



# CHILDGARD® Security Glazing

The Ideal Solution For School Protection



# Helping to Keep Schools Safer

CHILDGARD® security glazing is laminated glass constructed with a state-of-the-art proprietary security interlayer that is built to withstand extensive physical attack during a forced-entry scenario. It provides the aesthetics and daylighting advantages of glass, with an additional level of security.

## Benefits:

- Tested to nationally recognized detention standards ASTM F1233-08
- Meets safety glazing standards
- Installed following industry guidelines, no need for licensed installers
- Can be installed in industry standard doors, framing, and window systems
- For retrofit or new construction
- Provides security while optimizing daylight

## Typical Applications:

- Entryway doors
- Vestibules
- Classroom doors/sidelites
- Ground floor areas
- Monolithic and insulating units



## CHILDGARD® Products

|                            |                      | CHILDGARD® Security Glazing                                       |   | CHILDGARD®-2118 Security Glazing                   |
|----------------------------|----------------------|---|---|--|
|                            | <b>Thickness</b>     | 5/16"   | 3/8" - 1/2"   | 9/16"  |
|                            | <b>Availability</b>  | Available for ONLY retrofit monolithic and interior               | Available for monolithic and insulated glass units                                    | Available for monolithic and insulated glass units |
|                            | <b>Maximum Size</b>  | less than 20 sq. ft.  | 72 x 130*   | 60 x 96*   |
|                            | <b>Weight</b>        | 3.68 lbs./sq. ft.   | 4.16 - 5.80 lbs./sq. ft.  | 4.95 lbs./sq. ft.                                  |
| <b>STANDARD COMPLIANCE</b> | <b>Forced Entry</b>  | ASTM F1233-08 Class 1.3   | ASTM F1233-08 Class 1.3   | ASTM F1233-08 Class 1.4                            |
|                            | <b>Test Duration</b> | 6 min 47 sec  | 6 min 47 sec  | 17 min   |
|                            | <b>Safety</b>        | ANSI Z97.1, CPSC 16 CFR 1201 (Cat. I and II), Hurricane Compliant |   |  |
|                            | <b>Manufacturing</b> | ASTM C 1036, ASTM C 1048, ASTM C 1349, ASTM C 1172                |   |  |
|                            | <b>Options</b>       | Clear   | Tinted Glass, Reflective Glass, Fire-Rated Glass, Low-E Glass, Insulating Glass Units |  |

\*Actual glass thickness may vary due to glass size options and design loads.

## Product Comparison to Other Detention Products

Global Security Glazing offers a wide range of security glazing products to protect schools, including high-performance **forced-entry** and **bullet-resistant** constructions that can be installed in lobbies, access points, shelters, transactional windows and other areas where heightened security is desired.

|                            | GOOD                       | BETTER                                      | BEST   |
|----------------------------|----------------------------|---|--|
|                            | CHILDGARD SECURITY GLAZING | ATTACK RESISTANT                            | BULLET RESISTANT   |
| <b>Cost</b>                | \$                         | \$\$\$                                      | \$\$\$\$   |
| <b>Level of protection</b> | ★★                         | ★★★   | ★★★★★  |
| <b>Thickness</b>           | 5/16"                      | 7/16" - 1 1/4"                              | 3/4" - 2 1/8"  |
| <b>Construction</b>        | Laminated security glass   | Glass-CladPoly w/ glass on exposed surfaces | Glass-CladPoly w/ Poly on safe side. All glass make-ups available. |

## Test Data for CHILDGARD® and CHILDGARD®-2118 Security Glazing

| TEST SEQUENCE | TEST IMPLEMENTS                     | # OF 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 1/2" 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            | <p><b>CHILDGARD:</b><br/>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.</p> <p><b>CHILDGARD-2118:</b><br/>Immediately after discharging the extinguisher in Test Sequence 4, 25 impacts were delivered to the sample utilizing a Sledge Hammer.</p>   |
| 6             | Propane Flame Torch                 |              | 300                     | 1.5            | <p><b>CHILDGARD-2118:</b><br/>The propane torch was used IAW ASTM F1233-08, Section A1.5.2. The flame was continuously applied and was held such that the blue tip of the torch flame was no further than 1-in from the surface of the sample. The flame was initially held at the location of the hole that allowed the 1/8-in contraband rod to pass through at the completion of Sequence 5. The sample material began to melt and the torch flame was used to enlarge the opening. At the conclusion of this sequence, a fine mist of water was used to extinguish the still-burning material. The Forced-Entry Shape was able to pass through the hole created during this sequence.</p> |

### 5/16" - 1/2" - CHILDGARD® Security Glazing

Class Achieved: ASTM F1233-08 Class 1.3

Test Duration: 6 Minutes, 47 Seconds

### 9/16" - CHILDGARD®-2118 Security Glazing

Class Achieved: ASTM F1233-08 Class 1.4

Test Duration: 17 Minutes

**For installation and cleaning instructions, see our website [CHILDGARDGlazing.com](http://CHILDGARDGlazing.com).**

Please note that only the glazing has been tested to the attack tools, techniques, methods, testing procedures and durations detailed in ASTM F 1233-08, Class 1.3 and 1.4. GSG makes no warranty, and claims no responsibility for any loss, damage or claim for any tools, devices, techniques, or methods used, or any attack duration not otherwise detailed in ASTM F 1233-08, Class 1.3 and 1.4.

CHILDGARD® security glazing products were also tested to additional non-industry standard test protocols. Please contact us for more details at [childgardsales@cghinc.com](mailto:childgardsales@cghinc.com) or 866.412.6977 ext.114.





Featured on *Inside the Blueprint*,  
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To learn more about CHILDGARD® security glazing  
visit [CHILDGARDGlazing.com](http://CHILDGARDGlazing.com) or email [childgardsales@cghinc.com](mailto:childgardsales@cghinc.com).

**CHILDGARD® security glazing was developed to meet the needs of the educational institution market and their desire to improve security.** Global Security Glazing's team has over 50 years of experience developing and fabricating glass products for the security industry from correctional facilities, international embassies, federal courthouses, and hospitals. Our knowledge base has driven innovation in several security and safety glazing categories including bullet, blast, impact, attack, and fire resistance, as well as our latest breakthrough school protective glazing. Security glazing products include all-glass laminates, glass-clad polycarbonates, and laminated polycarbonates that are fully tested to industry and governmental specifications, as well as additional specific testing standards.

**Global Security Glazing**  
616 Selfield Road, Selma, Alabama 36703

**866.412.6977 ext.114**

