

ACCESS CONTROL

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Access control is the practice of controlling or restricting entrance to a space, room, building or property to an authorized person. Physical access control can be achieved by a human control point, by mechanical means or by using technology effectively.

Physical access control is a matter of who, where, and when. A proper access control system determines who is allowed to enter or exit, where they are allowed to enter or exit, and when they are allowed to enter or exit. Historically this accomplished through the use of a guard that controlled entry to a space or keys and locks. A guard would allow an individual access only if they met certain criteria. When a door is locked only someone with a key can enter through the door depending on how the lock is configured. Mechanical locks and keys do not allow restriction of the key holder to specific times or dates. Mechanical locks and keys do not provide records of the key used on any specific door and the keys can be easily copied or transferred to an unauthorized person.

Mechanical access control effectiveness is impacted when a mechanical key is lost or the key holder is no longer authorized to use the protected area, resulting of a re-keying of the lock. The bane and main weakness of any mechanical access control system is requirement for a master key, grand master key and worst of all the great grand master key (GGMK). The requirement for a “master” key came about when guards had to have access to a space that may have been one of hundreds of space under surveillance. To aid the guard a master key was provided that provided access to many doors in the same facility. The compromise of the “master” key will have significant impact on the overall security of a facility.

The application of technology is considered a step forward in access control. Electronic access control uses sensors and computers to solve the limitations of mechanical locks and keys. A wide range of credentials can be used to replace mechanical keys. The electronic access control system grants access based on the credential presented. When access is granted, the door is unlocked for a predetermined time and the transaction is recorded. When access is refused, the door remains locked and the attempted access is recorded. The system will also monitor the door and alarm if the door is forced open or held open too long after being unlocked.

The security industry views electronic access control to be more effective and less vulnerable than mechanical access control. Guards still play an important roll in access control, but also fall behind electronic access control when cost benefit analysis is considered.

