

# TESTIFYING AGAINST BARRICADE DEVICES IN SCHOOLS

Door Security & Safety  
Foundation Represented  
at Ohio Hearings

By Lori Greene, AHC/CDC, FDAI, FDHI, CCPR

The Ohio Board of Building Standards held two hearings to gather testimony regarding the use of barricade devices in schools, before releasing its final report July 24.

Photo courtesy of Mark J. Berger



**The code development process is** a time-tested method of updating model codes to address new technologies and lessons learned—often because of tragic events. These codes are modified by a consensus process, which incorporates the perspective of multiple parties to help shape the new code language and look at the issue from all angles.

A disturbing trend is beginning to emerge—the use of legislation to address what should be handled by the code development process. The Door Security & Safety Foundation recently worked with other industry members and code officials to share our insight with the Ohio Board of Building Standards, where a law was recently passed which requires the Board to adopt rules for the use of barricade devices in schools.

A barricade device is a secondary locking device used to lock a classroom door from the inside during an active shooter incident. While at first glance

this might seem like a cost-effective way to provide security, there are many safety concerns. In addition to the code-compliance issues\*, one of the primary concerns is that a barricade device can be used by an unauthorized person to lock the door and secure a classroom to commit harm, preventing access by staff and first responders. Although some barricade devices have a means of releasing them by sliding a special tool under the door, many of these devices have no way to release them from the outside.

The situation in Ohio began when a community organization, intent on securing classroom doors in their school district, raised \$30,000 to purchase a barricade device for each classroom. When the district was told that they could not install the devices because they do not comply with current Ohio codes, local legislators were engaged by parents and school districts to create bills that would prohibit the fire code from prohibiting the devices.

## CODE REQUIREMENTS

- ▶ The model codes require latches on egress doors to be retracted with one operation, with no key, tool, special knowledge or effort. Operable hardware is typically required to be mounted between 34 inches and 48 inches above the floor, although some codes and standards exempt locks used only for security purposes from the mounting height requirement.
- ▶ Accessibility standards require hardware to be operated with no tight grasping, tight pinching, or twisting of the wrist, and also require the bottom 10 inches of the push-side face of a manual door to be flush and smooth with no protruding hardware.
- ▶ Some classroom doors are fire doors, and products used as part of a fire door assembly must be listed for that purpose. To date, there are no known barricade devices that have been listed for use on a fire door. In addition, some retrofit classroom security products are designed to inhibit latching so that the outside lever can be left in the locked position. Fire doors must close and latch, and are not allowed to be equipped with a device that prevents positive latching.

# Door Security & Safety FOUNDATION

## DSSF Continues to Advocate for Classroom Door Security

The mission of the Door Security and Safety Foundation (DSSF) is to promote safe and secure openings that enhance life safety. DSSF is dedicated to serving the public by advocating for safe openings through awareness, education and research.

Doorway systems are designed to instantly provide life safety or security depending upon the scenario—fire or threat. Accordingly, all proper door assembly designs equip the doorway to meet the NFPA 101 *Life Safety Code*. DSSF believes that no door locking device that also compromises life safety should be approved by any jurisdiction.

DSSF recently provided the Ohio Board of Building Standards with resources for their consideration as well as testimony, with the support of several industry partners, including the National Association of State Fire Marshals and the Builders Hardware Manufacturers Association.

In the end, the debate was usurped by legislation passed by the state representatives and signed by the governor. The battle will continue in Ohio and other states. To contribute to the Foundation to support these efforts, and to learn more about this important issue, go to [www.doorsecuritysafety.org](http://www.doorsecuritysafety.org).



Conceptual barricade images courtesy of Allegion

The language of the bill was changed several times and was eventually rolled into the state's budget bill which was passed a few days later, despite the efforts of many to explain the safety concerns to Ohio state legislators.

Meanwhile, the Ohio Board of Building Standards conducted an examination into the state's current building codes and fire codes, to determine whether code changes were warranted. Two hearings were held—the first was for invited speakers involved in codes and law enforcement to share their insight with the board. The second was a public hearing, where anyone was allowed to speak; the door and hardware industry was represented by five speakers at the second hearing.

Additional speakers included code officials, manufacturers of barricade devices, state education and public safety agency representatives, and the public.

At the second hearing, one of the speakers was former Superintendent of Chardon City Schools Joseph Bergant. Chardon High School was the location of a school shooting in 2012, where three students were killed and three were injured by another student. Bergant discussed lessons learned during and after the shooting, and told the Board and the audience to “expect the unexpected.”

He described different types of incidents that schools may face, including

bomb threats, fires, bus accidents, and tornadoes, as well as school shootings. He stressed relationships, pre-planning and drills, and a holistic approach involving all stakeholders with different perspectives. “Gadgets and gimmicks aren't gonna do it,” he emphasized.

With regard to locking of classrooms, Bergant explained that Chardon High School's classroom doors were equipped with standard classroom function locksets, which have a key cylinder on the outside only. This lock function requires teachers to open the door, and possibly even enter the corridor, to lock the door. After the shooting, Chardon's classroom locks were re-keyed, keys were issued to all teachers, and the current policy is that the outside lever is always kept locked so doors are immediately locked when they are closed.

When asked by the Board if he would support the use of barricade devices, he said that he would not, because emergency responders would not be able to enter the room to assist occupants. He also talked about the need for egress/evacuation, and concern that students could use the devices for unauthorized lockdown. According to the *AIA Ohio News*, Bergant said, “In a lot of situations, people need to get out of the building in some capacity. 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.”

The outcome of the Board’s research, entitled *Ohio Board of Building Standards Classroom Barricade Forum Report*, is an important piece of research for any jurisdiction considering the use of barricade devices (the report can be downloaded at [www.iDigHardware.com/schools](http://www.iDigHardware.com/schools)). The report describes the initial adoption of the Ohio Building Code, shaped in part by the Collinwood, Ohio, school fire which resulted in the loss of 175 lives. This was one of several high-fatality fires which prompted the public to push for improvements in school building safety systems, and motivated the adoption of building codes to address construction type, provisions related to building heights, egress requirements, exit enclosures with fire doors, and other safety requirements.

As proof of the success of current codes, NFPA reported in 2008: “There has not been another school fire in the

*United States in which 10 or more people have died. Between 1994 and 1998, grades K through 12 averaged one civilian death per year, which has been a typical annual death toll for schools since at least 1980. Moreover, these fatalities do not appear to be innocent children but juvenile fire-setters, caught in the fires they set, or adults such as janitors. It is a bittersweet legacy that, after 100 years, we have indeed made progress in improving school fire safety, and the innocent victims of Collinwood, Ohio, did not die in vain”* (Grant, Casey C., *The Lake View School Fire*, NFPA Journal, September/October 2008).

While some proponents of barricade devices cite the reduction in school fire deaths as a reason to relax the egress code requirements, most in the code enforcement community credit strong codes and enforcement for this success.

The report discusses the codes that pertain to classroom doors, and the reasons behind each of the requirements, stating in part: “Using devices that require specialized skill or knowledge

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*will interfere with occupant egress, or possibly even prevent it altogether. Therefore, in order to ensure safety for all building occupants, egress requirements must protect and accommodate the widest number of individuals, not only under normal circumstances and at optimal performance levels, but also in times of increased stress where everyone’s ability to perform normal, simple door operations becomes compromised. Understanding potential conditions in emergency situations, the*

(Continued on page 32)



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# 8

## Myths (and Facts) about Classroom Barricade Devices

By Lori Greene, AHC/CDC,  
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The following myths and facts about classroom barricade devices were presented at the annual conference of the National Association of State Fire Marshals (NASFM), where I represented the Door Security & Safety Foundation in an effort to help each state fire marshal understand the safety concerns associated with the use of secondary locking devices.

NASFM members approved a resolution at the 2015 conference, supporting its Classroom Door Security Checklist. These documents are available on the Foundation's website, [doorsecuritysafety.org](http://doorsecuritysafety.org); on NASFM's website at [firemarshals.org](http://firemarshals.org); or by visiting [iDigHardware.com/schools](http://iDigHardware.com/schools).

### 1. MYTH: The benefits of barricade devices outweigh the risks.

**FACT:** The perceived benefit of barricade devices is the relatively low cost; most ranging from \$50-\$150, and the easy procurement and installation. The school custodian could buy a slide bolt or padlock and hasp at the hardware store and accomplish a similar level of security. Historically, fire marshals have not allowed these security methods, because they're not code-compliant. Some jurisdictions are continuing to enforce current

codes that do not allow these devices, and some are being pressured by school districts and politicians to put the codes aside in favor of security.

### 2. MYTH: Emergency responders can easily defeat a barricade device.

**FACT:** I'd like to know how emergency responders are going to gain access to a classroom once a barricade device is in place. 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 schoolhouse, and Platte Canyon High School. 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 shooting at an Amish schoolhouse, several news reports discussed law enforcement officers' concerns that they are not equipped to overcome classroom barricades.

### 3. MYTH: Some agencies recommend barricading with furniture; barricade devices are a better option.

**FACT:** A classroom barricade device may be easier to install than using furniture to barricade the door, but it may also be easily installed by an unauthorized person to secure a classroom and prevent access by school staff and emergency responders.

A 2007 study called *Barricaded Hostage and Crisis Situations in Schools: A Review of Recent Incidents*, examined 19 hostage situations that occurred in schools between 1998 and 2007. In 16 of the 19 cases, the perpetrator was



MYTH 2

Photos courtesy of Lori Greene



MYTH 2

a student at the school—the threat was already in the room. A barricade device available to anyone in the classroom could make these crimes easier to carry out, or could even encourage criminal acts.

#### **4. MYTH: School shootings are very common and should be the main security concern for schools.**

**FACT:** Statistics for school shootings are quite subjective. Some lists include gang-related shootings on school grounds, suicides, and accidental discharge of weapons. Other reports include only random shootings inside of the building, and omit suicides, gang related incidents, and deaths resulting from interpersonal conflicts.

In 2012, the year of the school shooting at Sandy Hook Elementary School, there were seven K-12 school shootings in the U.S. All of the school shooters were students except for two. The other casualties—three deaths and six injuries—were the result of students who brought guns to school.

While each incident is tragic, the statistics show that school shootings, although widely publicized, are very rare.

In comparison, the incidence of non-fatal victimization at school is very high. According to the National Center for Education, in 2012, students ages 12–18 were victims of more than 1.37 million nonfatal victimizations at school, including 615,600 thefts and 749,200 violent victimizations; 89,000 of which were serious violent victimizations.

#### **5. MYTH: The risk of fire during an active shooter situation is low, so code requirements are not a priority.**

**FACT:** Barricade devices are installed during a lockdown, so some may consider them safe for this limited period. One of the problems is that there are currently no widely-used standards for school security, and schools frequently call lockdowns for events that do not involve an active shooter. There are many situations that could require

an evacuation while a school is in lockdown, and doors must provide free egress to facilitate evacuation.

I don't know of a barricade device that meets the current model code requirements for fire protection, accessibility, or egress—particularly when installed along with existing latching hardware.

#### **6. MYTH: Lots of other states are allowing classroom barricade devices.**

**FACT:** Although there are a few states where barricade devices have been allowed either by the state fire marshal or because of political intervention, there are many states that have issued directives addressing their requirements for code-complaint hardware.

In Minnesota, I found the rationale requiring code-compliant locks very compelling given the fact that the state is the location of the 2005 school shooting at Red Lake High School, where a 16-year-old killed seven people and wounded five others.

Although the classroom doors were locked, the shooter broke the glass and gained access to the classroom by turning the inside lever. And yet, 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.

#### **7. MYTH: Fire marshals do not have authority over barricade devices that are not permanently attached to doors.**



Photo courtesy of Wayne Ficklin

**FACT:** How many fire marshals would allow this chained and padlocked panic hardware (above) in an occupied school? This photo was taken after the end of the school day, but while the school was occupied for an event. The fire marshal has the authority to order the chains and padlocks removed, even though they aren't permanently attached. Why would classroom doors be any different?

#### **8. MYTH: Locksets do not provide enough protection against active shooters.**

**FACT:** There are many locks that provide the necessary level of security and meet the model code requirements for egress, fire protection, and accessibility. These products are certified to meet recognized industry standards for security and durability and are listed for use on a fire door assembly. In some cases, schools looking to use barricade devices already have locking hardware but may not have distributed keys or established the protocols for lockdown.

In addition to standard mechanical locksets, there are also electrified locks available which can be locked using a fob, a code, or from a remote location. All of these classroom locking products will allow free egress at any time.

The Final Report of the Sandy Hook Advisory Commission 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." A holistic approach must be taken for classroom security including training, drills, key distribution, and impact-resistance of glazing adjacent to the hardware, and there is no reason to sacrifice life safety in favor of security.

(Continued from page 29)

1958 edition of *The Building Exits Code* required that, "Latches or other releasing devices to open exit doors, or doors in the path of travel to reach exits, shall be of simple types, the method of operation of which is obvious, even in darkness." Accessibility standards and fire protection are addressed in the report as well as the egress requirements.

One concept introduced during the second hearing was the idea that during an active shooter situation, the classroom becomes an "area of detention or restraint." While the code requirements for an area of detention or restraint do allow restricted egress, the report states that these requirements typically apply to occupancies where egress is unwanted, dangerous, or impossible. In facilities where a protect-in-place strategy is expected to be used, there are many additional code requirements to reduce the risk for building occupants. Schools are not typically designed with the added safety features that would be required for an area of detention or restraint, so locking students and teachers in a classroom results in a much lower level of safety for those contained occupants.

Another important consideration addressed by the report was the need for access by emergency responders, which is crucially impeded when a barricade device is installed. Many of these devices cannot be deactivated from the outside, or require a proprietary tool for access. Because of the

numerous different barricade devices currently on the market, first responders who are assisting another district may not be aware of the type of device used in a particular school, or how to defeat it. Delayed access caused by barricading of classroom doors with wood, chains, or other objects has already played a role in several school shootings with fatalities.

Based on all of the information presented in the report, the Board concluded that **no changes were recommended to the current building code or fire code at this time.** Unfortunately, the law that was passed by the Ohio legislature a few weeks before the report was released requires the Board to adopt rules for the use of barricade devices. The Board will now be forced to create these rules, which will go into effect in March 2016. Many school districts believed that the new legislation would allow them to immediately begin using barricade devices, but until the Board releases the new rules, the devices should not be used.

On Sept. 2, 2015, the Ohio BBS issued an advisory statement to all Ohio school system superintendents and administrators as well as building and fire department personnel, regarding barricade devices and egress in educational occupancies. The advisory describes the next steps in the process to develop rules for classroom barricade devices, lists the current Ohio Building Code



requirements, and states, "Schools are cautioned against purchasing and deploying devices before the rules take effect as some devices may not comply with the new rules."

This situation in Ohio could set a dangerous precedent of lawmakers getting involved where they do not have the experience to consider all aspects of a code issue. A similar law allowing barricade devices has already been passed in Arkansas, despite strong opposition from the state fire marshal, who is also one of the top law enforcement officers in the state.

While some states have already rejected the use of barricade devices in schools and reinforced their position in support of current model code requirements, a few jurisdictions do allow the devices. It's important to help code officials, school districts, legislators, law enforcement, and parents understand the risks involved with putting lower-cost security ahead of safety. ■

In general, the Ohio Building Code (OBC) requires and will continue to require the following for door operation:

- (1) Egress doors should be readily openable from the egress side without the use of a key or special knowledge;
- (2) Door handles, pulls, latches, locks and other operating devices on doors shall not require tight grasping, tight pinching or twisting of the wrist to operate; and
- (3) The unlatching of any door shall not require more than one operation. Doors in the means of egress must be readily openable from the egress side without the use of a key or special knowledge or effort.



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