Specifying SageGlass

When you're ready to specify SageGlass, we are here to assist you. SAGE's services include:

- Modeling glass performance
- Identifying optimum glazings and zone design
- Reviewing installation details with window, skylight, and curtain wall manufacturers
- Helping design and specify wire routing through framing systems
- Assisting with selection and evaluation of framing systems
- Developing control system wiring diagrams and schematics
- Supporting the integration of SageGlass controls with building automation systems
- Assisting with the specification and design of controls system configurations
- On-site training and telephone support for glazing and low-voltage contractors

Cover photos: Chabot College (Hayward, California) features SageGlass as part of the school's intelligent building initiative. Upper windows at 2% visual light transmission on the left, 62% in box on the right.

Contact us to find out how you can create beautiful spaces without compromising occupant comfort or energy efficiency.

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SAGE

SAGE

Dynamic glass for a changing world

SageGlass® Product Guide

Ultra-efficient SageGlass provides unmatched performance and proven reliability in commercial, institutional and residential buildings

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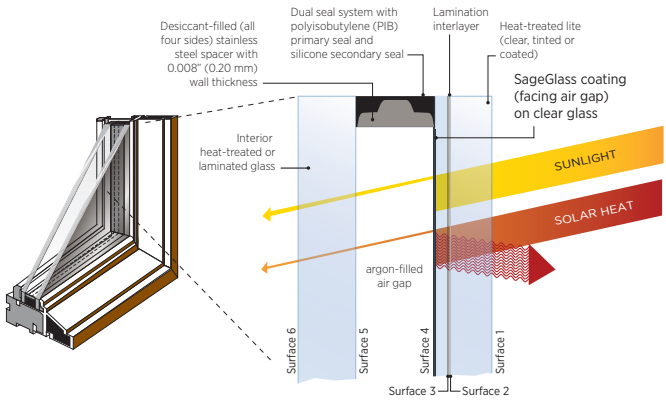
How Does SageGlass® Work?

The SageGlass portfolio includes standard double- and triple-pane configurations in a range of sizes, shapes and colors. SageGlass IGUs can be integrated into most frame systems. Our products are fabricated in-house using the highest quality sealing and component materials.

Double-pane glazing

This diagram shows our standard dual-pane product, and highlights some of the features of its best-practice construction methods. Our standard product is a 25 mm IGU, but the outermost and inner lites can be of custom thicknesses to meet specific requirements.

SageGlass laminated insulating glass unit (IGU) - *tinted state*



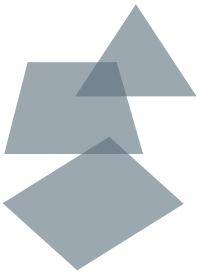
Triple-pane glazing

For even greater energy efficiency, our SageGlass glazing is also available in triple-pane configurations. Our triple-pane product is the most energy efficient glazing on the market today.

Skylight at 62% visible light transmission, left, 2% on the right, in the Provinciehuis, Utrecht, the Netherlands

Sizes and shapes

SageGlass is available in rectangular panes as large as 1524 x 3048 mm, suitable for installation in new construction and retrofit projects. We also offer select shapes, including parallelograms, trapezoids and triangles, for more distinctive designs.



SageGlass is available in select straight-sided shapes.

Colors

SageGlass is available in a variety of tinted or coated substrates to coordinate with the exterior aesthetics of your building.

Frames

SageGlass can be integrated into virtually all frames. We maintain strong relationships with leading window, skylight and curtain wall manufacturers, and have prepared integration details for many of their framing systems.

Superior Results

SageGlass delivers different capabilities according to the configuration and color you select. Whether you need a double- or triple-pane product, SageGlass gives you the ability to let in as much or as little visible light and heat as you want, while minimizing glare.

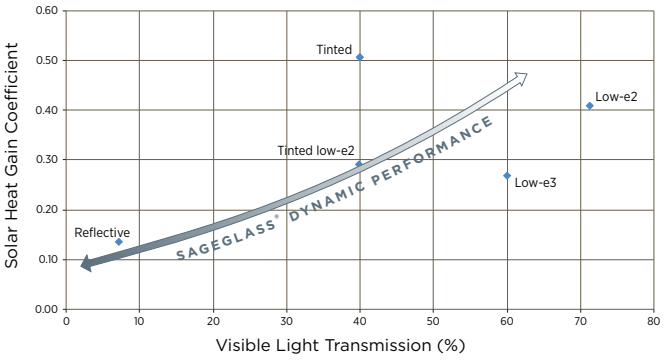
Double-pane performance

Double-pane SageGlass IGUs create comfortable, cost-saving environments that maintain clear exterior views at all times. According to the U.S. Department of Energy's Lawrence Berkeley National Laboratory, these products can help reduce cooling loads by as much as 20%, peak power demand by as much as 30% and lighting costs by as much as 60%. In addition, because of the energy efficiency of SageGlass, HVAC systems can be 25% smaller than those in buildings where static glass is used.

Unprecedented Performance

SageGlass lets you control visible light transmission and solar heat gain over a wide range. When designing a building, you never have to compromise between SHGC and visible light transmission. No matter what the weather or available light, SageGlass provides an ideal balance of light and heat to reduce energy costs and keep occupants comfortable.

SageGlass® Dynamic Solar Performance vs. Traditional Glazings



SageGlass at a glance

	Visible Light Transmission (Tvis)	Solar Heat Gain Coefficient (SHGC)	UV Transmission	Fading Protection*
SageGlass Performance (clear – fully tinted)	62% – 2%	0.47 – 0.09	5% – 0.5%	83% - 99%
The SageGlass Difference	SageGlass provides control over a wide range of solar conditions, while static glazing is optimal for only one.	SageGlass offers the ability to tint or clear, harvesting or rejecting the sun's heat as needed.	SageGlass has a maximum UV transmission that is lower than the minimum UV transmission of static clear low-e glass.	SageGlass enables nearly 100% fading protection, with a low end that far exceeds the maximum of conventional glass products.

*KDF measures the amount of the sun's radiation transmitted through the glazing that causes fading. Fading protection is 1 – KDF.
The above data is based on 1"(25 mm) argon-filled IGU, calculated using Window 6.3.

SageGlass performance specifications

		Selon EN410, D65 2°						According to EN673
Composition	State	Visible light transmission	External reflectance	Internal reflectance	Transmission du rayonnement UV	Solar factor g value	KDF*	Thermal transmission Ug W/m².K
6 mm clear with coating SageGlass 16 mm spacer - gap argon filled 90% 6 mm clear float glass	clear	63%	11%	12%	4%	0.47	17%	1.4
	intermed 1	21%	6%	10%	2%	0.16	9%	
	intermed 2	6%	5%	9%	1%	0.09	3%	
	tinted	2%	5%	10%	0.4%	0.06	1.0%	
6 mm clear with coating SageGlass 16 mm spacer - gap argon filled 90% 6 mm clear float glass with low e coating	clear	60%	10%	9%	4%	0.42	17.00	1.1
	intermed 1	19%	6%	7%	2%	0.14	9.00	
	intermed 2	5%	5%	7%	1%	0.07	3.00	
	tinted	1%	5%	7%	0.4%	0.05	1.00	
6 mm clear with coating SageGlass 13 mm spacer - gap argon filled 90% 6 mm heat treated clear glass 13 mm spacer - gap argon filled 90% 6 mm clear float glass with low e coating	clear	54%	14%	18%	4%	0.40		0.8**
	intermed 1	19%	6%	16%	2%	0.12		
	intermed 2	5%	5%	16%	1%	0.06		
	tinted	1%	5%	16%	0.4%	0.04		

*KDF: Krochmann Damage Function (KDF) is used to rate a glazing's ability to limit fading potential
** by filling with Krypton gas instead of Argon, U=0.6W/m2K