



WHY BARRICADE DEVICES?



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AFTER WORKING WITH DOOR OPENINGS AND THE RELATED LIFE SAFETY CODE REQUIREMENTS FOR OVER 30 YEARS, AND SPENDING THE LAST FIVE YEARS EVEN MORE FOCUSED ON ADVISING SCHOOL DISTRICTS AND OTHER STAKEHOLDERS ON HOW TO KEEP SCHOOL SECURITY SAFE, I HAD TO STEP BACK AND ASK MYSELF SOME QUESTIONS:

- Why would a school district consider using security devices that are not compliant with the model codes or accessibility standards, given the associated risks and liabilities?
- Why is the potential for unauthorized lockdown being ignored, when non-fatal victimizations and other crimes in school classrooms are hundreds of thousands of times more likely to occur than a school shooting?
- Why has the perceived need to lock building occupants inside of a room replaced the established need for safe egress and evacuation, especially when barricading has been used to delay emergency responders during past school shootings?
- Why has this become a battle of law enforcement versus fire marshals, state legislators versus code officials and code-compliant security products versus unregulated barricade devices, when traditional locksets provide the needed level of security?

You might think the answer to these questions has to do with cost. In my opinion, the answer is related to complexity.

Traditional security products – locksets and panic hardware – are complicated. To most architects, a door hardware schedule looks like hieroglyphics. When I meet with a security consultant or integrator, everyone else in the room thinks we're speaking another language. There are dozens of lock

functions, various types of locksets and panic hardware options, not to mention electrified hardware. When faced with the task of puzzling through the existing hardware on classroom doors to determine how to improve security, it may seem easier to order a retrofit security product online or have bent bars fabricated in a high school metal shop class and placed in each classroom for the teachers to use when necessary.

This is not unlike the workarounds that have become so common because of the widespread use of technology in other areas of our lives. When the left mouse button on my computer stopped working, I bought an inexpensive wireless mouse, plugged the receiver into my USB port and was back in business in minutes. When a setting on my smart phone affected the headphone jack, I bought some cheap Bluetooth headphones. When I couldn't figure out how to use our fancy new video conferencing system, I called into meetings the old-fashioned way. We are conditioned to find a workaround, especially when time is of the essence and money is tight.

I do understand the motivation to employ the unregulated security products or bent bars made in metal shop class, but I was initially unprepared for the legislative workaround that has occurred in several states. The model codes used across the United States are created by a consensus process involving hundreds of stakeholders and based on more than 100 years of experience – often tragic events

Deadbolts installed in addition to existing hardware can lead to delayed evacuation and unauthorized lockdown and may also be more costly than upgrading existing locks, addressing adjacent glazing and/or distributing keys.

and hard-earned lessons. I've been surprised by the bills I've seen in several state legislatures that remove all of those safeguards, and even more bewildered when a fire marshal considers overriding the adopted model codes – just so a school district can purchase classroom barricade devices or have the shop class start bending bar stock.

Which brings me back to the original question: "Why would a school district consider using classroom barricade devices?"

I have seen many comparisons, from manufacturers of barricade devices, between a traditional lockset at \$500 versus a barricade device at \$150, for example. Given the pressure to "do something – anything – and do it now!" this seems like an easy decision. A few PTA fundraisers and some classroom doors sponsored by parents, grandparents and community members, and the problem appears to be solved. In theory, a school district could spend \$150 per classroom on a classroom barricade device (or much less on the shop-fabricated version) that can be procured quickly and installed easily, rather than spending a lot of time and money to buy and install a new lock.

The problem with this comparison is that almost every classroom door already has a lockset or panic hardware. In many cases, a new \$500 lock is not needed in order to reliably secure the classroom

door – the lock is already there, and locksets and panic hardware are certified to ensure security and durability.

Maybe school staff members do not have keys to the existing locks – this can be resolved for a minimal cost, even if the locks need to be rekeyed. If the existing lock function is not ideal for today's security threats, some locks can be upgraded with a conversion kit to change the function rather than replacing the entire lock – often at a lower cost than purchasing a classroom barricade device. Where glass in vision lights and sidelights adjacent to the existing hardware cause concern, there are films or replacement glazing products available that increase the impact resistance.

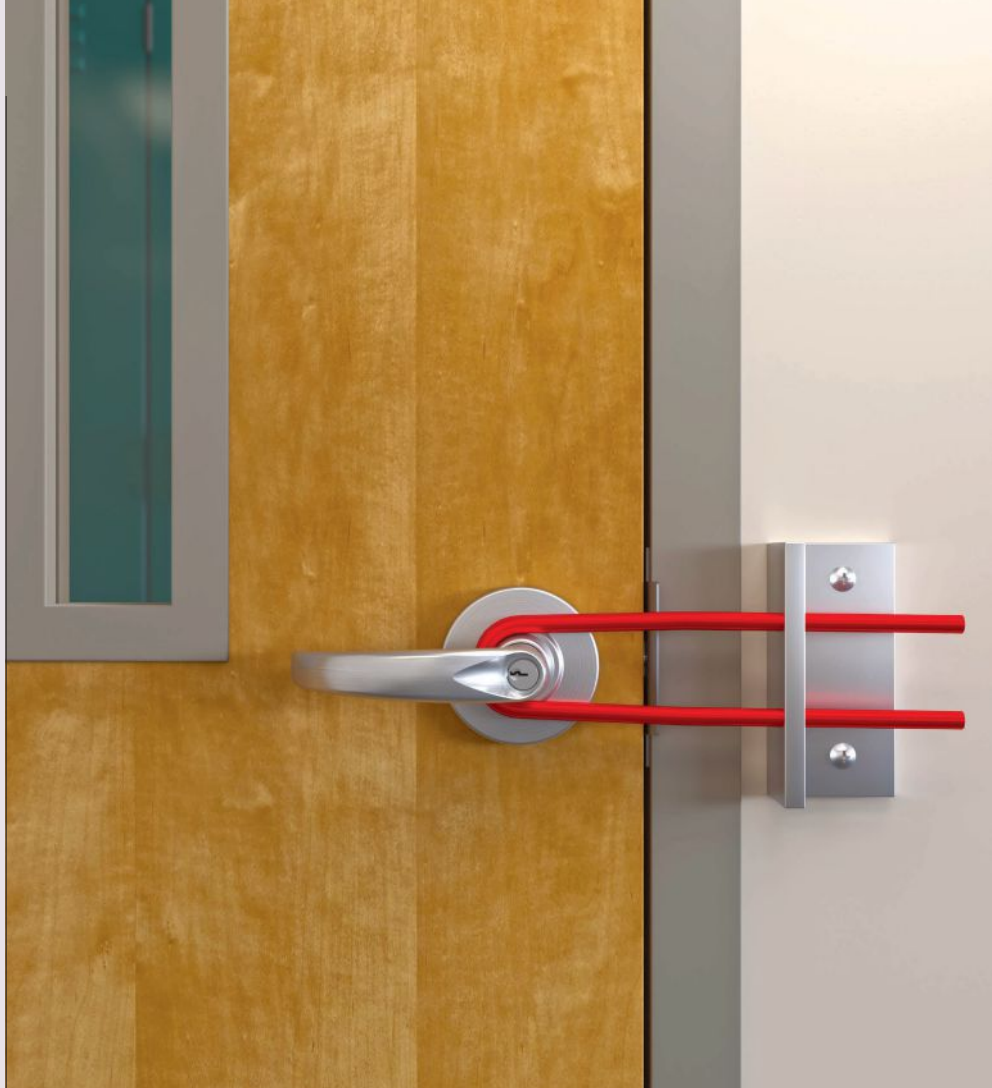
When a school district decides to completely replace their existing locksets, it is often because they are long overdue for an accessibility upgrade, the existing locks are beyond their usable lifespan or because of a desire to add electronic access control and remote lockdown functionality. But a complete lock replacement is not required for most schools and should not be used as the typical comparison.

I have also seen added deadbolts suggested as an alternative, but in addition to requiring more than one releasing operation to unlatch the door (not allowed by the model codes), installing deadbolts can be much more expensive than rekeying or using a conversion kit to upgrade existing locks.



When evaluating a security method to determine whether it is safe and code-compliant, here are six questions to ask:

1. Does the door unlatch with one releasing operation? Current model codes require one operation to release all latches on the door simultaneously.
2. Can the door be opened for egress without a key, tool, special knowledge, or effort, and without tight grasping, pinching, or twisting of the wrist? When it's time to exit, a building occupant must be able to open the door without wasting valuable time trying to find a key or remove a security device that is not intuitive.
3. Is the releasing hardware mounted between 34 inches and 48 inches above the floor, or in the location required by the state or local codes? This requirement ensures that all building occupants – including children as well as people using wheelchairs – can operate the hardware for egress.
4. If the door is a fire door, is the locking/latching hardware compliant with NFPA 80 and listed to UL 10C / NFPA 252? This listing ensures that the product is suitable for use on a fire door assembly and that it will not negatively impact the performance of opening protective.
5. Can the retrofit security device be deployed without attaching to, or modifying, the existing panic hardware, fire door hardware or door closers? Retrofit devices attached to existing hardware may impact the listing and/or performance of the hardware and often rely on the strength of fasteners and connections that have not been tested for this purpose.
6. Is it possible to unlock the door from the outside with a key, credential or other approved means? It is critical for school staff and emergency responders to have access to classrooms from the outside in case an unauthorized person secures the door in an attempt to commit an assault or other crime.



Although it may be tempting to fabricate inexpensive security devices in a high school metal shop class or purchase retrofit devices online, there are multiple safety concerns regarding these methods.

WE CAN HELP

As members of the door and hardware industry, we have relationships where we help to ease the complexity and pain points associated with traditional hardware. We work with architects and specifiers to provide detailed hardware specifications for new projects and renovations. We coordinate with security consultants and security integrators when electronic access control is involved. We are available to facility managers and locksmiths when there are problems with existing openings. What we don't always have is a connection with the school administrators charged with making decisions about their school's security.

It's our responsibility – as experts in both security and the codes that

ensure life safety and free egress, fire protection and accessibility – to offer our expertise to school districts looking for answers.

We can assist school administrators, teachers, parents and students with information about how their locksets function and suggest improvements if needed.

We can reach out to code officials, law enforcement officers, state legislators and state boards of education to help keep their state and local security requirements safe.

We can use lessons learned in past events to guide future decisions and make sure the implemented security methods comply with adopted codes and laws.

Get involved. Share your experience. Keep school security safe. +