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How to use wireless technology to upgrade security in older buildings

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If wireless solutions are not on your radar for access control installations, it is time to take notice of this growing trend in physical security. Such solutions can give your school buildings the benefits of a wired system without the cost of a hardwired system. In older buildings, this retrofit solution may be the only viable option available for new access control solutions.

Wireless solutions are one of the fastest growing alternatives in access control. You can apply wireless solutions for doors, elevators, exit devices, gates and electric strikes. More important, wireless systems connect to any of today's access control systems. That means users do not have to replace their existing panel, keys or ID credentials. Such systems are an attractive alternative to off-line, stand-alone locking systems, because they offer a real-time solution that is compatible with all brands of access control panels.

Wireless solutions seamlessly integrate into the access control panel, eliminating wire between the lock and the access control panel and providing a complete solution at each opening. Anywhere a lock is installed a wireless system can be installed. Certain applications lend themselves particularly well to wireless, including older buildings that would be difficult or impossible to hardwire. These systems preserve the integrity of the architectural design. Plus, potential asbestos issues are avoided entirely.

Elevators are another prime candidate for wireless systems. Traveling cables are routinely included at the time of installation, yet they are often ill equipped to reliably transport credential data from the cab to the elevator controller. Elevator shafts are harsh electrical environments and are often the source of data corrupting noise that becomes induced onto the card reader data lines. This causes inconsistent performance, which often gets worse over time as cable shielding decays due to continual movement.

Conversely, wireless solutions eliminate the need for the data lines in elevators up to 1,000 feet. In fact, they thrive in this environment and provide consistent, reliable data transport that does not wear out. With traveling cable installation costs ranging from \$2,600 to \$13,000 or more per cab, wireless alternatives can save thousands of dollars per elevator.

System cost is reduced by eliminating wiring from the access control panel to a door up to 200 feet away in typical building construction, or up to 4,000 feet line of sight. Installing conduit or wire molding and pulling wire down the hallways is no longer required, making these products a great fit for historical and architecturally significant buildings.

While wireless locksets work equally well on wood and metal doors, both interior and exterior, there are several other wireless applications as well. These include glass, monitored and scheduled doors, gates, elevators and portable solutions. Wireless does not need line of sight. Signals are able to penetrate cinder block walls, plasterboard walls, brick walls, and many other non-metallic materials for simplified system design and implementation.

Wireless access control is robust. Advanced transmitters and high sensitivity receivers use high frequencies to send the signal throughout an area. This method combined with spread spectrum technology, which sends the same data over many frequencies simultaneously, makes wireless very reliable.

Wireless locking systems provide the same online, real-time capabilities as wired systems and are compatible with most brands of access control panels. Access privilege changes and audit records are available at the central control terminal, all from a common database, which simplifies data entry and management. This also eliminates the need to go door to door to upload changes and download records making wireless locksets a good alternative to off-line, stand-alone locking systems.

For outdoor applications, like vehicle and pedestrian gate access, wireless links can bridge up to 1,000 feet, eliminating costly trenching. Wireless systems are especially cost effective for controlling gates around a facility. Optional directional or gain antennae are available for still longer distances.

Wireless, portable readers also provide a quick and easy way to validate credentials for visitor entrances, bus loading, and special event attendance. Simply take the wireless portable reader to the temporary location, and have card holders present their credentials.

Real-life installations prove that a wireless solution can have a substantially lower installed cost than wired alternatives. Plus, wireless systems use less hardware and install between five to 10 times faster. Even in situations that might once have seemed impossible, retrofitting electronic access control systems is now made easy and affordable with wireless solutions.

Learn more about wireless access control

For more information about options for wireless access control in your older building, please visit http://us.allegion.com/Products/electronic_locks/networked/ad_wireless_locks. To reach a professional security consultant in your area, please contact us at **888.758.9823** or fill out the **Contact Us** form on our website at allegion.com.

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