

Suntuitive® Dynamic Glass

ADVANCE SUSTAINABILITY

Earn BREEAM credits – see what your project and Suntuitive Dynamic Glass can achieve together.

Suntuitive Dynamic Glass helps projects achieve higher BREEAM scores, earning credits in six different areas.

SUNTUITIVE & BREEAM – A holistic approach to sustainability.

The connection between our natural environment and the built one is complex, and maintaining balance between the two is essential for improving sustainability and occupant well-being. BREEAM was created to bring sustainable value to development. If your goal is to create amazing buildings that are not only beautiful but also sustainable, you've come to the right place.

Windows are essential, but standard glass wastes energy and introduces glare and a larger heat load. Suntuitive Dynamic Glass offers a more sustainable solution. Suntuitive is a self-tinting glass product that adapts its tint in response to heat from direct sunlight. Thermochromic glass technology is an innovative and holistic approach to bringing light into a space. The sophisticated design allows for optimal daylighting and unobstructed views of the outdoors while mitigating heat and glare.

Suntuitive blocks up to 90% of the sun's solar energy before it gets inside the building while retaining daylight autonomy. The result is a thermally and visually comfortable space that occupants can enjoy in any weather while maintaining exterior views and reduced use of artificial lighting. Used strategically, Suntuitive Dynamic Glass allows designers to take full advantage of natural light without compromise.

Suntuitive Dynamic Glass blocks up to 99% of harmful UV light. This benefits occupants behind the glass, keeping them safe from harmful UV exposure, but it also protects flooring and furniture from fading.

Our incredible thermochromic technology allows Suntuitive to do all this without relying on external power other than direct sunlight. There are no wires and no controls. Only unobstructed views, optimal daylighting, and comfort for everyone behind the glass.

Health and Well-Being

Visual Comfort | 7 Credits

Visual comfort is important to overall health and well-being. Building occupants can enjoy the benefits of natural daylight without the drawback of glare. Suntuitive Dynamic Glass mitigates glare while still allowing for optimal daylighting and unobstructed exterior views. Suntuitive's unique interlayer technology is designed to work with the sun's light to maximize daylight levels under all conditions while avoiding glare in the workplace and other sensitive areas. Suntuitive never inhibits daylight from entering the space under cloudy conditions and maintains appropriate daylight autonomy.

Thermal Comfort | 3 credits

Thermal comfort is essential to well-being as well as productivity. Suntuitive Dynamic Glass works to maintain a thermally comfortable space for all occupants. The thermochromic technology continuously adapts to direct sunlight throughout the day providing optimal solar control. Suntuitive ensures appropriate thermal comfort in winter and summer. Occupants will be comfortable even if they are directly behind the glass.

Acoustic Performance | 4 credits

Suntuitive's laminated IGU design reduces noise to maintain a quiet workspace. Students will be able to concentrate uninterrupted in quiet classrooms and hospital patients can rest easy without being bothered by street noise of sirens and other vehicles.

Energy

Reduction of Energy Use and Carbon Emissions | 15 Credits

Minimize energy demand with Suntuitive Dynamic Glass. Thermochromic glass is a passive technology, powered only by heat from the sun and requires no additional energy input. Suntuitive minimizes energy use by reducing heating loads in winter as well as cooling loads in summer. The reduced need for artificial light (daylight autonomy) allows for a reduction in the need for artificial lighting throughout the year when compared to other solar control systems.

Management

Life Cycle Cost and Service Life Planning | 4 Credits

Suntuitive is a product that offers holistic benefits for occupants as well as the building. When considering life-cycle costs of the building, Suntuitive contributes to an improved design that will minimize life cycle costs and maximize value. A reduction in heat load lowers strain on HVAC systems which will last longer between replacements. Suntuitive lessens the need for blinds or shading devices, often eliminating the upfront cost as well as any replacement or maintenance costs. Additionally, Suntuitive Dynamic Glass blocks UV light and offers fading protection to decrease replacement costs of interior materials such as furniture and flooring.

Innovation | 10 Credits

Suntuitive Dynamic Glass thermochromic technology goes beyond the commonly found dynamic glass benefits of dynamic tinting ranges and the associated ranges in SHGC and glare control. It is not dependent on external energy sources other than the sun itself and works without wires or controls. Its design, with a laminated thermochromic interlayer, is unique in the dynamic glass space and offers additional safety and acoustical benefits.

The self-tinting glass design allows architects and designers to go beyond the limitations of conventional glass to include more glass in the building façade and more daylight for building occupants. Suntuitive doesn't work against the sun but works with the sun's energy to mitigate heat and glare- allowing for optimal daylighting while mitigating heat and glare for maximum comfort. Exemplary glass performance allows for more productivity, less absenteeism, faster recovery times for hospital patients, higher retail sales in commercial stores, and increased concentration which leads to better grades for students.

Environmental and Wellness Benefits of Suntuitive Dynamic Glass

Suntuitive Dynamic Glass	Live Well	Conserve Energy	Protect Resources	Save on Cost
Reduce heat & glare	Thermal and visual comfort	Estimated energy savings up to 43%*	Reduce dependency on fossil fuels by lowering energy use	Higher productivity, less absenteeism, lower medical costs, increased retail sales
Blocks harmful UV light	Protects occupants skin and eyes from UV light	Fading protection for interior furnishing, flooring, etc.	Conserve resources with less frequent replacement of interior materials	Lower medical costs, reduced spending on replacement materials
Reduced need for shading devices	Occupants retain connection to the outdoors	Less energy used for manufacturing shading devices	Fewer resources used for fabrication and packaging	Less cost of replacement/cleaning
Reduced heat load	Less energy consumption means less pollution through energy production	Reduces the amount of energy needed to maintain optimal comfort	Smaller HVAC systems preserve natural resources	Lower CAPEX and OPEX
Solar controlled tinting level	Consistent daylighting in sync with circadian rhythms	Preserves natural daylighting autonomy**, less need for artificial lighting	Reduced energy usage for artificial lights protects resources	Energy cost savings with reduced need for artificial lighting

*Lawrence Berkley National Lab

** ILIK, University of Stuttgart

