INTRODUCTION

In today’s educational environment, enhanced security is the goal and desire of many school districts. Many school districts are resorting to the installation of barricade devices and unapproved door locking devices which may violate today’s fire and life safety and accessibility regulations.

Inexpensive, unapproved products (see page 11) that cover strike plates, prop open locked doors, or prevent ingress from the hallway cause problems and place students in jeopardy. Products that cover strike plates, such as magnets or moveable plastic pieces, must be removed for the latch to engage, while those that prop open doors must be kicked out of the way before the door can be secured. Additionally, products that prevent ingress often require prior knowledge of the mechanisms method of operation on the part of the user who needs to gain access, such as security personnel or first responders. Installation of cheap, quick-fix solutions may achieve an immediate goal but may be costly in the long run, because they may damage existing doors and hardware and can easily become jammed in the door frame or wedged underneath a door, actually preventing doors from securing under normal operation.

All locking/security hardware is required to be tested and listed to adopted national standards. Building codes, fire codes, and life safety regulations require users to have the ability to readily unlatch the door from inside the classroom with one motion without the use of a key, tool, or special knowledge or effort to facilitate immediate egress from the classroom or area. In addition, California building code accessibility regulations require doors to have the following features:

- A smooth surface on the bottom 10 inches of the push side of the door.
- Door operating hardware located between 34 and 44 inches above the floor.
- Door hardware that operates without requiring tight grasping, tight pinching, or twisting of the wrist.
- A maximum of 5 pounds of force to operate door hardware.

Retrofitting existing doors with aftermarket locking/security hardware may appear to solve the problem of being able to lock the door from inside the classroom; however, great consideration should be given to the risks and potential consequences of the various options. Devices which prevent classroom doors from being unlocked and openable from outside the classroom may place the inhabitants of the room in peril because these doors should always be unlockable and openable from outside the classroom by authorized persons.
EXAMPLE 1 – CLASSROOM FUNCTION
Historically, the classroom function has been the most common hardware used in classrooms (American National Standards Institute (ANSI) mortise F05/bored F84). A classroom function lock permits the door to be lockable by key only from the outside (hallway). Typically, a staff member unlocks the door in the morning and puts the lockset into “passage mode.” The advantages of this function are that during the school day, students and staff will have easy access to the classroom (unlocked) and there is no chance of accidentally locking the door. However, in the event of a lockdown, a teacher is required to lock the door from outside the classroom, placing themselves and others at risk to the security threat. In addition, the key holder must be present to lock the door during a security threat.

EXAMPLE 2 – CLASSROOM SECURITY FUNCTION
A classroom security function lock (ANSI mortise F09/bored F88) allows the door to be locked by key on the inside or outside. Although this type of lock permits free egress, it presents a challenge in that if the door remains in the locked position from the outside, the teacher would need to interrupt instruction to open the door from the inside for a student to gain access, or the key holder would need to be present to unlock the door from the outside. As with the classroom function described above, this lock also requires the key holder to be present to lock the door during a security threat.

EXAMPLE 3 – CLASSROOM SECURITY INTRUDER FUNCTION
The classroom security intruder (ANSI mortise F32, F33, F34) function is available for mortise locks. These devices operate like the classroom security function lock mentioned above but in the case of the F33 and F34 functions, also have the added strength of a deadbolt locked by a key. In the case of a lockdown, staff can lock the door from the inside. In addition, students are prevented from locking the door from the inside because there is no push-button locking. This lock permits free egress, yet the same challenge as above exists to gain access. As with the classroom function described above, this lock also requires the key holder to be present to lock the door during a security threat.

Unapproved Cable Restraint
In response to the need for enhanced indoor security, changes to section 1010 of the 2018 International Building Code (IBC) were introduced and approved. California adopts the IBC as its model code; therefore these changes will be effective in California on January 1, 2020, and will permit electrically locking hardware on egress doors serving Group A assembly occupancies, and Group B and E educational occupancies. If appropriate for the facility, the installation of electrically locking hardware presents no operational challenges to everyday use; provides an increased degree of safety to the students and staff while still allowing for compliant safe egress; and has the added benefit of being able to be activated from a central control point such as the campus administration office.

To aid school districts and community college districts in the decision-making process as part of their emergency preparedness plan, the following information is being provided in an effort to address the desired need for additional security measures, while maintaining compliance with fire and life safety and accessibility regulations.
1. **When is a fire safety and evacuation plan required by regulation?**

The CAL FIRE Office of the State Fire Marshal (OSFM) adopts section 403.2 of the 2016 California Fire Code (CFC). This section requires a fire safety and evacuation plan be prepared for occupancies classified as Group A (Assembly) and for buildings containing both a Group A occupancy and an atrium.

2. **What are the minimum requirements for a fire safety and evacuation plan by regulation?**

Local establishing authorities may request additional items; however, at a minimum, the CFC requires a fire safety and evacuation plan for occupancies classified as Group A (Assembly) to include:

1. A seating plan.
2. An evacuation plan.
3. The provision for an audible announcement to be made not more than 10 minutes prior to the start of each event informing the occupants of the location of the exits to be used in the event of a fire or other emergency.
4. A requirement for one or more crowd managers during occurrences of high attendance.

3. **Beyond the requirements of the CFC, when is a fire safety and evacuation plan recommended?**

Although not specifically adopted by the OSFM, sections 403.4, 403.5, 403.6, 403.9 and 403.10 of the 2016 CFC identify the following occupancies as requiring a fire safety and evacuation plan:

- Group B occupancies with occupant loads of 500 or more, or more than 100 located above or below the level of exit discharge.
- Group E occupancies, and buildings containing both a Group E occupancy and an atrium.
- Group F occupancies.
- Group M retail occupancies with occupant loads of 500 or more, or more than 100 located above or below the level of exit discharge, and for buildings containing both a Group M and an atrium.
- Group R, college/university residential buildings.
4. Beyond the minimum requirements of the CFC for a fire safety and evacuation plan, when is a comprehensive emergency preparedness plan recommended?

Given the various emergency events that may occur in our communities, school districts and community college districts are encouraged to create a detailed and comprehensive emergency preparedness plan for each campus.

Emergency preparedness plans should include “lockdown” plans to address incidents such as active shooter, trespassers/strangers on campus, bomb threats, gas leaks, etc., and the appropriate response actions for each scenario.

5. In addition to the minimum requirements of a fire safety and evacuation plan, what information should be included in the emergency preparedness plan?

1. An identification of possible emergency incidents and an action outline for each incident type.

2. Identified outdoor assembly areas located a safe distance away from the affected building or location.

3. A fire/emergency evacuation plan within each room that indicates the primary path of egress travel to evacuate the room or area to the outdoor assembly area, and an alternate route.

4. Emergency vehicle ingress and egress routes.

5. Directions for family members and the media. It is a common reaction for family members of students and staff, and the media, to come to a campus when a security or emergency incident occurs.

It is important to remember that a panicked response by family members causes chaos and traffic congestion at the affected location, interferes with emergency service personnel, and jeopardizes the safety of additional individuals.

School personnel should work with law enforcement to identify a safe location for family members and the media to congregate, to receive informational updates while the incident unfolds, and to be given clear direction as to when and where families can be reunited.
6. How should the emergency preparedness plan be communicated to staff and students?

Written documentation should be provided in each classroom and reviewed with teachers and staff, inclusive of long- and short-term substitute teachers, prior to the start of the school year.

Training and practice drills are the keys to a successful implementation of an emergency preparedness plan.

Training and practice drills should occur on a regularly scheduled basis.

For multi-storied buildings, training and practice drills are mandatory by the CFC and must be conducted on a minimum annual basis for all staff and students.

7. Where can I obtain assistance in developing an emergency preparedness plan?

Local law enforcement agencies and fire department personnel should be consulted in the development of an effective emergency preparedness plan. As first responders, their input is vital.

Additional agencies to consider would include the local utility companies providing water, gas and electricity.

8. Should DSA review campus emergency preparedness plans?

Emergency preparedness plans are developed at the local level between the campus administration, the school district, local law enforcement officers, and fire department personnel. DSA does not need to review nor approve school emergency preparedness plans.

DSA review is required for any alteration or modification of the facility, unless exempt. Alterations necessitating review may include the replacement or modification of doors, door frames, door hardware and locks.

Whether or not DSA reviews an alteration, it is important to remember that all alterations and modifications must meet code compliance. Specifically, at no time may the manner of egress from a room, area or building be obstructed, obscured or otherwise prevented from being used. Exit doors and egress hardware must be functional in the egress direction at all times and meet the following requirements:

1. Readily operable from the egress side, without the use of a key, special knowledge or effort.
2. Does not require tight grasping, tight pinching or twisting of the wrist.
3. Does not exceed 5 pounds of force to operate.

School districts may want to consider electromagnetic locking hardware, which is permitted on egress doors when hardware is installed in accordance with conditions 1–6 of 2016 CBC section 1010.1.9.9, and the manufacturer’s instructions.
9. When considering additional security hardware, what are some other concerns school districts should be aware of?

Often, the existing hardware on doors is already capable of modification for less cost than procuring and installing additional hardware or devices. School districts should contact the manufacturer of the hardware already installed to ascertain if approved security options are available.

Any new door security hardware should be tested by a Nationally Recognized Testing Laboratory as meeting adopted standards.

If the installation is on doors that require a fire rating, such as corridor doors, the hardware must be listed as fire door hardware, and be installed per the hardware manufacturer’s installation instructions.

Hardware installed on swinging doors is to be approved by Builders Hardware Manufacturers Association.

The installation of additional security hardware cannot require the modification of a listed, fire-rated door or door frame. Such modifications include, but are not limited to, the drilling of pilot holes, or installation of screws or bolts in locations other than those permitted by the door/frame assembly manufacturer.
ADDITIONAL RESOURCES

Department of Homeland Security, Ready Campaign
Sample School Emergency Operations Plan
www.ready.gov/business/implementation/emergency
https://training.fema.gov/programs/emischool/el361toolkit/assets/sampleplan.pdf

Federal Emergency Management Agency
Guide for Developing High-Quality School Emergency Operations Plans
https://rems.ed.gov/docs/rems_k-12_guide_508.pdf

Governor’s Office of Emergency Services
School Emergency Planning & Safety
www.caloes.ca.gov/cal-oes-divisions/planning-preparedness/school-emergency-planning-safety

National Fire Protection Association
Emergency Preparedness
www.nfpa.org/Public-Education/By-topic/Emergency-Preparedness

CAL FIRE Office of the State Fire Marshal
Sample Lockdown Procedure

Allegion – Safer Schools & Classroom Security
Specifying Safer Schools
https://us.allegion.com/content/dam/allegion-us-2/web-documents-2/Article/Allegion_K-12_Securing_Weakest_Link_Architects_Article_112191.pdf

Decoded: Code Requirements for Classroom Security (Video)
https://www.youtube.com/watch?v=k7gzQFu6o0A&feature=youtu.be

If you have further questions, or require a consultation, please contact your local DSA Regional Office Access and Fire & Life Safety Supervisor.

DSA Oakland: (510) 622-3101

DSA Sacramento: (916) 445-8730

DSA Los Angeles: (213) 897-3995

DSA San Diego: (858) 674-5400
EXAMPLES OF UNAPPROVED, AFTERMARKET DOOR SECURITY DEVICES

Emergency Preparedness & Classroom Security