# ClimaTech Elite

High-Performance Solar Control Insulated Glass Package



A solar solution with year-round comfort.



# ClimaTech Elite Insulated Glass



Let's face it, homeowners not only want to remain comfortable when the sun is at its peak, but year-round too. They often face a dilemma when they want protection from the sun's damaging rays, but don't want their view disturbed by heavy, protective laminates or inferior glass coatings.

Alside offers an unparalleled combination of energy saving solar control and fading protection, it's called ClimaTech Elite. Simply put, this solar-focused insulated glass package will help protect a home's carpet, furniture, floors and draperies from fading, prevent the overbearing heat gain from the sun's rays and still allow you to enjoy the outdoor view without distortion or haze.

Where most soft coat Low-E glass products are manufactured with two separate metallic, vacuum-deposition layers that help to repel the sun's hot and damaging rays, the Low-E glass surface of the ClimaTech Elite insulated glass package offers an unparalleled third metallic layer. This extra layer makes ClimaTech Elite one of the most high-performance and energy-efficient glass packages available on the market today.



### A Solution for Solar Heat Gain.1

The solar heat gain coefficient (SHGC) is a number that represents the fraction of solar radiation admitted through a window, door or skylight, both transmitted and absorbed, and eventually released inward. The lower a window's solar heat gain coefficient, the less solar heat it transmits into the home. Climates that rely heavily on air conditioning, which have abundant cooling degree days, will benefit from a window product that displays a lower solar heat gain. As shown here, the ClimaTech Elite insulated glass package will diminish the sun's solar radiation by 62% over a clear insulated glass unit.

## Valuable U-Factor Performance in Winter.1

The U-Factor (also referred to as the U-Value) is a number that represents the rate of heat flow through a glazing system. The lower the U-Factor, the greater a window's resistance to heat flow and the better its insulating value. This performance is especially critical to keeping homes energy-efficient during cold winter months. As shown in the side-by-side comparison, the ClimaTech Elite insulated glass unit will outperform the clear insulated unit by 36%.

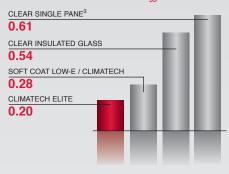
### Understanding Visible Transmittance.<sup>2</sup>

The visible spectrum, sometimes called the optical spectrum, is the portion of the electromagnetic range that is visible to, or can be detected by the human eye. Electromagnetic radiation in this range of wavelengths is called visible light (VT) or simply light. The VT is usually expressed as a number between 0 and 1, but most values are found between 0.3 and 0.8. The higher the visible transmittance, the more light is allowed to pass through a window, door or skylight. However, as shown in this chart, even clear glass reduces the amount of the VT allowed. The ClimaTech Elite insulated glass package, which offers both a reduction in solar heat gain and ultraviolet light, only blocks 21% more visible transmittance than a clear insulated glass unit.

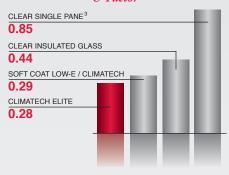
### Reducing Ultraviolet Energy.<sup>2</sup>

Ultraviolet light rays (UV) are the invisible rays of the spectrum, and are found in everyday sunlight. Most humans are aware of the effects of UV through the condition of sunburn. But these same rays are also responsible for the fading of carpets, fabrics, floors and even paint finishes. As shown, the ClimaTech Elite insulated glass package reduces these damaging rays by 90% compared to that of a clear insulated glass unit.

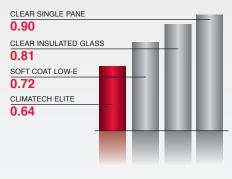
### Solar Heat Gain Coefficient



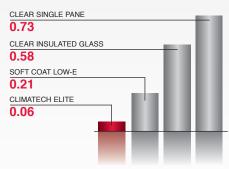
### **U-Factor**



### Visible Transmittance



### Ultraviolet Transmittance



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Alside PO Box 2010 Akron, Ohio 44309 1-800-922-6009 www.alside.com





