

FAQs

Prepared by

DBS

DAYLIGHT BUSINESS SOLUTIONS

A licensed manufacturer and distributor of

 digitalglass®

SolaVeil®

Can SolaVeil be installed on any project or building?

Yes. SolaVeil is digitally manufactured to enhance flexible substrate that can be applied to existing or new glass surfaces.

How does SolaVeil work?

The core SolaVeil concept is to use digital techniques to combine the best elements of existing daylight management technologies (Brise Soleil, louvres, light shelves, solar films and window blinds) into a single cost effective solution that removes their inherent disadvantages.

What does SolaVeil do?

The application of SolaVeil provides solar control by significantly reducing the amount of IR solar heat gain from entering a building, whilst enabling cooled daylight to be projected into the interior of building, but diffused to mitigate the problems associated with glare. SolaVeil is also antibacterial, thereby providing a far cleaner alternative to conventional window blinds or curtains. The result is that SolaVeil provides energy and carbon savings through reduced air conditioning costs, artificial lighting costs and costs associated with the maintenance and operation of window blinds or other shading features.

What happens in winter? Isn't solar heat gain something that cuts down on winter heating costs?

Yes, this is correct. However you need to remember that:

- i. Space heating costs are typically 10% of building energy costs in the UK. Cooling is typically 30%. The benefits of reduced cooling costs more than outweigh increases to heating costs.
- ii. When applied to a LOW-E coated substrate, SolaVeil adds an insulating layer to the window reducing the transmission of heat to the outside.

Is it visible and does it affect the view out of windows?

Yes to some extent but in practice it provides better overall views than windows using traditional window blinds, which studies show are drawn down over 70% of the time to combat glare. SolaVeil is a bespoke product and can therefore be digitally tailored to the requirements of the individual building, elevations and sections as required. Typically this would mean providing good views for people sitting at their desk. This is achieved either by having a clear section of SolaVeil or by making SolaVeil more easy to see through depending on the specific needs of an installation. The primary function of a window is to let daylight into a building, which is what SolaVeil does.

In overcast conditions it is still possible to see through SolaVeil. In sunny conditions, SolaVeil does become more opaque to provide illumination in acting as a source of light. It compares well with window blinds which will block out the entire view in sunny conditions and are typically left down even when the sun is not shining.

Can I achieve a good ROI and payback from the application of SolaVeil ?

Yes, typically around 3 years. ROI is calculated using a sophisticated calculator which takes into account glazing type, air con systems, lighting systems, construction, energy consumption etc in accordance with CIBSE standards. Through SolaVeil's significant reduction of solar heat gain, it provides primary energy savings in relation to cooling loads. However, one of the underlying principles of SolaVeil is to minimise user input. SolaVeil therefore enables other technologies, such as digital lighting controls, to perform optimally through its daylight management and illumination features.

Digital lighting controls enable lighting units to operate at greatly reduced power levels and by removing human intervention with lighting switches, it is possible to produce additional lighting energy and cooling savings.

Does SolaVeil help reduce carbon emissions and does it offset against Carbon Reduction Commitment (CRC) obligations?

Yes. SolaVeil reduces energy consumption in buildings and related carbon emissions. We provide a detailed energy performance survey report which demonstrates how much CRC savings will be generated from its application.

Does SolaVeil cover the whole window? Why do I need SolaVeil on windows which do not have direct sunlight?

SolaVeil is applied to the whole window to provide a baseline thermal performance. The digital components are then applied selectively to different sections of a window. For example the top section will typically have glare control and light projection features with the middle to lower section being transparent or semi-transparent to provide a viewing area. SolaVeil is applied to windows without direct sunlight to help retain heat, in winter or cooler conditions, when applied with a low e-coating substrate. Also SolaVeil will reflect light back into the building at night or low light conditions and can provide privacy and a uniformed appearance across the building.

Does SolaVeil have issues with dust-build up or cleaning?

SolaVeil is cleaned in the same manner as all internal glass is routinely cleaned and therefore does not suffer any extra issues. Cleaning guidelines are provided that must be adhered to – these guidelines are essentially the same as for glass cleaning.

How is it applied? Can it be retrofitted to existing buildings?

SolaVeil was designed to be retrofitted to existing buildings. The application process is simple but technically thorough. Utilising a water based application solution, SolaVeil is applied to existing glazing that needs to be properly prepared and cleaned.

Where is SolaVeil made?

It is proprietary technology, designed and manufactured in Wales

Is SolaVeil suitable for very hot climates such as UAE or India?

SolaVeil's unrivalled ability to reduce solar heat gain and also be manufactured digitally on demand, makes these regions highly suited for SolaVeil technology. Any region with strong daylight conditions and a commitment to reducing energy usage and related carbon emissions, are obvious location for the application of SolaVeil.

Does SolaVeil have a Warranty?

Yes. SolaVeil carries a 10 year warranty against factors such as adhesive failure, bubbling, cracking, crazing, delamination, demetalisation or peeling subject to conditions which are set out in our terms and conditions of sale.