

ECO

Thermal Efficient Glass **SSG® Low Emissivity Glass**

Lee Kong Chian School of Medicine,
Singapore



High energy consumption is a main concern for commercial buildings due to bills chalked up on air-conditioning and lighting. SSG® Low Emissivity (Low E) Glass is the key solution for both comfort and cost savings. It prevents unwanted heating of interiors while still allowing as much daylight into the building as possible. The new SSG® Low E design combines maximum solar control with astonishing light transmittance and a low external reflection. There is considerable freedom when designing the façade as it is available in various thickness & sizes.

SSG® offers a wide range of Low E coated solar control glass, which comes in various colours, solar control and light transmittance. A Low E coating applied via chemical vapour deposition is commonly referred to as a "hard coat", whilst a Low E coating

applied via magnetron sputtering is known as a "soft coat". Soft coat SSG® Low E Glass performs better at thermal insulation, but is prone to oxidation upon exposure to the atmosphere. Hence, soft coat SSG® Low E Glass needs to be double-glazed or laminated with edge deletion.

"Triple Silver Low E" is now available for an ideal balance of solar control and high visibility for year-round comfort, making it perfect for façades, windows and building envelopes.

PREMIUM SELECTION

Performance summary of 6mm SSG® A35/15 Low E #2 + 12mm Airspace + 6mm Clear

Visible Light Transmittance	35%
Visible Light Reflectance (out)	15%
Visible Light Reflectance (in)	22%
Solar Energy Transmittance	11%
Solar Energy Reflectance	30%
Shading Coefficient	0.18
U-Value (W/m²K)	1.50

U-Value was determined as per EN 673
SSG® A35/15 Low E must be heat-treated

PRODUCT FEATURES

LIGHT TO SOLAR HEAT GAIN RATIO
SSG® Low E Glass allows most of the sunlight into a building's interiors, but minimises the entry of heat caused by the sun. This results in a high light to solar heat gain ratio.

HIGH VISIBLE LIGHT TRANSMITTANCE

With SSG® Low E Glass, natural daylighting is possible, allowing the interior environment to be well lit without the need for artificial lighting during the day.

HEAT INSULATION

Low solar heat transmittance allows an effective reduction of heat radiation and occupant discomfort.

ENERGY CONSERVATION

Subsequent needs for artificial lighting and air-conditioning loads are reduced, making the building more energy-efficient and environmentally-friendly.

USES AND APPLICATIONS

- Commercial buildings
- Educational institutions
- Government and public sector buildings
- Windows

SPECIFICATIONS

PRODUCTION SIZES

Production size for this product varies. Get in touch with us for more information!



Marina Bay Sands, Singapore

APPLICABILITY

SSG® Low E Glass can be used with a wide range of Design applications, and is available in tinted and SSG® Low Iron Glass or with self-cleaning functions for further cost savings.