

## High Performance Windows Volume Purchase Program

*Bringing advanced highly insulating windows and low-E storm windows to the building community.*



### Goals Of The Program

The Department of Energy's (DOE) Windows Volume Purchase (WVP) program is a market transformation effort that allows potential buyers of highly insulating windows and storm windows to obtain bids from a consortium of qualified window vendors.

The program brings together buyers and industry partners to overcome the price barrier of highly insulating windows (a U-factor of around 0.2) and low-E storm windows and to increase their widespread market commercialization for maximum energy savings. This program not only increases the availability of these products, but provides an explanation of benefits associated with these high performance products.

### Phase II of the Volume Purchase Program

Building off the success of the phase I WVP (May 2010-April 2011), phase II of the WVP launches in May 2011. This phase brings many exciting changes to the program:

- Commercial-grade windows.
- Stepped pricing to benefit bulk purchases.
- Updates to [www.windowsvolumepurchase.org](http://www.windowsvolumepurchase.org), including price listings and a filterable database.

### [www.windowsvolumepurchase.org](http://www.windowsvolumepurchase.org)

You can browse [www.windowsvolumepurchase.org](http://www.windowsvolumepurchase.org) to find products, learn about these products, and compare prices. As stated, a new database format will allow for filtering by desired criteria, including Solar Heat Gain Coefficient (SHGC), structural performance grade, condensation resistance and shipping region. In addition, external manufacturer links will be required to lead to program-specific information.

### Why Windows?

Buildings are responsible for about 40% of U.S. primary energy consumption, and windows play an important part in the design of a building envelope. For many years, highly insulating windows and low-E storm windows were considered "special order" products. Today, through consumer education and manufacturer participation in programs like the WVP, highly insulating and low-E storm windows are more widely available and can achieve considerable cost savings on the nation's energy bills.



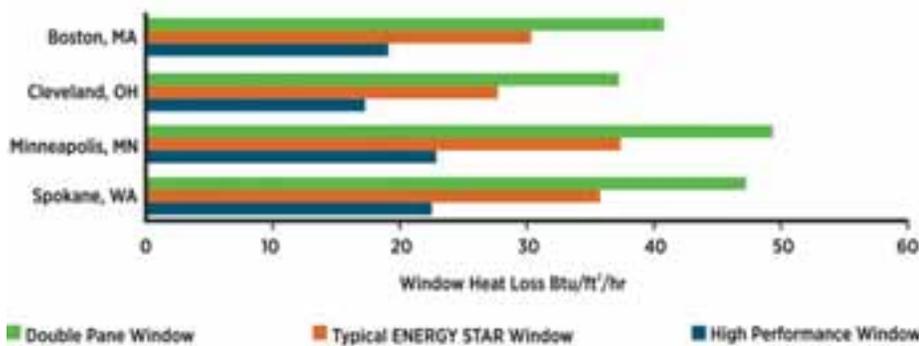
## Highly Performance Windows: Information You Need To Know

There is no specific definition for 'highly insulating', but the term as it is used here corresponds to windows with a U-factor of around 0.2 or less. Typically these are triple pane windows with advanced features such as gas fills, advanced spacers, and low-E coatings. A U-factor measures a window's insulating abilities; the lower the U-factor, the less heat loss through the window.

### Energy Savings:

High performance windows will save the most energy in climates with significant heating needs. A comparison of typical winter window heat loss across four sample cities can be found in the graph below. More detailed savings estimates, including other locations and baseline windows, can be found at [www.windowsvolumepurchase.org](http://www.windowsvolumepurchase.org).

Typical Winter Window Heat Loss for Selected U.S. Cities

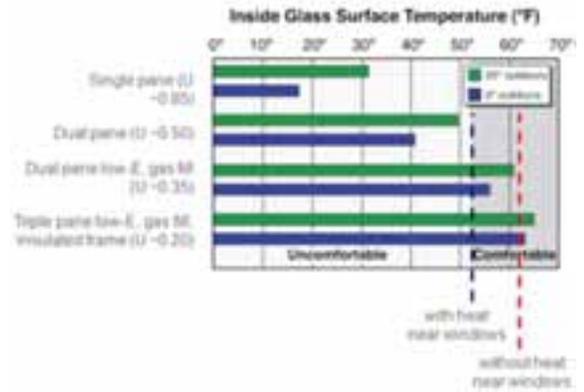


### Other Benefits:

Improved insulating properties associated with a lower U-factor also means that the internal glass surface is warmer. This can significantly improve comfort of occupants near the window, and in some cases even eliminate the need for perimeter heating. Additionally, the extra glass layer between the inside and outside in triple-pane windows will often provide noise reduction.

### Incentives For High Performance Windows

The WVP program has been well-received across the U.S. The state of Pennsylvania has been a strong supporter of weatherization efforts and now the state's weatherization Program priority list includes low-E storm windows and highly insulating windows.



- WVP qualified windows are recommended whenever windows must already be replaced.
- Low-E storm windows are recommended as a cost effective measure when used over single pane or metal framed clear double pane windows.

The Energy Trust of Oregon (ETO) already provided incentives for ENERGYSTAR windows and needed a higher performance tier for further window incentives. ETO's current high performance tier aligns with the WVP program requirements, benefiting from increased product availability for incentive recipients.