

HPS-G HeatShield

Product Prospectus



about us

eTime Energy is a CleanTech organization focused on providing companies with the right green technologies that make significant progress towards cutting down carbon emissions and conserving energy.

eTime Energy is a Toronto-based nanotech firm, providing products focused on energy conservation. We specialize in heat preservation coatings which create significant energy savings, increase comfort and reduce carbon emissions. These coatings are chemically altered using nanotechnology giving them properties that reflect and block heat. Using the power of titanium, our coatings aid in regulating building envelopes and reducing consumer reliance on excessive HVAC requirements. This has become the core value in our belief that the greenest energy is saved energy.





Company overview

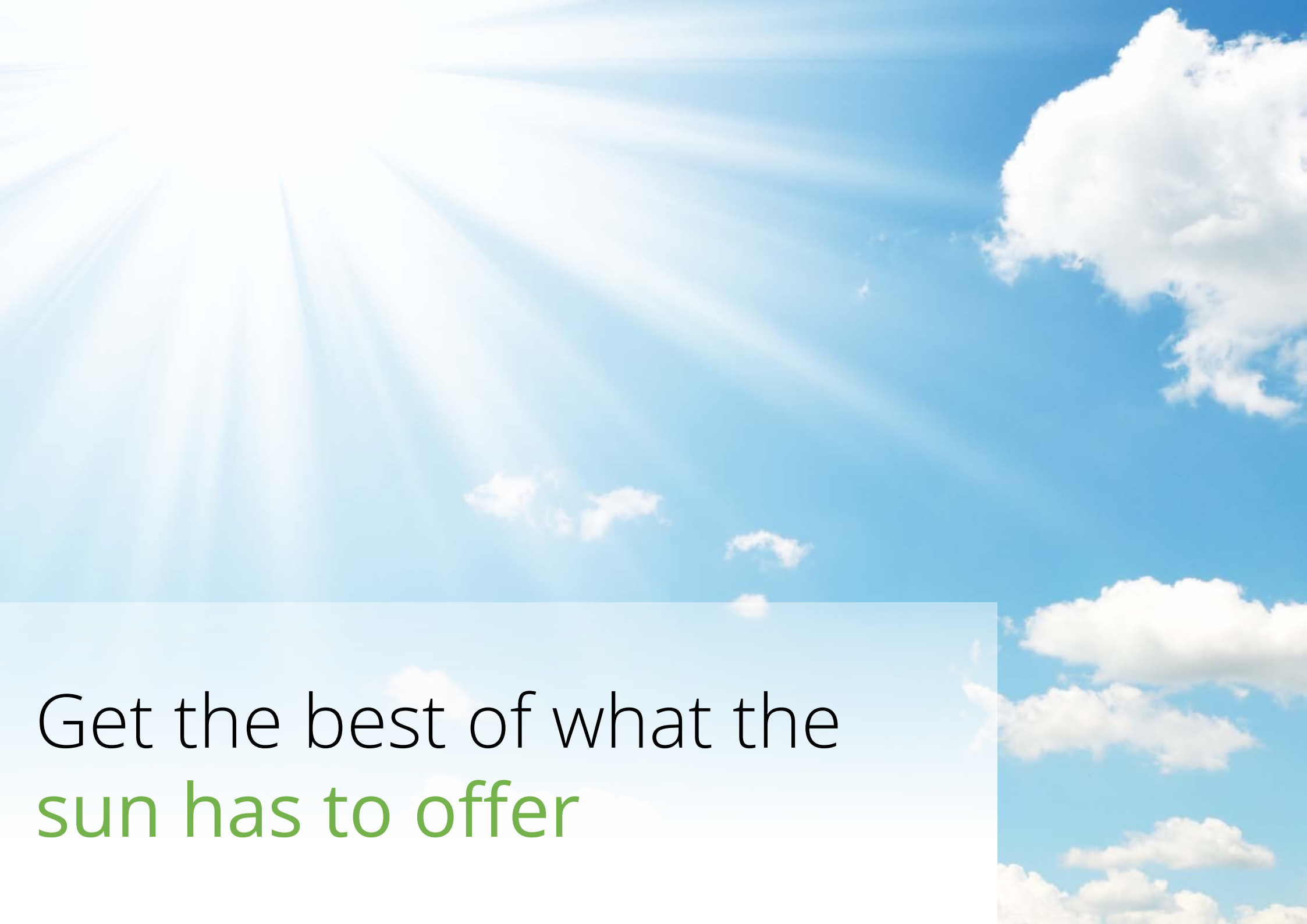
Canadian-based sustainable solutions provider.

Focused on providing the highest performing economical and functional technologies that reduce energy loss.

We directly address fenestration as the weakest link in energy preservation.

HPS HeatShield is our first offering, designed and manufactured with ground-breaking nanotechnology, to reduce cooling and heating loads on building systems.

This is the simplest, greenest way of reducing energy loss out of your windows by 8 to 10% on the total energy bill of your facility.



Get the best of what the
sun has to offer

The Problem

To much solar light spectrum results in:

Infrared

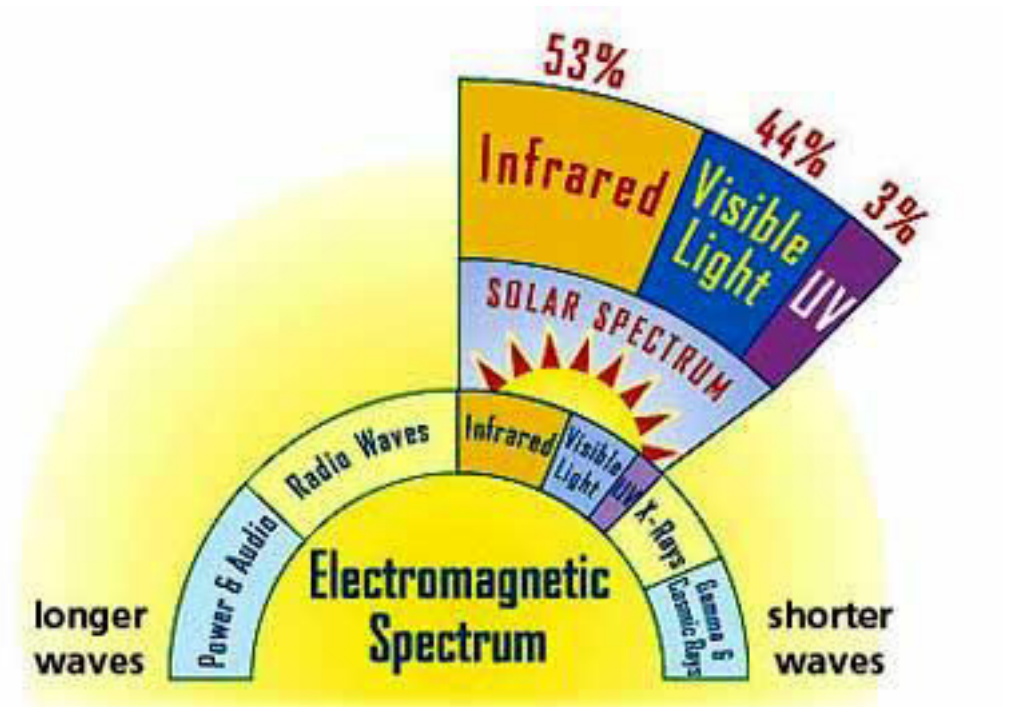
Excessive heat results in increased energy consumption, uncomfortable spaces

Visible Light

Distracting glare, uncomfortable seating

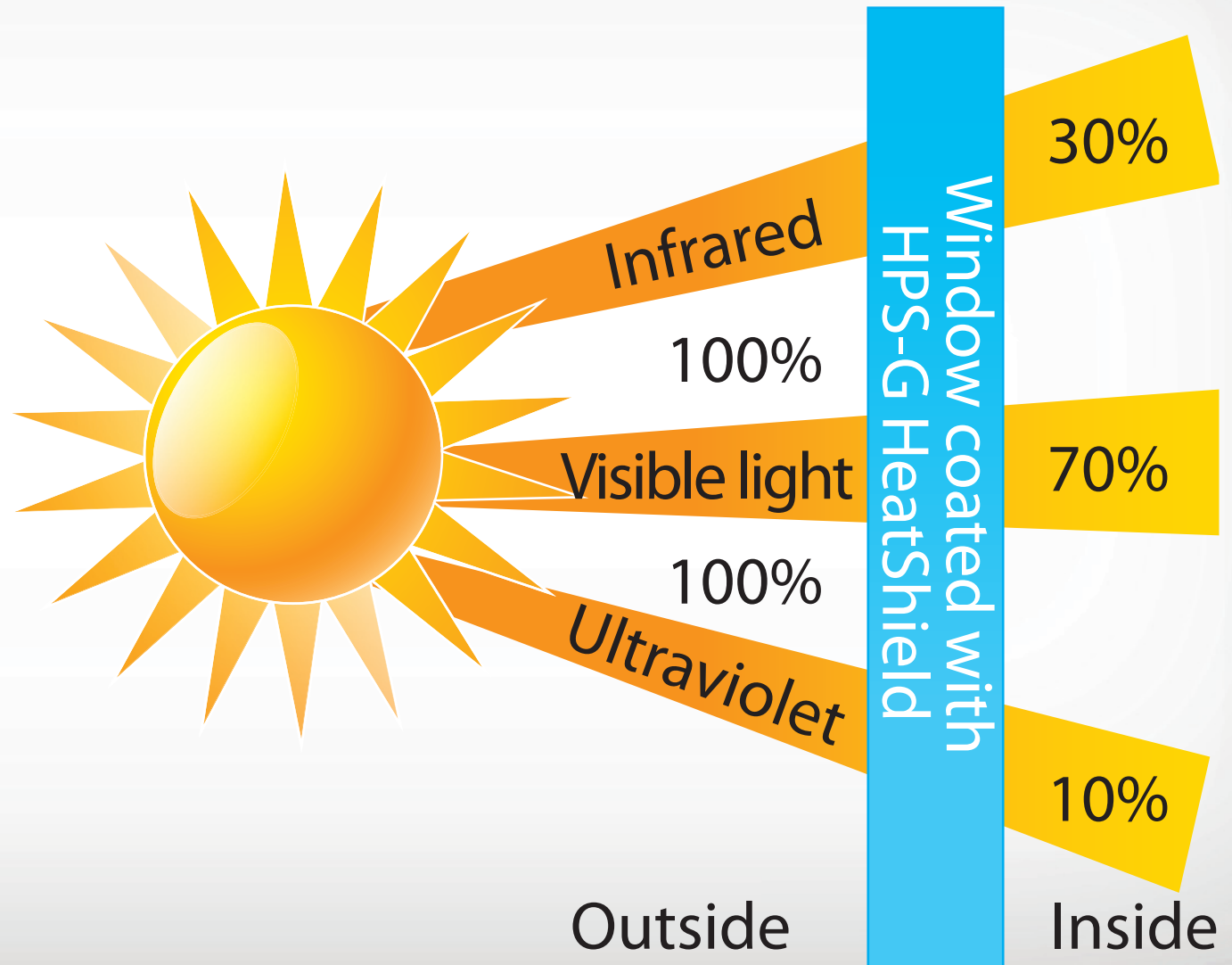
Ultra Violet Light

Damages room contents



The Solution

HPS-G HeatShield





HPS-G HeatShield

A clear liquid window treatment

Interior retrofit installation

For glass and polycarbonates

Lowers temperatures up to 20°C

Reduces heating and cooling costs 20-40%

No need for additional lighting

Saves landfills

Spectrally selective: + 70% Tv

Customizable tint

Immediate benefit

ROI as fast as 2 years

15 year warranty

HPS- G HeatShield

Is a retrofit solution for aging and ineffective windows. It creates a thermal barrier that stops the migration of heat into or out of the building envelope. This reduces heating and cooling loads by up to 20-40%. In turn, this translates to a ~10% reduction in your total energy bill.

Metrics 5mm clear glass; water based; 3H water/alcohol based
other results available on different panes with varying HPS mixtures

Specification

Solar Heat Gain Coefficient (SHGC)

0.40 0.50 0.60

UV Blockage

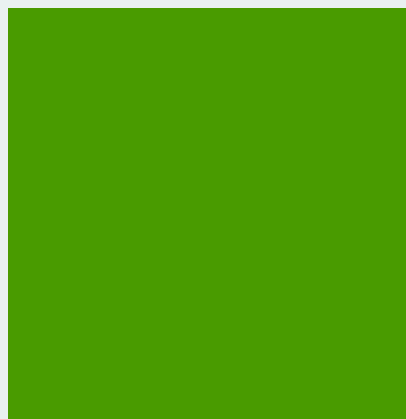
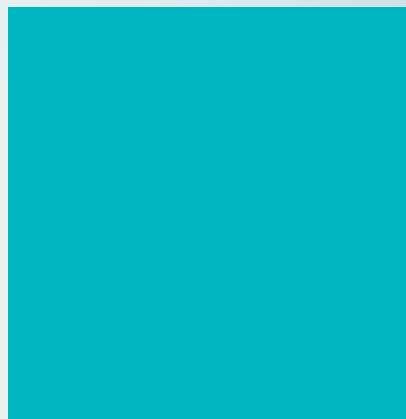
94% 90% 99%

IR Blockage

80% 70% 50%

Visual Light Transmittance (VLT) (TV)

65% 72% 76%



The Application

1

The installation process begins with the diligent preparation of each window pane in order to prepare the glass surface to accept the HeatShieldCoating

2

Once prepped and cleaned, each pane is then coated using our customized free flow system, allowing for a 100% uniform, transparent finish on each completed window

3

After a 30 minute drying period, the process is complete and the window is now energy efficient, blocking 40 -60% more infrared radiation than an average double pane insulated glazing unit

Most cost efficient window upgrade

*3,000 SF/Toronto	Liquid Nano Coating eTime: HeatShield	Low-E IGU Standard	Window Films Spectrally Selective
Per SF installed*	\$10-\$15	\$75	\$10
Visual Presence	Becomes a part of the window's molecular structure; unnoticeable	Applied during the manufacturing process in an oxidized environment.	Alien material to the window. Dark, distortion, easily damaged, tough to clean
Optical Distortion	No	No	Yes
Install Process	Window coating performed by licensed applicators	At the new construction stage or by removing existing window	Window film installation contractors or a user guide
SHGC	0.33 - 0.75 / customizable	0.41 - 0.74 / depending	0.35 - 0.75 / depending
Tv	0.58 - 0.80 / customizable	0.55 - 0.76 / depending	0.30 - 0.75 / depending
UV Blockage	99.70%	up to 99.5%	99.70%
Warranty	15 years	10 years +/-	5 years +/-
Removable	Yes	No	Yes
Thickness on window	8 - 15 microns	8 - 15 microns	1 - 8 mm
Issues		Fail; Landfill; disruptive install	Bubbles; shrinks; cracks; peels



84 (BTU/Hour per SQ. FT. reduction

We have been able to leave the blinds up all day and let more light into the restaurant. Previously hesitant customers are now asking to be seated up front next to the windows and my staff are enjoying a more comfortable working environment.

Mike McCarthy

Owner of Queensway Cora's
Breakfast and Lunch

Customer
satisfaction
is our
specialty



"If not for fact that I personally witnessed the heat shielding properties of the HPS coating first hand, I would have been skeptical in reading any claim stating that 20 -40% heating and cooling energy savings could be achieved using this product. But our test data clearly shows that this is indeed the case as evidenced during the hot and humid days of late summer when the HPS treated glass surfaces reduced the inside temperature of the test box by an average of 12°C. This alone translates into a 35% reduction in the amount of cooling energy that would have otherwise been required if the glass was not coated."

Leo Salemi Professor,
Centre for Construction and
Engineering Technologies
George Brown College

Accredited Labs

HPS-G HeatShield

Bodycote Labs

*Toxin reports, VOC contents
Spectrum report*



GeoScience Labs

*SHGC, Tv, UV blockage
Glass breakage*



US Department of Energy

*LBNL, NREL
ORNL*



OnSpex Labs (CSA)

*Durability
Longevity*



Why HPS-G

- Retrofit application
- Blocks 40-60% more IR than other method available today
- Blocks 99.7 UV
- Spectrally selective allowing more light through than any other product available
- 15 Year warranty is the longest in industry
- 2-3 year ROI; and keeps on giving for the natural lifespan of the IGU
- No optical distortion
- Green CleanTech product
- 15 year warranty
- No glare; no sweat; no worries

Increase Profit

- Save 20-40% on heating and cooling costs year round
- Save ~10%+ on electrical bill
- Recapture building view value
- Sell space at more affordable rates
- Offer premium space for premium \$'s
- More productive staff
- Less lighting requirements
- Less load on HVAC systems
- Non disruptive install means no disruption of ongoing business

