.

# Energex™ Elite Hopper



Security and style are both available with these basement windows, plus they are energy efficient and easy to use.

- 3¼" Frame Depth
- Quanex Super Spacer (pg 11)
- 7/8" Insulating Glass
- Extruded Aluminum Screen with Fiberglass Mesh
- Fusion Welded Frames and Sashes
- Innergy Reinforcement (pg 10)

## Architectural Shapes

Nothing adds drama like architectural shapes. Non-operating windows like these add light and style while maintaining energy efficiency.

### Architectural Features

- ComforTech DLA-UV Warm Edge Glazing System
- 7/8" Insulating Glass
- 3¼" Frame Depth
- Fusion Welded Construction
- Interior Glazing
- Wide Range of Shapes



*Dramatic accents and endless style...*



# Bay and Bow

Bay and bow windows are constructed using your choice of picture, double hungs, or casements. Choose the combination that will deliver exactly what your application requires.

## Bay and Bow Standard Features

- ComforTech DLA-UV Warm Edge Glazing System
- Head, Jamb, and Seat Boards are Constructed with 1 1/4" Oak Veneer Plywood
- Knee Braces and threaded rods for Structural Support
- Fusion Welded Frames and Sashes

## Available Options

- Pre-finished Head and seat Board available in Light Oak, Dark Oak, Cherry, White Pionite or Beige Pionite
- Insulated Seat Board (Recommended)



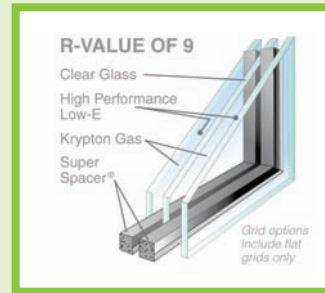
Sharing beautiful views...



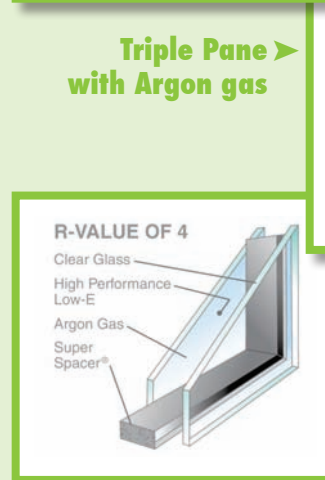
# Options

- Triple Pane High Performance Low-E Argon Glass
- Triple Pane High Performance Low-E Krypton Glass
- Tempered Glass
- Half Screen
- Aluminum Screen Netting
- Factory Mulling
- Integrally Molded Nail Flange with J-channel
- Oriel Style Sashes
- Obscure Glass
- 2 Exterior Brickmould Styles

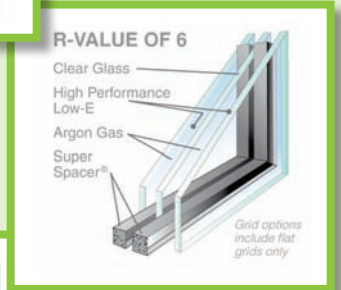
Ask for additional options that are not listed.



◀ Triple Pane with Krypton gas



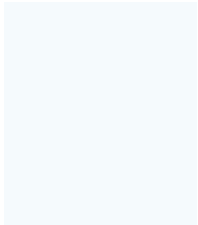
▶ Triple Pane with Argon gas



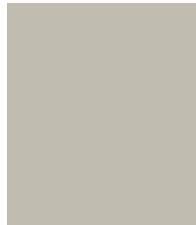
◀ Double Pane with Argon gas

# Colors

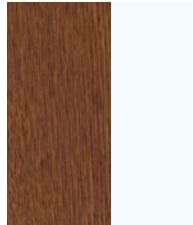
White



Clay



Dk Oak/White

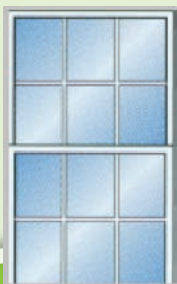


Dk Oak/Clay



# Grids

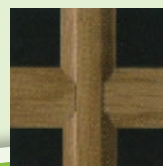
Colonial



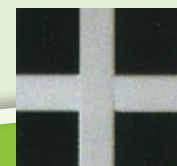
Prairie



Contour



Flat



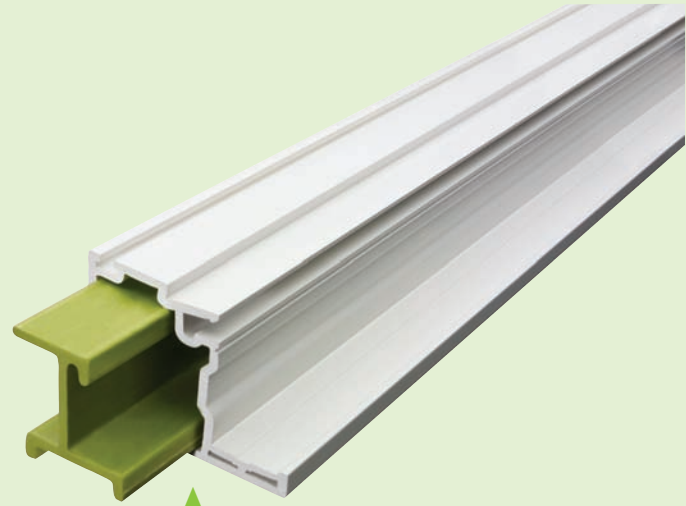
# Innergy™

## The High-Performing Alternative to Aluminum Inserts

Superior performance doesn't get much easier than this.

Innergy® Rigid Thermal Reinforcements are advanced fiber glass reinforced resin inserts, designed to slide easily into window and door frame chambers for greater support and insulation.

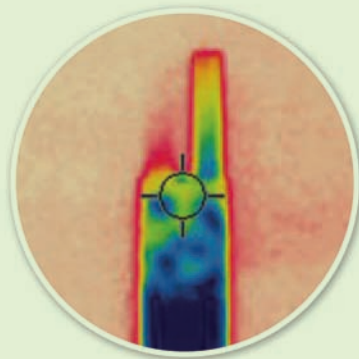
The result is a new, more efficient system with all the strength and structural reinforcement of aluminum, but with a whole new set of high performance benefits for the home.



**Innovative Thermal Performance 700 Times Better Than Aluminum**



*Innergy and Aluminum in a 32 degree ice bath*



*Infrared analysis shows major conductivity in aluminum and virtually none with Innergy\**

*\* Photos taken after one hour ice bath*

| FEATURES  | BENEFITS  |
|---|---|
| Direct replacement for aluminum reinforcements with better performance characteristics                                      | Improves window thermal and structural performance                                  |
| Co-developed under an exclusive agreement with Bayer MaterialScience  | Tested & proven technology backed by a global materials manufacturer                |
| Fiber glass reinforced pultruded product made with resin that is 20% bio-based, made from soy and other renewable resources | Utilizes materials that are renewable and bio-based                                 |
| Up to 700 times better thermal performance versus aluminum (when comparing material to material)                            | Virtually eliminates the thermal bridge that exists with other metal reinforcements |
| Resists condensation  | Helps prevent staining that can occur with other metal reinforcements               |
| Superior impact performance   | Will not permanent set under sustained high winds                                   |

# Super Spacer®

The all-foam formula of Super Spacer® is proven to be less conductive, blocking heat from entering or escaping through the glass edge, and providing optimal thermal performance and the lowest U-Value in the industry.

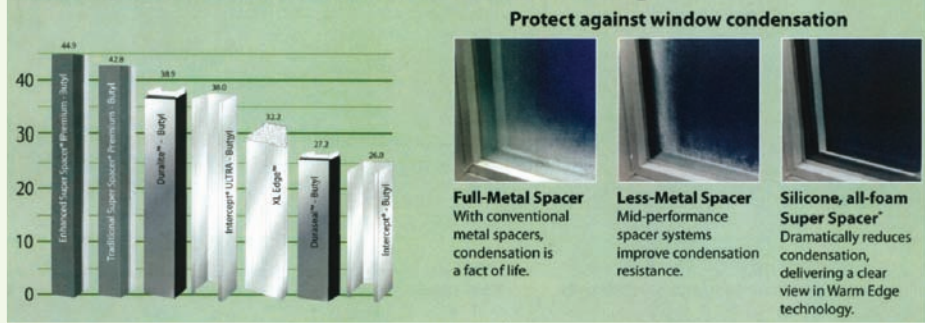


## Super Spacer® for so many reasons...

- The all-foam formula of Super Spacer blocks the heat escape path and provides on the best thermal performances in the industry.
- Condensation can lead to more than bacteria and molds. It can increase the likelihood of fungi, viruses, and mites that cause respiratory infections, allergies, and asthma.
- Improved sound absorption over traditional metal spacers; NO-Metal Super Spacer is a huge help in keeping the decibels down.
- Our dual seal system helps Super Spacer insulating glass units last up to nine times longer\* in durability tests than single-seal units.
- Our all-foam formula offsets the effects of temperature changes, barometric pressure, wind load, and glazing pressure. The end result is less seal failure and fewer stress cracks.
- Super Spacer units withstand the 140°F/60°C temperatures, 95–100% humidity and constant UV bombardment in the world's toughest durability test—the P-1 chamber.

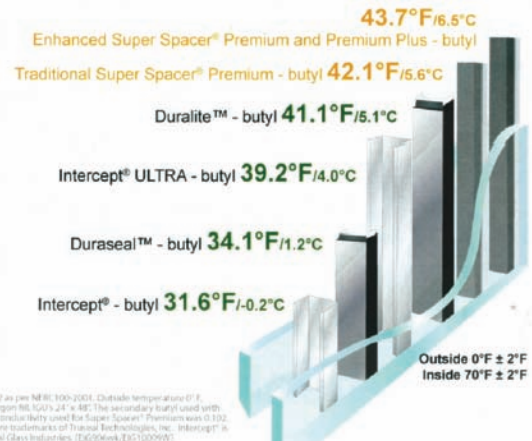
\* Source: Glass Digest, November 1992; Test RLS08006B

## The Highest Condensation Resistance Rating



## The Warmest Edge of Glass Temperature

Up to **+12.1°F/6.7°C** warmer temperature at the edge of the glass (vs. Intercept®)



Simulations performed by Environmental Engineering Ltd. using Window 5.2 and Therm 5.2 as per NFRC 100-2001. Outside temperature 0°F, inside temperature 70°F. One-way glass Cardinal Edge of 7/32. Air spacers 3/60F mode, 90% argon fill, IGU's 24" x 48". The secondary butyl used with Intercept® was 0.015" thick. Temperature results shown are average temperatures. The conclusion used for Super Spacer® Premium was 0.102. Super Spacer® is a registered trademark of Edgetech LLC, Inc. Duralite™ and Duraseal™ are trademarks of Truslow Technologies, Inc. Intercept® is a registered trademark of CGG Integrated Solutions. XL Edge™ is a trademark of Cardinal Glass Industries. (E600666/EG100999)





# About Us...

Thermo-Seal Vinyl Products has been building vinyl windows since 1997. We have always used only Top-grade Vinyl in all of our window frames and sashes for the longest lasting window available.

Our vinyl is provided by Deceuninck, a global leader in vinyl products for over 75 years. Their commitment to innovation and quality fits the very philosophy of Thermo-Seal.

Years of experience has given Thermo-Seal the expertise needed to build the highest quality windows on the market today. We are deeply committed to product excellence and customer service and satisfaction. Today you have many choices in style and quality, and we do our best to provide both. We are always looking for ways to improve our vinyl windows.

Our Energex Elite windows have optimum design, superior performance, and extreme weather resistance. You will also find that the Energex Elite Window Systems offer excellent color retention, and they are designed with quality and craftsmanship in mind while being engineered to exact standards.



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## Also selling...



Entry Doors  
Storm Doors  
Patio Doors



Vinyl Siding



Stone Siding



Overhead Doors



PVC Deck Flooring



Vinyl and Aluminum  
Fencing and Railing



Architectural Shingles

...and much more!

