Preserving the environment while saving energy.
Advanced Energy Performance for Your Home.

When choosing the best windows for your home, it’s important to understand that windows are roughly 80% glass, so you'll want to select a glass package that delivers superior thermal protection and year-round energy savings.

ClimaTech TG2 insulated glass provides a powerful shield against energy loss. This triple-glazed unit features the Intercept® Warm-Edge Spacer System, two surfaces of low-emissivity (Low-E) glass and two airspaces filled with argon gas. It not only blocks heat from escaping in the winter and keeps cool air in during the summer, it creates a more balanced, comfortable interior climate throughout your home. You’ll enjoy lower heating and cooling costs, while also helping to protect the planet by reducing the consumption of fossil fuels.

When you consider the superb energy efficiency and eco-friendly benefits of this precision-engineered glass system, you’ll see why ClimaTech TG2 is an excellent selection for your home.

Advanced 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 TG2 insulated glass unit with two chambers of argon gas will insulate nearly 40% better than a unit filled with air.

Valuable 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 TG2 insulated glass unit built with two surfaces of multi-layer, low-emissivity (Low-E) glass will outperform the standard clear unit by 48%.

Increased 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 0501 Window with the ClimaTech TG2 insulated glass package is nearly 92% more energy-efficient than a standard double-paned unit.

Protective 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 TG2 glass unit outperforms the standard clear insulated unit by 54%.

*Performance based on whole window values of a 0501 Double-Hung Window.