Maximize Your Energy Savings and Help Protect the Planet with High-Performance Windows.
**Greater Thermal Efficiency.**
Initially, insulated glass units were filled with air or dry nitrogen. It was later discovered that a dense, slow moving gas would minimize the convection currents within the space, thereby reducing conduction and the transfer of heat. These inert, colorless, odorless and safe gases substantially improve the thermal performance of a window. As shown in this chart, using a grams-per-liter measurement, the ClimaTech TK2 Plus insulated glass unit with two chambers of krypton gas will insulate nearly 110% better than a unit filled with argon gas.

**Increased U-Factor Performance in Winter.***
The U-Factor (also referred to as 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 TK2 Plus insulated glass unit built with two panes of multi-layer, low emissivity (Low-E) glass will outperform the standard clear unit by over 50%.

**Improved Insulating R-Value.***
R-Value represents a material’s resistance to heat flow and its ability to insulate. It is the inverse of a U-Factor (R=1/U) and is expressed in terms of hr-sq ft-F/Btu. The higher the R-Value, the better the window’s insulation performance. Typically, window R-Values range from 0.9 to 3.0. As shown in this chart, an Alside Window with the ClimaTech TK2 Plus insulated glass package is nearly 145% more energy efficient than a standard double-paned unit.

**Enhanced Solar Heat Gain Performance.***
The Solar Heat Gain Coefficient (SHGC) measures how well a window blocks heat from the sun. SHGC is expressed as a number between 0 and 1 – the lower the SHGC, the better the window is at preventing unwanted heat from penetrating your home. This protection is particularly important during the summer cooling season and in climates that rely heavily on air-conditioning. As shown in the comparison chart, the ClimaTech TK2 Plus glass unit outperforms the standard clear insulated unit by 125%.

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*Performance based on whole window values of a Sheffield Double-Hung Window.

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Krypton Gas Density: 3.749 g/L
Argon Gas Density: 1.784 g/L
Air Density: 1.190 g/L

You may not realize it, but a window’s glass system is a key factor in achieving maximum thermal protection. Windows are roughly 80% glass, so it’s essential to select a glass package that blocks heat from escaping in the winter and keeps cool air in during the summer. High-performance insulated glass helps ensure a more balanced, comfortable climate with reduced annual fuel costs.

ClimaTech TK2 Plus insulated glass, which incorporates the most advanced insulated glass technology, is your best defense in achieving maximum energy efficiency. This triple-glazed unit features the Warm-Edge Structural Foam Spacer System, two surfaces of low-emissivity (Low-E) glass and two airspaces filled with krypton gas.

When you compare the performance properties of ClimaTech TK2 Plus to other insulated glass options, you’ll see why it’s a smart choice for you and a positive choice for the environment.