

ENERGY CONSERVATION-

By Peter Davey, American Window Film, Inc.

BLACK GOLD RISING...WILL WE SEE \$75 A BARREL FOR CRUDE OIL?

Conserve Energy with 3MTM ScotchtintTM Window Films

il may rise above \$75 a barrel in the next three months if the dispute over Iran's nuclear programme causes the country to cut exports..." ("Threat of Iran Cutting Exports Looms Large", Bloomberg, August 20, 2005, posted on Financial Express, Commodity Watch, August 22, 2005.) Pumping gas and paying fuel bills have become down-right painful these days. Still many of us continue to think prices can't possibly continue to rise. I say...prepare yourself.

One way to conserve heating fuel significantly is to insulate your building thoroughly. Most of us immediately think of adding more insulation within the walls of our building, tuning up our HVAC equipment, wrapping hot water tanks and pipes with insulating materials but we often overlook our windows which are the greatest source of heat loss and heat gain in any building.

There is a variety of insulating (Low-E) window films on the market. 3M Company manufactures a series of these films. 3M™ Scotchtint™ Plus All Season Films, that work much the same way as their Sun Control Films except that they offer increased performance against cold weather heat loss in addition to their solar performance (heat gain reduction) during warmer months. Featuring Wavelength-Selective metals which block more of the solar spectrum than conventional metals, these Low-E (emissivity) window films can reduce heat loss by up to 23 to 30 percent and can reduce air conditioning costs by blocking 55 to 73 percent of the sun's heat. The patented construction of these films enable the metal coating to reflect more of the interior room heat back into the room. Personal comfort is improved and the reduction in drafts and fluctuations in temperature can generate considerable savings on fuel expense.



Peter J. Davey, President American Window Film, Inc.

If your building is equipped with Low-E windows already, 3M™ Scotchtint™ Plus All Season Films can enhance their performance. A well made Low-E window can block up to 90 percent of UV radiation. The same window with 3M™ Scotchtint™ or Scotchshield™ Films installed will block more than 99 percent of the UV radiation that contributes to heat loss and gain. In addition, by holding broken shards of glass in place, 3M™ Scotchshield™ Films will improve the safety and security of Low-E windows that do not typically protect against broken or flying glass unless they are tempered. Also, Low-E windows do not ordinarily reduce glare since most have a visible light transmission greater than 70 percent. 3M™ Scotchtint™ and Scotchshield™ films can reduce glare up to 80 percent depending on the film used.

A \$20 billion diversified technology company and an ISO9002 certified facility, 3M is the only window film manufacturer that produces their own raw materials such as polyesters, metals, scratchresistant coatings and adhesives. Window film is only as good as its adhesive. A bad adhesive will produce bubbling and blistering – distortions

created by thermal cycling that can ultimately result in seal failure. Unlike others, 3M's ultraviolet inhibitors are included directly in their adhesive. This ensures lifelong clarity and reduces UV degradation, thus providing long-lasting protection from fading of fabrics and furnishings. Their patented micro-layered window film construction has proven itself in the field. 3M has effectively responded to market demands through the introduction of solar control films, ultraviolet light control films, low reflectivity, high optical clarity and shatterresistant window films. Their films vary in color, density and heat rejection/retention qualities and their sun control films offer up to 99 percent UV protection.

Applied to the inside of windows, a quick, professional installation of window film creates little disruption to the flow of business. It's inexpensive compared to window replacement, and it can pay for itself with the energy cost savings it provides. That savings is no small line item when crude oil prices are rising faster than revenues and significantly affecting the cost of doing business.

Next time you're at the gas station, filling your tank and cringing at the cost, think about your building and how much it costs to fill its tank. Insulating your building's windows with 3M™ Window Film will pay for itself over time while conserving precious energy. Without a doubt, there are many factors that may keep that "black gold" rising. At potentially \$75 a barrel for crude oil, conserving energy should rank high on our list of priorities.

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