

# Door Security + Safety

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Pages 16 - 19

## Opening the Door to School Safety

*Lock Don't Block*

### THIS MONTH SCHOOLS:

- + DOOR ASSEMBLIES
- + EMERGING TOOLS
- + LISTED AND LABELED
- + MAXIMIZING SAFETY

*Code-compliant  
classroom  
door products  
are the most  
practical and  
safest solution*

BY KERBY LECKA

# MAXIMIZING K-12 SCHOOL SECURITY AND SAFETY



## What happens after every school shooting?

Many hardware and security system manufacturers and providers receive numerous phone calls from school principals. Many of these are private school principals who also function as the security director and are actively involved with door choices for their facility. Usually they are looking for a solution to satisfy the concerns of the parents who fund the school through the tuition they pay. There is an emotional drive to do something. Private schools must operate with limited budgets and do not have access to public funding.

No classroom security solution is complete unless it also addresses life

safety. For example, fire is statistically three times more likely to happen than an active shooter situation in a school, according to April Dalton in her article, “Finding Reasonable Solutions to the Problem of School Safety,” in the March 2015 issue of *Doors + Hardware*.

School administrators considering security, risk mitigation and liability should only consider traditional, tested, locking products that meet the code requirements for providing life safety in addition to security.

Many administrators of small schools do not have knowledge in this area and may not completely understand the importance of life safety. Understandably, they need an affordable solution and may have unfortunately chosen barricade-type products to address security concerns. Potentially, these barricade-type products can create more risk to life safety than the chances of an active shooter event occurring.

### Code Compliance

At Security Door Controls, we recommend that any viable school classroom lockdown solution meet the 2018 model codes including the International Building Code (IBC), International Fire Code (IFC) and NFPA 101 – The Life Safety Code. These codes require one operation to release the latch on a door as a means of egress, with no tight grasping, pinching, twisting of the wrist, and no key, tool, special knowledge or effort required. Lockable doors in educational facilities must be capable of being unlocked from the outside with a key or other means approved by the building official.

Quick fixes, like secondary barricade locks or supplemental braces that force a door shut, clearly do not meet building code requirements, put lives at risk and escalate the liability for the school.

In addition, more sophisticated solutions may be layered with

technology requirements that are too expensive for smaller schools. And, the reliance on Wi-Fi, Bluetooth and other wireless communication increases the risk of delay when lockdown may truly be needed.

Some of these solutions may not have the practical flexibility of allowing re-entry in lockdown mode. This has proven to be life threatening for any students left outside the classroom.

### Eliminating Unintended Consequences

By adhering to traditional code-compliant solutions that provide a balance between classroom security and safety, a good school classroom lockdown solution should not have to rely on well-intentioned products such as barricades that clearly violate life safety standards.

Although these products are intended to protect students and create a safe haven, they actually create a greater risk than any security they provide. If they are used to barricade a door, a bully or dangerous person could trap someone in a classroom and a teacher or first responder would not be able to enter. This is clearly an unintended consequence of their application.

A good solution provides a balance between life safety and security centered around a well-known, reliable, hard-wired method that is code compliant, using products that, over time, have proven to provide both security and life safety. These products should allow the door to be locked from inside a classroom without requiring the door to be opened, yet also provide notification and allow authorized access by staff and emergency responders in case someone inside the room intends to cause harm or injury.

Look for solutions that provide specifically designed classroom security locking functions allowing users to quickly lock the door from either side





## *Replacing traditional mechanical locks with electrified locks allows for global and local lockdown to secure the safety of the students within the classroom.*

and meet code requirements for free egress, fire protection and accessibility. These can be the fastest and safest solution for lockdown situations and minimize the possibility of an exit being blocked during an emergency.

### **Fire Rated Doors**

As stated in the code for fire door assemblies, good school lockdown door components should be listed for use on a fire door. When properly installed by licensed technicians, retrofitting with these locksets, power transfer devices and door closers will maintain the integrity of fire rated doors as well as meet code compliance.

In a horizontal campus environment, common in the western United States and suburban areas, classroom doors egress to the outside and do not have a fire listing. Schools in urban areas and other locations where buildings are situated closely together, utilize vertical or hi-rise-style facilities with doors that lead to a corridor, and these doors will be fire rated.

### **Retrofitting Doors**

Oftentimes classroom doors have mortise locks. Replacing traditional mechanical locks with electrified locks allows for global and local lockdown to secure the safety of the students within the classroom. Recently, a few manufacturers have added an

additional manual deadbolt to an electrified mortise lockset to increase the security strength opening. This allows the inside thumbturn to project the deadbolt.

Throwing the deadbolt locks out electric operation of the outside lever. Locked from the outside only, the mortise lock is unlocked by an access control or key from the outside. Uninhibited egress is provided at all times by turning the inside lever handle, which retracts deadbolt and latch - ensuring fire life safety while providing classroom lockdown security.

This practical addition of a deadbolt to an electrified mortise lockset provides a proven, time-tested, high-level of security to a classroom door.

### **Three Simple Guidelines**

The Door Security & Safety Foundation recommends that any school classroom lockdown solution address three simple guidelines. The solution should:

1. Open from inside the room without requiring tight grasping, pinching or twisting of the wrist, and be accomplished in one operation.
2. Lock and unlock from inside a classroom without requiring the door to be opened, while still allowing staff to enter in an emergency.
3. Lock automatically or have a simple locking mechanism requiring a pushbutton, key, card, fob or fingerprint that will lock the door from inside the classroom without having to open the door.

### **Assessment Guide**

Is the classroom secure in the event of a lockdown situation or an active shooter scenario?

Safety isn't just about closing the door; it's also about opening it. The National Association of State Fire Marshals (NASFM) recommends what classroom locking mechanisms can and should do and includes a suggested classroom door checklist, which identifies many parameters that should be met 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 in 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.

Private school decision-makers need to be educated about the risk and liability involved if they do not provide the proper life safety compliant products. Barricades are not the answer. In fact, they may allow a misbehaving student to lock teachers and administration outside the classroom. They may also allow an active shooter to barricade himself - and hostages - inside the classroom if entry is gained before closing the door.

### **Nuisance Prevention**

A good classroom lockdown solution should be designed to eliminate liability issues that non-code compliance solutions such as barricades may create, relative to life safety. These solutions can be abused by students creating a nuisance when

locking themselves inside a classroom. Gaining admission to disable the barricade may require excessive force that damages the door or window.

Allowing students to be in control of lockdown with a pushbutton or deadbolt may raise some concerns. However, using one of the new electrified mortise locks with a manual deadbolt means each lock is keyed so administration can retract the deadbolt and open the door when needed.

Some existing solutions do not account for juvenile behavior and have required calls to law enforcement to breach the opening or gain access through a window.

Practical, safe solutions ensure substantial security, life safety code compliance and provide electrified access control or manual key over-ride to resolve nuisance behavior.

### Conclusion

The most practical and safest school classroom lockdown solution should create a balanced approach that provides both life safety and security. Traditional, tested locking products that comply with building, fire and life safety - like NFPA 101 (National Fire Protection Association), the International Building Code and the International Fire Code - to provide a means of egress to unlatch with one releasing operation are always recommended.

Additionally, locking hardware that has been certified by BHMA (Builders Hardware Manufacturers Association) offers a safe and reliable solution, compared to non-traditional devices like barricades, because they comply with all codes including ADA (Americans With Disabilities Act).

As always, local jurisdiction approval is required. Changes to codes will continue as the industry tries to find the best solution.

The most practical and safe solutions simply address the classroom door and are a small but important layer of the overall lockdown system protocol. In fact, for schools operating on a tight budget, focusing on the last line of defense - the classroom door - may

be the most common-sense solution. While at Security Door Controls we also believe in a layered approach to school security, it should be noted that according to the Sandy Hook Commission, an active shooter has never breached a locked classroom door in any recorded school security incident. +



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