



Build It Back Green

Install Energy Efficient Windows & Shade your Windows

Products & Practices Sheets



The Global
Green House
409 Andry St.
New Orleans, LA
70117

Green Building
Resource Center
841 Carondelet St.
New Orleans, LA
70130

504.525.2121

www.globalgreen.org

bibg@globalgreen.org

BENEFITS

Windows provide your home with views, sunshine, and ventilation. Unfortunately, windows are also a source of unwanted heat loss in cool climates and unwanted heat gain in warm climates. According to the U.S. Environmental Protection Agency, **the average home loses 25% to 50% of the energy used to heat it and cool it.** This results in wasted energy, wasted money, and loss of comfort.

Installing new, energy efficient windows or improving the energy efficiency of your existing windows can save you **\$75 to \$350 a year on your heating and cooling bill!**



DESCRIPTION & CHARACTERISTICS

Energy efficient windows may have all, or a combination, of the following features:

1. **Frame Material:** Wood, vinyl, fiberglass, and composite frames reduce heat transfer and help insulate better.
2. **Multiple Panes:** Two panes of glass, with an air or gas-filled space in the middle, insulate much better than a single pane of glass.
3. **Low-E Glass:** Special coating on the glass that reflects warmth back into the home in the winter and prevents unwanted heat from entering the home in the summer.
4. **Gas Fills:** Argon, krypton, or other gases may be used in the airspace between the panes of glass to increase the insulating value. These gases are odorless, colorless, and non-toxic and they insulate better than regular air.


Windows with the ENERGY STAR label combine a variety of these energy efficiency features.



ENERGY STAR windows typically cost 10% to 15% more than standard windows but they can **reduce energy loss by as much as 30% to 50%!**

The National Fenestration Rating Council (NFRC) is a non-profit organization that identifies the energy-efficiency of windows. The **NFRC label** may be found on many different brands of windows.

- **U-Factor:** Measures how well a window prevents heat from escaping from your house. The **lower the U-Factor, the less heat escapes.**
- **Solar Heat Gain Coefficient (SHGC):** Measures how well a window blocks heat caused by sunlight. The **lower the SHGC, the less heat your house gains.**
- **Visible Transmittance (VT):** Measures how much light comes through a window. The **higher the VT, the more light is transmitted.**
- **Air Leakage (AL):** Measures the amount of air leakage through and around the window. The **lower the AL, the more airtight** the window.
- **Condensation Resistance (CR):** Measures how well a window resists the formation of condensation on the inside. The **higher the CR, the better the window is at resisting the formation of condensation.**

		World's Best Window Co. Millennium 2000+ Vinyl-Clad Wood Frame Double Glazing + Argon Fill + Low E Product Type: Vertical Slider	
ENERGY PERFORMANCE RATINGS			
U-Factor (U.S./I-P)		Solar Heat Gain Coefficient	
0.35		0.32	
ADDITIONAL PERFORMANCE RATINGS			
Visible Transmittance		Air Leakage (U.S./I-P)	
0.51		0.2	
Condensation Resistance			
51		—	
<small>Manufacturer stipulates that these ratings conform to applicable NFRC procedures for determining whole product performance. NFRC ratings are determined for a fixed set of environmental conditions and a specific product size. NFRC does not warrant any product and does not accept the liability of any product for any specific use. Consult manufacturer's literature for other product performance information. www.nfrc.org</small>			

PERFORMANCE IMPROVEMENT & INSTALLATION TIPS

If you are not in the market for new windows, there are other steps you can take to improve the performance of your existing windows:

- Install window shades, drapes, or blinds with light-colored backs to reflect heat away from the house.
- Install awnings and solar screens on the outside of windows.
- Apply solar or reflective film to a window's interior glass surface.
- Strategically plant deciduous trees on the south and west sides of your house to shade your house in the summer and provide warmth in the winter.

PRODUCT TYPES & PRICES

- The estimated cost of energy-efficient windows can range from \$80 to \$100 per window. The estimated cost of installing energy efficient windows in a typical 1200 square foot shotgun house can range from \$960 to \$1200.
- The estimated cost of blinds and reflective film can range from \$20 to \$40 per window. The estimated cost of installing these products in a typical 1200 square foot shotgun house can range from \$200 to \$500.
- Energy efficient windows and associated products may be purchased at Home Depot. Other local suppliers are identified on the **Vendors List** available on our website at globalgreen.org/bibg and in the **New Orleans Green Building Resource Center** at 841 Carondelet Street.