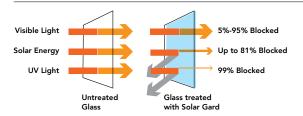


# Commercial Window Films for Solar, Safety and Energy-Saving Solutions







#### Solar Gard blocks harmful rays while letting visible light through.

Practically invisible when installed onto glass, Solar Gard window films reject high levels of solar heat – offering you strong protection against bothersome glare, uncomfortable hotspots, and uneven temperature fluctuations. You'll feel an immediate difference upon installation. Solar Gard window films allow you to work with your blinds wide open, without the excessive solar heat you'd expect.

#### **Solar Gard Solar Protection**

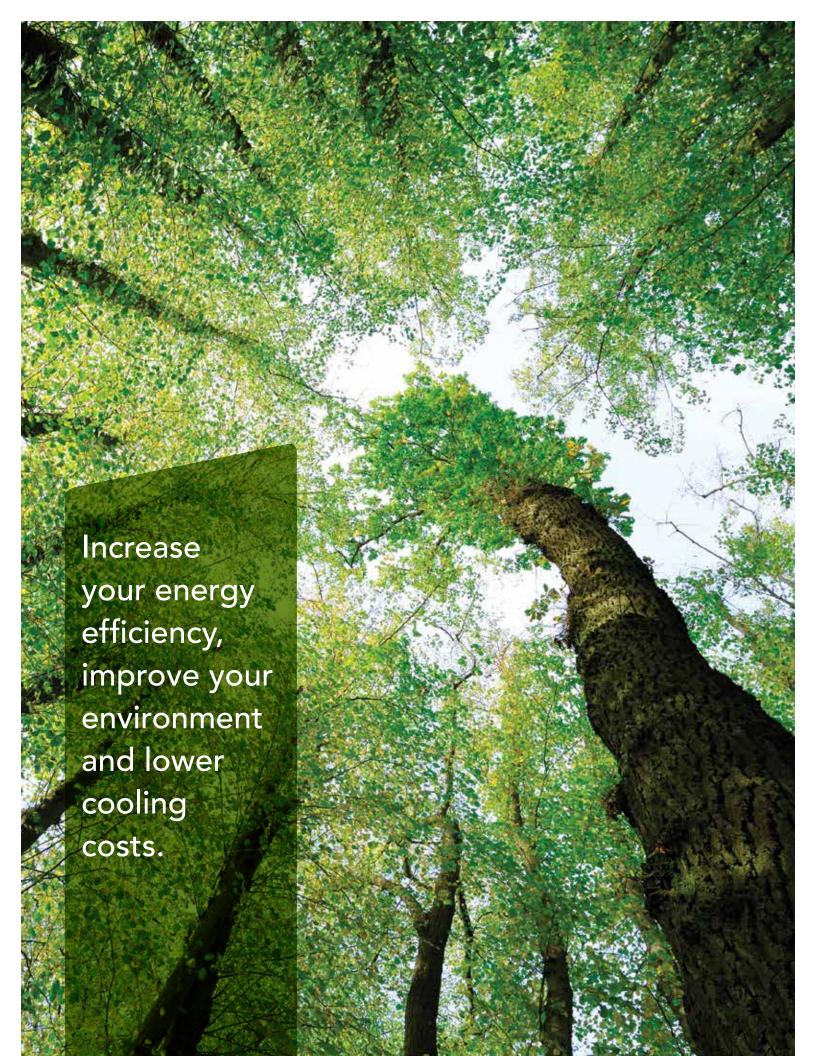
Nothing adds more ambience and energy to a workspace than natural light, but it's also possible to have too much of a good thing. With natural sunlight comes unwanted heat and hotspots, which can affect everyone's comfort. Solar Gard window films reject up to 81% of solar energy – providing your employees and customers with a more temperature-stable and comfortable environment. By reducing annoying glare, Solar Gard window films improve visibility of computer screens and monitors and minimize eye strain.



"Solar Gard window film has made all the difference. Previously, the light was so bright that the staff were coming to work in their sunglasses – and the intense heat certainly didn't encourage customers to linger.

About 75% of the glare is now gone, so the computer screens are much more visible and the temperature and levels of light are perfectly pleasant. We couldn't have picked a better solution than Solar Gard."

David Cavanaugh General Manager, Benfield Ford Leeds, England



#### Reduce energy use and costs.

Here's how Solar Gard window film can help save energy in a 16-story Los Angeles office building with 360,000 sq. ft. of floor space and 50,000 sq. ft. of single pane glass windows.

Information is based on a whole building simulation conducted using Efilm, an energy analysis tool supported by the IWFA and running on the EnergyPlus Version 8 engine. Calculations are shown for illustrative purposes only, and results will vary based on climate, building construction and energy use characteristics, and window film selection.

Projected reduction in energy use (kWh)

Average cost per kWh

\$ .125

293,998

Projected reduction in annual energy spending

\$ 48,720

## **Solar Gard Energy Efficiency**

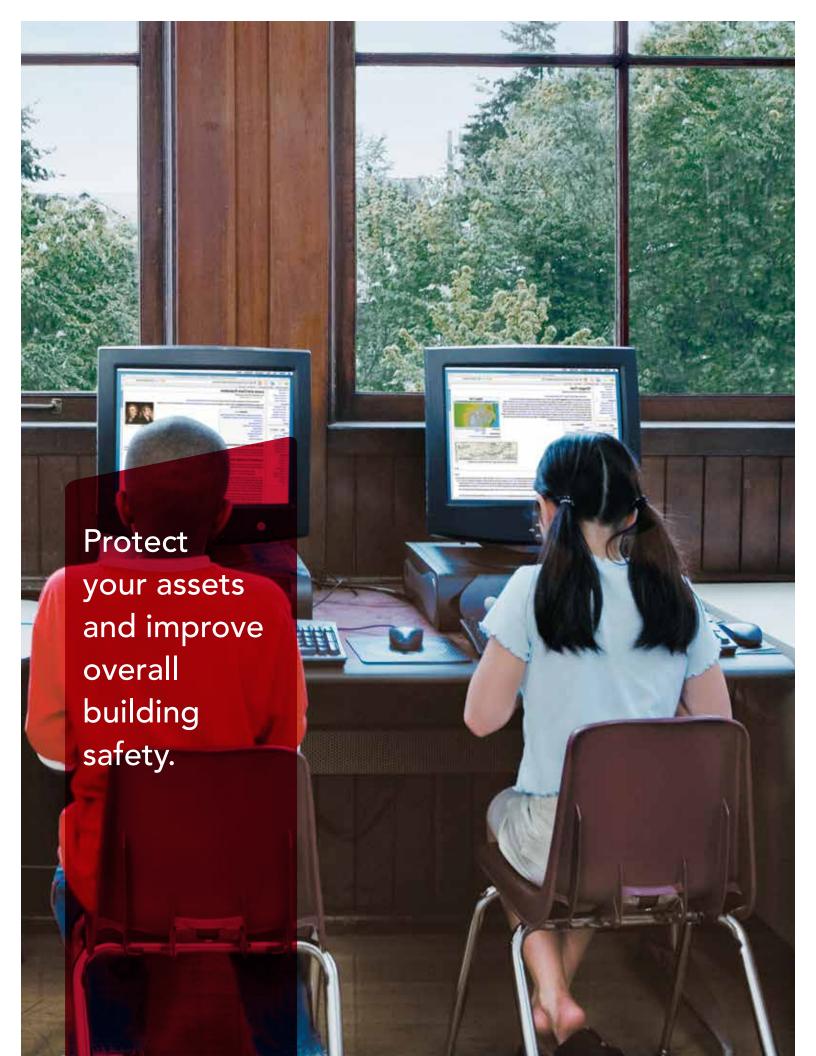
These days, the need to conserve energy, reduce your company's carbon footprint, and conform to stricter environmental standards has never been greater. At the same time, the cost of energy continues to rise – affecting your company's bottom line. With proven heat-rejection properties, Solar Gard films help your business consume less energy by keeping interior temperatures more controllable and stable. This reduces the need for air conditioning, moderating extreme peaks in usage to allow your cooling system to operate more efficiently and inexpensively.

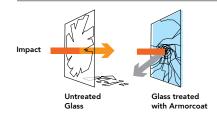


# Solar Gard provides a cool facade for ASEM Tower

The ASEM Tower in Seoul, South Korea, is one of the most coveted commercial addresses in the country. The breathtaking structure stands at an impressive 42-stories high and boasts 1,450,000 square feet (135,000 square meters) of office space. Since the facade is comprised mainly of glass and its broadest faces stand in the direct path of the sun, office workers suffered through intense heat and distracting glare.

To solve the problem, building management retrofitted the two largest faces of the building with 80,000 square feet (7,400 square meters) of Solar Gard Silver 20. The results were ideal. Room temperatures decreased by 7° to 11° F (4° to 6° C), utility costs went down, and tenants were able to work more comfortably.





Solar Gard Armorcoat safety films help keep shattered glass intact and protect building occupants.

Anything from a stray golf ball to severe weather can send dangerous shards of glass flying, subjecting people and property to serious damage, injury or worse. Armorcoat safety films help keep dangerous shards together on impact, whether due to accidents, acts of nature, attempted break-ins, vandalism or unexpected blast incidents.



### **Solar Gard Safety and Security**

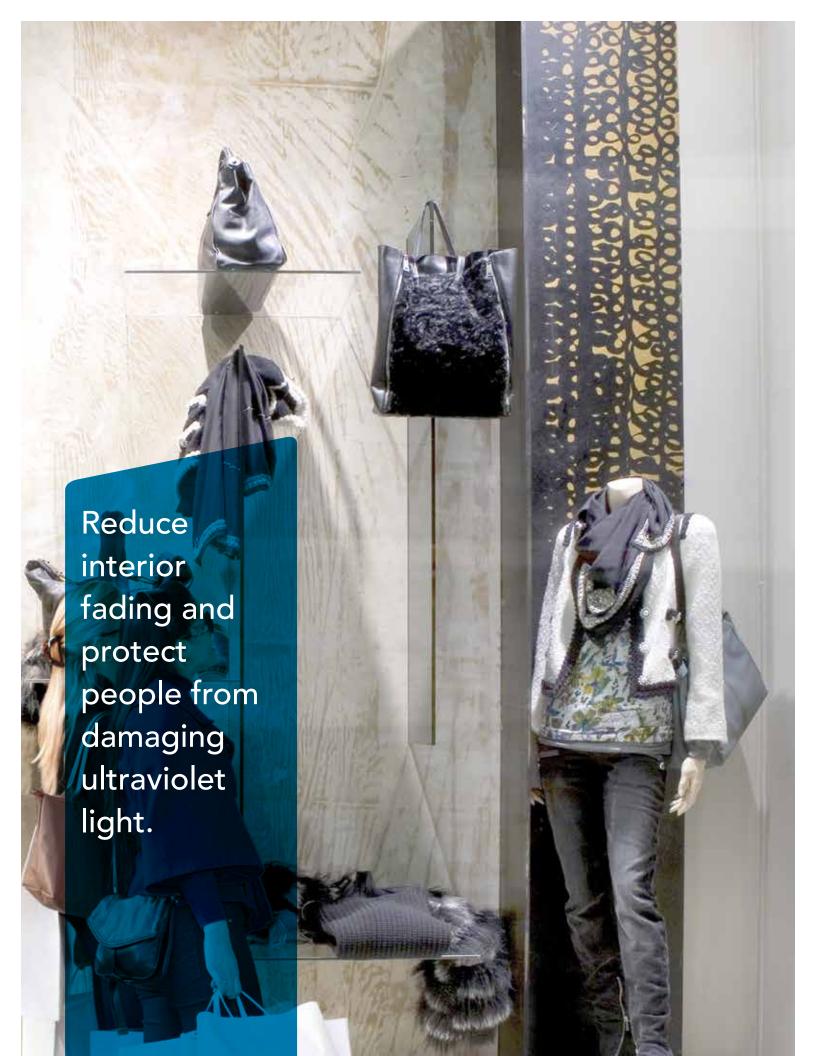
From severe weather and terrorism, to burglary and vandalism, threats to human safety and property these days are on the rise. Which is exactly why the extra layer of protection that Solar Gard Armorcoat® safety and security window films provide, is such a valuable addition to your building. Specially designed to absorb shock and hold shattered glass in place, Armorcoat not only helps protects people from flying shards, but also provides a barrier against break-ins, blasts, looting and interior damage. To provide inexpensive protection against everything from glass etching to spray paint, Solar Gard Graffitigard® is specially designed to be applied in removable layers or to be easily stripped and reapplied when tagged.



#### Armorcoat makes the government a safer place to work

The U.S. government has always implemented the most stringent and fail-safe security and safety measures in its facilities. But after the shocking events of September 11, 2001, it was clear that additional protection was immediately needed on many government facilities, especially the most high-profile and potentially targeted buildings located in the U.S. capital.

Armorcoat was installed on numerous prestigious government facilities, such as the Department of Energy, J. Edgar Hoover FBI Building, Hubert Humphrey Building, the National Imagery & Mapping Agency, and the U.S. Capitol. Working from the moment offices closed until government employees returned in the mornings, installation on 15 government buildings was completed in a record 33 working days.

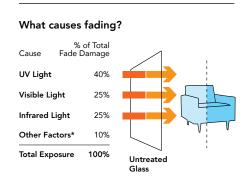






#### **Solar Gard UV Protection**

Even indoors, exposure to excessive ultraviolet light and heat can cost you more than you probably realize. UV light and solar heat coming through any window can cause fading and irreparable damage to everything from your merchandise, furnishings and precious artifacts, to your very own skin. Solar Gard films reject solar heat and block over 99% of harmful UV light - protecting your valuable assets and interior furnishings from expensive sun damage.



The sun's ultraviolet radiation, heat and light cause fading and deterioration of fabrics, carpets, furnishings, storefront displays and other interior items. All Solar Gard films reject up to 99% of harmful ultraviolet radiation, and varying amounts of heat and light. This helps dramatically reduce damage to your interiors and furnishings, keeping them in like-new condition longer.

\*"Other Factors" include humidity, air quality, temperature and material construction.





# **Determining Which Film is Right for You**



#### Heat and Comfort

Whether it's a corner office or tables by an expansive window, keep every area of your building a consistent, comfortable temperature.



#### **Energy Consumption**

Solar Gard window film is an easy, cost-effective retrofit to boost overall energy efficiency.



#### Safety and Security

Gain protection against break-ins, vandalism and theft without blocking views or changing your building's external appearance.



#### Glare

Enjoy your views without having to use blinds to block excessive glare.



#### Fade Control

All Solar Gard window films block 99% of UV light, the primary cause of fading.



#### Appearance

Choose from a wide array of tints and colors, from optically clear to fully reflective, that allow you to change the appearance of your building as much or as little as you like.



#### Privacy

Protect your occupants from onlookers and passers-by with a reflective film that blocks views into your building.

# Let us match your goals to the extensive product line from Solar Gard

#### Panorama® Hilite® Window Films

Boast technology that provides extraordinary solar energy rejection performance along with higher visible light transmission.

#### Panorama® CX Ceramic Films

Offer an attractive balance of solar heat rejection and low reflectance, with exceptional durability and a natural appearance that maintains views.

#### Panorama® Sterling® Window Films

Protect against solar heat, lower cooling costs, and block 99% of harmful UV ray exposure.

#### Panorama® Slate Window Films

Deliver exceptional solar rejection performance while maintaining views with reduced interior reflectance.

#### Stainless Steel Window Films

Provide extraordinary solar control with a subtle grey finish from the outside.

#### Quantum® Window Films

Patented metallized films that provide superior heat protection.

#### Solar Bronze Window Films

Feature a subtle exterior copper finish that naturally complements most home designs and landscapes.

#### **Aluminum Window Films**

Constructed of metals such as gold, silver and bronze for optimum privacy with dramatically reduced heat gain.

# Low-Emissivity Summer/Winter Window Films

Protect from solar heat in the summer and also keep interior heat inside during the winter.

#### **Decorative Window Films**

Designed for privacy, with clear frost, black opaque and white opaque options.

#### **Graffitigard®**

A clear protective barrier that protects surfaces from permanent damage caused by vandals, and can be easily replaced.

#### Armorcoat®

Safety and security films designed to reinforce glass and help keep shards in place in the event of breakage.

# Feel confident in your purchase with professional installation and warranty coverage

Solar Gard offers strong warranty coverage for its line of Panorama and Solar Gard window films. Commercial installations are protected for up to 12 years. Ask your professional installer for details.

Panorama films are only available through an authorized Panorama dealer.

With over 40 years of innovation in window films and surface protection solutions, and backed by more than 350 years of Saint-Gobain's success in the glass and building materials industries, Solar Gard is one of the most trusted and popular window film lines in the world. Sold through company-owned distribution centers and independent dealers and distributors, Solar Gard window films are installed each year on thousands of buildings and millions of vehicles worldwide.

























# What matters most to you... We're On It!



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Please recycle.

www.solargard.com



#### About Solar Gard®

Solar Gard protects what matters most to you: your family, your home, your business, your car. Headquartered in San Diego, California, Solar Gard makes state-of-the-art window films and protective coatings for the architecture and automotive markets. Solar Gard is a division of Saint-Gobain Performance Plastics, a subsidiary of Saint-Gobain, the world leader in habitat and construction markets. Our proven carbon-negative solutions positively impact lives and reduce global greenhouse gas emissions. Solar Gard products are sold in more than 90 countries under the Solar Gard, Quantum, and Solar Gard Armorcoat brands.