



CAMPUS FIRE SAFETY CODE TALK

Campus Fire Safety e-NewZone

Life Safety, Fire Safety, Security Safety: Blended, Balanced and Built In

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At the NFPA *School Safety, Codes Security* workshop held in December 2014 ([see workshop report, May 2015](#)), a prime recommendation centered on the need to integrate security into building design. The workshop report indicated that in far too many cases, security is an afterthought to other key building design considerations. Traditional building, fire, and life safety code rules address the need to regulate materials of construction, installation of fire protection systems and design of egress systems among other topics. Coupled with building structural design, aesthetics, and accessibility provisions, the codes tend not to put building security at a particularly high level. In this case, security is similar to a “bolt on” or “aftermarket” consideration.

After any type of active shooter event- regardless if it's a terrorist attack, workplace violence, hate crime or a specific targeted attack at one or two people- media accounts like to focus on the reaction of the occupants and the ever repetitive, almost rhetorical question “what can be done to prevent this type of occurrence?” The answers range from the need to provide new gun-control regulations, allow more people to have guns, develop more programs to address mental health and well-being issues and provide coping mechanisms for individuals who feel disenfranchised for whatever reason – topics that can be discussed in other forums and venues.

Related responses also touch on certain building design issues dealing with access control, door locking and a general preparedness plan for occupants to deal with an active shooter regardless of the environment they're in. This is one area where the codes and standards organizations such as NFPA, ICC and ASIS among others can have an influence on potential outcomes. In addition, federal preparedness programs put forth by the FBI and DHS also have utility in helping us deal with active shooter scenarios.

So where do we start? Access control doors have been a staple in the NFPA *Life Safety Code* for more than 20 years. As the name implies, such doors limit or control the



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access that an individual has to a given building or given space. At NFPA's headquarters building, access control is used to enter the building and even to move around within different floors and areas throughout. [See Figure 1, Access Control Door Card Reader]. Should the occupants need to evacuate or simply leave the area or the building, this type of door automatically unlocks and releases from the occupied side (in the direction of travel) as the occupant approaches. It has other built-in fail safes that permit the door to continue to operate in the event of a loss of power or other circumstances. This type of feature can thwart an outside intruder and is quite effective for that scenario. It is not foolproof however since a measurable number of active shooters typically have the proper credential to be in the building or space in which they launch their attack.



Figure 1 Access Control Door Card Reader

Simple devices such as delayed egress locking systems are permitted in the *Life Safety Code* as well. A delayed egress lock prevents access to a space or even to the entire building. Typically located on doors that serve at an exit discharge on the building exterior or at an exit enclosure, the door is normally in a locked position. An occupant that approaches the door must engage the releasing mechanism at which point a predetermined delay (normally 15 or 30 seconds) is built-in after which the door lock will release the occupant can move through the door.

Other types of locking mechanisms and locksets are permitted, but often times with great restrictions on specific occupancies. Deadbolt, key operated and even thumb latch style locks are often discussed following an active shooter event. While these components can be utilized in certain occupancies, they are typically precluded from being used in business, educational and assembly type occupancies – those being some of the more typical occupancy classifications or uses found on a college or



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university campus. While our general mindset with regard to fire safety is and always will be to maintain a free and unfettered means of egress for the occupants- architects, engineers, end users, authorities having jurisdiction, the code organizations including NFPA need to come to terms with the need to consider other scenarios beyond fire and hence more locking options on more types of doors.

A very recent example of this was the shooter on the UCLA campus this past May. While the perpetrator had a targeted list of victims he was after, the campus went into a lock down mode after a campus wide notice went out from its very robust mass notification system. The problem confronting many students and faculty however- there was nothing to lock. Many schools within the K-12 level as well as the college and university level have never had a need to install locks on their classroom doors. After each one of these types of events, administrators agree to take a look at their security measures including preparation, response and brick-and-mortar solutions that might enhance security.

Often times, the easy or cheap fix is recommended with respect to classroom door locking. Field applied or installed hardware components are retrofitted onto doors, frames or are kept nearby to install over door hardware once an event is underway. These devices are not code compliant, may interfere with normal use of the door, or otherwise prevent first responders from entering rooms or spaces. Modern era codes offer complying solutions for door locking configurations in these environments. Any locking device that precludes someone from entering the classroom and that can be operated without special knowledge or a tool from inside the classroom is a perfectly acceptable solution. Often times the type of locking mechanism recommended is what you might see on your hotel room guest door and is typically referred to as a hotel lock set.

Retrofitting this type of lock on an existing door is an expensive proposition. However the cost of not doing so can be even greater. Building in the appropriate door locking option during building design and construction, rather than as an afterthought is more cost-effective and allows for a consistent approach with respect to planning for lockdowns or other emergencies where the door needs to function-whether to keep people in or keep people out.



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So what's the next level of debate regarding this issue? After decades of carefully regulating, controlling and in some cases prohibiting locks on doors, the most recent question is 'shouldn't the codes require some type of lock on all classroom doors?' That's a good question and that provision is being addressed by NFPA. NFPA 730, *Guide for Premises Security* has a proposed change that would actually recommend such locks. A series of changes have been proposed for the 2017 edition of NFPA 730 to address the recommendations in the NFPA workshop report. One of those recommended changes states:

11.3.4.7* All classroom doors should be equipped with locking hardware that allows for a single motion egress as defined by *NFPA 101*.

If this provision remains in the new edition of NFPA 730 and is ultimately referenced in some form by the building, fire and life safety codes, it will be the first time we actually require a lock on a door. This demonstrates a way to think differently and look at the problem pragmatically. The codes traditionally have said 'if you put a lock on a door, then some set of restrictions or conditions would apply.' The codes appear to be moving towards a philosophy of 'you will put a lock on the door, and the following restrictions or conditions will apply.' Different times require different mindsets to be applied to this challenge. We are moving in the right direction by integrating security as another specific goal and objective to be addressed in our codes. I have confidence that we are moving in the right direction and that security doesn't have to be an aftermarket add-on to building design.

