

VON DUPRIN®

Guide to selecting an electric strike

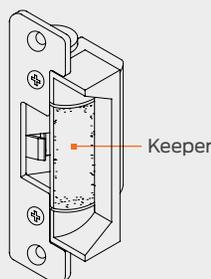
With so many electric strikes on the market today identifying the right solution can seem like an overwhelming task. This brief guide highlights some important considerations when making your selection. Allegion security and safety consultants are here to help you every step of the way. You can turn to us for expertise and service at any time before, during or after installation.

Openings which do not function properly from a mechanical perspective cannot effectively carry out their mission as access control points. Door misalignment and sag should be identified and corrected before access control is deployed. Likewise, worn or misaligned hinges should be addressed to prevent damage to the door and frame. Your door closer must also be strong enough to allow for proper latching.

1. Application

Electric strikes are a cost effective alternative for applications where electrified hardware is not practical. What makes electric strikes different from traditional lock strike plates is the movable keeper. The keeper interacts with the latch bolt of the lockset or panic hardware, either securing it to lock the door, or allowing the latchbolt to be pulled through the keeper for access.

Figure 1



When selecting a strike, begin by defining the application and operational requirements. For example, you may have a perimeter door with an entry buzzer or emergency exit doors connected to the fire alarm system. Regardless of the application, Von Duprin offers a full portfolio of electric strikes to address it.

Our new construction portfolio provides a wide breadth of factory orderable options to address virtually any application. For aftermarket installations where flexibility is key, our portfolio includes modular products with many field configurable options. No matter what Von Duprin electric strike you choose, you can be confident that it will perform. Each of our strikes is designed and tested to meet the highest standards in the industry.

2. Lockset

There are a wide variety of locksets on the market today which necessitates the need for many different types of electric strikes. To determine which strike is compatible with the manufacturer and model number of your lockset there are several factors you need to consider, including:

- the type of lockset — cylindrical, mortise or exit
- the latch bolt dimensions

The electric strike must accommodate both the dimensions and position of the latchbolt, deadlatch and in some circumstances the deadbolt. It is important

to reference the manufacturer's compatibility chart and stay within spec to minimize the amount of alterations required. Field modification of the door or frame typically voids the label on fire rated openings.

When electric strikes are used with panic devices it is important to designate the type — rim, concealed vertical rod/cable or surface vertical rod. Electric strikes are not typically recommended for use with vertical rod devices because it must be installed less bottom rod (LBR).

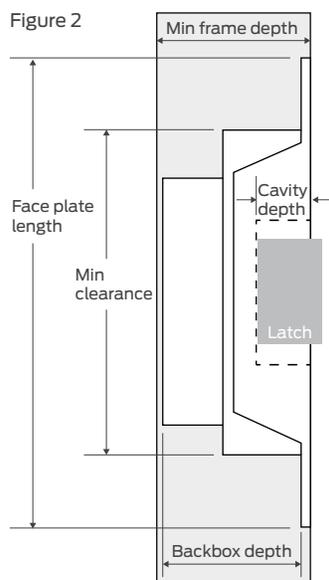
Choosing a compatible electric strike is only the first step. You must also check the installation instructions and properly position the centerline of the electric strike in relation to the centerline of the lockset to ensure optimal performance.

3. Type of doors

An electric strike replaces the standard mechanical strike of a lockset or exit device. On single doors, the electric strike mounts to the frame. For a pair of doors the electric strike can mount either to the inactive leaf or to the mullion. When selecting an electric strike for such applications it is important to ensure that the stile width and thickness of the inactive leaf can accommodate the strike prep. Electric strikes are not typically used on pairs of doors where both leaves are active.

4. Dimensions

When retrofitting a mechanical strike, begin by examining the dimensions of the existing prep. The height of a standard ASA prep is 4 7/8", which corresponds to the typical face plate length of the strike. Likewise you must examine the height, width and depth of the cutout to ensure it can accommodate the minimum clearance and backbox depth of the strike. As previously discussed, it is important to also note the dimensions of the latchbolt to ensure the strike cavity is deep enough to accept it.



5. Door and frame material

Electric strikes have unique design elements to accommodate wood, hollow metal and aluminum doors and frames.

- **Wood** frames typically require longer face plates to provide stability. Cutting away too much of a wood frame can compromise its integrity so proper installation is essential.
- **Hollow metal** frames are sometimes filled with grout, making installation difficult. Many Von Duprin strikes feature an internal solenoid to allow for easier installation even if a door is reinforced.
- **Aluminum** are often between 1 3/4" and 2" wide and include glass that can protrude into the frame, so it is important to verify the dimensions.

6. Codes

Fail-secure/electrically unlocked electric strikes are most commonly used. Fire-rated doors require that fail-secure/electrically unlocked strikes be used per NFPA 80.

Fail-safe/electrically locked strikes have more limited applications and are thus less frequently installed. Fail-safe/electrically locked strikes are non fire-rated.

7. Power requirements

The most common electric strikes on the market today are 24 VDC (direct current). However, other options including 12 or 24 VAC (alternating current) are also available. All devices fed from a power supply must be the same voltage and current output capability. The total load of all devices should not exceed 75% of the listed capacity of the power supply.

8. Additional options

Finally it is important to document any additional options that are required.

- **Latchbolt monitoring** indicates when the latchbolt is extended into the strike cavity.
- **Locked status monitoring** indicates if the strike is electrically locked or unlocked.
- **Rectifier kit** allows DC strikes to be used where AC current is present.
- **Entry buzzer** for fail-secure applications- where an audible indication is required to notify that the door is unlocked.

About Allegion

Allegion (NYSE: ALLE) creates peace of mind by pioneering safety and security. As a \$2 billion provider of security solutions for homes and businesses, Allegion employs more than 8,000 people and sells products in more than 120 countries across the world. Allegion comprises 27 global brands, including strategic brands CISA®, Interflex®, LCN®, Schlage® and Von Duprin®. For more, visit www.allegion.com.