

ECO

Eco-Active Glass SSG® Self-Cleaning VariShield

GreenHub, Singapore



be washed away by rainwater in neat sheets, leaving no dirty spots or streaks after the water evaporates. SSG® Self-Cleaning VariShield plays the role of a holistic daylighting tool which saves on cleaning agents, water, energy and resources used for maintenance. It is ideal for East/West-facing buildings and for hard to reach places that are difficult to clean.

With SSG® Self-Cleaning VariShield glass, we have the power to reduce huge utility bills or massive maintenance by using nature's elements in our favour. This presents a new way to a green building.

USES AND APPLICATIONS

- Airport terminals
- Glass façades
- Commercial buildings
- Educational institutions
- Government and public sector buildings
- Hospitals
- Shopping centres
- Office buildings
- Private residences
- Skylights and sunroofs
- Windows

PRODUCT FEATURES

ENERGY CONSERVATION

This thermal efficient glass lets light in, but not excessive glare or heat. Hence, high light transmission coupled with solar heat gain control allow us to rely less on continuous artificial lighting for indoor illumination, and load less on our air-conditioning system to maintain a comfortable indoor temperature. This helps to conserve energy by reducing electricity consumption.

MAINTENANCE SAVINGS

While cleaning is still required, it is minimal. The glass stays clean longer and allows easier cleaning when needed. It results in lesser use of cleaning agents and water while allowing continuous clear view of exterior scenery, without dirty spots or streaks.

INTUITIVE & SELF-SUFFICIENT DESIGN

Completely weather-activated design means you never have to worry about a technical glitch. Works hands-free and indefinitely, using free and unlimited supply of sunlight and rainwater. No re-treating needed as properties are inherent of the glass.

ENVIRONMENTALLY FRIENDLY PRODUCT

SSG® Self-Cleaning VariShield is a revolutionary eco-friendly solution that glass can offer. The dual-action of self-tinting and self-cleaning allows you to leave it to the intelligence of the glass to save cleaning agents, water, energy and resources in maintenance. This places building owners and occupants in the best position for maximum cost savings and an added emphasis on Corporate Social Responsibility.

SSG® Self-Cleaning VariShield is an eco-active glass that self-tints through sunlight and self-cleans through daylight and rainwater. Combining thermochromic, photocatalytic and hydrophilic properties, it is an intuitive and self-sufficient design that is completely weather-activated without tedious operable systems. The glass darkens its tint according to sunlight intensity, actively ensuring optimal lighting conditions and minimal heat transfer at different times of the day. We can then rely less on continuous artificial lighting for indoor illumination, and load less on our air-conditioning system for a comfortable indoor temperature. The ultraviolet light present in sunlight is also used to photocatalyse organic dirt on the glass, so that the dirt can

SPECIFICATIONS : Production Sizes

Minimum Size (W/mm x H/mm)	Maximum Size (W/mm x H/mm)
300 x 300	1,600 x 5,700

SSG® VariShield	SSG® Self-Cleaning VariShield
<p>THERMOCHROMIC PROPERTIES</p> <p>SSG® VariShield adopts a thermochromic approach. This means that the glass uses heat (thermo) to cause a "change in tint" (chromic).</p> <ul style="list-style-type: none"> - Visible light transmission ranges from 13% to 60% - 50% reduction of heat transmission and heat gain into the building as compared to SSG® Low Emissivity Glass 	<p>PHOTOCATALYTIC AND HYDROPHILIC PROPERTIES</p> <p>Photocatalytic action of the glass actively attacks dirt, to break down and destroy organic matter.</p> <p>The hydrophilic surface then allows the organic dirt to be rinsed off the glass in a neat fashion.</p>