

CASE STUDY: Better safety for a busy memorial

Building

John F. Kennedy Center for the Performing Arts

Location

Washington, D.C.

Window Film

SCL SR PS7 (Clear)

Type

Safety and Security Film



SITUATION

The John F. Kennedy Center for the Performing Arts is a living presidential memorial and one of the country's most esteemed performance venues. The magnificent structure covers 17-acres and features theaters, concert halls, an opera house and more. The Kennedy Center's foyer is itself one of the world's largest rooms, with towering glass walls. The Center wanted to better protect the thousands of people who visit each month from the danger of broken glass.

SOLUTION

The Kennedy Center installed more than 18,000 square feet of LLumar safety and security window film all throughout the building. A laminated polyester film bonded by a unique adhesive system, the 7 millimeter clear film was fitted to all glass entryways and interior walls to help hold most of the broken glass in place and prevent patrons from injury. Both the thickness of the LLumar safety and security window film and its unique bonding system play key factors in keeping the glass from shattering.

RESULT

Today, while thousands of visitors pour into the Kennedy Center each month to enjoy performances and galas, the memorial's management team rests easier knowing that all of their patrons are well-protected from harm in the unlikely event of broken window glass. The clear window film preserves the appearance of the building so patrons can enjoy their visit safely and in style.

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 290-380nm)	Emissivity	Solar Heat Gain Coefficient	% Total Solar Energy Rejected	Light-to-Solar Heat Gain Ratio (LSS)	% 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 PS7 (Clear)	82	8	10	89	9	9	1.06	0.98	94	0.90	0.85	15	1.05	1	-2	1

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 PS7 (Clear)	0.007	Clear	Single	31,050	32,000	230	211	>100%	>2720(>6)	145

EASTMAN

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The solar performance data reported for LLumar architectural window films was captured using the National Fenestration Rating Council's (NFRC) standard guidelines for window film solar performance measurement as measured on single pane, 1/8 inch (3 mm), clear glass. Reported values are taken from representative product samples and are subject to normal manufacturing variances. Actual performance will vary based on a number of factors, including glass type and properties. Films do not eliminate fading - they reduce it. UV rays and heat are contributing factors to fading, but other factors exist. For further information, see LLumar.com/download-library. © 2016 Eastman Chemical Company. LLumar® and the LLumar® logo are trademarks of Eastman Chemical Company or one of its wholly owned subsidiaries. As used herein, ® denotes registered trademark status in the U.S. only. (06/16) L1817