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A Win-Win with Window Film

The next generation of window film offers a new level of protection and energy efficiency

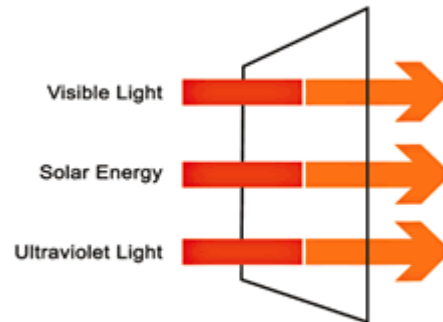
Although the original objective of window film design (which dates back to the early 1960s) was to help control the heating and cooling imbalances resulting from solar loading, today's modern products, according to the Martinsville, VA-based [Intl. Window Film Association](#), offer myriad benefits:

- Up to 99-percent ultraviolet light reduction, resulting in significant fade protection for interior finishes and furnishings, and reduced UV exposure for building occupants.
- Significant reduction in solar heat gain, which reduces air-conditioning costs and the associated wear and tear on HVAC equipment.
- Increased shatter resistance.
- Scratch resistance to protect against accidental abrasion and product deterioration during normal cleaning.
- Glare reduction.
- Daytime privacy.

To understand how window films work, note the illustration on this page. In a nutshell, solar energy through a window or glass surface is transferred or transmitted by infrared waves. Radiant energy is converted to heat when it strikes people or objects. If you block the transfer of this energy, you keep it from turning into heat because it never strikes an object. Window film interrupts the transfer of this energy by reflecting the energy back.

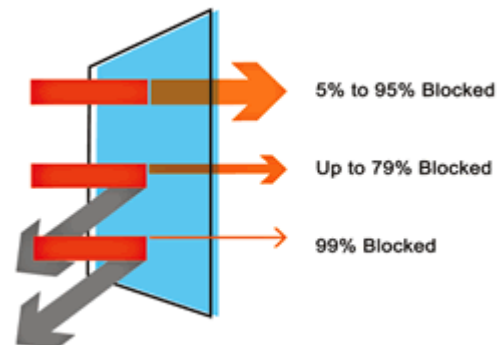
The efficiencies of solar control window films are closely related to local weather conditions, but building orientation, window size, construction materials, and other factors, including exterior shading conditions, also impact the energy-related benefits. As energy costs continue to escalate, many building owners have considered short-term solutions to control solar glare and reduce energy costs, yet some products can negatively impact the building design, views, and desirable solar light.

On the other hand, today's window films offer protective and energy-related benefits, along with a remarkably clear aesthetic. The types and quality of materials used, as well as the technical improvements in the manufacture of the film, have become so refined that building occupants may not even realize that film has been installed on a glass surface. "As a result, you get the safety benefits and UV protection, as well as the savings on energy, yet maintain your views and harvest the daylight," says Kathryn Giblin, vice president of global marketing at [Bekaert Specialty Films](#), San Diego. Not surprisingly, the majority of window film for the commercial market is used in retrofit applications. Giblin notes, however, that there are opportunities in new construction as well.



Untreated Glass

BEKAERT SPECIALTY FILMS



Glass with Window Film

Window Film Suppliers Commit to CCI According to Kathryn Giblin, vice president of global marketing at San Diego-based Bekaert Specialty Films, one of the goals of the Clinton Climate Initiative (CCI) is to bring vendors together to provide information, products, and services at preferred prices. "The thought here is that preferential pricing will drive the adoption of those products and services more quickly and, hopefully, reduce energy consumption overall," she explains.

Related Companies/Organizations
Bekaert Specialty Films

For facilities professionals looking to determine the dollars-and-cents benefits of window film for building projects, Giblin suggests asking window film suppliers for an energy analysis that includes full building modeling. Since building orientation, insulation, roofing materials, HVAC equipment, etc. will be part of that scrutiny, facilities professionals can expect a better understanding about what type of film will provide the best solution, as well as payback estimates that can help them decide whether to move forward with a project. Installation is relatively quick and easy, too, with minimal downtime.

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