



*We envision a future in which glass is the material of choice to enhance spaces where people live, play, learn, work and heal.*

**Public Comment**

Text of Proposed New 19 TAC - Chapter 61. School Districts  
Subchapter CC. Commissioner's Rules Concerning School Facilities

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**Introduction**

The National Glass Association supports the implementation of school security design strategies in model building codes, including security windows. In active shooter events, windows can be the first line of defense in high-risk areas such as entrances, classrooms and cafeterias. Properly selected security windows can slow down an attacker, allowing more time for schools to enact emergency plans and for first responders to arrive.

The National Glass Association (NGA) is a non-profit membership organization that consists of more than 1,700 member companies that represent every aspect of the glass and glazing building products industry. Our members include glazing contractors, full-service glass companies, glass and metal fabricators, primary glass manufacturers, architects, engineers, component suppliers, and others throughout all aspects of the glass and glazing supply chain.

**Performance Standard**

The new consensus standard ASTM F3561-22 Standard Test Method for Forced-Entry-Resistance of Systems after Simulated Active Shooter Attack ("ASTM F3561-22") serves as the minimum industry-accepted standard for the selection of security glazing intended to address the threat of active shooters in schools. NGA recommends that schools specify windows for high-risk areas that meet, at a minimum, ASTM F3561-22.

NGA supports modifications to 19 TAC Chapter 61, adding ASTM F3561-22 as the performance reference to clarify the level of required forced entry protection. Note that Level 1 is the minimum level indicated (there are 8 levels in the standard). A recommendation for higher levels of performance may be needed based on risk assessment, threat and vulnerability of certain areas in schools and the school itself.

**Proposed Modifications to 19 TAC Chapter 61**

The following proposed modifications are supported by NGA:

§61.1031(a)(2)(A)

...if enclosed by a fence or wall, utilizes a fence or wall at least 6 feet high with design features that prevent it from being easily scalable, such as stone, glass, wrought iron, chain link with slats or wind screen, or chain link topped with an anti-scaling device, or utilizes a fence or wall at least 8 feet high...

§61.1031(c)(3)(B)

...be constructed, both for the door and door frame and their components, of materials and in a manner that make them resistant to entry by intruders. Unless inside an exterior secured area, ~~doors~~ constructed of glass or containing glass shall be constructed or modified such that the glass cannot be easily broken and allow an intruder to open or otherwise enter through the door (for example, using forced entry resistant film); all doors shall be certified as complying to a minimum Level 1 of ASTM F3561 *Forced Entry Resistance of Fenestration Systems after Simulated Active Shooter Attack or, for retrofit applications only, have a glazing which meets ANSI Z97.1 For Safety Glazing Materials Used In Buildings – Safety Performance Specifications And Methods Of Test Level A Type 1, installed, and shall...*

#### §61.1031(c)(5)

Except when inside an exterior secured area, all windows that are adjacent to an exterior door with any part of the window less than 10 ft from the walking surface and that are of a size and position that, if broken, would easily permit an individual to reach in and open the door from the inside shall be constructed or modified such that the glass cannot be easily broken. shall be certified as complying to a minimum Level 1 of ASTM F3561 *Forced Entry Resistance of Fenestration Systems after Simulated Active Shooter Attack or, for retrofit applications only, have a glazing which meets ANSI Z97.1 For Safety Glazing Materials Used In Buildings - Safety Performance Specifications And Methods Of Test Level A Type 1, installed.*

#### §61.1031(c)(6)

Except when inside an exterior secured area, all ground-level windows ~~near exterior doors that are of a size and position that permits entry from the exterior if broken~~ shall be constructed or modified such that the glass cannot easily be broken and allow an intruder to enter through the window frame (for example, using forced entry resistant film) shall be certified as complying to a minimum Level 1 of ASTM F3561 *Forced Entry Resistance of Fenestration Systems after Simulated Active Shooter Attack or, for retrofit applications only, have a glazing which meets ANSI Z97.1 For Safety Glazing Materials Used In Buildings - Safety Performance Specifications And Methods Of Test Level A Type 1, installed.*

### **Additional Information**

Window solutions - Glass can be part of the school's security plan as the "first element of surprise"

- Security glass installed in school entrances looks like a normal entrance and is perceived as a point of weakness. However, it can act as the first line of defense. It can isolate those entering the building, slow down an active shooter and delay entry into the building.
- Windows can allow for line of sight to potential threats approaching the school building, allowing school and security personnel to identify impending dangers. Security windows can create safer spaces within the building. Tinted or translucent glass can provide privacy and allow light flow while selectively blocking line-of-sight of attackers.
- Windows can be designed for forced entry resistance, energy-efficiency, fire-rating, bullet-resistance, or any combination.
- Retrofit options are available for existing windows.
- Security windows provide passive protection 24/7, continuing to function during power outages.
- Students in classrooms with windows providing natural daylight and a view to the outside have lower absenteeism and score 7-30% higher in math and reading [source: *Daylighting Impacts on*

*Human Performance in School. Journal of the Illuminating Engineering Society, Summer 2002. Lisa Heschong, Roger L. Wright, Ph D. and Stacia Okura].*

- ASTM F3561 Forced Entry Resistance of Fenestration Systems after Simulated Active Shooter Attack is available at <https://www.astm.org/f3561-22.html>. Products meeting this performance standard are readily available.
- ANSI Z97.1 For Safety Glazing Materials Used In Buildings - Safety Performance Specifications And Methods Of Test Level A Type 1 glass indicates filmed or laminated glass that has intrusion resistance. Type 2 glass is tempered and will shatter creating openings when impacted, therefore the designation of Type 1 is necessary. ANSI Z97.1 is available at <https://webstore.ansi.org/standards/gisc/ansiz972015r2020>. Products meeting this performance standard are readily available.

Respectfully,

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Cc: Nicole Harris, NGA President and CEO