

Life Safety, Security, and Operational Conflicts

Our world is full of threats. For the purpose of this article, we will outline threats in schools and universities and how various life safety and security door hardware can reduce those threats. The buildings and systems we interact with everyday are designed to limit our exposure to the risk of fire, bodily harm and other such threats. We tend to take for granted many of the safety features afforded us by these systems, but nevertheless they influence our daily lives. Established fire and life safety codes insure buildings are designed and systems are in place so we can quickly and safely exit during a fire. Security and access control systems protect our students from the threat of bodily harm. Each guideline, regulation and system was put into place with good intention, however, in some cases, these systems can conflict with each other and as the facility and staff grows, so does the conflict. For instance, how do you allow authorized staff to move freely through your facility, accessing areas that are restricted to the general public, but still allow egress during an emergency? Are you vulnerable to an attack from a disgruntled staff member, begrudged student, or stranger off the street? How effective is your access control system if staff or students are propping open doors? Can we put controls in place, but still meet ADA requirements? (Insert Photo A here) We give these threats little thought, until the unthinkable is broadcast on national news and then we scramble to insure our faculty and students are not exposed to such a threat. Managing these conflicts with technology can provide a safer environment and peace of mind. The days of locking all the doors and handing out keys are gone. Access control systems with anti-tailgate technology, door prop alarms and automatic door operators compliment electrified door hardware products, such as latch retraction, delayed egress, latch retraction + delayed egress and electric dogging exit devices. These products can provide greater protection, more conveniences and avoid the unimaginable.

Education

Although use of delayed egress in education facilities is typically restricted by life safety codes, under certain circumstances, exceptions can be made, especially when it is used to protect the occupants. Delayed egress exit devices prevent exit through secured openings, controlling foot traffic to a specific corridor that is monitored by security personnel. Delayed egress can be combined with electric latch retraction and automatic door operators for access control, which will allow staff to move freely throughout the facility, while controlling visitor and student foot traffic. (Insert Photo B here) Playgrounds with emergency exits gates, opening near a busy street would be cause for concern. Life safety code may restrict traditional locking of this gates and weatherized delayed egress may be an acceptable application, depending on the authority having jurisdiction. Weatherized delayed egress would provide a loud, local alarm, encouraging a

child to move away from the area, while alerting staff that a child is attempting to exit through the gate. The 15-second delay provides staff time to react before the gate unlocks and helps to avoid a dangerous situation. All delayed egress, even exterior weatherized systems, must be tied into a fire alarm override, providing safe, un-delayed exit during a fire emergency.

Access control systems and temporary visitor badges have become common in most school districts, but regardless of the campus size, anti-tailgating technology can be used to control access to only authorized personnel to restricted areas. Anti-tailgating systems sound an alarm if someone attempts to follow an authorized employee through a secure door which may contain sensitive material, expensive equipment, or personnel or student records. Even the most sophisticated access control system is defeated by someone propping open a door, yet a simple door prop alarm can eliminate this threat and insure the systems are used as intended.

Unfortunately, it is an accepted fact that occasionally schools have to go on lockdown. What “lockdown” means varies depending on size, number of doors, and the type of facility. Some define a lockdown as securing all exterior doors, while some also include all classroom doors and possibly the cafeteria, library, and gymnasium. Regardless of how many doors get locked, one key question remains foremost in the minds of administrators, facility and security directors. What is the safest, fastest, easiest and most cost effective means of locking down our campus? There are many answers to this question; however, one way that has been overlooked by many security door consultants is the use of panic exit devices with electrified dogging. When installed throughout a school facility, the use of electrified dogging accomplishes several things. It allows all of the devices to be “energized” by one control switch that can be located in a centralized area of the building. This action keeps the doors in push/pull configuration via the electronics. In case of a required lockdown, one of several switches located throughout the campus can be activated to de-energize all devices. All panic devices revert to secure mode, effectively preventing entry at every door equipped with this type of device. You should be aware that add-on mechanical options like hex or cylinder dogging may jeopardize the effectiveness of the lockdown system.

Electric dogging is different than electric latch retraction. With latch retraction, applying power pulls the latch(s) back and holds them until power is removed. With electric dogging, after applying power a user must manually depress the pushpad to retract the latch(s). The latches stay retracted until power is removed from the device. (Insert photo C here) Also introduced in this article is the electric dogging device with key override (EDK). EDK adds monitor LEDs and a built in key switch for local release of the electric dogging. Such an application allows a teacher or administrator to secure their room in situations such as a lunch break. Again, Electric Dogging with key override should not be confused with the

addition of mechanical dogging to a device. Mechanical dogging cannot be released from a remote location.

When electric dogging is applied to classroom doors, it removes the need for a teacher, perhaps in the height of a crisis, to remember where the key is and how to lockdown a device on a classroom door. The administrator, taking the responsibility off the shoulders of the education staff, makes the decision and takes action to lockdown.

When used on places of assembly such as gymnasiums and auditoriums, electrified dogging exit devices can be tied to a timer. The timer allows the doors to be dogged for push/pull operation during a specific after-hours event, such as a basketball game or theater performance. The timer could be set for 3 hours, at which time the event would be ending, the door automatically revert to secure mode, locking the doors to entry, but individuals leaving are still allowed to exit. Allowing technology to help people enter a building and insuring it is secure once everyone exits is a convenient alternative to traditional hex key or cylinder dogged exit devices that require someone to remember to dog and un-dog each and every door during every event.

(Insert Photo D here)

Coordinating the Right System into a Kit

Insuring all the pieces of technology will work together is key. Manufacturers along with some dealers will create a kit with best-in-class products, configured with wiring and riser illustrations to fit your application. Be careful of specification writers who supply only a list of products without a wiring diagram or how the items are integrated together. Failing to install the items correctly can create years of headaches and wasted money. Insure the supplier understands your need, has the best-in-class products to stand the test of time and make sure they can support the installation with wiring diagrams, riser illustrations and technical support.

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