## 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 large amounts of 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 / Improve Thermal Comfort

Solar heat entering through glazing can lead to uncomfortable temperatures in the home or place of work.

Solar Control Window Film can dramatically reduce heat from entering through glazing to help maintain a more comfortable temperature. 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 reflecting off computer screens and television sets in the home or office can lead to discomfort and frustration. Although a year round problem, it is particularly evident in the low angled winter sun. Solar Control Window Film can help to reduce eye strain and improve visual comfort 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 items of great sentimental value.

By rejecting over 99% 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 damage to eyes and skin. Window Film is also recommended by Doctors and the Skin Cancer Foundation.<sup>1</sup>







### Save Energy

40% of the load on air conditioning is caused by direct solar heat gain through glazing<sup>2</sup>.

Solar Control Window Film can reduce the amount of solar energy entering a building. This not only reduces heat gain to create a more comfortable environment, but can also cut expenditure on HVAC (Heating, Ventilation and Air Conditioning.) 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.



#### **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 for a home or office 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 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 nondisruptive 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** 

## What causes fading?

Fading is the degradation of pigments resulting in a change of appearance of an object to the human eye. It is caused by a number of factors, such as UVA rays, heat and visible light.



Solar Control Window Film significantly reduces the biggest contributor to fading, UVA rays, helping to protect a vehicles interior and contents against fading. It can also address the other causes of fading, visible light and heat, for further protection.

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

2) California Energy Commission

3) AIMCAL Guidebook



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