



Position Statement

Classroom Barricade Devices

There is a question currently under debate in several jurisdictions across the country: ***Should barricade devices be used to secure classroom doors during an active-shooter incident?*** These devices have emerged in the last few years in response to fears that inadequate security may leave classrooms vulnerable. The devices are typically designed to be installed on classroom doors during a lockdown in addition to the existing hardware.

Barricade devices are perceived to be generally less expensive to purchase, and easier to procure and install than traditional security devices such as locksets or access control products. While securing the door with a classroom barricade device may seem to address the immediate need for security, one should consider the safety concerns associated with this practice.

Conventional locksets meet code requirements for free egress (allowing occupants to exit without obstruction), fire protection (compartmentalizing the building to deter the spread of smoke and flames), and accessibility (ensuring access for all, including people with disabilities). These locksets effectively secure classrooms against active shooters; in fact, testimony presented to the Sandy Hook Advisory Commission indicated that an active shooter has never breached a locked classroom door by defeating the lock¹.

By definition, “barricade” means “to block (something) so people or things cannot enter or leave.”² Most codes require doors in a means of egress to provide free egress at all times, which allows building occupants to evacuate quickly if necessary. Some proponents of barricade devices suggest that, because the device is intended for use only when an active shooter is in the building, securing the door takes priority over allowing safe evacuation.

Those on the other side of the debate believe that, because there is no guarantee the device will only be installed under these limited circumstances, the devices could be misused, preventing authorized access by staff and emergency responders, as well as delaying or preventing egress.

Some advocates of barricade devices have stated that, if the product is not permanently attached to the door, it is not under the jurisdiction of the code official and is not subject to the same

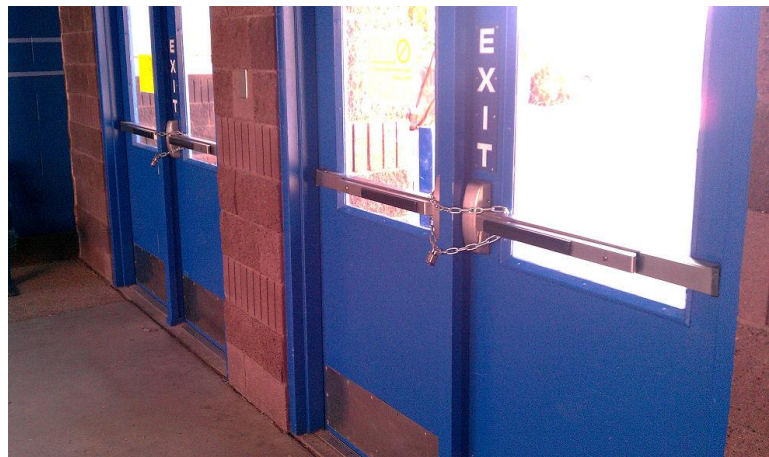


Fig. 1: Exit doors in a school, chained to provide security. This locking method does not meet IBC, IFB, or NFPA 101 requirements for free egress. Photo: Wayne Ficklin, Architect

¹ Sandy Hook Advisory Commission, [Final Report](#). (2015): n. pag. 32 Mar. 2015. Web.

² Merriam-Webster. [Barricade](#). Merriam-Webster, n.d. Web. 28 Sept. 2015.



requirements that door locks and security hardware must comply with.

Following this premise, panic hardware secured with padlocks and chains would not be under the code officials' jurisdiction either. In reality, code officials address these unsafe temporary locking methods frequently; most codes do not differentiate between a device used temporarily and a permanently installed device. Fire doors blocked open with wood wedges or other creative (but "temporary") hold-open devices create obvious fire protection problems; again, the code official is responsible for enforcing the code requirements even though the offending devices are not permanently attached.

Comparisons have been drawn between the use of furniture as a barricade, and the installation of a barricade device. Barricading a location with furniture and other environmental items is a secondary response for incidents of active shooter and terrorism, and is recommended if evacuation as a primary response is not possible.

Barricading with environmental objects is recommended by many organizations, including the [ALICE Training Institute](#), [U.S. Department of Homeland Security](#), [U.S. Department of Education](#), [Federal Emergency Management Agency \(FEMA\)](#), [U.S. Department of Justice](#), and [Federal Bureau of Investigation](#) (FBI). None of these recommendations, however, involve the installation of secondary door-locking devices. Barricading uses gross motor skills, is applicable in any location, and does not require a door or special door-locking device.

The ALICE Training Institute recently published a document³ that includes guidance with regard to a barricade vs. a door-locking device. The first item on this list reads (in part): *"Door-locking devices are subject to approval. According to the fire code, 'Security devices affecting means of egress shall be subject to approval of the fire code official.' Ensure that any application of a door-locking device is not in violation of the fire code. A door-locking device accepted by one fire marshal may be rejected by another jurisdiction."*

Because barricade devices are installed during a lockdown, some may consider them safe for this limited period of time. There are currently no widely used standards for school security, and schools frequently call lockdowns for events that do not involve an active shooter. If a lockdown plan includes the use of barricade devices on the classroom doors, the devices could be installed for extended periods of time whether the danger is inside the building or somewhere in the vicinity.

It is not uncommon to find 20 or more lockdown incidents mentioned in national news within a day – with very few involving a direct threat to the school. There are many situations that could require an evacuation while a school is in lockdown, and doors must provide free egress to facilitate evacuation. The school shooting at Columbine High School reportedly involved a firebomb, propane tanks converted to bombs placed in the cafeteria, and dozens of explosive devices⁴. In case of a scenario like this, maintaining free egress is an important part of a school security plan.

³ ALICE Training Institute. [Barricade vs. Door-Locking Device - There is a Difference](#). (2015): n. pag. 11 Mar. 2015. Web.

⁴ Columbine Review Commission, The Report of Governor Bill Owens. (2011): n. pag. iii, 12, 23, Web.



Code Considerations

Given the increased focus on school security, the discussion about using a barricade device or alternative method to secure a classroom door has likely taken place with code officials in every state. A set of guidelines⁵ published by the [National Association of State Fire Marshals \(NASFM\)](#) includes a “Suggested Classroom Door Checklist,” which identifies many parameters that should be satisfied when selecting and installing hardware intended to increase classroom security:

- *The door should be lockable from inside the classroom without requiring the door to be opened.*
- *Egress from the classroom through the classroom door should be without the use of a key, tool, special knowledge, or effort.*
- *For egress, unlatching the classroom door from inside the classroom should be accomplished with one operation.*
- *The classroom door should be lockable and unlockable from outside the classroom.*
- *Door-operating hardware shall be operable without tight grasping, pinching, or twisting of the wrist.*
- *Door hardware operable parts should be located between 34 and 48 inches above the floor.*
- *The bottom 10 inches of the “push” side of the door surface should be smooth.*
- *If the school building does not have an automatic fire sprinkler system, the classroom door and door hardware may be required to be fire-rated, and the door should be self-closing and self-latching.*
- *If the door is required to be fire-rated, the door should not be modified in a way that invalidates the required fire-rating of the door and/or door hardware.*

The NASFM guidelines also note that, although the word “should” is used in the checklist, these requirements may be mandatory depending on applicable codes, laws, and regulations. The International Building Code (IBC), International Fire Code (IFC), and/or NFPA 101 – Life Safety Code have been adopted in most states, and these three publications include the egress, fire, and accessibility requirements in NASFM’s checklist (NASFM, 2015).

These model codes are revised on a three-year cycle to take into account changing environments and new technologies, using a consensus process with careful consideration by technical committees and ample time for public comment. States and local jurisdictions may modify these codes, so it’s very important to be aware of local code requirements, including the jurisdiction’s position on barricade devices.

The NASFM checklist parameters for A) classroom doors to be lockable from inside the classroom without opening the door, and B) classroom doors to be lockable and unlockable from outside the classroom, are not currently included in the three model codes referenced above, but [code change proposals](#) have been submitted by the [Builders Hardware Manufacturers Association \(BHMA\)](#) which will add these requirements if the proposals are approved (BHMA, 2015). The prescriptive documentation included in the model codes ensure that requirements for free egress, fire protection, and accessibility are met in addition to providing adequate security.

⁵ National Association of State Fire Marshals (NASFM). [“Classroom Door Security & Locking Hardware.”](#) (2015): 1. 22 Mar. 2015. Web.



At NASFM’s 2015 annual conference, members approved a resolution⁶ supporting the NASFM Classroom Door Security & Locking Hardware guidelines. In an excerpt from this resolution, the state fire marshals warn against the use of classroom barricade devices:

“WHEREAS, when selecting hardware that allows classroom doors to be lockable from inside the classroom, consideration should be given to the risks and potential consequences of utilizing a device that blocks the classroom door from the inside. For example, devices that prevent classroom doors from being unlocked and openable from outside the classroom may place the inhabitants of the room in peril. In addition to the requirement that classroom doors must be unlatchable in a single motion from inside the classroom, these doors should always be unlockable and openable from outside the classroom by authorized persons.”

Local Jurisdictions

Many code officials have responded to questions about school security by reiterating that egress doors (including classroom doors) must meet the requirements of the adopted codes. The model codes may be modified locally, which could make the local requirements less stringent (for example, allowing one additional operation to unlatch the door) or more stringent.

Some states, such as [Florida](#)⁷ and [California](#)⁸, have already adopted requirements or guidelines for classroom doors to be lockable from the inside, with classroom security locks being the preferred lock function. For these states, the local guidelines are more stringent than the current model codes.

Some states have not modified their codes, but have published directives supporting their current code requirements. The New York State Education Department issued a bulletin on “Fire Safety and Proper Classroom Door Locks,” which cites the state fire code and the New York State Education Department Manual of Planning Standards code. This document clearly prohibits classroom barricade devices, reinforces the requirements for free egress, and recommends classroom security locksets (Thurnau).

The Minnesota State Fire Marshal’s office has published an information sheet titled *Security and Barricade Devices on Classroom Doors*, which also recommends classroom security locks and explains their rationale for code-compliant methods (Minnesota Department of Public Safety State Fire Marshal Division, May 2015).

Minnesota’s position on classroom security is very compelling, as Minnesota is the location of the 2005 school shooting at Red Lake High School⁹, where a 16-year-old killed seven people and wounded five others.

⁶ National Association of State Fire Marshals (NASFM). [“Resolution on Classroom Door Security & Locking Hardware.”](#) (n.d.): n. pag. 27 July 2015. Web.

⁷ Florida Department of Education. [State Requirements for Educational Facilities](#) (2014): n. pag. Nov. 2014. Web.

⁸ Mendoza, Tony. [“School Facilities: Classroom Security Lock.”](#) *AB 211 (Mendoza)*. N.p., 29 Sept. 2010. Web.

⁹ WW: [“Shattered Security – Surviving Red Lake Teacher Calls for Change.”](#) N.p., 11 Feb. 2015. Web.



Although the classroom doors were locked, the shooter broke the glass and gained access to the classroom by turning the inside lever, but Minnesota has not responded to this incident by choosing inexpensive security over free egress, fire protection, and accessibility. There are glazing products and films that will delay access to the inside lever, and would be a much more logical solution than installing a barricade device.

In some jurisdictions, there is political pressure to relax the code requirements in favor of approving the use of barricade devices, even when code officials oppose the change. In 2015, Ohio lawmakers passed a law requiring the Ohio Board of Building Standards to adopt rules for the use of classroom barricade devices. The board conducted an examination of the state's current codes to decide whether changes should be made due to emerging threats to public safety. After extensive review, including two hearings where parties on both sides of the issue presented information, the board determined that no changes needed to be made to the current building and fire codes. Regardless of the board's conclusion, the new state law mandates the creation of rules for the use of barricade devices¹⁰.

In [Arkansas](#), the state fire marshal voiced strong objections to a senate bill that would amend the fire code requirements and allow the use of barricade devices in schools, noting potential issues with emergency egress and removal of the device. The Arkansas State Senate voted unanimously to approve the fire code change, despite the fire marshal's objections, as well as the financial interest of an Arkansas state legislator in a company that manufactures barricade devices.

Other states have independently issued directives or adopted code changes that vary from state to state. For example, Colorado¹¹ has adopted a code change that allows temporary security measures only until Jan. 1, 2018 (Colorado Department of Public Safety Division of Fire Prevention and Control).

The state fire marshal in [Kansas](#) issued a memo allowing temporary security devices to be used (Jorgenson, 2014), [Louisiana](#) allows a deadbolt that requires one additional operation to unlatch the door (Browning, 2013), and [New Jersey](#) permits some types of devices but not others (New Jersey Department of Community Affairs, 2013).

These policies lack consistency from one state to the next. A more efficient and effective approach would be to incorporate school security requirements into the model codes used across the country, utilizing the expertise and experience of code officials and others who are knowledgeable about all aspects of the issue.

Other Potential Consequences

In addition to code considerations, another concern is that barricade devices can be used by anyone who has access to them, including someone who wants to barricade himself along with others in a room to commit harm or take hostages.

¹⁰ "[Ohio school safety policy should be barricaded from politics](#)," SchoolSecurity.org, (March 7, 2015)

¹¹ Colorado Department of Public Safety Division of Fire Prevention and Control. "[Code Enforcement and Certification of Inspectors for Public Schools, Charter Schools, and Junior Colleges](#)." N.p., n.d. Web.



Addressing this possibility by storing the device in a locked drawer or location known only to the teacher could result in a delay in installing the device at a critical time. A substitute teacher may not have the means or knowledge to secure the door.

Although every school shooting is tragic, and we must do all we can to prevent them, these events are rare; nonfatal victimizations at school are thousands of times more likely to occur, and unauthorized lockdown of a classroom could help to create a haven for someone attempting to commit a crime. According to the [National Center for Education Statistics \(NCES\)](#) (NCES, 2013):

- *“In 2012, students ages 12-18 were victims of about 1,364,900 nonfatal victimizations at school, including 615,600 thefts and 749,200 violent victimizations, 89,000 of which were serious violent victimizations.”*
- *“During the 2009-10 school year, 85 percent of public schools recorded that one or more of these incidents of violence, theft, or other crimes had taken place, amounting to an estimated 1.9 million crimes.”*
- *“During the 2011-12 school year, nine percent of school teachers reported being threatened with injury by a student from their school. The percentage of teachers reporting that they had been physically attacked by a student from their school in 2011-12 (five percent) was higher than in any previous survey year (ranging from three to four percent).”*

In addition to the negative impact on egress, most barricade devices prevent access from the outside, so even a staff member or emergency responder with a key would not be able to enter. While there is debate on whether or not barricade devices should be allowed for use, schools should also consider their liability in using such devices. What if a barricade device was used by an unauthorized person to secure a classroom and commit an assault or other crime, leaving staff and/or law enforcement unable to access the room because of the device?

As every school administrator knows, and as documented by the Centers for Disease Control and Prevention (CDC) and by the FBI, the people most likely to commit violence on school grounds are students themselves.

A person injured in a barricaded classroom might have a strong argument that the school district should have recognized that a



Fig. 2: Examples of various classroom barricade devices.



student, or someone else lawfully on the premises, could use a barricade to lock others into a classroom and prevent safety officers from entering. More generally, obstacles to egress can be fatal for both children and adults during an emergency. Modern codes exist because of hard lessons learned from school fires and other tragedies. A district considering whether to install classroom barricades should take into account the possibility of an exit being accidentally or maliciously blocked during an emergency ([School Liability and the Law of Unintended Consequences](#), 2015).

There have already been school shootings where the intruder brought materials with them to barricade the doors, including the incidents at Virginia Tech, the West Nickel Mines School, and Platte Canyon High School¹². At Platte Canyon High School, explosives were used by emergency responders to gain access to the classroom, and a student hostage was killed by the shooter during the chaos. After the West Nickel Mines School shooting at an Amish schoolhouse, several news reports discussed law enforcement officers' concerns that they are not equipped to overcome classroom barricades.

A shooting at Chardon High School in Chardon, OH, has been cited in support of the state legislation to allow barricade devices; however, when the former superintendent of the Chardon School District, Joseph Bergant, was asked whether he would be in favor of using classroom security devices, he told members of the Ohio Board of Building Standards that barricades have the potential to backfire and make active shooter situations more dangerous.

"There was a situation in Colorado ... where a gentleman came into the school, went up the hallway, went into a classroom, and he barricaded himself in that particular room and ended up killing one child," he said. "The police had a difficult time getting into that room because the door opened in the opposite way, and they actually had to blow the door off with some kind of explosive." He said that barricades could be dangerous if a bomb started a fire in the school or if a teacher left a room unattended with a barricade available. "In a lot of situations, people need to get out of the building in some capacity," he said. "There have been situations where kids have locked other kids in classrooms. I have huge anxiety with that. If the teacher is not in the room, what do you do? Somebody could barricade themselves in a room and kill everybody." (Bergant).

In the words of Police Lieutenant Joseph Hendry, "The fact is, these devices can easily be used against us. From a tactical standpoint, hanging the device next to the door is an invitation to disaster. It gives any threat the ability to secure a room with potential victims inside with little recourse for staff or law enforcement except to breach using physical force. The fact that vendors are touting the devices by posting videos of law enforcement using current assigned tools that cannot breach the door gives threats a tactical advantage in planning and use in a facility that is already a soft target."

References from Safety Guidelines

There are many publications that address recommended locking methods for classroom doors, the need for code compliance, and support for incorporating school security requirements into the model codes.

None of the following include recommendations for installing secondary locking devices:

¹² Platte Canyon High School Shooting, After Action Report. (2006): n. pag. 6 Dec. 31, 2006. Web.



- The final report of the [Sandy Hook Advisory Commission](#) includes many recommendations for school safety, including Recommendation No. 1: Classroom doors should be lockable from inside the classroom. The report states: *“The testimony and other evidence presented to the commission reveals that there has never been an event in which an active shooter breached a locked classroom door.”* There are other factors to consider, such as impact resistance of glass adjacent to door hardware, distribution of keys to all staff (including substitute teachers), methods of securing exterior doors, visitor protocols, and procedures, communication, training, and drills. Barricading of doors is not mentioned in the commission’s report (Sandy Hook Advisory Commission, 2015)
- [FEMA-428](#) – Buildings and Infrastructure Protection Series Primer to Design Safe School Projects in Case of Terrorist Attacks and School Shootings (2012) states that all locks on egress doors in schools must comply with the requirements of NFPA 101 – Life Safety Code. The FEMA publication also discusses the importance of lockable classroom doors: *“While the interior locks on classroom doors saved many lives at Columbine High School, they were not available in classrooms in Norris Hall at the Virginia Tech campus. Although attempts were made to barricade the doors with furniture or live bodies, they were not successful and the death toll was much greater.”* (FEMA, 2012)
- The [International Fire Code Commentary](#) is a companion publication to the IFC, and includes a section addressing lockdown requirements. The 2012 IFC Commentary for section 404.3.3 Lockdown Plans, reads (in part): *“Note that the code does not require a lockdown plan; however, if a lockdown plan is developed, it must be strictly supervised in order to maintain occupant safety at an acceptable level. Many facilities are adopting procedures that can significantly affect fire and life safety, such as using the fire alarm system to signal a security emergency, locking doors with devices that prevent egress in violation of the provisions of Chapter 10 of the code, and chaining exit discharge doors from the inside to prevent occupants from leaving the building. It is important that plans for security threats do not include procedures that result in violations of life safety and actually increase the hazard to the occupants.”* (IFC, 2012)
- The Occupational Safety and Health Administration (OSHA) [regulation 1926.34](#) prohibits devices that impede egress: *“No lock or fastening to prevent free escape from the inside of any building shall be installed except in mental, penal, or corrective institutions where supervisory personnel is continually on duty and effective provisions are made to remove occupants in case of fire or other emergency.”* In some states, OSHA regulations do not cover state and local government employees (including school staff), but many states adopt the OSHA regulations as part of their workplace safety requirements. In those states, OSHA requirements for free egress may apply to schools (OSHA).
- Some proponents of barricade devices have suggested that it is safe to relax the code requirements addressing fire protection because fatal school fires are no longer common. The NFPA reports that, *“U.S. fire departments responded to an estimated average of 5,690 structure fires in educational properties in 2007-2011 annually. These fires caused annual averages of 85 civilian fire injuries and \$92 million in direct property damage. An average of one death occurred in daycare properties.”* ([NFPA Structure Fires in Educational Properties Fact Sheet](#)) (Campbell, 2013). Any one of these fires could have been tragic, as fatalities in school fires were [not uncommon](#) before the codes were put in place and enforced. Although it has been more than 55



years since 95 lives were lost in the fire at [Our Lady of the Angels School in Chicago](#), it seems likely that the strength of current codes and enforcement have played a role in the improved safety of our schools (Steffen, 2009).

- In the [March/April 2015 issue](#) of *NFPA Journal*, Ron Coté notes that guidelines do not exist currently that would “allow a classroom door to be locked against opening from the corridor side while still ensuring the door can be opened by any classroom occupant, or that emergency responders can access the classroom in time to prevent an occupant from causing harm to those within the room.” In December 2014, NFPA held a two-day school security workshop, attended by more than 60 stakeholders. The purpose of the workshop was to look at issues affecting schools as they balance security with fire and life safety, and propose solutions to those problems. Upcoming meetings of several NFPA technical committees are expected to discuss provisions for blending school security with fire safety, which could lead to changes in the 2018 edition of NFPA 101 (Coté, 2015).

Conclusion

The instinctive reaction to the fear surrounding school shootings is to do everything possible to protect students and teachers from being in the line of fire. The desire to react quickly and within budgetary restrictions sometimes leads to choices that may solve one problem but inadvertently create others. The requirements for free egress, fire protection, and accessibility must be considered in conjunction with the need for security. Unauthorized lockdown and emergency responder access are important considerations, although not currently addressed by the model codes.

Changes made to codes or laws at a national level would establish more consistent requirements than addressing this issue individually. When a jurisdiction chooses to modify the model codes, requirements should be prescriptive, and an all-hazards approach should be taken, considering not just active shooters and terrorism, but also fire, severe weather, natural disasters, and other types of emergencies.

The reasoning behind proposed changes is often based on the misconception that barricading the door is the only way to protect students and teachers in the classroom. There are code-compliant locks readily available from many lock manufacturers that provide the needed security without compromising safety in favor of lower cost. While locks address one aspect of classroom security requirements, there are other factors to consider, such as the door, frame, glass, key distribution, communication, and lockdown procedures.

Many school security experts [recommend classroom security locks](#), which can be locked from within the classroom using a key (mechanical locks) or electronic fob (electrified locks) (Timm, 2014). Other lock functions can be used, depending on existing conditions, the needs of the facility, and the budget. All lock functions that would typically be installed on a classroom door allow free egress as well as authorized access by staff and emergency responders, and will provide the necessary balance between the security of teachers and students within the classroom and safety for a range of hazards that may occur.

Additional Resources

PASS



As the Security Industry Association (SIA) and National Systems Contractors Association (NSCA) received questions from the educational community about what can be done to better secure our schools – and how these security projects can be funded – it became quickly evident that there were no easy answers. School budgets are tight, and funding is difficult to pull together for potential security threats that, statistically, have a very low probability of occurring.

The PASS story is one born out of concern and commitment for school safety. When a school system makes an investment in security, we want to help them make sure their money spent on the right solutions. The PASS guidelines:

- Define threats common to schools at each educational level
- Offer recommendations on parental and community involvement
- Detail a layered security approach that combats common threats and mitigates risks related to active shooters
- Provide information for integrators, school administrators, resource officers, and IT staff on technology-focused solutions like video surveillance, duress alarms, and electronic access control
- Deliver scalable/tiered measures that administrators can implement based on available resources and local risk levels

We also provide integrators with risk assessments and white papers that can be used when working with schools to evaluate and establish the best security protection for their building.

Several industry organizations have stated their position regarding classroom barricade devices:

- [Associated Locksmiths of America – Institutional Locksmiths](#)
- [Builders Hardware Manufacturers Association](#) – BHMA has put forth code amendment proposals around the use of barricades devices
- [Door Security and Safety Foundation](#)
- [Security Industry Association \(SIA\)](#)

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Supporting materials such as whitepapers, assessment tools, design images and device placement recommendations and position statements will be produced to support these guidelines and are developed to help navigate the complexities that exist.



These documents are also provided without representation or warranty. They are developed as a general recommendation by consensus of the PASS K-12 organization and follow the same good practices used in development and updating of the guidelines.