# **GLASS PACKAGES**



# PRO-EFFICIENCY. PRO-VALUE. PRO-COMFORT.

Your windows and doors should be as energy-efficient as possible. That's why Simonton developed innovative, high performance glass packages designed to meet your specific needs.







# ENERGY EFFICIENCY, COMFORT AND SAVINGS START HERE.

Simonton has made it remarkably easy to choose a glass package that will help keep your home comfortable and energy bills lower, season after season, year after year.





# KNOW THE LIGHT.

There's nothing like a home filled with beautiful sunlight. Depending on your climate, sunlight can help keep your home warmer during cold winter months. But in summer months, it can increase your cooling costs and cause uncomfortable solar heat gain. And in any climate or season, sunlight can fade carpeting, drapes and furnishings.



**UV LIGHT** Can fade carpets, furnishings and artwork.



### VISIBLE LIGHT Desired for the illumination that makes your home bright and inviting.

### **NEAR-INFRARED LIGHT** Causes heat gain, can raise energy costs and make your home uncomfortable.

### **PROSOLAR GLASS**

- Helps keep warmth inside during winter months
- Helps retain cooled air in summer
- Reduces fading
- Available with Argon gas and efficient spacer systems
- In winter, Low E helps retain warmed air.



### **PROSOLAR SHADE GLASS**

- Perfect for warmer climates that require more help with cooling
- Allows desirable light inside
- Dramatically reduces the unwelcome near-infrared and UV light that causes heat gain and fading
- Available with Argon gas and efficient spacer systems



# KNOW THE BASICS.

Every insulating glass package has these four basic components: the glass,

the gas, the spacer and the glass panes.

- THE GLASS. ProSolar glass packages feature Low E coatings for improved efficiency. Unlike clear glass, ProSolar Low E coatings help lower heating and cooling costs.
- THE GAS. Optional Argon gas is sealed between the glass panes. This odorless, non-toxic gas is much denser than air, so it insulates better.
- THE SPACER. Insulating glass units have at least two panes of glass, separated by a low-conductance spacer that helps minimize the migration and transfer of heat between the glass panes.





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### THE PANES.

DUAL-PANE. Dual-pane windows consist of two pieces of glass, with the option for Low E, Argon gas and a low-conductance spacer.



**TRIPLE-PANE.** For even greater thermal performance, triple-pane windows feature three panes of glass, creating two separate insulating airspaces.



LAMINATED. Impact-resistant laminated glass consists of a durable interlayer sealed between two layers of glass. This advanced glass package provides increased safety, sound control, UV protection and energy efficiency.

ProSolar Shade, triple-pane insulating glass units and laminated glass packages are not available on all products.

# **GLOSSARY**

### Low E Glass

Glass with a transparent metallic oxide coating which allows short-wave energy to pass through but reflects long-wave infrared energy, improving the U-value.

### Visible Transmittance

Visible Transmittance (VT) measures how much light comes through a product. The visible transmittance is an optical property that indicates the amount of visible light transmitted. VT is expressed as a number between 0 and 1. The higher the VT, the more light is transmitted.

### ENERGY STAR

ENERGY STAR® is a joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy helping us all save money and protect the environment through energy efficient products and practices. Windows and doors that meet ENERGY STAR guidelines have been tested for optimum energy efficiency.

### Argon Gas

This odorless, colorless, non-toxic gas is six times denser than air. When used to replace air between glass panes in insulating glass units, it helps reduce temperature transfer.

### **U-value**

The U-value or U-factor is commonly described as the amount of heat transferred through a material. The lower the U-factor, the slower the rate of heat flow and the better the insulating value.

### Solar Heat Gain Coefficient (SHGC)

The SHGC refers to the amount of heat from the sun that windows and doors allow into the home. The lower the number, the greater the ability to reduce the amount of heat absorbed into the home.



The optional **Supercept**<sup>™</sup> spacer features a U-channel design and is made of stainless steel alloy for better thermal performance and increased strength.



The optional Super Spacer\* is made of non-metallic foam that is resistant to heat transfer. Its flexible design makes it the best choice for curved windows.

# CHOOSING THE RIGHT GLASS PACKAGE IS AS EASY AS KNOWING WHERE YOU LIVE.

When a window or door meets the regionally specific ENERGY STAR<sup>®</sup> guidelines, you know you will have optimum energy efficiency and comfort for wherever

you live. That's why Simonton has developed ENERGY STAR glass packages for each climate zone. Select the glass package custommade for your region, and you'll be assured of the right combination of components to deliver impressive year-round thermal performance.





As an ENERGY STAR partner, Simonton Windows<sup>\*</sup> is committed to meeting the strict criteria of the U.S. Environmental Protection Agency and the U.S. Department of Energy to help conserve energy and reduce heating and cooling costs for all our customers.





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