

Ratings, ENERGY STAR®, Energy Savings

“Canada’s climate zones have changed.”

When Canadians want to reduce energy use and save money, they look for the ENERGY STAR® symbol to identify energy-efficient products.

Windows and doors can be a significant source of energy loss in your home – up to 25%. In Canada’s climate, this means higher energy bills for you. Buying ENERGY STAR® certified doors and windows will help you save energy.

Windows

ENERGY STAR certified windows are about 20% more energy efficient than the average window.

Doors

ENERGY STAR certified doors are about 15% more efficient than the average door.

Keep your home or building more comfortable year-round. Less condensation in cold weather compared with a conventional product.

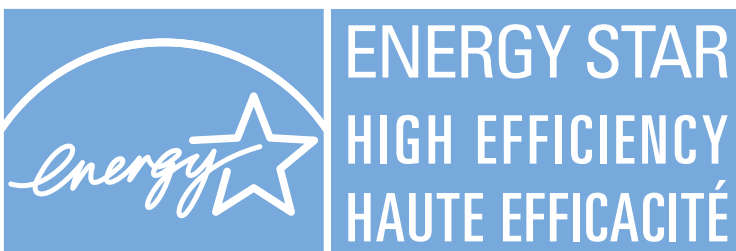
How do these products qualify for ENERGY STAR?

To be ENERGY STAR qualified, products must meet specific energy efficiency levels that have been set for Canada. In addition, all products must be certified for their energy efficiency by an accredited agency.



ENERGY STAR is the mark of high-efficiency products in Canada. The familiar symbol makes it easy to identify the best energy performers on the market. ENERGY STAR certified products meet strict technical specifications for energy performance – tested and certified.

Look for the ENERGY STAR symbol



Just remember...

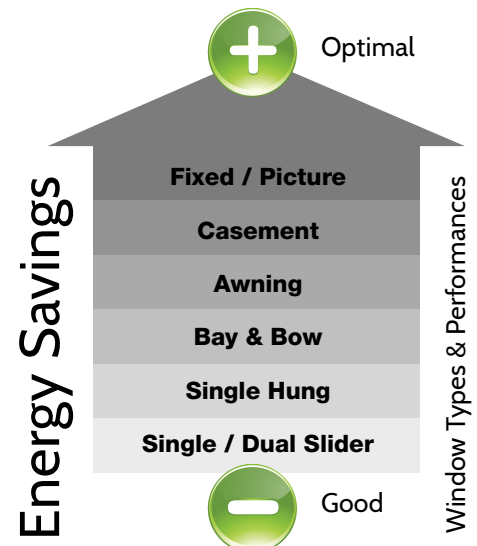
All ENERGY STAR® windows are certified by the Canadian Standards Association based on energy performance. Windows are tested and verified by an independent third party to ensure that the product will perform properly.



Criteria

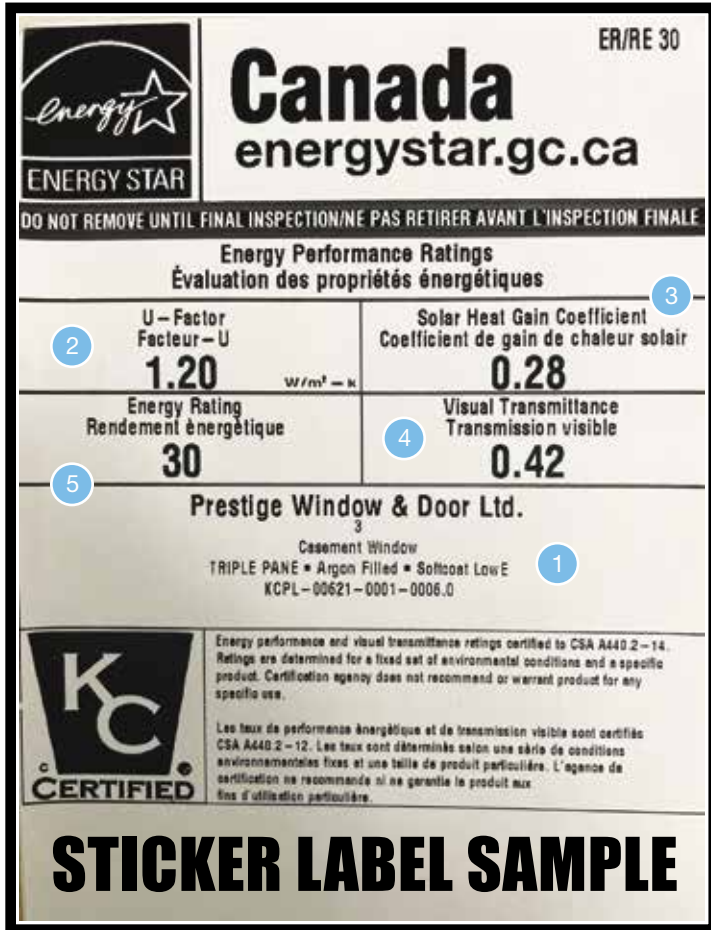
Products are rated on their U-factor or their Energy Rating (ER). The U-factor is a measure of the rate of heat loss. The lower the number, the slower the heat loss. The ER is a formula that includes the U-factor, air leakage and the benefit of potential solar gain.

The higher the value, the higher the potential annual energy savings.



How can you determine a product's energy efficiency?

It's easy - just look for the labels.



NOTE: For example purposes only.
CSA and ENERGY STAR® ratings vary by product.

Look for the CSA label.

This is the most reliable way to determine a window or door's "whole unit" energy performance.

- 1 CSA-certified products:** Reputable window manufacturers rate and certify products according to CSA Group requirements.
- U-Factor:** The lower the U-Factor, the better the window insulates.
- Solar Heat Gain Coefficient:** This number tells how effective the product is at blocking the sun's radiant heat. The lower the solar heat gain coefficient, the less solar heat the window allows into your home.
- Visual Transmittance:** The visual transmittance (VT) is an optical property that indicates the amount of visible light transmitted. While VT theoretically varies between 0 and 1, most values among double- and triple-pane windows are between 0.30 and 0.70. The higher the VT, the more light is transmitted. A high VT is desirable to maximize daylight.
- Energy Rating:** The Energy Rating (ER) value is calculated using a formula that balances a product's U-value with its potential solar heat gain coefficient (SHGC) and its airtightness. The higher the number, the more energy-efficient the product.



Look for the ENERGY STAR® label.

Prestige is a proud supporter of the ENERGY STAR® program promoting the use of high-efficiency products. Prestige products offer the energy efficient options that will meet or exceed ENERGY STAR® guidelines in Canada. In fact, we have some products with U-Factors that significantly exceed Canadian ENERGY STAR® guidelines.



For more information, contact your local Prestige sales representative or go to <https://natural-resources.canada.ca/energy-efficiency/energy-star-canada/18953>

With more than 30 years of leadership in energy efficiency, CSA Group has the experience and technical experts that fully understand Canadian and U.S. energy efficiency requirements

Low-E Benefits & Savings

The glass in windows and doors from Prestige makes a major difference in your comfort and energy use. In fact, the better your glass insulates (keeping the surface of the glass from getting too hot or cold), the more comfortable your room will feel. Yes, climate affects which glass you should choose, but window placement and size should also be considered, along with exposure to the sun and noise.

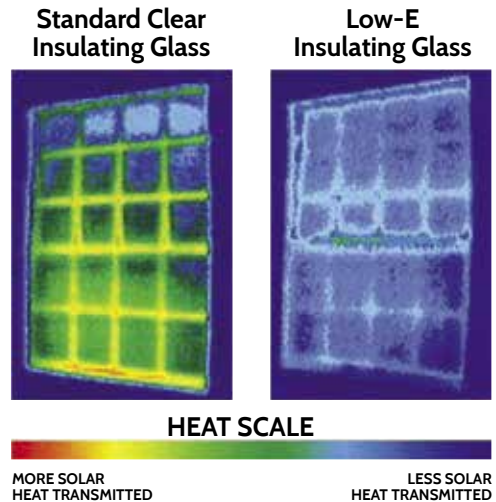
Did you know that up to 35% of a home's heat is lost through its windows? Since heating a home accounts for over half of your energy bill, it is important to find ways to reduce these costs.

The Low-E glass difference.

Energy efficient Low-E (low-emissivity) glass is simply the way to go. Choosing Low-E glass makes a dramatic difference in savings and comfort for the life span of your windows. These windows have a transparent micro-metallic coating and are filled with non-toxic argon gas that blocks out harmful ultraviolet energy and provides superior insulation.

The higher the solar heat gain coefficient, the more natural energy is transmitted through the glass. Since Canadians spend more money heating their homes in the winter than cooling them in the summer, high solar heat gain coefficients are important to harness solar energy during the winter months. This soft coat Low-E with its solar blocking capabilities remains a popular choice.

Heat Photographs (infrared thermography)



Low-E stands for “low emissivity” and is designed to improve thermal performance. Low-E glass is coated with microscopic metal or metallic oxide layers to reflect or absorb the sun’s warmth, as well as reduce the damage from UV rays.

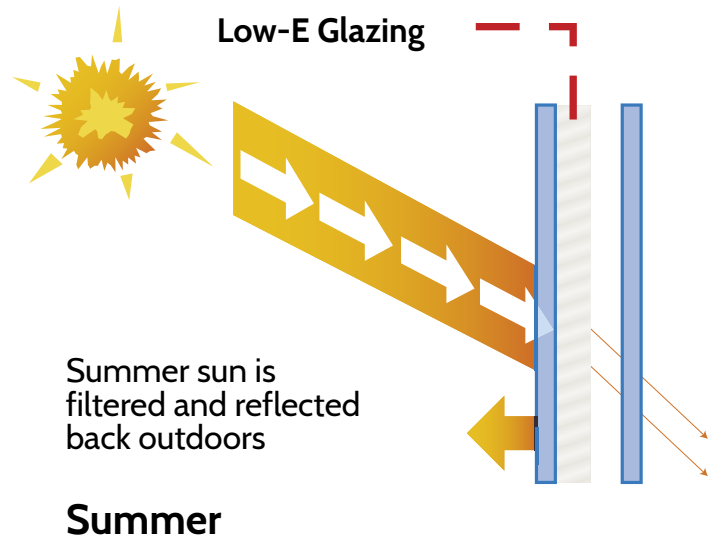
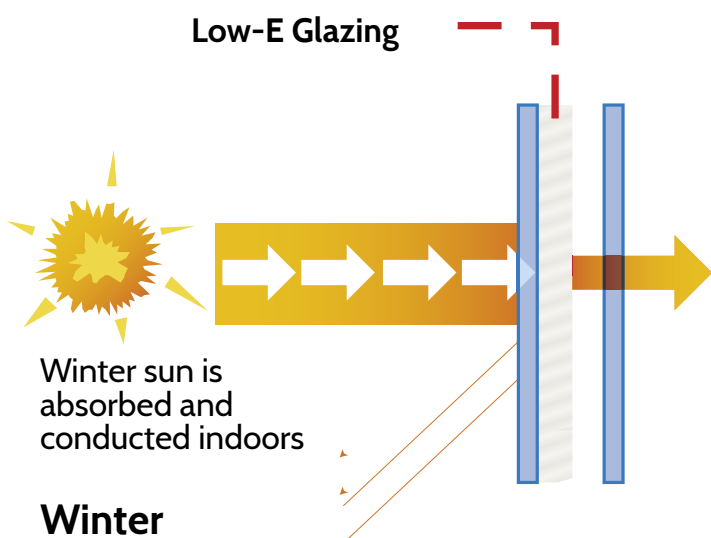
Windows sealed with argon gas...

- Benefits: Increases R-values · Increases soundproofing ·
 · Minimizes heat exchange · Reduces chance of condensation / frost ·
 · Energy cost savings · Heating & cooling systems more efficient ·
 · Argon will not corrode the window material ·

Solarban 60 Low-E

Our new standard.

- Meets ENERGY STAR requirements. Windows can qualify by 2 metrics:
- Maximum U-Factor of 1.22 Metric
 - Minimum ER of 34



Solar Heat Gain & Windows

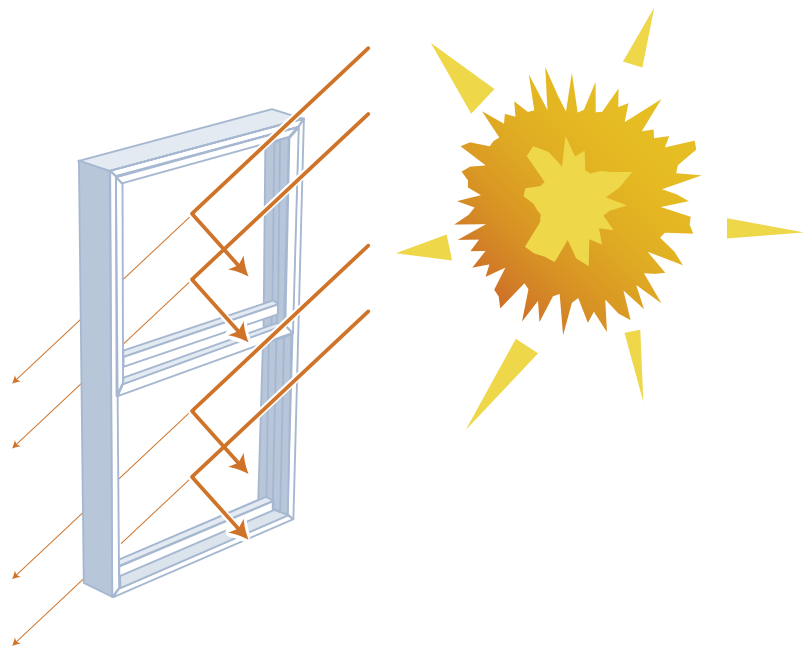
Today and every day, the sun provides immense quantities of energy to the Earth. In colder climates and during winter months, this energy can be quite beneficial; warming our homes and reducing our need for heating fuel. In some climates (with the proper designs) solar energy can be used to heat buildings and generate hot water. There is technology available to create electricity with sunlight (photovoltaics). However, for warmer climates, summer months, and commercial office buildings, unmanaged solar energy can create thermal heating loads that must be removed by air-conditioning.

The majority of this solar heat gain comes through your windows and glazed doors. The most effective way to manage the amount of solar gain that enters your home or office is to block it before it gets into the building. One way to accomplish this is by carefully choosing and installing windows with a low Solar Heat Gain Coefficient (SHGC) rating.

The lower the SHGC rating, the better the window's ability to block heat from the sun.

What is SHGC?

A simple way to explain SHGC is in terms of a ratio; where 1 is the maximum amount of solar heat gain that can come through a window and 0 is the least amount. A SHGC of 0.40 means that 40% of the available solar heat is coming through the window. It should be noted that SHGC ratings express the performance rating for the entire window, not just the glass. This is important because SHGC ratings also include a window's ability to absorb heat from the sun and transmit it through the entire window and room. Therefore the type of window, as well as the glass, can affect the SHGC rating.



Noticeable Improvements

In winter, the glass surface will be warmer because Low-E coatings reduce the amount of warm air that can escape. You will also notice reduced condensation, fewer down-drafts, lower heating costs, and better overall comfort in your home.

In the summer, cool air inside your home is retained as the Low-E coating reflects re-radiated heat from outside, keeping the air cool on the inside.