

SageGlass®

IMPROVING THE  
**HUMAN EXPERIENCE**  
IN THE BUILT ENVIRONMENT





SageGlass®



SageGlass® tints automatically to control daylight and solar heat, making it easier for architects to design sustainable, visually compelling buildings with exceptional energy efficiency.

# SAGEGLASS® — DYNAMIC GLASS FOR A CHANGING WORLD

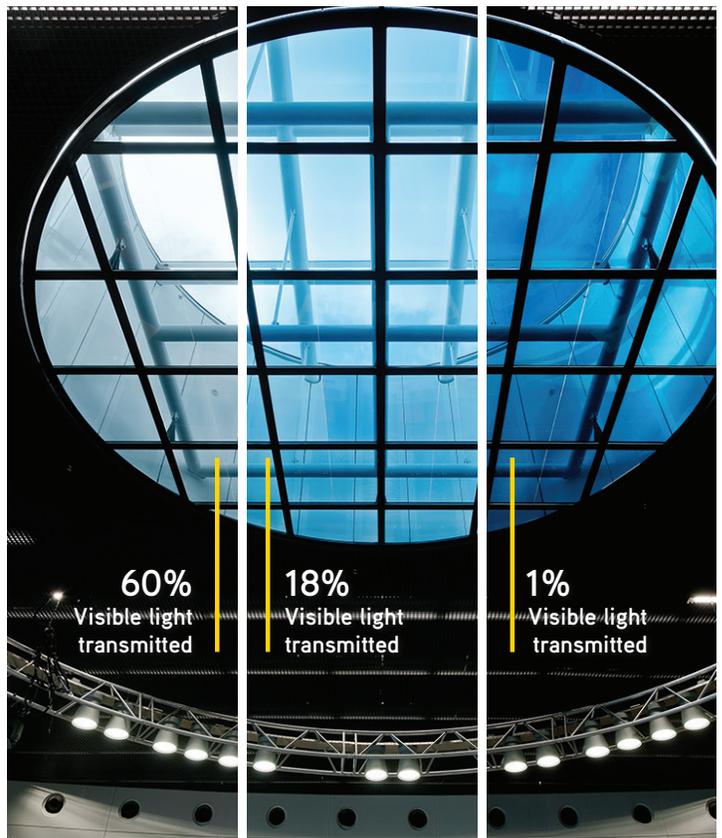
Daylight varies continually.

Wouldn't it be nice if building glass could do the same?

Static glass is a constant challenge for architects. It adds natural light, opens up interiors and creates connections to the outside world. Static glass also imposes limits, forcing you to compensate for extremes in light and temperature, and clutter designs with blinds and shades.

**SageGlass changes everything.**

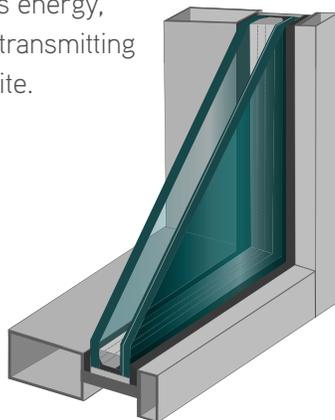
Dynamic glass that tints on demand gives architects unprecedented freedom in design. Because SageGlass adapts to changing exterior conditions, it enhances occupant comfort and energy efficiency without compromising aesthetics.



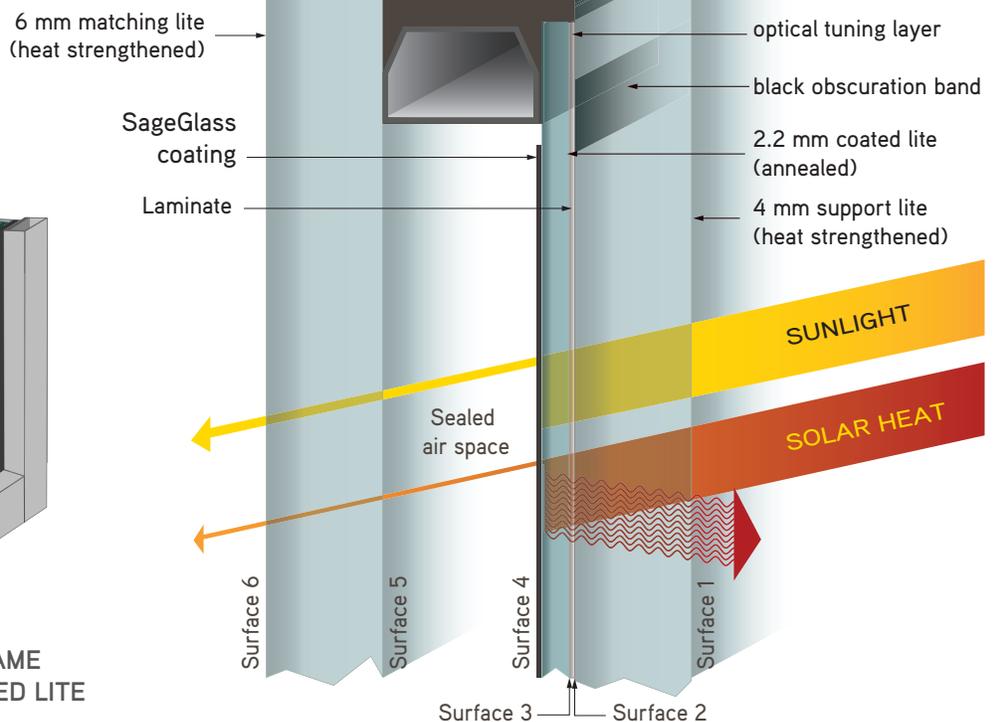
CUTAWAY VIEW OF SAGEGLASS IGU (TINTED GLASS)

## CLEAR INNOVATION

The SageGlass coating is on the inside (air gap facing) surface of the outboard laminated lite where, when tinted, it absorbs and reradiates the sun's energy, preventing it from transmitting through the inner lite.



SAGEGLASS IGU IN FRAME WITH OUTBOARD LAMINATED LITE





## Explore Every Angle

Architectural designs must incorporate a complex matrix of requirements. Yet static glass serves only one purpose. SageGlass glazings allow you to use finite window space in multiple ways, maximizing flexibility and creating opportunities to differentiate your skills and your firm.

- Outpace competitors by adopting a new, proven approach to daylighting
- Transform the building envelope into a living, dynamic skin
- Eliminate the need for motorized shades, blinds, louvers and other obstructions
- Bring in sunlight while managing glare and heat effectively and automatically
- Neutralize traditional tradeoffs of light transmission and heat gain
- Innovate without the constraints of static glass
- Innovative heating and cooling systems allow more glass without an energy penalty



## Design Sustainable, Striking Buildings

LEED® certification is becoming a baseline expectation for your clients. SageGlass not only makes it easier to achieve LEED certification, it gives you more ways to design elegant yet sustainable buildings that exceed client expectations for energy efficiency.

- Specify sun control solutions with the smallest possible carbon footprint
- Reduce cooling loads up to 20%, peak power demand up to 30%
- Lower HVAC equipment requirements up to 25%, minimizing capital costs
- Open up interior spaces while keeping the building energy efficient
- Maintain clear exterior view, allowing occupants to connect to the outdoors
- Achieve daylight and outdoor views credits without compromising energy and atmosphere points



## Reduce Total Cost of Ownership

SageGlass offers a simpler, more versatile and remarkably cost-effective solution compared to other glass options. When you factor in all the costs of traditional sun controls, SageGlass clearly offers a better value —so you can recommend it to your clients with confidence.

- Remove the cost of installing, operating and maintaining shades, blinds and exterior awnings
- Downsize the capacity of HVAC systems
- Reduce peak demand charges
- Minimize hidden costs of static glass, such as increased lighting and cooling
- Conserve energy and help your clients realize significant long-term cost savings



## Automate Tint Control

One of the biggest drawbacks to conventional sun control systems is their reliance on human intervention. SageGlass improves occupants' comfort without requiring them to open or close shades. Instead, tint levels can be managed automatically with our unique control system.

- Achieve tint levels across the full performance range of the glass with proprietary algorithms
- Manage daylighting and glare based on occupancy or ambient light levels
- Choose from flexible control architectures
- Integrate SageGlass with building controls to coordinate with HVAC, power and lighting
- Override the glass manually at any time for maximum flexibility

### SageGlass Performance Specifications

SageGlass® Clear w/SR2.0	%Tvis	%Rf Ext.	%Rb Int.	%Tsol	SHGC	U-factor	%Tuv	%Tdw-K
Clear State	60	16	14	33	0.41	0.28	0	15
Intermediate State 1	18	10	9	7	0.15	0.28	0	5
Intermediate State 2	6	10	9	2	0.10	0.28	0	2
Fully Tinted	1	11	9	0.4	0.09	0.28	0	0.6



## CONTINUOUS MANAGEMENT OF LIGHT AND HEAT

As the sun moves around the sky, the glass tints or clears.

### HOUR TO HOUR

**MORNING:** SageGlass tints automatically, precisely balancing natural light and shade

**AFTERNOON:** SageGlass reacts to changing light levels, tinting or clearing zones as needed

**EVENING:** SageGlass tints to prevent exterior light pollution

### DAY TO DAY

**CLOUDY DAYS:** SageGlass clears to allow maximum natural light

**SUNNY DAYS:** SageGlass tints to provide adequate cooling and glare control

### SEASON TO SEASON

**SUMMER:** SageGlass rejects excess solar heat and prevents glare, reducing demand for cooling

**WINTER:** SageGlass maximizes solar heat and light, reducing demand for heating and lighting tinting only when necessary to control low angle sun glare

### ALL YEAR LONG

**EDUCATION:** SageGlass adds natural light, aiding student performance

**GOVERNMENT:** SageGlass provides critical support for LEED® certification

**COMMERCIAL:** SageGlass creates pleasant interiors for occupants increasing productivity, job satisfaction and comfort

**HEALTHCARE:** SageGlass brings the natural world indoors to improve patient outcomes

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SageGlass® is the pioneer of the world's smartest dynamic glass and is transforming the indoor experience for people by connecting the built and natural environments. Electronically tintable SageGlass tints or clears on demand to control sunlight and prevent heat and glare without the need for blinds or shades. SageGlass dramatically reduces energy demand and the need for HVAC by blocking up to 91 percent of solar heat. As part of Saint-Gobain, SageGlass is backed by more than 350 years of building science expertise that only the world leader in sustainable environments can provide.

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