



# Electrified Latch Retraction Locks

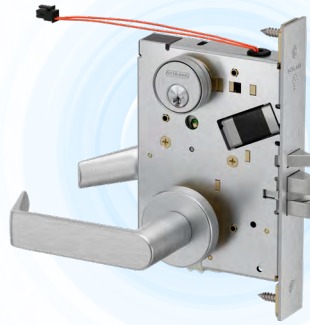
Key Benefits for Retrofits



Campus Security Today,  
Nov/Dec 2025 Edition

## BUILDING OWNERS AND FACILITY MANAGERS INCREASINGLY RELY ON ELECTRIFIED HARDWARE TO ENHANCE SECURITY WHILE MEETING ACCESSIBILITY STANDARDS.

Among these technologies, electrified or motorized latch retraction locks are especially effective for retrofit projects where existing door and frame conditions complicate upgrades. Latch retraction capable locks combine security, accessibility and code compliance benefits, making them ideal for retrofitting fire-rated and non-rated openings in schools, healthcare facilities, commercial buildings and more.



### What is Electrified Latch Retraction?

Latch retraction capable locks are equipped with an electric motor that retracts the latch bolt when energized. This allows the door to open freely without manually turning the lever or pushing the latch bolt back, which is critical for automatic door operators and hands-free access.

Unlike electric strikes that release the latch by moving the strike plate, latch retraction locks physically pull back the latch bolt itself. Some latch retraction locks are designed to overcome static pressure conditions that often cause electric strikes to fail or "buzz" without releasing.



### Why Latch Retraction Locks Are Ideal for Retrofit Applications

Retrofitting electrified hardware into existing buildings poses challenges, especially for fire-rated openings and legacy door frames. Modifying fire-rated door frames to install electric strikes is generally prohibited by building codes because cutting into the frame can void the fire rating and require costly re-certification or replacement.

Latch retraction locks can help solve this problem by eliminating the need to alter the door frame. Power wiring is routed through the door itself, which can be replaced or factory-prepped with raceways for wiring. This preserves the fire rating of the frame, reduces labor and material costs, all while minimizing disruption. Note, however, that use of an existing door being field modified for a raceway may require prior approval from the door manufacturer and the listing laboratory.

Key retrofit benefits of latch retraction capable locks include:

- **Hands-free access:** This can be particularly helpful for accessible single-use restrooms, doors where cart use is common, and doors where momentary or prolonged passage function is desired.
- **Quiet operation:** Motorized retraction of the latch will tend to be much quieter than solenoid-based solutions such as electrified strikes.
- **Preservation of Fire Ratings:** When converting from mechanical to an electrified solution, no frame modifications are needed, maintaining compliance with NFPA 80 and local codes so long as the door itself has prior fire listing compatibility for a raceway or is being replaced.
- **Simplified Installation:** Many existing non-fire rated doors are already prepped for mortise locks, allowing latch retraction capable locks to fit into the same pocket with minimal adjustments.
- **Future-Proofing Security:** Latch retraction capable locks can be used independently with a localized control such as in a reception area or as part of a larger access control system, facilitating a smooth transition from mechanical keyed locks to electronic credential-based entry.
- **Reliable Operation Under Load:** Some newer motorized latch retraction lock options are designed to overcome side load to help ensure consistent door opening even under pressure from HVAC systems, warped door conditions or weather seals.

### ADA Compliance: Enhancing Accessibility

The Americans with Disabilities Act (ADA) requires interior doors to open with no more than 5 pounds of force, a standard often met using automatic door operators. However, automatic operators cannot overcome the physical barrier of a latched door.

Latch retraction capable locks are a preferred hardware solution to enable automatic operators to function effectively. By electrically retracting the latch bolt, these locks help ensure doors open easily and quietly for people with disabilities, meeting ADA requirements without compromising security.

In retrofit scenarios, ELR locks are particularly valuable for:

- **Accessible Restrooms:** Single-occupancy restrooms often require hands-free operation for hygiene and accessibility.
- **School Secure Vestibules:** Schools retrofit vestibule doors to enhance security and accessibility.
- **Healthcare Facilities:** Doors to storage rooms or patient areas where staff frequently push through carts or equipment benefit from reduced door damage, improved efficiency and quiet operation.
- **Package Delivery Entries:** Anywhere "hands full" situations frequently occur will benefit from a latch retraction lock application.



### The Alternative to Electric Strikes: Why Latch Retraction Locks Win in Retrofit Situations

Electric strikes are a common type of electrified hardware but have limitations in retrofit and ADA applications:

- **Meeting Code:** On fire-rated doors, electric strikes cannot meet the positive latching requirement unless installed as fail-secure; however, latch retraction locks can provide positive latching in either fail safe or fail secure mode.
- **Sideload Pressure:** Latch retraction locks are more dependable when there is sideway pressure on the door.
- **Noise:** It's no secret that solenoid-based electric strikes are noisy and not suitable for any setting where quiet is valued.
- **Higher Power Consumption:** Latch retraction locks consume less power than e-strikes, which saves energy, especially on doors that are left unlocked or held open for long periods.
- **Loose Tolerances:** Electric strikes must accommodate a wide range of latches making their receiving pocket larger than necessary, which can allow door movement or rattling unless the faceplate is well matched to the lock latch.

*In contrast, electrified/motorized latch retraction locks operate more quietly, efficiently and reliably under pressure, making them better suited for retrofit projects requiring consistent ADA-compliant operation.*

### Conclusion

Electrified latch retraction locks offer a compelling retrofit solution to improve accessibility, security and code compliance. Their ability to preserve fire ratings, help ensure smooth operation under pressure, and integrate with fire and access control systems makes them invaluable in schools, healthcare facilities, commercial buildings and beyond.

Contact an Allegion Professional to Learn More

Author, Mark Kuhn, is a Specification Consultant for Allegion.



Commercial.Schlage.com

© 2026 Allegion plc  
016560, Rev. 01/26