CASE STUDY: Residential development retains view & improves safety

Building
Spring Side Terraces

Location
Singapore, Singapore

Window Film
SCL SR PS4

Type
Safety and Security Film

SITUATION

Spring Side Terraces is a private residential development of modern luxury homes surrounded by greenery. The architect's design gives homeowners a floor-to-ceiling view of the outside from the living room and bedrooms. High ceilings and large clear tempered glass panes create an open, inviting space. But glass panels of that size can also create a safety hazard.

SOLUTION

Concerned with safety for the homeowners, but wanting to retain the expansive view, the architect chose LLumar safety and security window film SCL SR PS4. Over 300 rolls of the clear safety film were installed on the glazing to further enhance safety and security against accidental or intentional breakage. The project took approximately four months to complete with each panel of glass fully inspected for defects prior to installation.

RESULT

"Homeowners are satisfied that their windows are protected by LLumar safety and security window film. In addition to the safety benefits, the film is working to help screen harmful UV rays to reduce fading of interior furnishes," said Mr. Bernard Chia from Spring Side Terraces. Because LLumar safety and security film has a patented scratch resistant coating, it will be protected from scratches during routine use and cleaning, maintaining its visual clarity.

Performance Data

	% Total Solar Transmittance	% Total Solar Reflectance	% Total Solar Absorptance	% Visible Light Transmittance	% Visible Reflectance (exterior)	% Visible Reflectance (interior)	Winter U-value	Shading Coefficient	% Ultraviolet Ray Protection (wavelengths 280-380nm)	Emissivity	Solar Heat Gain Coefficient	% Total Solar Energy Rejected	Light-to-Solar Heat Gain Ratio (LSG)	% Summer Solar Heat Gain Reduction	% Winter Heat Loss Reduction	% Glare Reduction
Clear Glass	83	8	9	90	8	8	1.03	1.00	29	0.84	0.86	14	1.05	–	–	–
Clear Series	Clear safety films can be applied over tinted glass to improve aesthetics, solar performance and glare. These thicker films meet the most stringent standards for burglary resistance, blast mitigation, wind-borne debris, and basic safety glazing.															
SCL SR PS4	82	10	8	88	10	10	1.05	0.97	94	0.86	0.84	16	1.05	2	-1	2

Physical Properties

	Film Thickness (inches)	Appearance	Film Structure	Tensile Strength (constructed)	Tensile Strength (average as reported)	Break Strength (peak load)	Break Strength (average load)	Elongation at Break	Peel Strength	Puncture Strength
SCL SR PS4	0.004	Clear	Single	34,555	32,000	135	133	>100%	>2720(>6)	70

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