Securing your school

Door hardware solutions for primary education

ALLEGION

Allegion and school security

Allegion's purpose is to create peace of mind by pioneering safety and security. Our vision is to make the world safer as a company of experts, securing the places where people thrive. Children not only need educational tools to learn, but also an environment that allows them to be their best.

At Allegion, we know that securing your school is a high priority. We also know that you are balancing this priority with many others, such as funding, curriculum, staffing and a lot more, so sometimes it's hard to know where to start. We have experienced security consultants around the country that can help you identify a balanced security solution for your specific needs.

How we can help:
- Conduct facility assessments to identify security weak links throughout your school
- Develop facility standards to drive consistency throughout your locations
- Pre-installation site visits to train personnel on product installation, maintenance and use
- Post-installation site visits to ensure all products are installed properly, will pass inspection and are in good working condition
- Consult on adopted building codes to ensure fire, life safety and accessibility requirements are met
- Create specifications and hardware schedules for new construction and renovation projects

Allegion's security consultants will partner with you to simplify the process of determining your security needs and provide the right solutions for your building. We can also connect you with our numerous distributor, locksmith, and integrator partners to help streamline the process from specification through installation.

OVERTUR™

Introducing Overtur™, a centralized collaboration hub for all of your door, hardware and opening information.

- Get visibility and access to hardware information from design through maintenance of the facility
- Easily collaborate with project team members, track changes and communicate requirements
- Click on an opening and view the associated plans, hardware sets, and product information in one place

Improved collaboration, coordination and productivity. Overtur makes doors the easiest part of the building.

Learn more at discover-overtur.allegion.com.

We are Allegion

LCN®

Since 1876 LCN® has been the undisputed innovator and leader in door control. LCN products include surface and concealed door closers, ADA-compliant automatic door operators, and electronic accessories.

SCHLAGE®

For more than 90 years, Schlage® has been creating the strongest and most technologically advanced security products for homes, multi-family, commercial and institutional buildings.

VON DUPRIN®

Since pioneering the first exit device in 1908, Von Duprin® life safety products have provided unparalleled quality, performance and flexibility for schools, hospitals, stadiums and public buildings.

FALCON®

Falcon® delivers durability, convenience and unmatched value. Falcon products include locks, cylinders, key systems, exit devices, closers and accessories.

GLYNN-JOHNSON®

Known throughout the industry as the "overhead door holder specialist," Glynn-Johnson® has made its name with state-of-the-art manufacturing and technology.

IVES®

For more than 120 years Ives has produced a full line of premium hinges, pivots, flush bolts, strikes, door trim, pulls, protection plates, lock guards and many other hardware accessories.

STEELCRAFT®

Steelcraft® provides an impressive selection of steel doors and frames for virtually any wall condition or entryway requirement.

TGP

Since 1980, Technical Glass Products (TGP) has been supplying the architectural and commercial building industry with innovative fire-rated glass and steel solutions.

To learn more:
visit www.allegion.com/us or call 1.877.671.7011

School security tops the list of issues impacting K-12 schools today

749,400

nonfatal victimizations occurred at school among students 12-18 (2016)[1]

~100,000

public schools estimated throughout the U.S.[2]

44

years is the average age of public schools in the United States, with 12 years since major renovations[2]

Children spend nearly 11,500 hours in schools throughout their K-12 careers. Every stakeholder at your school expects students to spend that time in a safe environment—one that is properly secured to ensure only authorized individuals have access. At Allegion™, our vision is to make the world safer, securing the places where people thrive. Our team of experts is experienced in a variety of environments and can help you develop a strategy that builds a foundation of security, both today and in the future.

When it comes to securing your facility, there isn't a one-size-fits-all solution. And with a broad range of resources in the market, it's helpful to work with a trusted expert to navigate the solutions that fit your unique needs. The age of your facility, credential platform and protocols, budget and long-term security strategy must be considered. Wherever you are on the continuum, we can help you improve security. We'll address your most pressing needs, starting with the weakest links. From there, our experts will help you develop a long-term strategy that can evolve and adapt to future advancements.

Children not only need educational tools to learn, but also an environment that allows them to be their best. Allegion is here to help.

Learn more on how to **develop your security strategy** or for more assistance and support, **connect with an Allegion security consultant now.**

1 U.S. Department of Justice, Bureau of Justice Statistics, National Crime Victimization Survey (NCVS)
2 U.S. Department of Education, National Center for Education Statistics

4 | Classroom perimeter

There are a number of areas within a school that are vital to protect. While technology, administrative areas and other capital equipment may be targets in the event of an incident, the most important assets in a school are students, staff and visitors.

READ MORE.

2 | Parking lot

It is important to have a strategy for securing areas beyond the building itself. Exterior areas of focus could include parking lots, walkways, outdoor gathering areas, etc.
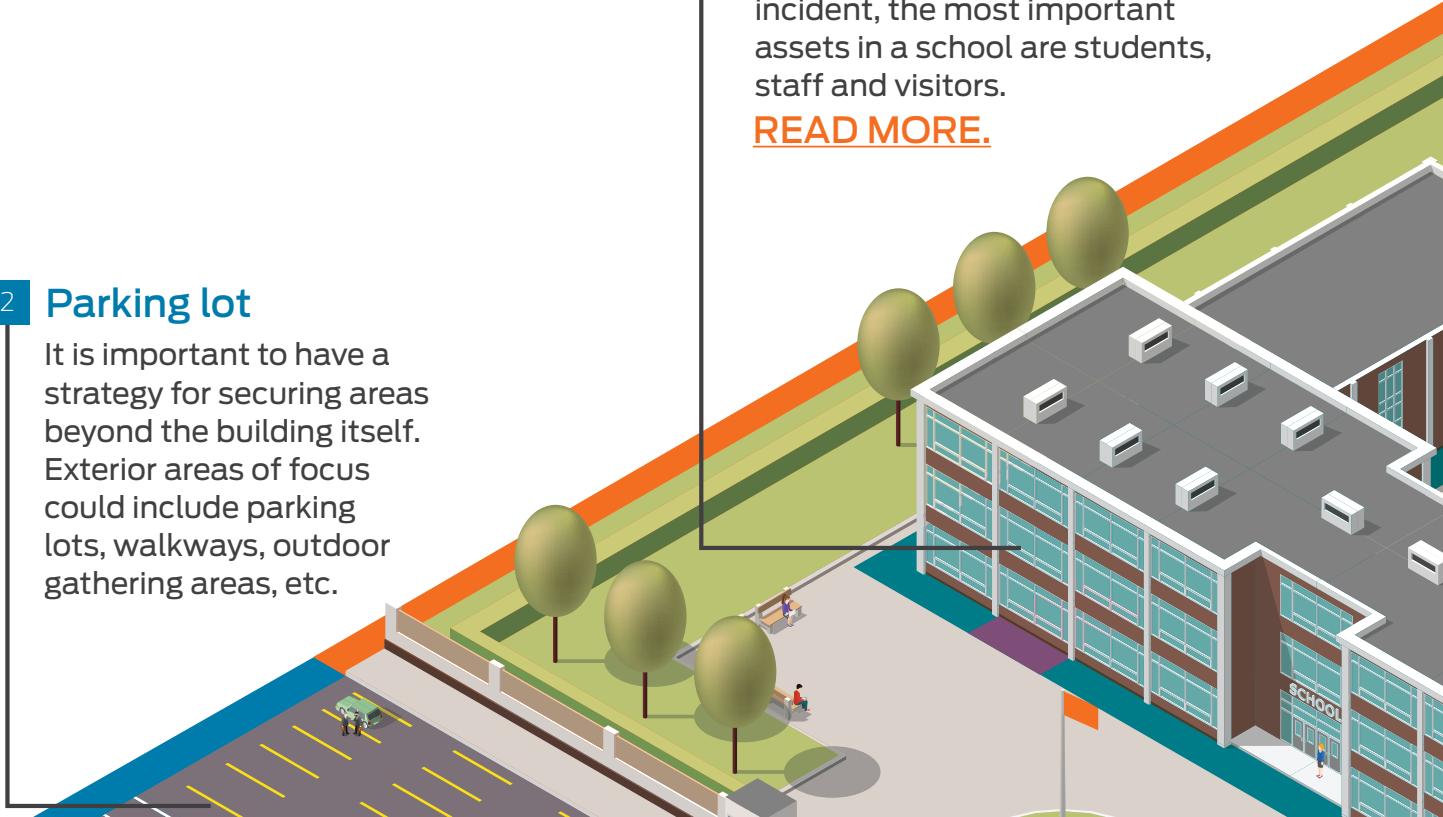
Lockdown: The foundation of your security plan

Taking a "layered security" approach can effectively deter, detect, delay adversarial behaviors. Allegion solutions are a piece of a layered and total safe school approach – a big piece in terms of providing safety and security for both the building and classroom perimeters.

Allegion's recommendations align with PASS (Partner Alliance for Safer Schools) guidelines for layered security. The PASS guidelines are a balanced approach developed based on the opinions of a cross functional group of industry experts including a security contractor, access control integrators, a fire alarm consultant, a life safety and security consultant, as well as an school administrator and a parent who have navigated active shooter tragedies.
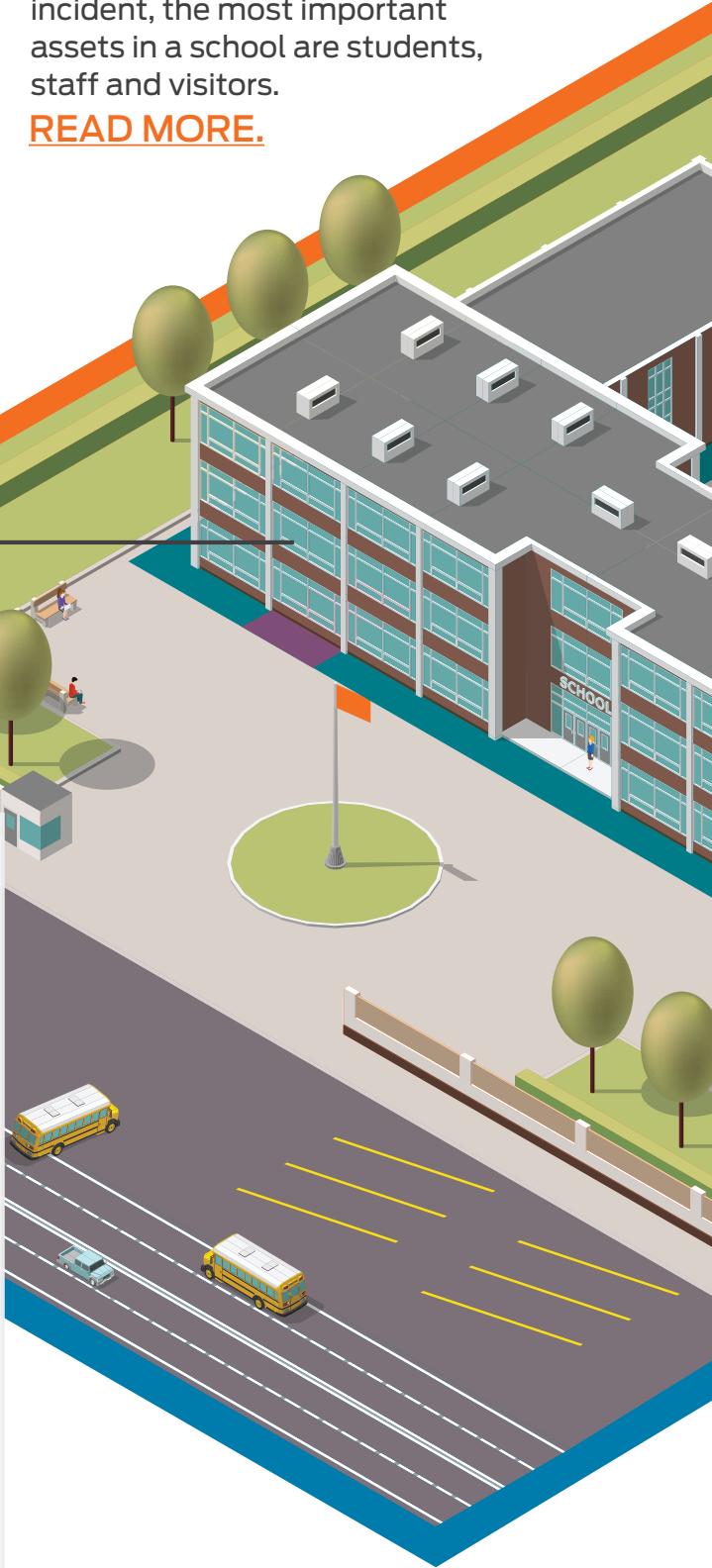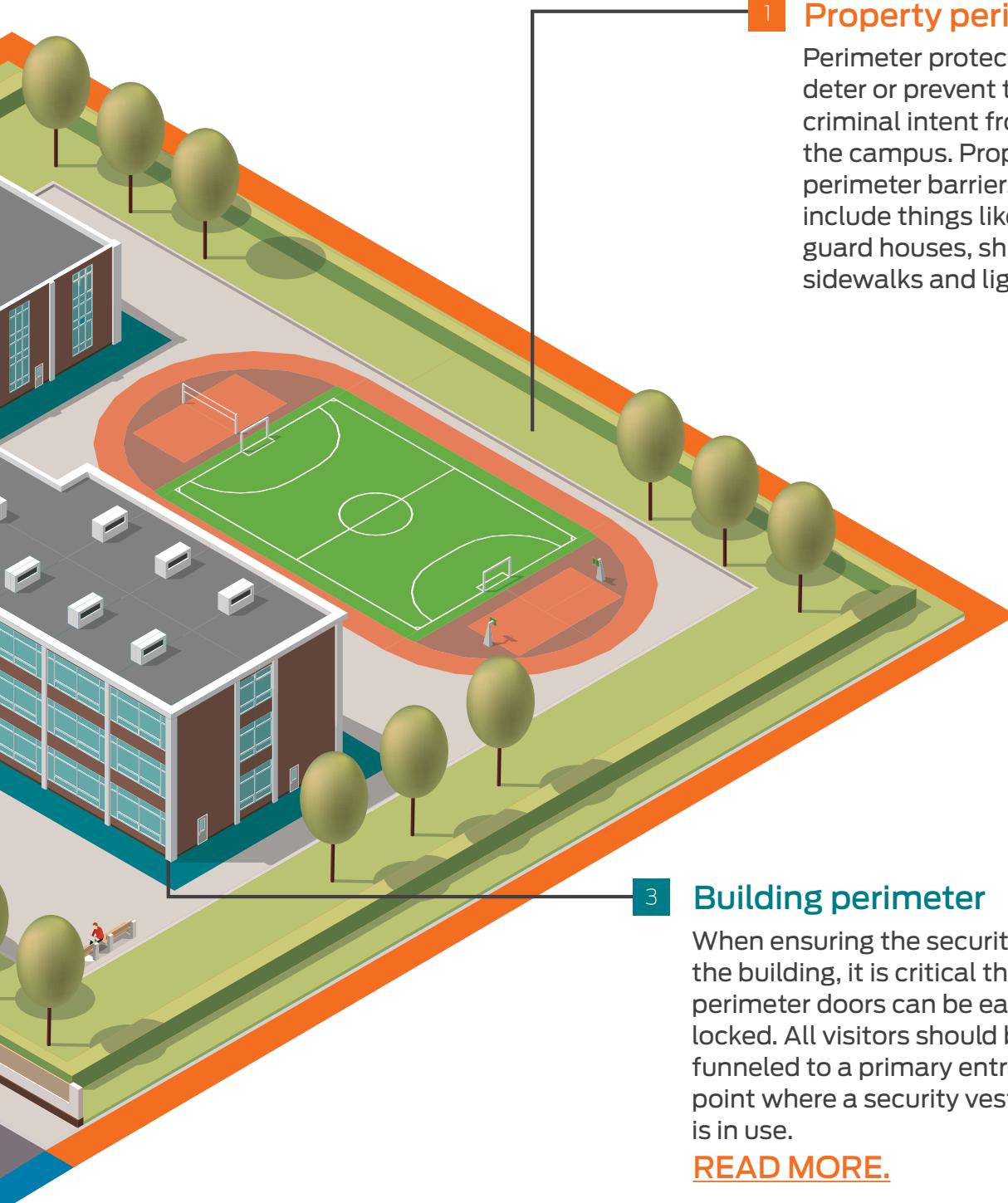
1 Property perimeter

Perimeter protection should deter or prevent those with criminal intent from entering the campus. Property perimeter barriers may include things like fencing, guard houses, shrubbery, sidewalks and lighting.

3 Building perimeter

When ensuring the security of the building, it is critical that all perimeter doors can be easily locked. All visitors should be funneled to a primary entrance point where a security vestibule is in use.

READ MORE.

Perimeter security

Controlling access is a critical part of a school's efforts to provide a safe learning environment. It begins with a secure perimeter—from the main entrance to all secondary entrances and tertiary openings. The perimeter is the first check point, or layer, to the building. It controls who enters the school and when.

- **Primary entrances:** These include main and event entrances. Main entrances typically lead to a security vestibule as an additional layer of security.

- **Secondary entrances:** These make up the majority of exterior openings throughout the campus and are essential to a secure perimeter. These openings are typically manually managed and monitored, and they should remain locked.

Featured Allegion products for primary perimeter security:

Main perimeter entrance		
Electronic solutions	Schlage readers	**Schlage multi-technology readers** - Compatible with magnetic stripe, proximity, and smart cards or an NFC-enabled smart phone. This allows for an easy transition to upgraded technology over time and as budgets allow.
	Schlage system accessories	**620/631 Series pushbutton** - A pushbutton designed for heavy duty applications. Used to control people entering the building.
	LCN auto operators	**4630/4640** - LCN auto operators provide easy access for people who need additional assistance passing through a door opening.
Mechanical solutions	Von Duprin exit devices	**33A/35A exit device** - For narrow-stile doors, this series offers multiple locking options with trim on the outside and a pushbar on the inside.
		98/99 exit device - For wide-stile doors, this series offers multiple locking options with trim on the outside and a pushbar on the inside.
		Von Duprin exit devices have options that allow the door to remain open during high-traffic times (morning and evening) while securing once school has started. Both series of exit devices also have electronic options that allow them to be paired with wall readers and buzzer systems to control access.
	LCN door closers	**4000 Series** - Offers heavy duty cast-iron construction in both application-specific and general purpose models.
	Zero perimeter seals	Perimeter seals help weather proofs the opening, while eliminating noise from outside.

Keys to securing perimeter entrances:

- Control access
- Establish a single point of entry during school hours
- Effectively secure and monitor secondary perimeter doors
- Have a long-term plan and use products that are flexible and scalable for the future

Secondary perimeter entrances

In schools with a networked access control system, it is estimated that only half of secondary doors are connected, because the majority of available security funds are focused on the main entrances. Not surprisingly, over 55% of schools reported that their secondary doors were frequently left unlocked or propped open, with 22% stating that this occurs on a weekly or even daily basis. This results in vulnerabilities that compromise the building's everyday security and limits the ability of administrators to effectively lockdown the facility in an emergency.

To address this need Von Duprin created the Remote Undogging (RU) and Remote Monitoring (RM) options for their 98/99 and 33A/35A models of exit devices.

- The Von Duprin RU option is a battery powered wireless solution that enables remote undogging and door status monitoring. It enhances perimeter security by providing electronic override of mechanical dogging for emergency facility lockdown.

- The RM option is a sensor only configuration for exit only or fire rated doors that require monitoring. It provides visibility to request to exit (RX), latch-bolt monitor (LX) and door position switch (DPS).
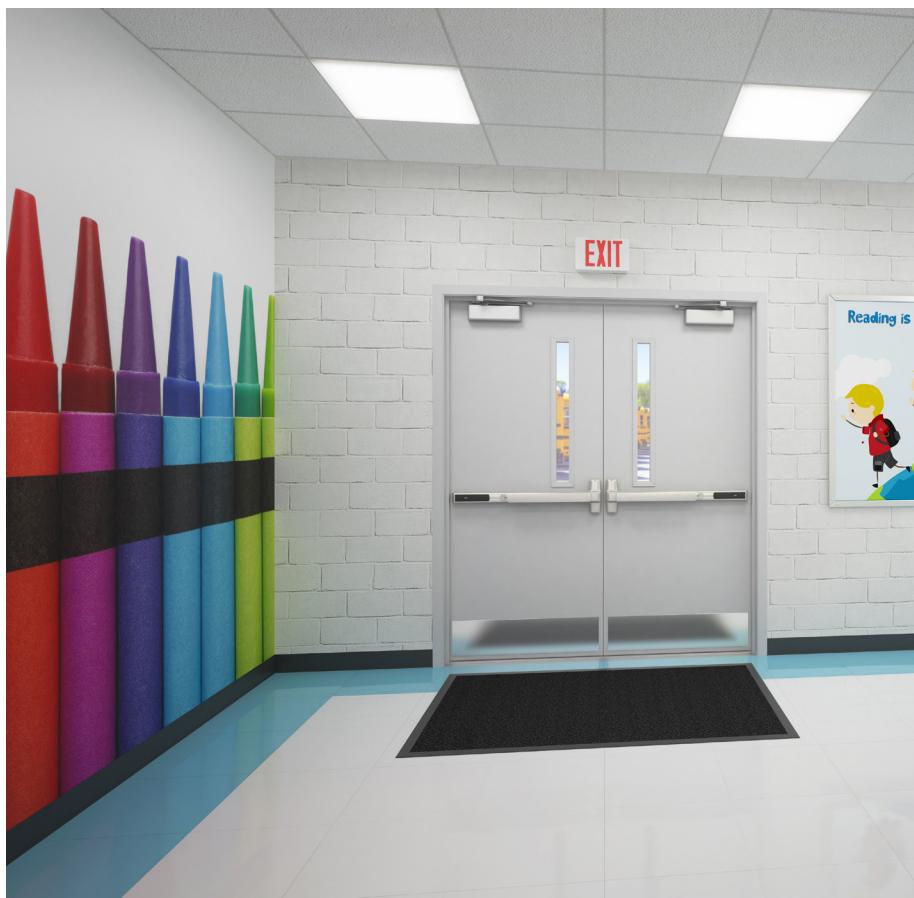
Von Duprin offers a variety of electric strikes for use with exit devices and mortise or cylindrical locksets.

It is easy to customize a solution for the specific needs of your application with our portfolio of electric strikes that offer a variety of factory orderable and field configurable options.

Assembly areas, high traffic areas and compartmentalization

Doors serving large assembly spaces like cafeterias and gymnasiums are very important to consider because of the potential for many building occupants to be gathered there. An additional point of security to consider is the use of cross-corridor doors.

However, these doors can also serve an important purpose when it comes to school security. The least complicated way to equip these doors is to specify panic hardware that is locked on the access (pull) side, with wall-mounted electromagnetic holders. The doors are held open most of the time but can be released with the push of a button-typically in the main office-that cuts power to the magnetic holders. Depending on the system, this could also be done automatically when the alarm sounds to indicate a security breach. Since the access side of the hardware is already locked, the doors are automatically secure as soon as they are closed.

	Stairs and corridors	Assembly areas - auditoriums, multi-purpose rooms, cafeterias, libraries, large classrooms
Steelcraft L Series door	Steelcraft L Series doors are designed to meet the broadest architectural requirements with premium construction, offering superior strength, stability and performance.	Steelcraft's patented Paladin™ PW Glass Light Series tornado doors are the first fire rated, tornado doors on the market. They're the perfect solution when utilizing a large assembly area as a storm shelter, providing the critical visibility and safety needed, while allowing natural light to enter the room.
Von Duprin 98/99 or 33A/35A exit device	Although using the same types of devices as stairs and corridors, congregation areas have the additional requirement that they need to be secured. Von Duprin exit devices offer a variety of locking options for seamless operation with the rest of your facility.	
LCN 4000 Series	Doors that exist to compartmentalize the building are often held open throughout the day but need to be able to quickly release and close the doors upon a fire or life safety emergency.	
TGP Pilkington Pyrostop® with School Guard Glass®	Protects against flames, smoke and heat transfer, as well as being resistant to bullets and forced entry.	
Zero STC2 sound control systems		Use in band and choir classrooms, as well as the auditorium to control sound and noise.

The value of fire-rated glazing

Fire-rated glazing is a key part of the solution. With proper specification, it can defend against the spread of fire, resist impact from rambunctious students and transfer natural light into learning areas, which can improve student performance. Clear, wireless fire-rated glazing is available with fire ratings from 20 minutes to 3 hours, can meet impact safety requirements and can even be created in configurations to protect against forced entry and bullet resistance.
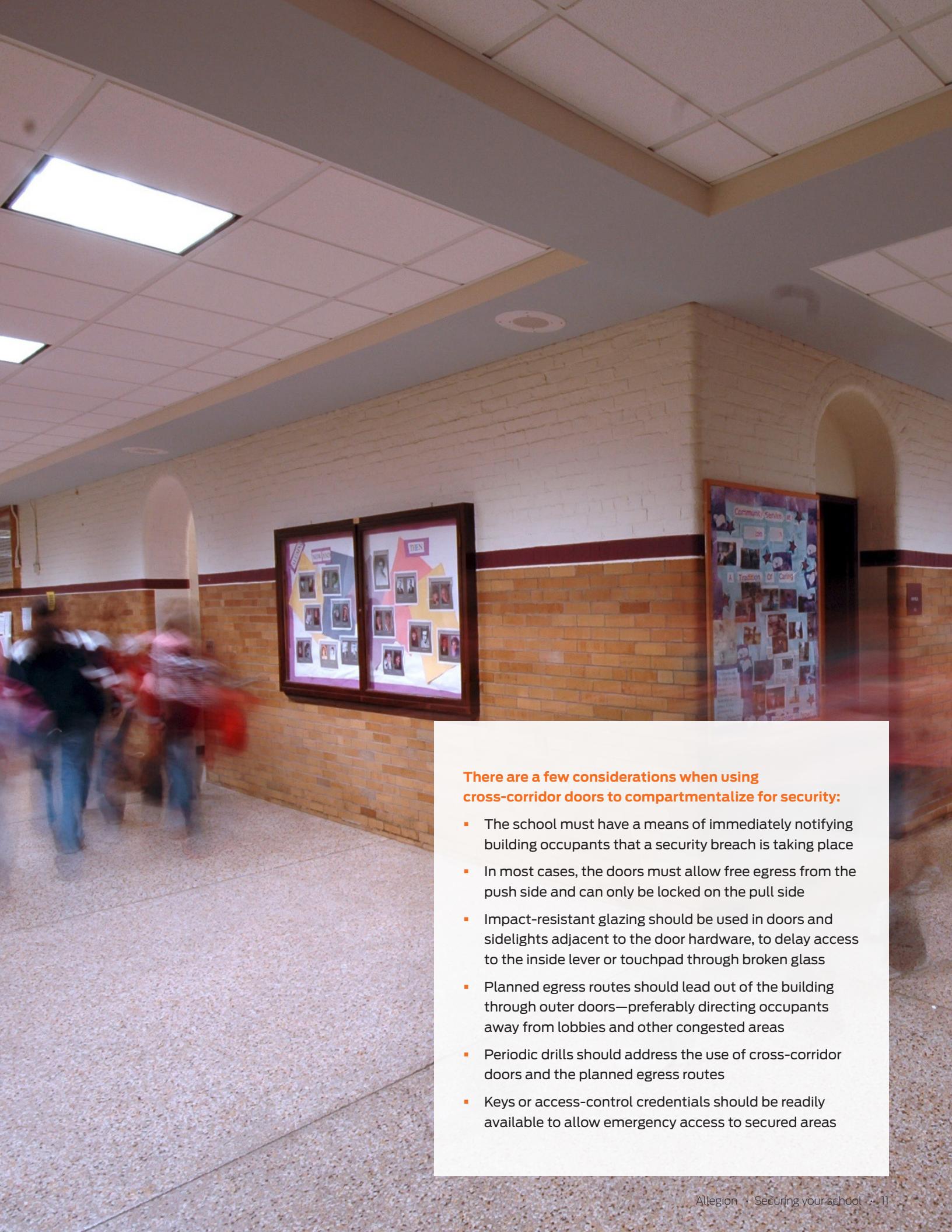
There are a few considerations when using cross-corridor doors to compartmentalize for security:

- The school must have a means of immediately notifying building occupants that a security breach is taking place

- In most cases, the doors must allow free egress from the push side and can only be locked on the pull side

- Impact-resistant glazing should be used in doors and sidelights adjacent to the door hardware, to delay access to the inside lever or touchpad through broken glass

- Planned egress routes should lead out of the building through outer doors—preferably directing occupants away from lobbies and other congested areas

- Periodic drills should address the use of cross-corridor doors and the planned egress routes

- Keys or access-control credentials should be readily available to allow emergency access to secured areas

Classroom security

Schools should have the tools in place to manage the use of each opening so that they can lockdown on demand, as soon as an emergency arises—without compromising egress. There are three options for classroom lockdown. Select the credential that best fits your building, protocols and budget. Options include patented keys, fobs, or magnetic stripe, proximity or smart cards.

- Manual lockdown: A high-security lock with an inside/outside cylinder allows a teacher/faculty member to lock the outside lever from inside the room in the event of an emergency.

- Remote lockdown: Standalone electronic door locks can be locked wirelessly with a fob or other device from anywhere in the classroom.

- Centralized lockdown: Electronic locking systems can be initiated both remotely or by a teacher in the classroom. This is a networked solution tied into the school security system.

In many applications, indicators are part of the overall security plan. With locks or exit devices, an opening can be quickly assessed—from a distance—to determine if it is locked. The convenience of using at-a-glance indicators to assess a lock saves time and alleviates confusion in the event of an emergency.

Von Duprin classroom security indicator

The Von Duprin classroom security indicator provides an at-a-glance verification of the locked/unlocked status of the door from inside of the room. Indicator in locked state has no flag present.

CO-220 Standalone classroom security lock with remote fob for local lockdown

The CO-200 features a remote fob that can be worn conveniently around the neck or wrist so that it is immediately accessible by teachers and staff members. Lockdown can be initiated for up to 10 doors in range by pressing the button on the fob. When the button is pressed, the visual indicator on the lock illuminates, verifying that the door is locked.

L Series mortise lock with 180º visual indicator

The Schlage L Series classroom security indicator provides 180º visibility of the door status, letting students and staff know whether the door is locked or unlocked from across the room. Message window is 2" wide x $\frac{1}{2}$" tall and utilizes text, symbols, and color coding to indicate status.

ND Series cylindrical lock with indicator rose

Standard on the ND Series classroom security lock, the ND Indicator rose provides at-a-glance instructions for locking the door (in panic situations, it is easy to forget whether key rotates clockwise or counterclockwise to lock the door).

The most fitting classroom solutions combine day-to-day ease of use with appropriate locking capabilities for a range of classroom layouts.

Electronic solutions	Schlage AD Series and CO Series cylindrical, mortise or exit trim	**AD-300 networked hardwired with classroom/storeroom function** - Door can be locked or unlocked by a command from the access control system, door schedule or toggle credential. Inside lever always opens door for immediate egress. Can be locked down instantly from from a central location.
		AD-400 networked wireless with classroom/storeroom function - Door can be locked or unlocked by a command from the access control system, door schedule or toggle credential. Inside lever always opens door for immediate egress. Can be locked down within 10 seconds from central location.
		CO-220 standalone with classroom security function - Door can be locked or unlocked by a door schedule or toggle credential. Inside lever always opens door for immediate egress. Up to 10 doors can be immediately locked down with remote fob.
	Schlage NDE and LE Series	**Schlage LE** - Electronic version of the L Series lock that fits an existing mortise prep. Can be used to easily upgrade classroom locks. Available for use with existing networked EAC systems or our Engage™ web and mobile apps.
		Schlage NDE - Electronic version of the L Series lock that fits an existing cylindrical prep. Can be used to easily upgrade classroom locks. Available for use with existing networked EAC systems or our Engage™ web and mobile apps.
		Engage™ Web and Mobile apps - Cloud-based web and mobile apps that allow management of the locks from a computer, tablet or phone for instant lockdown.
Mechanical solutions	Schlage L Series mortise and ND Series cylindrical locks	**Classroom security function** - Door can be locked or unlocked from either side of the door by key. Inside lever always opens door for immediate egress. **Entrance/office function** - Door can be locked or unlocked from outside by key or locked from inside by turn-button. Inside lever always opens door for immediate egress. **Storeroom function** - Door is always locked. Unlock outside with key. Inside lever always opens door for immediate egress. Note - Some states and local jurisdictions require classroom doors to be lockable from the inside, without opening the door. **Classroom security conversion kits** - provide a low-cost means to upgrade a classroom door's functionality and security.
	Von Duprin exit devices	Von Duprin offers a full portfolio of exit devices for large classrooms where occupancy requires the use of an exit device.
	TGP Pilkington Pyrostop® with School Guard Glass®	Protects against flames, smoke and heat transfer, as well as being resistant to bullets and forced entry
	Zero weather stripping	Perimeter seals provide smoke and draft control, as well as noise dampening.

Recognizing the need for lockdown

- If your door hardware requires an individual to step out of the room to lock the door, then your staff and students could be at risk

- Hardware with "unrestricted ability" to lock or unlock the door could allow anyone, including students, to take control of the opening

- Magnets or tape on the door to prevent latching violates model codes if the door is fire-rated

- If your school's exterior doors do not automatically close, then they are not in a ready position for an emergency lockdown

- Hardware that is not permanently attached to the door, requiring teachers or staff to locate and attach the device in the midst of a lockdown emergency, can take critical time

- Door hardware that slows down entering or leaving a room during an emergency situation could unnecessarily place staff and students in harm's way

- Current codes require classroom doors be able to unlock from the outside with a key, credential, or other approved means, for access by emergency responders.

Removing barricades to life safety

Barricade devices are retrofit security products that are designed to lock down a classroom in the event of an active shooter. They are often perceived as effective and inexpensive means to provide additional security. However, many of these products not only violate current life safety code requirements, but could also result in increased risk and liability.

The model codes that have been adopted in most of the United States—the International Building Code (IBC), the International Fire Code (IFC) and NFPA 101—The Life Safety Code—all require doors in a means of egress to unlatch with one releasing operation, with no special knowledge. While a handful of jurisdictions have modified their codes in order to allow classroom barricade devices, the vast majority of states require code-compliant security methods to be used. While the intention is to keep a gunman or active threat out of the classroom, there are several unintended consequences associated with these devices that could put children and faculty at great risk.

- Consider what might happen if barricade devices were deployed and the occupants inside suddenly needed to evacuate. The requirements for free egress, fire protection and accessibility must always be considered in conjunction with the need for security.

- There is no guarantee that these retrofit devices would only be deployed in an emergency situation. In fact, they may be misused by the students themselves to facilitate the types of assaults that occur more frequently in schools than active shooters.

- An active shooter could barricade the door with hostages inside, preventing entry for authorized personnel. With inconsistencies from one state to the next—and even greater variations between school districts where retrofit security devices are allowed—first responders could arrive on-scene unprepared. Not knowing what to expect and which tools are needed to access rooms equipped with classroom barricade devices can delay or prevent evacuation.

There are code-compliant locks readily available that provide necessary security without compromising safety. Our experienced security consultants can help evaluate your facility and identify solutions that fit your school, protocols and budget. Contact us today at 877-671-7011.

Industry expert Lori Greene shares the latest K-12 code-related information. Go to idighardware.com/schools to sign up for notifications today.

Designing safer schools

Architects are able to make a big impact on safety and security through design techniques. Crime Prevention Through Environmental Design (CPTED) considers physical and psychological aspects of a facility's design to help reduce opportunities for crime to occur. At its core, this strategy is designed to prevent crime by increasing the perceived risk of being caught or making it more difficult for a threat to occur. CPTED principles usually can be implemented at little to no cost, especially when designed upfront.

Three principles are defined here, but there are more that architects may find beneficial. For example, design for unsafe activities to happen in safe places. If you know that issues like drug dealing or fighting tend to happen on the basketball court, plan for the court to be in a highly visible area.

Want more design tips for schools?

Natural surveillance

Improving the visibility of potential offenders increases their perceived risk. Offenders don't want to be seen and they definitely don't want to be caught. Designing for clear sight lines means less opportunities for them to lurk or go unnoticed. This can be achieved by adding windows and improving lighting. Avoiding sharp corners and design elements that create blind spots can also improve natural surveillance.

Designed access control

Designed access control, also known as natural access control or way finding, differentiates between public and restricted spaces. This is achieved through the placement of signs, designated walkways, labeled building entrances, gates, vehicle barriers or even landscaping. The goal is to control the flow of access to approved areas.

Border definition

This is also referred to as territorial reinforcement and is another way to make the distinction between private and public property. Using fences, sidewalks and landscaping, schools can display their ownership and deter potential offenders. No trespassing or private property signs are common, as well as those that indicate a security system is currently in place.

The issue of school security is more than a product conversation at Allegion. We work with industry partners and leaders, government officials, fire marshals, educators, parents and others to bring you a balanced approach to school security that meets the needs of your students, staff and parents.

Our team of consultants have expertise that goes far beyond security products to complete opening specifications, codes and compliance, and best practices for securing the unique openings found in K-12 schools. To talk with one of our team members contact your local sales office, call 877-670-7011 or visit **us.allegion.com/schoolsecurity** for more information.

About Allegion

Allegion (NYSE: ALLE) is a global pioneer in safety and security, with leading brands like CISA®, Interflex®, LCN®, Schlage®, SimonsVoss® and Von Duprin®. Focusing on security around the door and adjacent areas, Allegion produces a range of solutions for homes, businesses, schools and other institutions. Allegion is a $2 billion company, with products sold in almost 130 countries.

For more, visit **www.allegion.com**

KRYPTONITE ■ **LCN** ■ **SCHLAGE** ■ **STEELCRAFT** ■ **VON DUPRIN**

ALLEGION™