FOUNDATION
for the Advancement of *Life Safety and Security*
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The Issue: School Safety and Security

Schools are faced with complicated life safety and security issues like never before. Administrators, principals, teachers, parents, educational facility mangers and school designers are faced with addressing the demand for security solutions every day. School life safety is a problem that requires sound psychological solutions as well as effective physical security solutions.

The psychological solutions are complicated and rapidly changing, making them difficult to address. Fortunately, physical security changes are readily available within existing products, technology and design.

A paradigm shift is taking place by putting a greater importance on the architectural opening (doorways) and the significant role these products play in improving life safety and security through specification design, product implementation and ongoing maintenance. During the process of inspecting and maintaining existing facilities, or designing new schools, the life safety and security features that doors and locks provide tend to be overlooked as to the crucial role they can play. This results in: designs which do not take advantage of simple life safety and security solutions; costly and unnecessary changes during the life of the building; and band-aid solutions which satisfy only an emotional response.

Every school uses doors and hardware but few are designed to take FULL advantage of the immense role these products can play in creating safer environments for our children to learn.

Merging Architectural Design with Life Safety

Often, the architectural design of a school will take priority over the safety features that should be part of every school's functional design. A school however, can benefit from both solid architectural design and strong life saving features.

The design of a school can be functional, as well as offering the additional security that many schools now desire. For example, schools in suburban Washington D.C. are being designed with a double entrance area. Once school starts, this second set of doors are locked and provide an additional layer of security, requiring all visitors to enter the school office before being able to gain access to the student area.

Door locks have also continued to be designed with additional security features in mind. Within the last few years, these locks have added enhanced security that should command the attention of anyone tasked with implementing safety features in a school.

The design of these locks now allows them to be 'locked down' from either inside or outside of the door, always allowing free egress

(exit) from inside the classroom. This is an important safety feature that brings to light the additional security these types of locks bring, for a relatively small cost.

This type of functionality allows faculty to lock down the classroom without exposure to intruders or unwelcome visitors outside the classroom. A classroom lock such as this also features functional options which prevent damage to the internal lock components caused by excessive force from persons kicking, hitting or standing on the lever to gain access.

Along with the functionality of the locks, an equally important feature is the door, the door frame and the exit devices attached to these doors.

The frames and doors are the backbone of access security. Since all of the hardware is mounted on, mortised into or connected to either the door or frame, it is extremely important the proper configuration is determined from the onset.

Door exit hardware devices have also been in long-time use for panic or fire exit door applications. These types of hardware features have been developed specifically for heavy traffic school applications.

Solutions such as these are relatively inexpensive, especially when thought of, and designed for, during the planning process.

As campus security personnel—to members of congress—look for ways to ensure safety in our nation's schools, the doors and associated hardware for every door opening can provide crucial safety and security features as a first line of defense, features that remain relatively inexpensive for the security solutions they provide.

Knowledge and Expertise of Architectural Opening Life Safety Systems

There is a need to bridge the gap between design priorities and life safety systems. A gap exists between the products that will bring an increased level of safety and security and the specification of how to implement them. There is the need for an individual to understand not only the technologies inherit in each of these products, but which security products will best serve the intended purpose.

The Door and Hardware Institute (DHI)'s Architectural Hardware Consultants (AHC), Certified Door Consultants (CDC), Electrified Hardware Consultants (EHC), and Architectural Openings Consultants (AOC) are called upon on a daily basis to write the specifications for over 95% of door openings in all schools and commercial buildings throughout the country. Unfortunately, these specifications are often compromised by budgets and design criteria instead of invested in to provide effective solutions. Both design professionals and school developers have little or no knowledge of the key role these products and systems can play in concert with inspiring design. We must change that misperception by emphasizing these systems in school design, renovation and maintenance.
These certified professionals are recognized experts in the design and construction of every door opening as it pertains to the important safety, security and daily functional usage. These individuals have years of door related safety and security knowledge that clearly places them at the forefront of creating the specifications to properly balance these features. However, if the budgets don't exist and life safety is sacrificed for design, then this expertise is compromised.

Schools need to rely on the advice and expertise of a door and hardware consultant to keep them current on standards, technology and codes as it pertains to important safety and security features. These experts can implement current standards and technology advances to offer a combination of the best possible and reasonable amount of life safety and security.

What can those that best understand the architectural opening—architectural hardware consultants—bring to the table in regards to safety and security? They, better than anyone, have the knowledge to be part of a team that could write guidelines, create checklist for design personnel or lead a specification criteria design meeting that would ultimately lead to a school building being appropriately designed, according to there life safety and security needs.

Efforts are being made to develop the proper synergy of disciplines to continue to develop the balance of design, safety, security and functionality in a school. No one individual will have the answer.

The approach should be one of collaborative consultation, with the end result being the design of a learning environment where a child can maximize their potential, without every having to think about the safety or security features of the building they are in.

The Foundation for the Advancement of Life Safety and Security, in cooperation with DHI and other associations is continuing to work towards that end. The Foundation is working toward creating an environment that can best be described as 'safely securing the built environment'.

With the Foundation's continued work on college campuses and K-12 security and life safety guidelines, schools will have access to some of the best possible solutions in an often overlooked but potentially vulnerable area for school safety – the door opening.

Criteria for these design principles need to address a wide variety of functional uses for both exterior and interior openings.

Exterior openings included the main school entrance, bus entrance, playground entrance, stairwells, and rooftops. Interior openings include classroom doors, administrative area, assembly spaces and cross corridor doors.

All of these openings have functional uses that determine who and when individuals need to enter and exit a particular area of a school building. All of the factors of a building's use have to be considered.

The understanding of a school's functional use helps to determine the 'proper feature set design' in regards to safety and security, two critical areas that should be addressed during the design phase.

By including an individual as part of a design team who has the necessary knowledge, and real-life experience with ingress and egress features for every door opening, a design is being created that would not compromise the safety and security integrity of a school's layout.

Existing Schools

As important as it is to address these issues in the design phase of a new school, thousands of our existing schools need to receive this same type of attention that would address any shortcomings from a safety and security perspective.

The aforementioned certified individuals understand every piece of hardware that goes into a door opening and how every piece of hardware works together to create a total door opening that is safe and secure. They understand the often complex issues that would be otherwise undetectable by the untrained eye.

Knowing how a door should function, after it has been in use for many years, is an important issue to be addressed by schools.

An important, and again, relatively inexpensive way to accomplish this goal, is to require annual safety inspections of each door opening at a school. Some of these inspections have already been mandated for fire-rated doors and will only help to provide a greater means of safety and security for our school-aged children and young adults.

The inspection of all doors, by individuals educated in the areas of door features, functionality and use, promises to give school personnel the necessary understanding and justification to make any changes that would enhance the safety features for all of the building occupants.

DHI and the Foundation

Along with DHI, the aforementioned 'Foundation for the Advancement of Life Safety and Security' is working with other associations across the country to help secure our nation's schools as well.

The Foundation's most recent undertaking is working with Head Start centers across the country to provide door inspections and no cost upgrades to the security and life safety features of their doors.
Programs such as these enable DHI and the Foundation to offer important safety solutions to organizations that could otherwise not afford them.

Conclusion

There are many ways to address safety and security for our nation's schools. A wide range of options, from physical security to cultural change need to be part of any solution — a solution that keeps the best interest of school-aged children and young adults at the heart of what we hope to accomplish.

The knowledge that individuals in the door and hardware industry possess, along with the actual product safety features, are important components to the overall safety and security for our schools.

We have the opportunity to make a significant impact. Much of what is needed is already in place. We need to continue to foster an environment of collaboration—one in which our collective efforts bring about the best possible safety and security solutions for our schools.

To inquire about a presentation or for further information, please visit:

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