



White Papers: Electric Strike Design & Application

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Strike - A metal plate located in the door jamb that is pierced or recessed to receive a projected bolt or latch, sometimes called a keeper.

Electric Strike - An Electric Strike is a jamb mounted electrical device activated by a push switch, keypad or card access control device that controls the locked or deadlocked mode of the movable keeper. When the keeper is locked and the door is closed, the lock's extended latchbolt is captured, keeping the door locked. When electrically activated, the keeper is permitted to pivot, thereby releasing the door lock's extended latchbolt and permitting the door to be pushed open without turning the knob or lever to retract the latch.

Several different electric strike designs are available to work with specific types of mechanical locks, including, cylindrical locksets, mortise locksets, deadbolts, and exit devices. Electric strikes are occasionally equipped with a buzzer to indicate when the keeper is released and the door may be open.

Failsecure Mode – A failsecure electric strike is **locked when de-energized** and unlocked when energized by the access control or other type of switching device. Failsecure electric strikes will lock or stay locked during a building power outage. A power supply with battery backup is required to provide unlocking capability during a power loss.

Failsafe Mode – A failsafe electric strike is **locked when energized** and unlocked when de-energized by the access control or other type of switching device or power loss. Failsafe electric strikes will release the door latch during a building power outage. A power supply with battery backup is required to provide locking capability during a power loss.



15 Series



25 Series



45 Series

Application

Electric strikes are possibly used more than any other type of electric locking device due to their ease of installation and compatibility with several types of door locksets and exit devices. All wires are maintained in the lock jamb, unlike electrified locksets that require a power transfer hinge and the labor of running wires through the door to the lockset.

UL Listed failsecure electric strikes may be installed on non-fire rated and fire rated doors and frames. Failsecure strikes are permitted on fire rated doors and frames as all building and fire codes require that fire doors stay latched even when unlocked. This feature ensures that smoke and flame does not travel to other parts of the building.

Failsafe electric strikes may only be installed on non-fire rated doors and frames. Due to their inability to keep the door latched when unlocked, they will compromise the integrity of fire rated doors by allowing the door to open when unlocked, thereby permitting smoke, gases and flames to escape into other parts of the building.

Stairwell Doors

Failsecure electric strikes are not permitted for use on stairwell fire rated doors as they will not unlock the stair side of the door during a fire emergency or power outage as required by fire life safety codes. Stairwell doors are considered two way exits and both sides must unlock in an emergency to provide re-entry by the public and entry by the fire department.

Failsafe strikes may not be used on fire rated doors, including stairwell doors. As these doors are not latched when the failsafe strike is released, fire door integrity is compromised, permitting fire, smoke and gases to travel through the opening.

The proper locking devices for stairwell door applications include ANSI Grade 1, failsafe electrified cylindrical or mortise locksets and failsafe mortise exit devices.