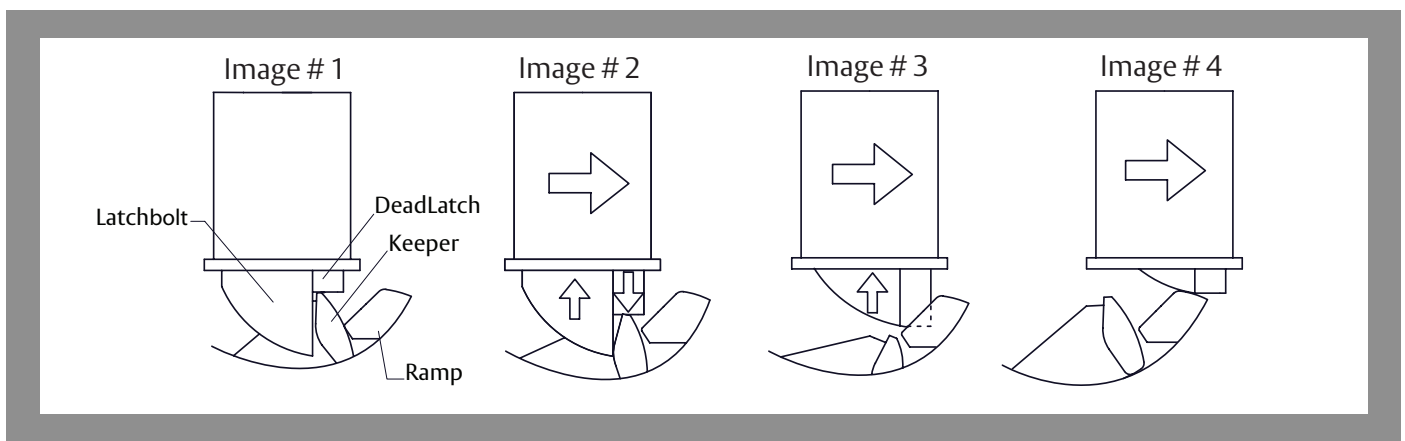


NOTE: Thank you for purchasing the new HES 5900 series electric strike. Before you begin installation, please take a few minutes to familiarize yourself with this product to understand how it functions and what makes it different from a standard electric strike.

A NEW KIND OF ELECTRIC STRIKE

A standard electric strike requires a cutout on the side of the door frame to allow the extended latchbolt to exit the frame. In contrast, the 5900 is designed to utilize special internal ramps to eject the latchbolt from an unmodified frame. For the 5900 to operate correctly, it is important for you to first understand the relationship between the unit's internal ramps and the position of the latchbolt.



1. Initially, the 5900 operates very much like a standard electric strike. With the door in the closed position, the latchbolt is held secure by the 5900's keeper (Image 1).
2. When energized, the keeper releases the latchbolt and as the door moves forward the deadlatch begins to drop (Image 2).
3. As the door continues to move forward the deadlatch and latchbolt will become fully released. The latchbolt will then pass from the keeper and begin to slide up the internal ramps (Image 3). Note: It is important that the deadlatch pass between the two internal ramps without contacting either ramp. The ramp adjustment is explained in detail within installation instructions.
4. As the door continues to open, the latchbolt and deadlatch will continue to slide up the internal ramps and out of the door frame to release the door. (Image 4)

WHY ANGLES ARE IMPORTANT

The 5900 ramps are designed with critical angles that minimize both latchbolt wear and the force required for exit. For optimum performance, the latchbolt should be positioned at a 40 to 45 degree angle in relation to the ramps of the 5900. An angle more than 45 degrees will steepen the ramp and impact the performance of the 5900 (Image 5).

We understand that correctly measuring this angle in the field may be difficult. The next section is designed to help you understand some simple techniques to evaluate the condition and relationships between the door, the latchbolt, the frame and the 5900.

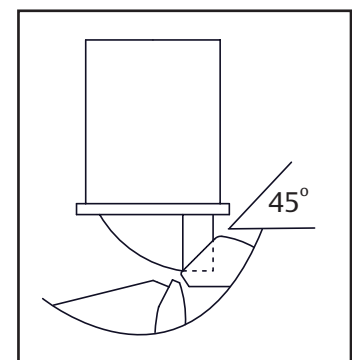


Image # 5

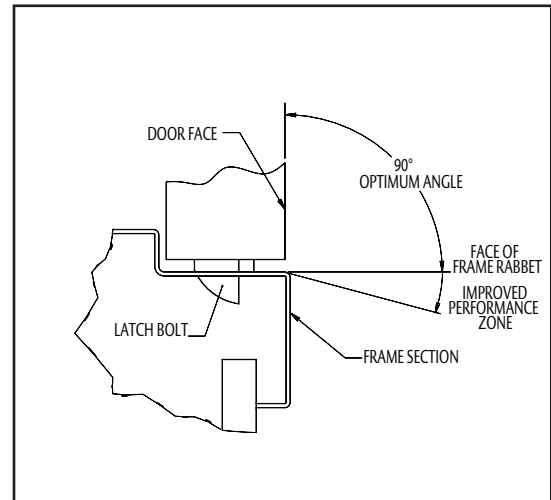
NOTE! The 5900 electric strike requires that the opening be plumb and square to insure proper catch and release of the latchbolt.

EVALUATE OPENING

Although the design of the 5900 provides adjustability to compensate for frame and door irregularities, in some cases, adjusting the frame and door back to industry standards is just not an option. Here are some tips to quickly compensate for frame twist and to determine the condition of the latch bolt.

One way to measure frame twist is to place a carpenter square on the stop and the face of the door. If the angle is less than 90 degrees, the 45 degree ramp angle of the 5900 is steepened and may need to be corrected as shown at right.

We also recommend you check the condition of the latch bolt prior to installing the 5900. Poorly constructed, worn out or damaged latch bolts may not slide along a ramp at any angle. To check the condition of your latch bolt, we recommend applying a slight force to the tip of the latch bolt (about 45 degrees to door face). Make sure the latch bolt can be pushed up into the door.



ACCOMODATING FRAME TWIST

When a frame is twisted, the relationship between the face of a closed door and of the inside face of the frame (i.e. Rabbet) may not meet the 90 degree industry standard. Untrue frames and doors impact latch bolt wear and the force required to exit, so we recommend you ensure that the angle is between 90 ~ 95 degrees.

If manipulating the frame is not possible, we recommend placing several shims under the top and bottom (stop side) of the faceplate (Image right). This effectively increases the 5900 ramp angle and compensates for frame twist. This can also be performed by placing shims under the top and bottom (bevel side) of the latchbolt (Image below right).

