

FM 164 10/10



 Door Must Swing Freely

Installation Instructions

Surface Vertical Rod Exit Devices

ED5400 (A) Series

ED5470 (B) (F) Series

1. Mark Door

Locate and Mark Horizontal and Vertical Reference Centerlines as shown.

LHR door shown preparation is typical for both door hands.

Caution: If device is mounted higher or lower than shown, rod length must change. Lengthen or cut top and bottom rods as shown on Step 7.

LBR - For ED5470 Series Less Bottom Rod Devices, omit bottom latch and strike installation steps and see separate instructions for ED5470 Series top latch and strike.

NOTE: Less Bottom Rod (LBR) Devices should not be used where security is a primary concern.

Single Door or Pair without Mullion

Measure Gap Write Dimension Here: _____

2. Prepare Door, Frame & Sill

A. Locate "Device Template" aligning VERTICAL REFERENCE and HORIZONTAL REFERENCE lines on door and template. Tape template to door face.

B. Extend centerline of Rods and Strikes from "Device Template" to door top and bottom, on door face.

C. Locate "Top Latch & Strike," "Bottom Case," and "Bottom Strike" templates, aligned on centerline of Rods and Strikes on door. Tape templates in place.

D. Locate and tape Trim Template to door (See instructions packed with Trim).

E. Spot and prepare holes:

Device and Bolt Case Plates:
Each (2) 1/4-20 Machine Screws*, or
(2) 3/8 (10) Dia. Sex Nuts & Bolts

(*) Metal reinforced door only.

Top Strike: For ED5400 Series (2) 10-24 Machine Screws, or (2) #10 Wood Screws
For ED5470 Series (2) 12-24 Machine Screws, or (2) #12 Wood Screws

Bottom Strike: 5/8 (16) dia. 3/4 (19) deep hole.

3. Clear Raised Door Molding

Device must seat flush on door surface, or on shims that keep it parallel to door face

(1) Shim Kit #650F92-8 needed to clear each 1/4 (6.4) of raised molding.

Longer mounting screws needed when more than (2) shim thicknesses of 1/8" (3) each are used.

See Shim Kit Option on front page.

4. Size Device

Device must be field cut to size, unless standard opening and device are 36" (0.91m).

Minimum: 3/4 (20)
Minimum to Stile Edge: 1/2 (13)
Standard: 15/16 (49)
Minimum: 11/16 (43)

5. Install Device

A. Mount Trim (Follow Instructions Packed with Trim).

B. Seat Bar in Place. Fasten Device Head (2 PRHMS or SNB).

C. Set Bar Level. Locate End Clamp Holes.

D. Prepare End Clamp Mounting Holes. Mount End Clamp.
(2 # 1/4-20 PRHMS or 3/8 (10) dia. SNB)

E. Check Slide Action (Slide Travel $\approx \frac{9}{16}$ (14)).

- Depress touchbar (slide should move up). Release touchbar (slide should fall back to original rest position).
- Activate trim (slide should move up). Release trim activator (slide should fall back to rest position).
- (NOT FOR FIRE DEVICES) Depress touchbar, turn dogging key clockwise (bar must remain depressed, slide must remain in up position). Turn dogging key counterclockwise (bar should extend, slide should fall back to rest position).

NOTE: When resulting operation is faulty, check first for visible binding or interference. If there is no apparent reason for the fault, remove item from the door and recheck its operation before assuming that it is defective.

F. Tighten All Mounting Screws.

6. Set Latches, Strikes & Guides

Top Strike Detail for ED5400 Series

NOTE: Reserve third screw for Step 8.

NOTE: For ED5470 Series Top Strike and Strike Angle Mounting Plate, refer to separate Instruction Sheet / Template FM 543.

Rod Guide Detail
(Typical 2 Places)

Bottom Strike Detail

Bottom Strike Detail
Strike (Press in Place)

Bottom Strike Detail
Strike (Press in Place)

7. Prepare Rods

Top Rod

Ready for 84 (2134) Openings

Openings Under 84 (2134)
For Top Rod cutoff length, deduct OPENING HEIGHT from 84 (2134).
Example:
Opening = 80 (2032)
84 - 80 = 4 or (2134) - (2032) = (102)
Top Rod must be cut 4 (102).

Openings Over 84 (2134)
For Top Rod additional length, deduct 84 (2134) from OPENING HEIGHT.
Example: Opening = 99 (2515)
99 - 84 = 15 or (2515) - (2134) = (381)
Top Rod must be lengthened 15 (381).

To Lengthen Rods

- Use Rod Extension(s) to extend Rod to length needed or longer (2", 6", or 12" Rod Extensions available).
- Cut excess length from end of rod with pin hole.
- Apply screw locking compound* to Rod Extension(s) male threads. Thread Extension(s) until seated tight over Rod.

To Cut Rods

- Cut from end with pin hole. NEVER CUT THREADED END.
- Press Jig till it bottoms over Rod.
- Drill 1/8 (3.20) Dia. hole thru, 3/8 (10) from end of Rod.

Bottom Rod

Ready for 39-15/16 (1014) Floor to Device Center

To Lower Device

A. Bottom Rod cutoff length is distance that device was lowered below 39-15/16 (1014).

B. Add to Top Rod a length equal to the Bottom Rod cut.

Examples:
Device at 36 (914) from floor.
39-15/16 - 36 = 3-15/16 or (1014) - (914) = (100)
The Bottom Rod must be cut 3-15/16 (100).
The Top Rod must be lengthened 3-15/16 (100).

8. Complete Installation

A Install Rods, as shown.

B Set Strike Roller between Tripping Lever and Bolt. DO NOT PRELOAD BOLT. Shim as needed.

C Test Device action by Touchbar, by Trim, by Dogging. ADJUST AS NEEDED. Upper Bolt should retract flat. Bottom Bolt should retract 1/2 (12). Bolts extend when door shuts and Top Strike hits Tripping Lever.

D1 Bottom Rod Adjusting Screw TILT ROD OUT & TURN

D2 Top Rod Adjustment TILT ROD OUT & TURN

E After acceptable Device function, install third screw in top Strike to lock Strike in position. 10-24 x 5/8" FHMS

F Install Device & Latch Covers. (2) 8-32 PFHMS each.

Maintenance: 1. Periodically remove covers and coat mechanisms with a silicone base lubricant. This is regularly required in corrosive environments for proper product function.
2. Check mounting fasteners periodically. Retighten if found loose. Apply screw locking compound (available at automotive part stores) or change part fasteners if screws continue to back up.