solar power

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 your energy bill, it is important to find ways to reduce these costs.

Choosing the right glass for your home

Good design and correct installation are important factors in ensuring that your windows are energy efficient. However, glass performance is the biggest factor that determines the overall energy efficiency of a window. Before choosing your type of glass, it is important to understand the effect of the sun's energy.

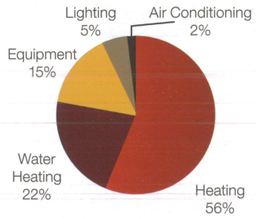
During winter the sun's lower elevation means the sun's rays shine through the windows and help warm your home thereby reducing heating costs. In summer, the sun is higher in the sky and there is less direct sunlight hitting your windows due to shading and the sun's angle in the sky.

By adding a glass coating to your windows, you can maximize your solar gains.

Low solar heat gain (LSG) glazing allows a small portion of solar energy into the house and is ideal in summer because it helps to reduce the cost of cooling your home.

High solar heat gain (HSG) glazing allows a large percentage of solar energy into a home and is most beneficial in winter when the heat provided by the sun reduces the demands on your furnace.

Research from Natural Resources Canada indicates that HSG glazing is a more energy efficient option for our cooler climate because we spend more money each year on heating than we do on cooling our homes. In fact, only 2% of residential energy use is spent on air conditioning whereas



heating accounts for 56%. HSG glazing does not block ultraviolet (UV) light as effectively as LSG, because it allows more solar heat to pass through the window. If you choose HSG glazing, consider installing blinds to block out the sun's rays and keep your home cooler in summer.

Another solution is to plant trees along the south and west sides of your home, as well as near an air-conditioner to increase energy efficiency. Choose deciduous trees which will shade your home from the sun during hot weather so you rely less on fans and air-conditioning, and will allow the sun's rays to reach your windows in winter.

Low-E Glass

All Weather Windows offers both LSG and HSG glazing. The HSG option is called Low-E (low emissivity) which is a special type of glass that has been coated with a microscopic layer of metallic atoms, making the glass more resistant to heat transfer without affecting the look or feel of the window.

It reduces the amount of heat loss by deflecting it back into the room and allowing passive solar gain.

SunStop Glass

The LSG glazing option is SunStop, which is a second layer of Low-E coating that helps control heat gain when natural shading is not available. SunStop filters out more light and UV to keep a room cooler in summer and reduce furniture fading.

The Right Balance

It is important to strike a balance so you always benefit from the sun's free solar energy. We recommend putting SunStop glazing on South and West facing windows, and use Low-E glass for the balance of the house.

Noticeable Improvements

In winter, the glass surface will be warmer because Low-E reduces the amount of warm air escaping. You will 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.

When combined with Tri-pane glass, a Low-E coating offers 35% to 105% better insulation than standard clear glass.

How does Low-E affect energy bills?

Simply replacing your windows and doors with ENERGY STAR® qualified products can reduce energy bills by up to 12%! Not only will you reduce your heating and cooling costs, you will also reduce your greenhouse gas emissions. In fact, 12% equates to an annual reduction in a household's greenhouse gas emissions of nearly three quarters of a tonne.

Is Low-E expensive?

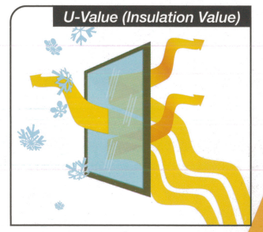
Low-E only adds about 10% to the cost of an average window package. SunStop costs a little more.

Low-E vs. Alternatives

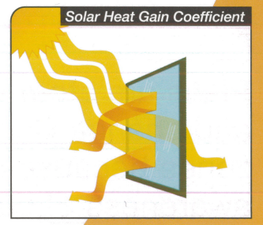
Our Clear Low-E sets the industry standard in terms of passive solar heat gains and insulation ratings (U-Values). No other coating has a greater impact on reducing heating bills and improving the overall comfort of a home.

Our Low-E coatings also meet the stringent ENERGY STAR® ratings.

To find out how much money you can save by switching to All Weather Windows, check out our exclusive Energy Savings Calculator at *www.allweatherwindows.com*.



Low-E Glass



SunStop Glass

	Code	Description	R-Value	Solar Heat Gain	Ultraviolet Blockage	Visible Light Transmittance
Clear	Dual	Dual panes of clear glass, no coatings and no Argon	2.02	0.76	42%	81%
	Tri	Triple panes of clear glass, no coatings and no Argon	3.15	0.68	42%	74%
Low-E	HS1A	Dual panes of glass, one pane with Low E coating and Argon	3.33	0.73	56%	76%
	HS2A	Tripane glass, one pane with Low E coating and Argon	4.58	0.66	63%	69%
	HS3A	Tripane glass, two panes with Low E coating and Argon	5.97	0.56	72%	64%
SunStop	HS4A	Dual panes of glass, one pane with SunStop coating and Argon	4.17	0.39	70%	62%
	HS5A	Tripane glass, one pane with SunStop coating and Argon	5.31	0.37	75%	57%
	HS6A	Tripane glass, two panes with SunStop coating and Argon	8.2	0.29	86%	43%