Security Safety

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This article updates "Maximizing K-12 School Security and Safety," which appeared in the May 2019 issue of Door Security + Safety magazine. That earlier article concluded that "...for schools operating on a tight budget, focusing on the last line of defense-the classroom door-may be the most common-sense solution." This approach still holds true today.

> Five years later, our industry has become more sophisticated and experienced in creating and integrating code-compliant, systems-based, layered security solutions for K-12 physical security projects (See the article, "A Systems-based Approach to School Safety" on page 8 of this issue.)

In a perfect world, the classroom door should be one of a series of comprehensive, layered security solutions for any school. But many schools and districts have limited resources to effectively implement every best practice solution at every layer.

Each time an incident occurs, school administrators, law enforcement and politicians are under pressure by parents and the public to solve the problem and protect our children, and rightfully so. Emotions run high and sometimes ignite polarizing debates about gun rights, school safety, education funding and a host of other social issues.

Why Focus on the Classroom Door?

As a door hardware security and safety professional, you are uniquely qualified to provide unbiased practical, codecompliant and time-tested solutions to help protect schools from active shooter incidents.

Rather than taking positions favoring one side or another in these debates, it makes sense to consider classroom safety and security solutions focused on securing door openings and on some significant facts:

- Fire is statistically more than three times as likely to happen than an active shooter situation in a school.1
- An active shooter has never breached a locked classroom door in any recorded school security incident.2



In several school shootings, the assailants barricaded doors and delayed law enforcement response-which may have increased the number of casualties.



A Multifaceted Approach

Just as a multifaceted, layered approach to school security can be effective, this approach to door security should also be used. The classroom door is the most obvious choice to focus attention on as the first and last line of defense. This means that any classroom door solution must deny access by addressing these three basic requirements:

- 1. No Barricades: Eliminate the use of noncompliant door barricades and solutions that create greater risk than any security they provide.
- 2. Keep Doors Closed: Eliminate the possibility that a door intended to be closed and locked can be intentionally or unintentionally entered. No security or lockdown solution will work unless the door is closed.
- 3. Defend Any Door: Provide the flexibility with budget and components to adapt to the specific needs of any classroom installation.

No Barricades

In several school shootings, the assailants barricaded doors and delayed law enforcement response, which may have increased the number of casualties. After the shootings at Virginia Tech, Platte Canyon High School and the West Nickel Mines Amish Schoolhouse, emergency responders publicly discussed their difficulties in accessing the barricaded classrooms.3

Free exit, or egress, must always be maintained.







Door prop alarms are a basic, yet fundamental element to provide the minimum level of lockdown security.

Barricade solutions should be avoided because they do not comply with accessibility regulations or egress requirements in NFPA 101 – Life Safety Code. They also do not allow for access by first responders.

Keep Doors Closed

It doesn't matter if there are mechanical locks or sophisticated lockdown systems on classroom doors. If the door is propped open, students are vulnerable. Door prop alarms are a basic, yet fundamental element to provide the minimum level of lockdown security. They provide access control and ensure positive security behavior.

An even more practical solution is to consider adding electromagnetic door holders and releasing devices with door prop alarms. Remember, an active shooter has never breached a locked classroom door in any recorded school security incident.

Electromagnetic door holders are designed to hold doors open and release the door by remote switch or fire life safety command center activation in a lockdown emergency. This simple combination should be used in conjunction with a mechanical door closer to ensure the door is fully closed when magnetically released.

Defend Any Door

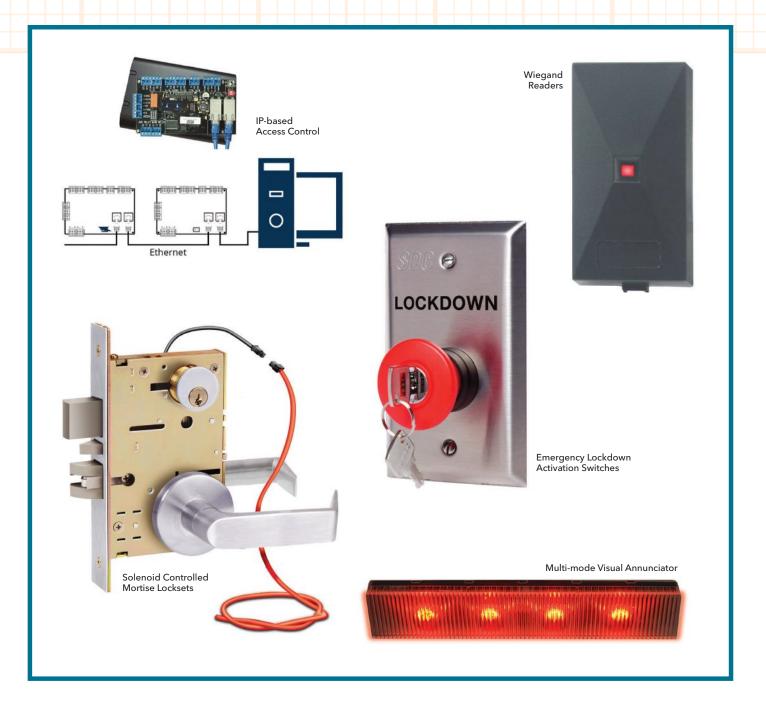
After ensuring that classroom doors are closed during an active shooter situation, achieved through the use of door prop alarms and electromagnetic door releasing devices, the next step is to promptly implement electrified locks. This is done by activating an emergency lockdown button to secure any door, thus fortifying the defense of each room.

The lockdown system should provide specifically designed classroom security locking functions that allow users to quickly lock the door from either side and meet code requirements for free egress, fire protection and accessibility. It should provide lock status notification and allow authorized access by staff and emergency responders in case someone inside the room intends to cause harm or injury.

KEY CLASSROOM LOCKDOWN SYSTEM COMPONENTS

Depending on the door or doors, key components of a lockdown system may include:

- Access control
- · Door closer
- Door prop alarm
- · Door release
- Emergency activation lockdown button
- · Locking device and egress control
- Power supply
- Power transfer
- · Remote control
- · Visual status



SELECT COMPONENT EXAMPLES

- · IP-based Access Control
- Emergency Lockdown Activation Switches
- Solenoid Controlled Mortise Locksets
- · Wiegand Readers
- Multi-mode Visual Annunciator

Depending on how these components have been applied, teachers and administrators can close and lock classroom doors to prevent unauthorized entry during an emergency. Depressing the lockdown button inside the classroom will activate the lockdown protocol. The emergency door release is activated. Then, an alarm is sent to administrators and the door's electrified lock will be locked from the outside upon closing.

An IP-based door controller can be installed to facilitate lockdown procedures in classrooms with multiple doors. By integrating additional internet protocol IP-based door controllers with a centrally located personal computer in the administration office, it is possible to lock down more than 100 doors efficiently.

From the outside, the multi-mode visual annunciators will signal the lockdown status of the door. Administrators or first responders can gain access by using a manual key or presenting a proximity card, key fob or tag to the IP-based reader to unlock the door.

Free exit, or egress, is always maintained.

Meeting Life Safety, Security and Code Compliance Guidelines

Regardless of the classroom door solution provided—from a simple door prop alarm to a fully featured electrified lockdown system—there are several guidelines to consider:

- Meets Life Safety and Security Guidelines: Any classroom lockdown solution should address these three classroom door locks guidelines to ensure life safety and security:
 - **1.** Opens from the inside without prior training in a one lever-turn operation.
 - **2.** Locks and unlocks from the inside of a classroom without requiring the door to be opened while still allowing staff entry in an emergency.
 - **3.** Locks automatically or has a simple locking mechanism such as a pushbutton, key, card, fob, fingerprint, etc., that can be locked from inside the classroom without having to open the door.
- Addresses Code Compliance: The classroom lockdown solution should meet the 2018 model codes including the International Building Code (IBC), International Fire Code (IFC) and NFPA 101—The Life Safety Code.

They require one operation to release the latch(es) on a door in a means of egress, with no tight grasping, pinching or twisting of the wrist and no key, tool, special knowledge or effort. Lockable doors in educational occupancies must be capable of being unlocked from the outside with a key or other means approved by the building official.

• Eliminates Unintended Consequences: By adhering to traditional code compliant solutions that provide a balance between classroom security and safety, the classroom lockdown solution does not rely on well-intentioned products, such as barricades, that clearly violate life safety standards.

Although the motivation to use these products is to protect students and create a safe haven, they pose a greater risk than any security they provide. If they are used to barricade a door, a bully or

- other 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 misapplication.
- lockdown solution should be designed to mitigate liability concerns that arise from non-compliant solutions such as barricades, which are particularly concerning to life safety. These solutions may be misused by students, leading to situations where they inadvertently lock themselves inside a classroom. To gain admission may require excessive force that damages the door to disable the barricade or damages a window for alternate entry. The proper solution ensures substantial security, life safety code compliance and provides electrified access control or manual key override to resolve nuisance behavior.

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

Finally, you should always consult the local Authority Having Jurisdiction for additional compliance requirements before implementing any classroom lockdown solution. The review of these recommendations is not a substitute for obtaining security advice from qualified security providers and other professionals. +

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ENDNOTES

- 1. Finding Reasonable Solutions to the Problem of School Safety. April Dalton, Doors & Hardware, March 2015
- Sandy Hook Advisory Commission Final report: https:// ccsso.org/resource-library/sandy-hook-advisorycommission-final-report
- 3. PASS (Partner Alliance for Safer Schools https://passk12. org/) Whitepaper: Classroom Barricade Devices