

CAMPUS FIRE SAFETY CODE TALK

Campus Fire Safety e-NewZone

Locking doors on college campuses to prevent unwanted entry.

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One of the issues facing many, if not all, colleges and university campuses today is the need for greater security against unwanted entry from events such as an active shooter or other violent acts. The events which are plaguing college campuses and other large venues such as malls, stadiums, arenas and concert halls, may require occupants to shelter in place and protect themselves within the building rather than immediately evacuate. While fire is still a major risk and something that must always be considered, its risk must now be balanced with that of the need for building and occupant security.

A basic principle of NFPA 101, Life Safety Code®, requires a means of egress must be under the control of the occupant; i.e occupants must be able to freely leave the building without encountering anything in their way upon moving to a point of safety. Egress doors must be arranged to be opened readily from the egress side whenever the building is occupied. I, as a building occupant, cannot unexpectedly approach a door that is locked, outside of my control, in the direction of egress travel. The Code does not prohibit locking doors in the ingress direction so long as it does not interfere with egress.

New requirements in the 2018 edition of NFPA 101 allow specifically for door locking in new and existing business occupancies to prevent unwanted entry of occupants. This new section can apply where specialized security measures are needed to prevent unwanted entry such as classroom doors in colleges and universities, areas of office spaces open to the public, laboratories or instructional rooms. In recent editions, the Code has made exemptions to the basic concept of the egress being under the control of the occupants in occupancies such as health care where, for example, locked door assemblies are permitted if it is necessary for the specialized



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protectives measures or the clinical needs of patients. The Code mandates additional requirements such as smoke detection and a heavy reliance on staff intervention in order to achieve an equivalent level of life safety should the doors be locked against

egress.

The new provisions for door locking to prevent unwanted entry are included in the chapters for both new and existing business occupancies, of which some buildings on colleges and universities are classified. To utilize the new provisions, the first step is to obtain AHJ approval to allow the doors to apply the locking permission. In addition, 8 different criteria must be followed when arranging for the doors to be locked. Some required features of the locking arrangement are as follows:

- The locking means must be capable of engaging without opening the door.
 During an event where occupants need to be locked within a classroom, for example, it is important that the classroom door can be locked without having to open the door and engage the lock from outside the classroom, potentially exposing the classroom to an intruder.
- The door must be capable of being unlocked and opened from outside the room
 with the necessary key or other credential. In some situations, the emergency
 may be within the locked space, such as a classroom. The locking arrangement
 must allow for someone, such as the fire department or other emergency
 personnel, to have the ability with a key or other credential, to access the
 room if and when needed.
- The locking hardware cannot modify the door components such as the closer, panic hardware or fire exit hardware and if the door is fire protection rated any modifications to the door must follow the requirements of NFPA 80. Closing devices are provided to make sure the door is closed during a fire to slow the spread of fire, smoke and toxic gases throughout the building. In some cases, where the door is a fire door, that closing device can mean the difference between containing a fire to a single compartment or allowing the fire to spread and impact multiple areas of the building. Panic and fire exit hardware is provided in those areas where a greater number of occupants may approach the door in a hurried egress. The hardware releases the latch upon application of a force in the direction of egress.



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 Other features of the locking arrangement are consistent with those permissions in Chapter 7 of the Code that can be used for other egress doors. These include requiring unlocking and unlatching without the use of a key, tool, special knowledge or effort, a releasing mechanism with not more than one releasing operation, and a minimum and maximum height of the releasing mechanism.

Doors to these areas requiring additional security are being locked today, often times against what's permitted by the Code and without understanding the effects their installation can have on fire safety, free egress or emergency response. The detailed criteria provided in the new package of provisions of Chapter 38 and 39 of the Code should help provide the necessary guidance on how to lock doors safely and also weed out those potentially dangerous door locking installations while recognizing the need for a level of security that colleges and universities are seeking.

For more information, please see the 2018 edition of NFPA 101, Life Safety Code, available to view for free at www.nfpa.org/101.



