

Everything You Should Know About Low-E Glass

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Energy efficiency experts estimate that around 70% of energy loss in buildings is caused by poor insulation of windows and doors. One important way to help improve home energy efficiency is to eliminate waste through the glass on home exteriors, including in doggy doors. Many pet doors are grossly inefficient, which can impact a family's comfort and cause higher heating and cooling costs.

Here's how installing Low-E glass into your doggy door can help maximize your home's energy efficiency all year-'round.

What is Low-E Glass?

In hot weather, ultraviolet and infrared light can enter directly through glass windows and doors, including your pet door. This generates excessive heat into your home, which increases energy costs, reduces the comfort, wastes energy, and deteriorates furniture and other personal belongings.

Low-emissivity or Low-E glass is the recommended energy-efficient solution to the problem of light heat penetration of ordinary glass. Low-E glass contains a transparent metallic oxide coating ***designed to reflect heat by minimizing the amount of ultraviolet and infrared light that can enter your home.*** Low-E glass accomplishes this heat blocking while simultaneously allowing natural light to pour in freely. The Low-E metallic coating reflects outside temperatures, keeping both heat and cold out.

Today's energy-efficient Low-E window glass is used in dual-pane windows, which are exceptionally effective in retaining both heating and cooling. This makes Low-E technology a modern essential for keeping homes comfortable.



What Types of Low-E Glass Can I Buy?

Low-E glass is manufactured in two forms — soft coat and hard coat. Both types of Low-E glass are energy efficient. While both versions are effective insulators, soft-coat Low-E has a higher level of thermal resistance (R-value) than hard-coat, which means it is a superior insulator.

However, glass covered with hard coat Low-E has had the metallic oxide coating applied in the manufacturing process, which makes it more durable against scratching. Soft-coat Low-E glass is applied to glass after it is made, which causes the coating to be more susceptible to being scratched.

Additional factors to be considered in measuring the energy efficiency value of Low-E glass include:

- **U-Value** — The measure of the window's insulation value. A lower U-value means higher effectiveness in retaining current air temperatures.
- **Solar Heat Gain Coefficient (SHGC)** — The amount of solar radiation allowed to pass through the glass to become either absorbed or become heat released in the interior of the building. A lower SHGC means a greater shading effect, allowing less heat to be transmitted through the glass.
- **Visible Light Transmittance (VLT)** — The amount of visible light the glass permits to pass through it. A higher VLT means the glass allows a greater amount of visible light transmission.

- **Light to Solar Gain (LSG)** – The measure of the efficiency in admitting natural light while simultaneously blocking heat from passing through the glass. A higher LSG means more light is passing through the glass than the amount of solar heat that is passing through it.

Low-e glass in pet doors, as in windows and glass doors throughout the home, are designed to help reduce heating and cooling costs, minimize damaging ultraviolet rays from deteriorating flooring, furniture, and decor, and still allow natural light to flow into your rooms.

Pet Door Products, Salt Lake City, Utah

We offer energy-efficient [dog doors for sliding glass doors](#) that are built directly into your sliding glass door. Our premium pet doors are exceptionally durable and well insulated, to withstand harsh weather conditions and maintain maximum energy efficiency.

If you prefer [DIY pet door installation](#), we will ship the glass panel to you at a great discount on the sale price! Or, can choose [professional installation](#) for a small charge. Give your pet the freedom of unlimited access and yourself the freedom from continuously tending the door.

Our advanced materials, design, and engineering Pet Door Products among the industry's best energy-efficient doggie door, featuring:

- High-efficiency vinyl framed pet door
- High-performance Low-E glass pet door
- Energy-efficient air-tight weather seal
- Exceptional dog door with the EPA's Energy Star® rating
- Slide [security panel](#) for times when you don't want your pet to go out or in

We manufacture doors for dogs and cats, in a range of sizes. Just some of the many exceptional benefits our state-of-the-art pet doors offer our customers include:

- [15-Year Warranty](#)
- Product Made in the USA

For [more information](#) about Low-E glass, or about ordering your [advanced-design dog door](#), contact us at [Pet Door Products, Salt Lake City, UT](#), at [\(801\) 973-8000](#) anytime!

A portion of our proceeds are donated to the Humane Society of Utah (HSU). We also sponsor our ongoing [spotlight of pets for adoption](#), and we pay the adoption fees. We are also regular sponsors of Make-A-Wish Utah.

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If you're looking for an energy efficient solution to provide your pets more freedom and exercise - you've come to the right place!