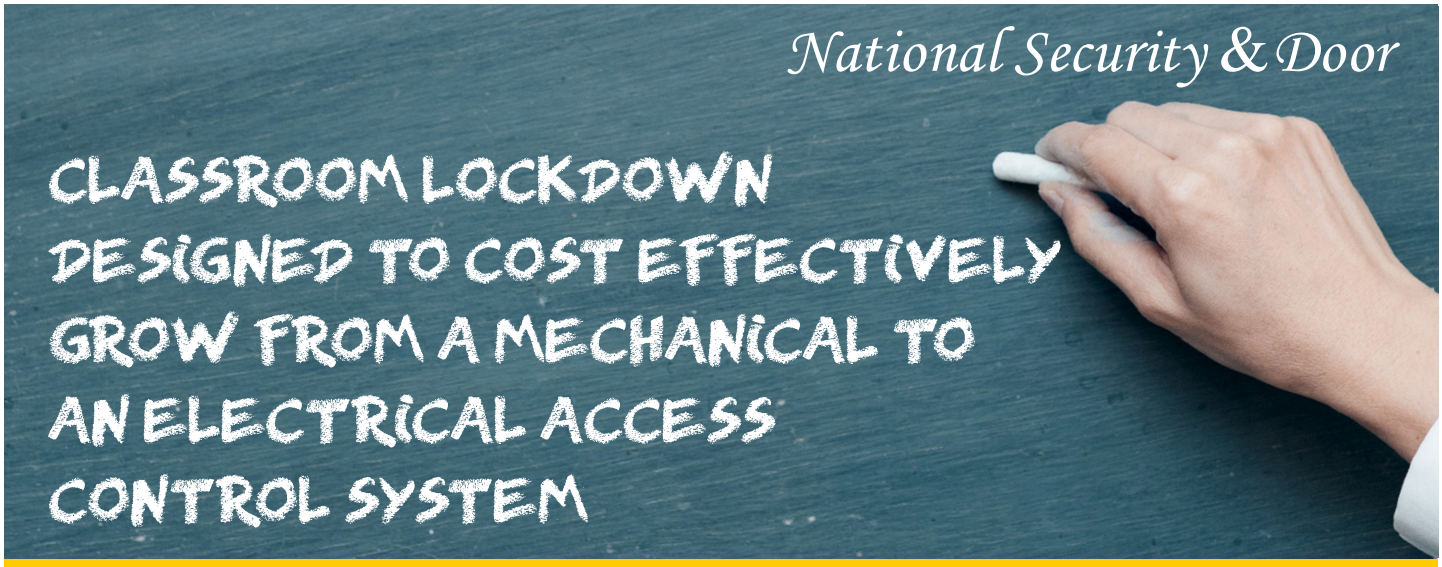

CLASSROOM LOCKDOWN DESIGNED TO COST EFFECTIVELY GROW FROM A MECHANICAL TO AN ELECTRICAL ACCESS CONTROL SYSTEM

The design and implementation of a "classroom lockdown system" may expand to more than the inclusion of just traditional classrooms. Offices, break rooms, assembly areas and any other meeting space that may house multiple individuals at the same time may be considered for inclusion in a "classroom lockdown" system design. There are other important security aspects to consider in creating a more secure environment such as, "chain resistant" double door openings, but the current discussion will be limited to a system providing a method for rooms to be locked from the inside without having to open the door.

The first thing to consider is the mechanical locking hardware on the door and how it functions on a day to day basis and during a time of emergency. The hardware selection should provide the most secure application, ease of use, confirmation of lock status without opening the door as well as adhering to life safety codes regarding single action egress. A classroom function mortise lock with deadbolt and inside visual lock status indicator provides all of these critical features. The inside locking function can be accomplished by use of a thumb turn or key. There are various opinions on which inside locking method is the best with the answer depending on the particular application and goals of the end user. Traditionally used in the education market segment, there is a considerable difference when considering a K-12 environment as opposed to a college environment. Each application calls for a thoughtful consideration of what works best in a particular situation. The "classroom lockdown" concept is expanding into office buildings, government buildings and public use buildings.

The second consideration for selecting mechanical locking hardware concerns what role the hardware will play if the decision is made to advance the lockdown system with electrical features. Even in an electrical access control systems programed for various designed lockdown capabilities the secured opening must still close, latch and secure the targeted space. Questions should be asked such as, will we be able to utilize the hardware selected for the project to leverage our initial hardware investment should the lockdown system advance to an electronic access system? Will our hardware selection compliment the new electrical lockdown system to provide redundancy for the lockdown of openings?

To answer the preceding questions with regards to advancing the lockdown system, to one with electrical features, there are some qualifying considerations that must be made. Choices available to a new construction or "ground up" renovation can be different than the choices available for a retrofit of existing openings project. In the new construction project we have a blank page to work with and can design a lockdown system for today and plan for the future. The retrofit project leaves us to confront the existing conditions and provides different challenges with each new project.

In new construction we recommend the mortise lock with deadbolt and visual indicator. Often this mortise lock can be utilized in a retrofit project as well. The installation requirements will vary but the end results can be equal in outcome. The mortise lock with deadbolt and visual indicator will work extremely well with the addition of an electric strike when upgrading a non-fire rated door. The classroom function mortise lock we selected for the mechanical only lockdown system can be modified by use of a "function conversion kit" to change the locking function to a storeroom operation leveraging the initial lock cost. The storeroom function operation keeps the mortise lock in the locked position at all times utilizing the electrical access control system and the exterior mechanical override key to access the opening. Both mortise lock functions will maintain a single action free egress function at all times.

The selection of an electric strike is guided by the use of an offset electric strike with an available deadbolt capture feature as standard. When utilizing this combination of storeroom function mortise lock and compatible electric strike, we have created a redundant lockdown system that can still function even in the event of an electrical access control system failure. The use of the inside visual lockdown indicator will still report the mechanical lockdown condition and during a fully functioning electrical access control lockdown will serve as a secondary means of securing the opening when utilized.

During the new construction project planning, a "VSR" qualified frame should be considered for installation at each opening that is to receive electrical access control or may be upgraded in the future. The cost of advancing to an electrical access control system will be dramatically reduced if the access control ready "VSR" frame is in place. This option will not exist in the retrofit project but should be considered in new construction or "ground up" renovations.

With proper planning and product selection regarding doors, frames and locking hardware the mechanical lockdown system can be positioned to cost effectively advance to a full featured electrical access control lockdown system. Each end user will ultimately decide the best approach for their particular needs and goals. Our role is to help in the discovery of available choices and help match the best fit options to the particular end user needs and goals.

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