

Enhanced Safety

ASWF films mitigate damage due to failed glass in the event of breakage from accidents, natural disaster or terrorism. Retrofit of fragment retention films is a require-ment for government organizations such as the General Services Administration (GSA). The GSA is the single largest tenant of commercial space in the United States.

The Crystal Guard safety series provides protection from UV rays. It can also help prevent glass from breaking on impact, holding shattered glass together when breakage occurs. The ideal way to prevent flying shards due to earthquakes, blasts, or hostile intrusions. Crystal Guard upgrades windows and doors to be the first line of defense during and after projectile impact. Crystal Guard aims to be a deterrent preventing or delaying attackers from breaching school premises, buying precious minutes to execute emergency plans and extend law enforcement response time.

Important: All tested materials were applied on a ¼" clear glass surface in accordance with industry standard tests. The intended purpose of the data provided is for comparison purposes only.

Crystal Guard[™] 16 Mil

% Total Solar	
Reflectance (RSOL Exterior)	9%
Absorptance	13%
Transmission (TSOL)	78%
% Visible light	
Transmittance (VLT)	85%
VLR Interior	8%
VLR Exterior	8%
% Glare Reduction	1%
Shading Coefficient (SC)	93%
Solar heat gain Coefficient (SHGC)	81%
Total Solar Energy Rejected (TSER)	19%

Includes UL972 Certification – We have qualified our 16 mil safety film for UL972 - This testing is the standard for burglary and forced entry resistance glazing materials.

Safety Series

Product Physical Properties

Tensile Strength

	Avg. MD/TD
Break Strength	440lb/in(PLI)
Puncture Strength	>275 lb
Elongation	>200%
Peel Strength	>5 lb/in (PLI)

32,000 PSI