



Inside every Glass Ops double hung window you'll find a variety of advanced design features that ensure you're getting one of the most structurally sound, energy efficient and easy to operate window available today.



#### SH-77 Single Hung Features

- All welded frame and sash
- Weather resistant hardware
- 3-1/4" frame depth
- Integral vinyl lift rail
- Night vent security/ventilation option
- White, beige or clay vinyl
- Internal weep system
- Dual seal weatherstripping
- Exterior glazed



Glass Ops windows are unmatched when it comes to design features that ensure you're getting one of the most structurally sound, energy efficient and easy to operate door available today.



#### DH-77 Double Hung Features

- All welded frame and sash
- Weather resistant hardware
- 3-1/4" frame depth
- Integral vinyl lift rail
- Night vent security/ventilation option
- White, beige or clay vinyl
- Internal weep system
- Dual seal weatherstripping
- Exterior glazed
- Equal glass option



Specially created for the discerning homeowner who wants the quality and performance expected from one of the most popular sliding windows on



#### SS-77 Sliding Window Features

- All welded frame and sash
- 3-1/4" frame depth
- White, beige or clay vinyl
- Internal weep system
- Tandem rollers for easy glide
- Dual lock and keeper interlock
- 1" glass thickness overall

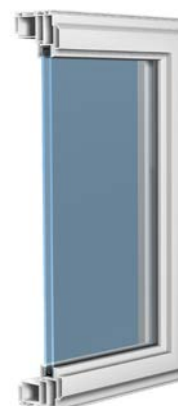


Fusion welded construction combined with a thermally efficient design and insulating glass package create a window that performs



#### CA-74 Casement Window Features

- All welded frame and sash
- 3-1/4" frame depth
- Hollow air chambers for better insulation
- Pleasing beveled exterior
- White, beige or clay vinyl
- Internal weep system
- Opens to 90° for easy cleaning
- Attractive color matched hardware



For strength and durability in a cost competitive window consider all welded vinyl windows by Glass Ops.



#### PI-77 Picture Window Features

- All welded frame and sash
- 3-1/4" frame depth
- Hollow air chambers for better insulation
- Pleasing beveled exterior
- White, beige or clay vinyl
- Internal weep system

# Glass Ops 77 Series



# Glass Ops Windows

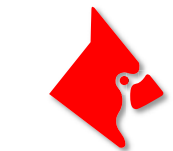
are built with the best components available from industry leading companies.

## Our Partners

Glass Ops Windows selects the best of regional suppliers to partner with in creating a window that combines the highest industry standards in one product.

Frame and sash extrusions come from Veka, a world wide leader in window profile and custom vinyl extruding. Veka's vast product line gives Glass Ops Windows unlimited solutions to your window and door needs.

For more information go to: [www.vekainc.com](http://www.vekainc.com)



Cardinal Glass Industries

Insulated glass units are from Cardinal IG in Waxahachie, Texas. Cardinal's patented spacer system and dual seal technology create superior insulated



units which have an almost zero failure rate. For more information go to: [www.cardinalcorp.com](http://www.cardinalcorp.com)

Truth hardware is self-latching and meets or exceeds the industries toughest forced entry standards.

As a finishing touch we fabricate our own screens at Glass Ops. We use high quality color matched aluminum rails and fiberglass mesh as the means for ventilation and insect control. Available in half screen or as a full screen which allows upper sash ventilation while providing a more pleasing curb appeal look.

- Limited Lifetime Warranty covers repair or replacement of components and insulated glass units for as long as you own your home. Full details of the warranty are available online at [tex-starwindows.com](http://tex-starwindows.com)
- Proper installation of your new windows will ensure years of trouble-free use and maximum energy savings. Glass Ops Windows strongly recommends the use of a certified master installer.



## LoE<sup>2</sup>-270® Glass



Every day, the sun provides an enormous amount of energy. In colder climate areas, this energy is beneficial and welcomed for warming homes. But summer temperatures throughout the U.S. can reach a blistering level and bring discomfort into the home. Since the majority of solar heat gain comes through your windows, choosing the right glass can be a key factor in comfort and year-round energy savings.

Cardinal CG Company's LoE<sup>2</sup>-270® glass is the perfect glass for all season comfort. It reduces solar heat gain by 50% or more when compared to ordinary glass. Although it is a clear glass, LoE<sup>2</sup>-270® even outperforms ordinary tinted glass typically used in sunny climates. And though it's coated, LoE<sup>2</sup>-270® lets the light shine in to warm your house during the cooler winter months.

## LoE<sup>3</sup>-366® Glass A new standard



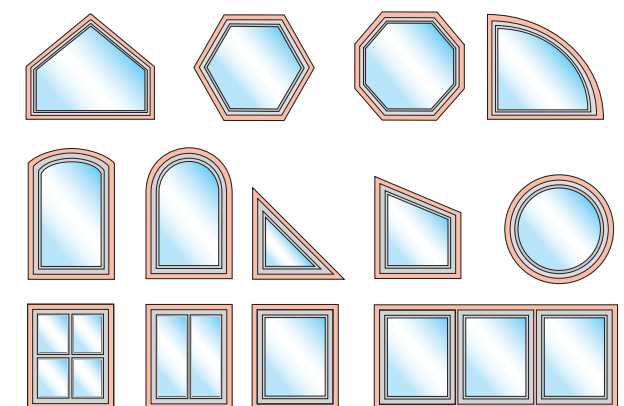
Cardinal introduces LoE<sup>3</sup>-366® (pronounced low E cubed-366), the ultimate performance glass. It just might make all other low-E glasses obsolete. LoE<sup>3</sup>-366® delivers the ideal balance of solar control and high visibility. And it provides the highest levels of year-round comfort and energy savings, making it the perfect glass no matter where you live. The secret? An unprecedented triple layer of silver. This is beyond ordinary low-E glass; LoE<sup>3</sup>-366® sets the new standard.



## Energy savings all year long

The full-year benefits of LoE<sup>3</sup>-366® can be clearly seen. When the temperature soars in the summer, ordinary window glass just can't beat the heat. And tinted glass spoils the view. LoE<sup>3</sup>-366® is formulated to reject solar heat while maintaining attractive visibility. So it keeps the heat out while letting light in. As a matter of fact, LoE<sup>3</sup>-366® glass is our ultimate in performance and clarity among all of Cardinal's clear coated products.

The multi-chambered construction, vinyls natural insulating characteristics and fusion welded construction combine to produce a window that is strong durable and energy efficient. The material is extruded with the color throughout which means that scratches will barely be noticeable.



Some typical geometric shapes and mulling options. Options are not limited to examples shown here. Contact your Glass Ops sales representative for complete product offerings.



Energy Star Climate Map gives you clear guidelines for determining which windows and doors will do the best job to help reduce heating and cooling costs in your region and your home.



## Vinyl Window Limited Warranty

We warrant that if your Glass Ops window product fails due to defects in material or workmanship, Glass Ops within the time periods from the date of purchase, we will, repair or replace that product free of charge. We warrant our products for a period of 20 years for as long as you own and occupy your residence. Warranty does not cover normal wear and tear or if product is not installed correctly in compliance with local building codes. See your Glass Ops representative for complete warranty details