Solar control and energy savings

What is Window Film?

Window Film is a highly engineered, optically clear, polyester film composite. It undergoes various treatments to provide safety, security, solar control and decorative enhancements for building and transportation glazing.

Untreated glazing offers little protection against solar energy, allowing excessive visible light (glare), infra-red (heat) and UV (ultra violet) to pass through, bringing with them a wide array of challenges.

Window Film can alleviate many solar control issues whilst retaining the view through the window. They are non-disruptive to install and maintain, and require no human intervention to operate. This fact sheet outlines the advantages and benefits of Solar Control Window Film.

Reduce Heat Gain / Improve Thermal Comfort

Solar heat entering through glazing can lead to uncomfortable temperatures for building occupants. Solar Control Window Film can dramatically reduce heat from entering through glazing to help maintain optimum temperatures and preserve occupant comfort.

This can also reduce the load on cooling systems, and therefore lower utility bills and lead to a lower carbon footprint.

Reduce Glare

Excessive glare can contribute to a visually uncomfortable working environment - potentially increasing employee fatigue and stress levels. This is particularly a problem when working with display boards and/ or computer screens, and especially in the low winter sun. Solar Control Window Film can help to reduce eye strain by significantly reducing glare, without sacrificing the view through the window.

Reduce Fading and UV Damage

Exposure to UV Rays can lead to fading of wooden floors, furniture or carpets – sometimes causing irreparable damage to areas with bespoke designed corporate branding.

By rejecting up to 99.9% of UV rays (along with other contributors to fading such as heat and visible light) Solar Control Window Film can help reduce fading of interior fixtures and fittings, and help prevent damage to eyes and skin. Window Film is also recommended by Doctors and the Skin Cancer Foundation.[1]

EWFA
EUROPEAN WINDOW FILM ASSOCIATION

Solar Control Window Film addresses the cause, not the symptoms, of energy inefficiency.

With energy costs constantly increasing Solar Control Window Film is a powerful tool to reduce energy use and achieve a lower carbon footprint.

Increase productivity and effectiveness

Numerous studies confirm that indoor temperatures can significantly impact on worker productivity[2]. Although there are slight differences over what is believed to be the “optimum” temperature, they concur that it lays within one or two degrees of an optimal “comfort zone” of 21°C-23°C. For each degree above 23ºC, productivity is reduced by up to 5%.

By reducing solar heat gain and helping to preserve optimum temperatures, Solar Control Window Film is an effective way to improve both employee productivity and effectiveness.

Save Energy

40% of the load on air conditioning is caused by direct solar heat gain through glazing[3].

Solar Control Window Film can reduce the amount of solar energy entering a building. This not only reduces heat build-up, temperature fluctuations and hot spots, but can also cut HVAC expenditures.

Types and Shades

There are many types of Solar Control Window Film, each offering a unique combination of benefits. They are available in a variety of grades, shades and tones. The correct product will depend on many factors such as the building and glass specifics, and the combination of benefits you wish to receive.

Due to the way that different window film technologies behave, a Solar Control Window Film should never be chosen purely on appearance and shade. Always seek professional advice from an EWFA member company.

Professional Installation

Solar Control Window Film is cost effective and non-disruptive to install, and can offer a range of additional benefits such as improved thermal comfort, increased privacy and even improved appearance.

Professional installation is highly recommended to ensure that the full benefits of a Solar Control Window Film are achieved.

More Information

For further information please visit the EWFA website at **www.ewfa.org**

1) Daniel B. Burfeind “New study finds time spent driving an automobile may increase skin cancer risk”. Dermatology Nursing (2012)

2) Seppanen, Fisk, Lei “Effect of temperature on task performance in office environment” - Helsinki University of Technology (2006)

3) California Energy Commission

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