SunGuard® Solar Prime™ Solar Control Glass

Let natural light in, while reflecting the sun's heat

SunGuard® Solar Prime™ is a high-performance solar control glass that offers the perfect balance between light transmission, solar protection, and energy efficiency. Designed to enhance comfort in both residential and commercial buildings, this innovative glass allows abundant natural daylight to enter while reflecting a significant proportion of the sun's heat – helping to keep interiors bright, cool and energy efficient.

With its very low emissivity, thermal insulation properties and ability to be used in monolithic or insulated glass units (IGUs), SunGuard® Solar Prime™ is a versatile solution that supports sustainable design without compromising aesthetics or performance.

An outstanding single glaze solution

Solar Prime™ outperforms all other conventional solar control monolithic glasses in its category. In many cases, this gives you the flexibility to achieve outstanding performance without the additional costs of double glazing.

Key benefits

- **Solar control** – Reflects a large proportion of solar radiation to help maintain cooler indoor temperatures.
- **Thermal insulation** – Improves indoor comfort by reducing heat loss in cooler months.
- **Energy savings** – Lowest emissivity levels help reduce reliance on artificial cooling and heating.
- **Glare reduction** – Enhances occupant comfort, especially in workspaces or areas with expansive glazing.
- **Aesthetic versatility** – Available in neutral tones to suit contemporary architectural styles.

Why choose solar control glass?

Excess heat and glare from the sun can significantly affect comfort and energy consumption – especially in buildings with large glass facades, skylights, glass roofs or conservatories. Solar control glass is specifically engineered to reduce solar heat gain, minimise glare and deliver improved thermal performance while maintaining high levels of visible light transmission.

Applications

- **Curtain walls and facades** – Supports modern glass-heavy architecture with improved energy performance.
- **Glass roofs and skylights** – Helps manage heat and light in overhead glazing.
- **Large format glazing** – Enables bold architectural statements with improved solar control.

Combine solar control glass with other glass types for enhanced performance

SunGuard® Solar Prime™ can be paired with other types of glass in an insulated glass unit (IGU) to further enhance building performance. It can be combined with:

- **Low-E glass** – For added thermal insulation and year-round comfort.
- **Laminated glass** – For increased safety, security, and acoustic insulation.
- **Tinted or decorative glass** – To meet specific aesthetic or design requirements.

Smart, sustainable, stylish

SunGuard® Solar Prime™ glass is ideal for architects, designers and builders looking to reduce energy consumption while maintaining beautiful, light-filled spaces. With solar control, thermal insulation, and architectural flexibility in one product, it helps meet sustainability targets and create more comfortable buildings – all year-round.

Performance data

Product	Nom. Thick. mm	Visible Light			Colour Rendering Index	UV	Solar Energy					Thermal	Light to Solar Gain	Embodied CO_2 eq. kg/m²
		Trans. %	Refl. In %	Refl. Out %		Trans. %	Trans. %	Absorpt. %	Refl. In %	Refl. Out %	SHGC	U Value Winter Night W/m²K		
Solar Prime™ Clear 65	6	67	3.9	10.0	94	33.95	44	45	15	11.0	0.54	4.45	1.2	21
	10*	65	3.8	9.9	92	29.22	41	50	15	9.8	0.52	4.36	1.2	34
Solar Prime™ Neutral 45	6	44	5.9	16.0	90	24.09	24	53	30	22	0.35	4.00	1.2	21

*10mm available by special order

Specifications

Product	Glass Thickness mm	Dimensions mm
Guardian SunGuard® Solar Prime™	6	2,440 x 3,660
	10*	2,440 x 3,660

*10mm available by special order

Understanding this data

Visible Light Transmission	The percentage of visible light that passes directly through the glass. The higher the percentage, the more daylight gets through.
Visible Light Reflect In/Out	The percentage of visible light reflected inwards/outwards.
Colour Rendering Index	A measure of the ability to reveal the colours of various objects faithfully in comparison with a natural or standard light source. A higher value means more faithful colours.
UV Transmittance	The percentage of UV light transmitted measured in the light range of wave lengths shorter than 380 nanometres. A lower number is better.
Solar Transmission	The percentage of solar energy that passes directly through the glazing.
Solar Absorptance	The percentage of the sun's energy that is absorbed by glass.
Solar Relect In/Out	The percentage of solar energy reflected inwards/outwards.
SHGC – Solar Heat Gain Coefficient	The proportion of total solar radiation that is transferred through glass in normal circumstances. A lower number indicates a better performance.
U Value	The measure of the rate of heat gain or loss through glazing caused by environmental differences between indoor and outdoor air. The lower the value the better the insulation.
Light to Solar Gain	The ratio of the visible light transmittance to the Solar Heat Gain Coefficient (SHGC). A higher LSG ratio means sunlight entering the room is more efficient for daylighting and blocking unwanted heat.
Embodied CO_2	The CO_2 equivalent in kg per square metre of glass, emitted during the glass production (cradle-to-gate)

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