

LoE²-272 Glass

Who says you can't do anything about the weather? Cardinal LoE²-272[®] glass delivers year-round comfort in all types of weather. In winter, it reflects heat back into the room. In summer, it rejects the sun's heat and damaging UV rays.

Cardinal LoE²-272 is very similar to our LoE²-270[®] glass, only with a little more light transmittance, while LoE²-270 offers slightly more solar control.

Cold or hot outside, Cardinal comfort inside.

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 LoE²-272 help you handle the weather – any weather.

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.

In fact, the Efficient Windows Collaborative (www.efficientwindows.org) suggests that when glass surface temperatures fall below 52°F, there is a risk of thermal discomfort. To maintain the best comfort during the winter, select a glass product that produces surface temperatures that will stay above this point during the coldest outdoor conditions.

Inside glass and outside temperatures.

The table below compares the room-side center of glass temperatures of different glass types against two different winter conditions.

INSIDE GLASS AND OUTSIDE TEMPERATURES

PRODUCT	(-20°F)	(-30°C)	(+20°F)	(-10°C)
Single-pane clear	0°F	-19°C	31°F	-3°C
Double-pane clear	37°F	2°C	51°F	9°C
Ordinary low-e (air fill)	46°F	7°C	57°F	13°C
LoE ² -272 (air fill)	49°F	9°C	58°F	14°C
LoE ² -272 (argon fill)	52°F	10°C	60°F	15°C

The superior insulating capability of Cardinal LoE²-272 is a key factor in the construction of comfortable

windows for cold climates. The dramatic comfort improvement from windows with warm glass surfaces also means the relative humidity of the indoor air can be controlled and maintained properly. Proper humidity levels (not too much, not too little) will improve comfort and promote a healthier living environment.



Summer Solar control for just about the **coolest windows under the sun.**

Solar control for just about the coolest windows under the sun.

When the temperature is heading to the top of the thermometer, ordinary window glass simply welcomes in the heat. Cardinal LoE²-272, however, has been specially formulated to reject the sun's heat and damaging rays and keep your home cool and comfortable.

The patented LoE²-272 coating provides the best clarity and high performance low solar control. The end result of all this engineering is that Cardinal LoE²-272 provides the ultimate in comfort because it reduces window heat gain by nearly 50% when compared to ordinary glass.

Glass Performance

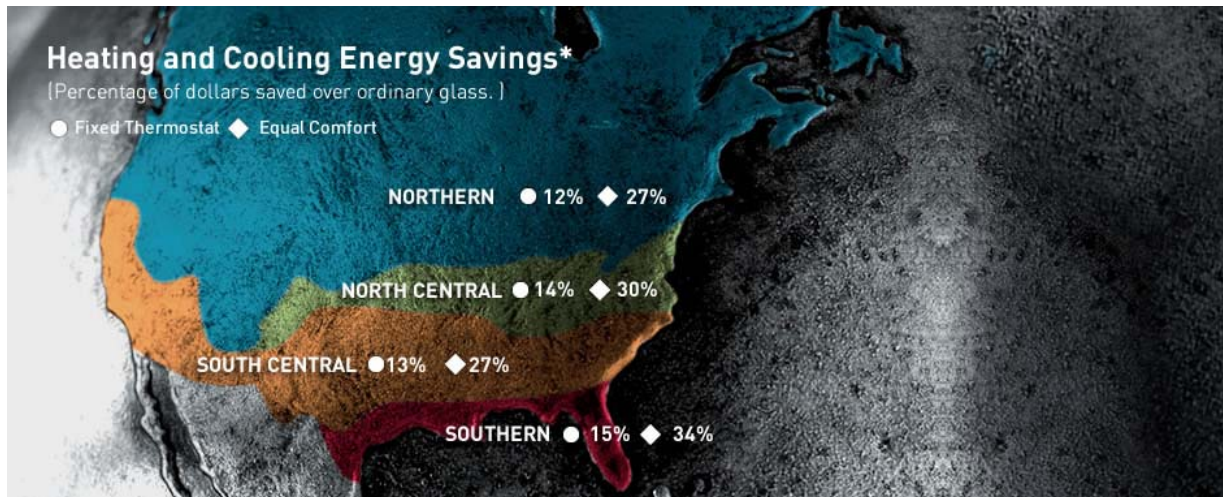
GLASS PERFORMANCE

PRODUCT	VISIBLE LIGHT TRANSMITTANCE	SOLAR HEAT GAIN COEFFICIENT	WINTER U-FACTOR (AIR / ARGON)	UV	FADING TRANSMISSION
Single-pane clear	90%	0.86	1.04/-	0.71	0.84
Double-pane clear	82%	0.78	0.48/-	0.58	0.75
Ordinary low-e (air fill)	76%	0.72	0.34/0.30	0.50	0.68
LoE²-272	72%	0.41	0.30/0.25	0.16	0.55

Definitions

Save energy with glass so smart, it can control your comfort.

Although windows provide beautiful views and wonderful natural light, they can also account for up to 50% of the heating and cooling energy consumed in a home. In the winter, Cardinal LoE²-272 helps your home stay warm and cozy by blocking heat loss to the cold weather outside. In the summer, it keeps your home cool and comfortable by rejecting the sun's heat and damaging rays. In short, it can save energy year around.



* Thermostat settings are the largest variable in establishing the heating and cooling energy savings potential with window replacements. If you tolerate the discomfort from your current windows and don't change thermostat settings with the weather, consider the savings suggested from the "Fixed Thermostat" column. If on the other hand you frequently adjust the thermostat, add space heaters to compensate for cold rooms, or close drapes/blinds to block the sun consider the additional savings suggested in the "Equal Comfort" column.

Modeling conditions >>

The difference is clear.

Cardinal LoE²-272 is ideal for all weather conditions in most climates. In winter, it reflects heat back into rooms. In summer, its patented coating blocks 84% of the sun's harmful ultraviolet rays and 59% of the sun's heat. It even outperforms the tinted glass often used in warm climates.

You can see out and the light shines in, with no heavy bronze or smoke colored tints to darken the personality of your home. LoE²-272 can be purchased in hurricane-resistant laminated glass in a variety of shapes and sizes.