

CASE STUDY: Invisible protection for people and property

Building

Hyatt Regency

Location

San Antonio, Texas, USA

Window Film

N-1050 SR PS4

Type

Safety and Security Film



SITUATION

The 632-room Hyatt Regency hotel in San Antonio, Texas is centered around a 16-story garden atrium rising over a cascading waterway. Given the size of the curtain wall, hotel management was concerned that its guests and property would be at risk for potential injury or damage in the event of glass breakage due to severe weather or other hazards. They needed a solution that would provide protection without compromising the aesthetics of the atrium.

SOLUTION

Professionals installed LLumar® N-1050 safety and security window film to 17,500 square feet of the entire atrium wall. Made from durable polyester and metalized coatings bonded by a unique adhesive system, this window film forms a shield across the glass, holding most of the glass fragments in place in the event of breakage, and drastically reducing potential for damage and injury. Additionally, because the film is optically clear, it does not block the view. At the same time, it rejects 39% of solar energy, and cuts down on harsh glare.

RESULT

The hotel was pleased with the non-obtrusive installation, as well as the appearance of the atrium following installation. By reducing glare, the film actually enhanced the view through the atrium, while improving comfort for hotel guests. The Director of Engineering was specifically pleased with the energy savings, which was an unexpected benefit of the installation of LLumar solar safety window film.

Performance Data

	% Total Solar Transmittance	% Total Solar Reflectance	% Total Solar Absorbance	% 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 Reflected	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	-	-	-
Solar Series																
Solar safety films are durable products available in a variety of clear, neutral, and reflective offerings with a range of solar control options. These thicker films meet the most stringent standards for burglary resistance, blast mitigation, wind-borne debris, and basic safety glazing.																
N-1050 SR PS4 (Neutral)	48	10	42	49	11	14	1.07	0.70	>99	0.90	0.61	39	0.80	29	-3	46

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
N-1050 SR PS4 (Neutral)	0.004	Light Neutral	Multi	33,884	32,000	120	119	>100%	>2720(>6)	78