



PRODUCT NAME:	CHILDGARD® Security Glazing
PRODUCT DESCRIPTION:	CHILDGARD® security glazing is laminated safety glass constructed using a unique arrangement of proprietary transparent materials. CHILDGARD® security glazing is designed to withstand extensive physical attack in a forced entry scenario, ultimately resisting entry until law enforcement or additional help arrives. CHILDGARD® security glazing has been fully tested to ASTM F1233-08 security glazing standards, one of the most recognized protocols in the detention industry and complies with standard safety glazing codes for all interior and exterior applications.
PERFORMANCE TESTING:	Forced Entry: ASTM F1233-08 Class 1.3 to 6 minutes and 47 seconds 5-aa1 to 10 minutes 10 seconds
CONSTRUCTION:	Proprietary Construction
THICKNESS:	5/16" (.370" Nominal) CHILDGARD® for retrofit and interior less than 20 sq. ft. 3/8" (.404" Nominal) CHILDGARD® available for monolithic and insulated glass
THICKNESS TOLERANCE:	5/16" CHILDGARD® (.356" Minimum & .384" Maximum) 3/8" CHILDGARD® (.382" Minimum & .424" Maximum)
WEIGHT:	4.16 Lbs. / Sq. Ft. (3.68 Lbs. / Sq. Ft. for Retrofit)
MAXIMUM SIZE:	72" x 130"
OPTIONS:	Tinted glass, reflective glass, Low-E glass, insulated units. (The use of some options may alter product thickness)
TECHNICAL DATA:	U-Value: .93 SHGC: .90 Light Transmission: .87
APPLICABLE STANDARDS:	ANSI Z97.1: ASTM C 1172 CPSC 16 CFR 1201 (Category I and II): ASTM C 1048 ASTM C 1036:
SINGLE RESPONSIBILITY:	GSG products are covered by our Single Responsibility® Program that ensures one firm has handled and is accountable for all phases of manufacturing.
INSTALLATION:	All glass should be installed in accordance with the guidelines set forth in the current edition of the Glass Association of North America (GANA) Glazing and Sealant Manuals. GSG recommends that CHILDGARD® security glazing be installed into frames with a fixed interior stop. If installed into frames with removable interior stops it is recommended that stops be secured with GSG recommends no less than ½" bite on all edges. In addition, CHILDGARD® security glazing should be wet glazed on the protected side of the glazing with a high quality structural silicone to promote glazing retention during attack. Product testing has incorporated Dow 995 structural sealant applied to the interior glazing leg. Care must be taken as to not interfere with weep holes during wet glazing operations to ensure the continued performance of the glazing.

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For more information visit CHILDGARDGlazing.com.

Call 866.412.6977

Test Sequence	Test Implements	Impacts	Sequence Time (seconds)	Class Achieved	Notes
1	Ball Peen Hammer	10	22	1.0	One technician delivered 10 impacts with a Ball Peen Hammer, no penetration or openings were created.
2	Ball Peen Hammer	10	24	1.1	A second technician delivered 10 additional impacts with a Ball Peen Hammer, no penetration or openings were created.
3	1 ½" Diameter Pipe / 12-lb Sledge	25	174	1.2	One technician held the pipe while one technician swung a 12-lb sledge hammer. The pipe was held at different angles to evaluate the resistance of the sample to both puncture and gouging.
4	Extinguisher, CO2	NA	60	1.3	Extinguisher fully discharged for 60-seconds. This step is designed to freeze the materials, mimicking cold weather and making the components more brittle for subsequent attack. Other products in the market avoid this step.
5	Sledge Hammer	25	44	1.4	Immediately after discharging the extinguisher in Test Sequence 4, 19 impacts were delivered to the sample utilizing a Sledge Hammer. Testing was terminated after the 19th impact as the opening created in the sample allowed Body Passage per IAW ASTM F1233-08 Section 10.2.4.2.

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Class Achieved: ASTM F1233 Class 1.3

Test Duration: 6 Minutes, 47 Seconds