

# Quiet Solutions

For Managing Hands-Free Access Control

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## IN TODAY'S FAST-PACED AND HEALTH-CONSCIOUS WORLD, THE DEMAND FOR HANDS-FREE ACCESS CONTROL SOLUTIONS IS GROWING RAPIDLY.

With increasing concerns about hygiene, convenience, and accessibility, building owners and architects are seeking modern approaches that enhance security and streamline entry. Among the more promising solutions are motorized latch retraction locks. These can be quiet, efficient, and reliable alternatives to traditional electric strikes. They offer a blend of functionality and aesthetics, making them ideal for a wide range of environments and applications.

### Why Hands-Free Solutions Matter

Hygiene and Health came to center-stage during the COVID-19 pandemic highlighting the importance of reducing touchpoints in shared spaces. Hands-free solutions minimize physical contact with door hardware, reducing the risk of transmitting bacteria and viruses. This is particularly vital in healthcare facilities, schools, and other high-traffic environments. But hands-free is also about convenience in "hands-full" situations. Whether it is a healthcare worker pushing a cart, a delivery person carrying packages, or a parent managing a stroller, hands-free access can be invaluable.

Perhaps most importantly, hands-free solutions play a vital role in improving accessibility for individuals with disabilities. For people who use wheelchairs, walkers, or have limited hand mobility, traditional door hardware can pose a challenging barrier. By integrating motorized latch retraction with automatic door operators and wave actuators, facilities can provide a truly inclusive experience that allows all users to move freely and independently.



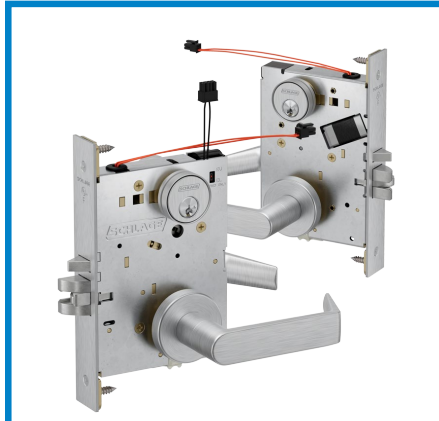
### The Advantages of Motorized Latch Retraction Solutions Over Electric Strikes

Newer motorized latch retraction locks represent a significant advancement in access control technology, offering numerous benefits that address the limitations of traditional systems like electric strikes. While electric strikes have long been a staple in access control, they come with both strengths and limitations. Their versatility and compatibility with auto operators make them a common choice, especially in retrofit scenarios. They can be tied into fire alarm systems and used on fire-rated doors—provided they are fail secure and meet positive latching requirements. However, they can also introduce various challenges.

One of the most noticeable differences is noise. Solenoid-based electric strikes can be loud, which can be disruptive in quiet environments like offices or healthcare facilities. Additionally, installing an electric strike often requires cutting into the door frame, which may result in additional considerations on fire-rated entries. Security concerns can also become an issue when electric strikes are used without latch guards.



Mark Kuhn, a seasoned hardware professional and specification consultant for Allegion, with over four decades in the industry recently shared an article depicting the electric strike as a legacy technology. "The electric strike was developed in 1886, by D. Rousseau and patented as an 'electric door opener.' The purpose was to remotely release apartment entrance doors." While it has evolved, many of its limitations remain. He went on to say that "most models of electric strikes will not release reliably under sideload pressure." Causes here can be door misalignment, seals and gaskets or HVAC pressure. They also require more power and generate more heat than motor-driven alternatives. And when it comes to access control integration, electric strikes typically only perform one function—releasing the door. To monitor door status or provide request-to-exit functionality, additional components and wiring are needed.



In contrast, motorized latch retraction locks can offer a modern and more elegant solution that addresses many of these challenges. These systems are designed to operate quietly, making them ideal for noise-sensitive environments. They use standard latch mechanisms and do not require guards for security which are not aesthetically pleasing. They also meet fire code requirements and support positive latching in either fail safe or fail secure mode, making them a safer and more compliant choice for fire-rated applications.

An advantage of using a motorized latch retraction lock is in the conversion of a mechanical or electromechanical lock to a latch retraction solution. Many models use the same pocket as other locks in their series. Wiring is more efficiently routed through the door and preserves the integrity of the door frame while also placing power on the hinge side for both the lock and the auto operator connections.

These new models go even further by offering additional lever control functions using dual motors to separately control latch and lever. This enables advanced features like remote locking/unlocking, door status monitoring, and the ability to overcome binding conditions caused by static pressure or side load—issues that traditional electric strikes often struggle with. These innovations make motorized latch retraction systems not only more functional, but also more adaptable to modern access needs. Applications include accessible restrooms, high security areas, infection control in hospitals, clean room labs, cart access areas, delivery doors, low traffic openings where limited or timed access is needed such as employee entrances or service/utility closets, and security access areas in schools.

### Important Factors When Considering a Hands-Free Access Solution

When choosing a hands-free access control solution, consider the following factors to ensure the best fit for your needs:

- 1. Quiet Operation**  
Prioritize motorized options that reduce noise, especially in environments where silence is critical. Also look for an auto operator known for quiet or if using a pneumatically powered solution, place the air compressor at a central location away from the door, where its sound can be muffled or insulated.
- 2. Ease of Retrofit**  
Look for solutions that minimize installation complexity and maintain the integrity of existing door frames. Be aware that running wiring through a door originally set up for a mechanical lock may require special equipment and licensing to ensure the integrity of the door and if applicable, its fire rating.
- 3. Hygienic Actuators**  
Pair your access control system with hands-free wave actuators to further reduce touchpoints and promote hygiene.
- 4. Versatility**  
While motorized latch retraction solutions are not new – some have been in market over 10 years, newer versions may feature more monitoring and functional options including independent lever control.



### Key Takeaways

Motorized latch retraction solutions represent a modern, efficient, and reliable approach to hands-free access control. With their quiet operation, enhanced functionality, and compliance with many modern codes and standards, they offer a compelling alternative to traditional systems. By embracing this technology, building owners and architects can create safer, more accessible, and more hygienic spaces—without sacrificing aesthetics or performance.

Contact an Allegion Professional to Learn More

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