



LoE²-270[®] Glass

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PDF Brochure \(2.3MB\)](#)SHGC: 0.37 / U-FACTOR: 0.25 / TDW: 0.53 / LIGHT TRANS: 70% / [All stats](#)

Solar control for all seasons

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 LoE²-270[®] 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, LoE²-270 even outperforms ordinary tinted glass typically used in sunny climates. And though it's coated, LoE²-270 lets the light shine in to warm your house during the cooler winter months.

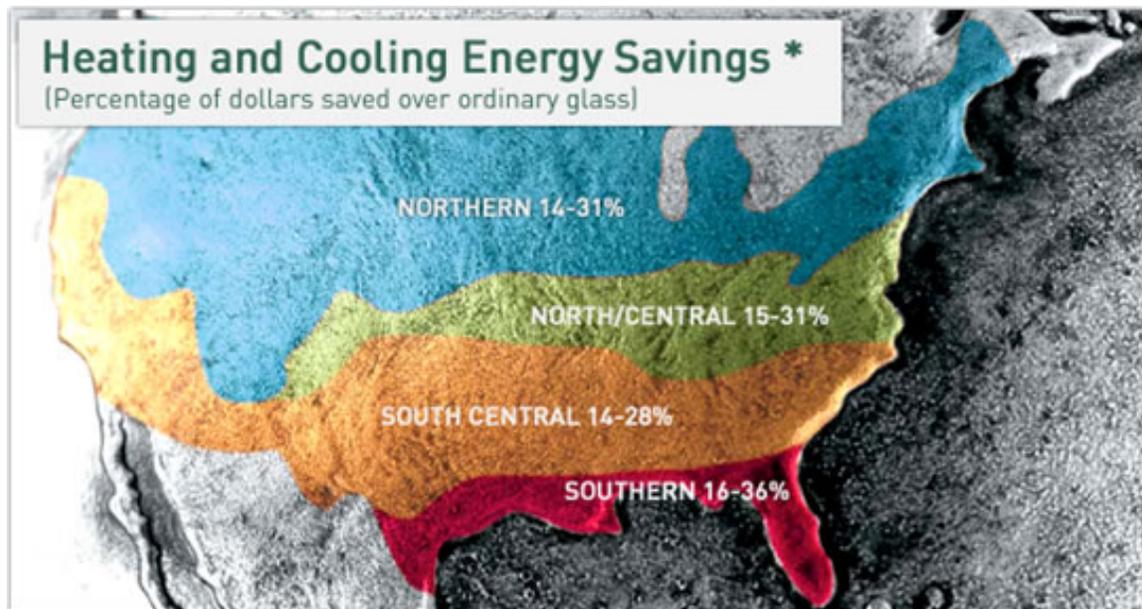
Glass so smart, it can control your comfort

LoE²-270 glass features a unique coating that has been specially formulated to reject the sun's heat, damaging rays and keep your home cool and comfortable.

Using Cardinal's state-of-the-art vacuum sputtering process, the glass is coated with microscopically thin, optically transparent layers of silver sandwiched between layers of anti-reflective metal oxide coatings. The patented LoE² coating provides the best clarity and highest performance of all low solar gain low-emissivity glass products.

LoE²-270's patented coating blocks 83% of the sun's harmful ultraviolet rays and 96% of the sun's infrared heat. Now, instead of shutting out the sun during the hot summer months, you can let the light shine in without letting the heat come too.

Cardinal's LoE² coatings reduce not just interior discomfort, but also annual energy costs.



*Total energy costs (heating + cooling) comparing a clear double-pane glass to LoE²-270 glass for a house with 15% window to wall ratio uniformly distributed on all four side of the house. The smaller savings value assumes identical occupancy patterns. The larger value shows the potential savings when the improvement in occupant comfort is included. A home with LoE²-270 can deliver equivalent comfort with a lower heating setpoint in the winter and a higher cooling setpoint in the summer.

Frigid outside, cozy inside

During cold weather, the insulating effect of your windows has a direct impact on how your rooms feel. Typically, 75% of the exposed surface of a window is glass, and the temperature of the room-side of the glass directly affects the air temperature in the room. The better insulated the window glass, the warmer your room will be. The [Efficient Window Collaborative](#) suggests that when glass surface temperatures fall below 52° F, there is a risk of thermal discomfort. As the chart below shows, the insulating capability of LoE²-270 is superior to that of competitive products. In fact, the insulating potential of LoE² coatings is equivalent to a four-pane insulating glass unit!

| Inside glass temperatures | outside temp | outside temp |
|--|--------------|--------------|
| | 20°F | - 20°F |
| Single-pane, clear | 31° | 0° |
| Double-pane, clear | 51° | 37° |
| Ordinary low-e | 58° | 47° |
|  LoE ² - 270 | 61° | 52° |

So regardless of where your home is located, choosing windows that provide you with the highest level of comfort and energy savings year-round is extremely important. And choosing the right glass for your windows is the most important factor in that decision. Go beyond ordinary low-E glass. Let LoE²-270 help you handle the weather – any weather.

Additional facts

- LoE²-270 is post-temperable
- All residential sizes, thicknesses and shapes offered

- Custom configurations available

How to buy windows with LoE² glass

Many window manufacturers provide LoE² glass in their standard configurations. Please contact your window supplier, builder or architect on how to obtain LoE² glass in your next window purchase.

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