



School Guard Glass' products are manufactured by:
LTI Smart Glass, Inc.
 14 Federico Drive / Pittsfield, MA 01201 / www.LTISmartGlass.com



PRODUCT NAME: SG5™ (PATENT PENDING)

PRODUCT DESCRIPTION: SG5™ is a laminated glass product consisting of outer layers of glass with a custom security, heat strengthened, chemically bonded core. The patent pending SG5™ core reacts to physical abuse like metal and will bend, but will not tear or rip like other security products. SG5™ is designed to replace glass used in openings that would normally be glazed with ¼" or 5/16" glass.

CONSTRUCTION: Proprietary

STANDARD DIMENSIONS: Up to 60" X 96"

MAXIMUM DIMENSIONS: Up to 96" X 130"

NOMINAL THICKNESS: Designed to replace tempered and laminated glass with thicknesses ranging from ¼" to ¾".

WEIGHT (SQ/FT): 4.6 lbs.

WARRANTY: 10 Years against delamination. Please refer to the warranty information sheet.

COMPLIANCE:

- ASTM C1036 - Standard Specification-Flat Glass
- ASTM C1172 - Standard Specification for Laminated Architectural Flat Glass
- ANSI Z97.1 Safety Materials Used in Buildings
- CPSC 6 CFR 1201

RATINGS: UL 972
 5-aa1 rated for 12 minutes.

Product	Ballistic Impact 5 shots with a .762 round	Concentrated Assault		Forced Entry (sequentially tested)			Total Time to Failure
		Brick	Steel Toed Boots	Tools ¹ 2 min. test	3lb. Hammer & Bat 3½ min. test	Sledge hammer 6 min. test	
1/4" Tempered	Fail - 1 shot	Fail	Fail	Fail	Fail	Fail	0 seconds
1/4" Tempered w/12 mil. Blast Film	Pass ²	Fail - 4 impacts	Pass	Fail - 8 seconds	Fail - 2 impacts/2 seconds	N/A	4 seconds
5/16" Annealed Laminated Glass w/ 0.060 SGP® Interlayer by DuPont®	Pass ²	Fail - 20 impacts	Fail	Fail	Fail	N/A	16 seconds
5/16" Annealed Laminated Glass w/ 0.090 PVB Interlayer	Pass ²	Pass	Pass	Fail - 40 seconds	Fail	N/A	40 seconds
3/8" Glass Clad Polycarbonate	Pass ²	Pass	Pass	Fail - 1 min. 12 sec.	Fail	N/A	1 min. 12 sec.
SG5™	Pass ²	Pass	Pass	Pass	Pass	Pass-6 mins.	12 mins. 10 sec.

Test failure occurs when a 4" object can pass through the glass or frame material.

¹ See testing methods for tools list. ²Bullets penetrate but glass stays in place.

Independent Testing Completed by H.P. White Laboratory, Inc. 3114 Scarboro Road, Street, MD 21154-1822