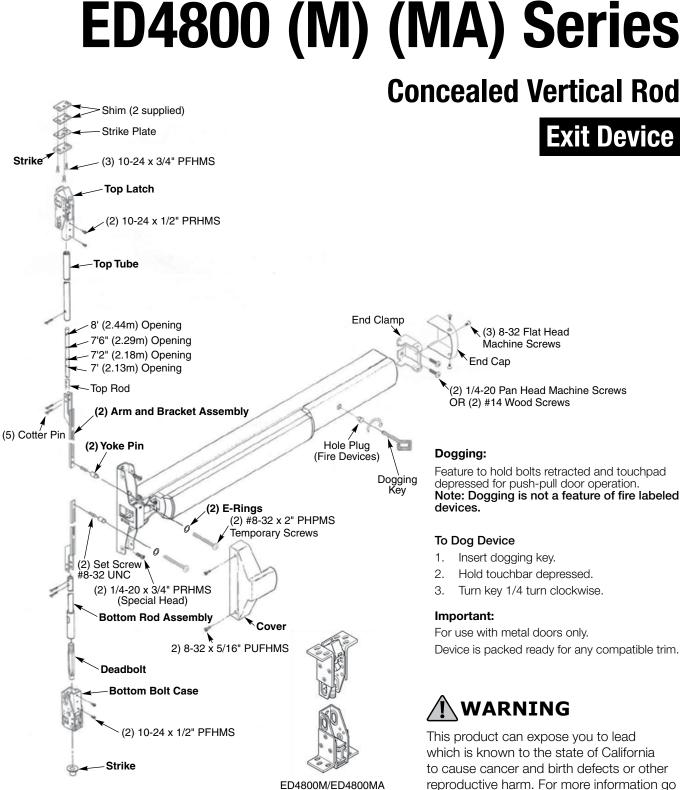
# **Installation Instructions**



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For installation assistance contact Corbin Russwin 1-800-543-3658 • techsupport.corbinrusswin@assaabloy.com ED4800M/ED4800MA Top Latch & Bottom Bolt Case

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to www.P65warnings.ca.gov.

## **Concealed Vertical Rod Exit Devices**

**Installation Instructions** 



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## **Concealed Vertical Rod Exit Devices**

## Installation Instructions



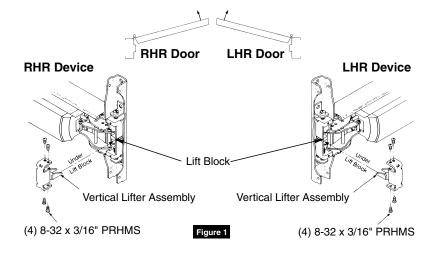
## ASSA ABLOY

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### **To Change Hands**

- 1. Remove four (4) screws and Vertical Lifter Assembly.
- 2. Rotate device to opposite orientation (180° degrees).
- 3. Insert Lifter Assembly and reinstall screws.

NOTE: Lifter must fit under lift block as shown. (Figure 1)



### Maintenance

- 1. Periodically remove covers and coat mechanisms with an appropriate lubricant. This is particularly required in corrosive environments for proper product function.
- 3. Periodic checks (and adjustments) or rods may be required, to compensate for changes in the opening (e.g.: door sagging).
- 2. Check mounting fasteners periodically. Re-tighten if found loose. Apply screw locking compound or change part fasteners if screws continue to back out.

3

## Options

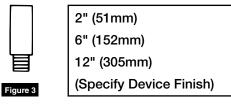
Figu

#### 1/4-20 Sex Nut Option: (Figure 2)

Standard for Fire Rated Doors. Recommended for Wood and Unreinforced Metal Doors.

	Device	Quantity	Size
	All (No Trim)	4	1/4-20
ire 2	All (With Trim)	2	1/4-20

## Rod Extension Option: (Figure 3)



#### For ED4800 -697F358 For ED4800M and ED4800MA - 697F338

Kit consists of two (2) latch head shims (device cover seats on shim) and two (2) end cap shims (end cap seats on shim). Each shim is 1/8" (3.2mm) thick more than two (2) shim thicknesses 1/4" (6.4mm), require longer device mounting screws (not included).

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## **Concealed Vertical Rod Exit Devices**

### Installation Instructions



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### **Check Before Starting**

Doors and Frames with walls having a structural thickness (metal skin plus reinforcement) to engage less than three (3) full screw threads are considered unreinforced.

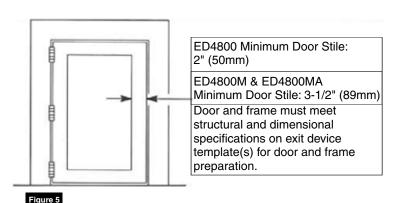
**Unreinforced Doors:** Use SNB (sex nuts and bolts), or Blind Rivet Nuts. (Figure 4)

**Unreinforced Frames:** Use Blind Rivet Nuts. (Figure 4)

Recommended fasteners for unreinforced openings are not necessarily supplied by Corbin Russwin.

- Door must swing freely.
- Door must not be warped.
- Door must not bind.
- Door must not sag.





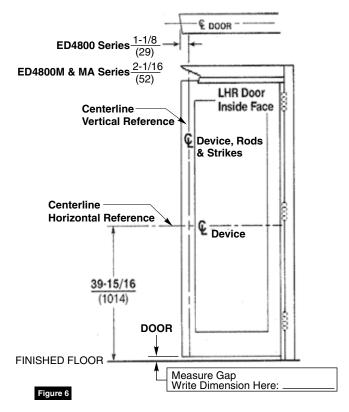
### Mark Door

**Single Door or Pair without Mullion** Locate and Mark Horizontal and Vertical Centerlines as shown. (Figure 6)

LHR door shown. Preparation is typical for both door hands. (Figure 6)

CAUTION: If device is mounted higher or lower than shown, rod length must change. Lengthen or cut top and bottom rods as shown in Section 8, page 6.

NOTE: Bottom Bolt will retract to 1/8" (3mm) above floor strike. Floor covering in the door path must be laid accordingly.



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### **Concealed Vertical Rod Exit Devices**

### Installation Instructions



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### Prepare Door, Frame and Sill

- A. Locate "Device Template" aligning VERTICAL REFERENCE and HORIZONTAL REFERENCE lines on door and template. Tape template to door face. (Figure 7)
- B. Locate Top Latch, Top Strike, Bottom Case and Bottom Strike templates, aligned on centerline of Device, Rods and Strikes on door. Tape templates in place and mark holes. (Figure 7)
- C. Locate and tape Trim template to door. (See instructions packed with trim.)
- D. Mark and prepare holes per installation template.

#### Device:

Each two (2) 1/4-20 machine screws for metal reinforced doors OR two (2) 3/8" (10) dia sex nuts and bolts

#### **Bolt Case Plates:**

Each two (2) 7/32" (5.5) dia. holes (Door Inside Face Only)

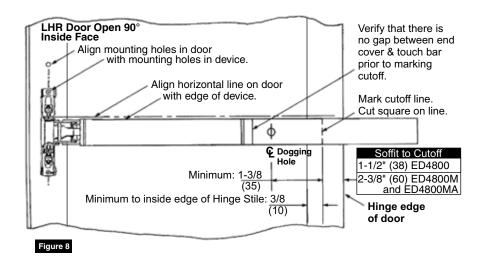
Top Strike: two (2) 10-24 machine screws NOTE: Third screw MUST ONLY be used to lock strike in final position (Step 8C).

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

NOTE: Device must seat flush on door surface or on shims that keep it parallel to door face. See Shim Kit Option, page 3.

### Size Device

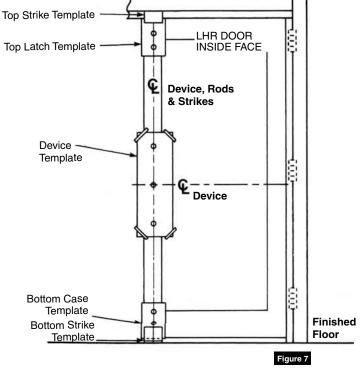
Device must be field cut to size, unless standard opening and device are 36" (0.91m) or 48" (1.22m). (Figure 8)





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### **Concealed Vertical Rod Exit Devices**

## Installation Instructions



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#### 8

### ED4800 Rod Assembly and Preliminary Adjustment

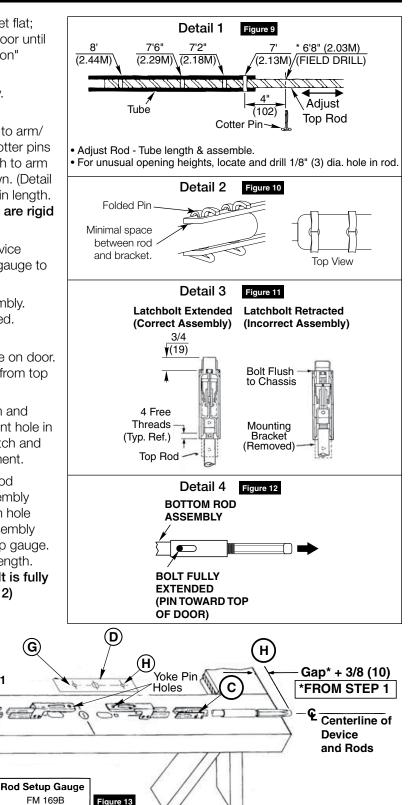
- A. Remove door from opening. Set flat; device side up. (Do not hang door until Section 12 "Complete Installation" beginning on page 11.)
- B. Set length of top rod assembly. (Detail 1 - Figure 9)
- C. Connect top and bottom rods to arm/ bracket assemblies. (Two (2) cotter pins each) Fold cotter pins over flush to arm and bracket assembly as shown. (Detail 2 - Figure 10) Clip off excess pin length. NOTE: Secure cotter so rods are rigid and inflexible.
- D. Align rod setup gauge over device cutouts and centerlines. Tape gauge to door face.
- E. Connect top latch to rod assembly. Latchbolt must be fully extended. (Detail 3 - Figure 11)
- F. Set top latch assembly in place on door. Maintain 7/8" (22mm) location from top of door as shown. (Figure 13)
- G. Align yoke pin holes in top arm and bracket assembly with alignment hole in rod setup gauge. Adjust top latch and rod assembly for proper alignment.
- H. Thread deadbolt into bottom rod assembly. Set bottom rod assembly in place on door. Align yoke pin hole in bottom arm and bracket assembly with alignment hole in rod setup gauge. Adjust bottom bolt for proper length. NOTE: Be certain bottom bolt is fully extended, (Detail 4 - Figure 12)

(G)

6

B)Detail 1

С



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F

 $(Hold)\frac{7/8}{(22)}$ 

G

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## **Concealed Vertical Rod Exit Devices**

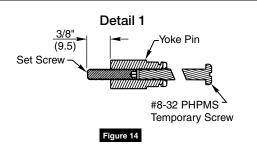
## Installation Instructions

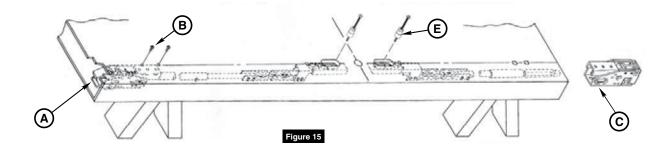


#### 9

### ED4800 Install Rods

- A. Slide rod assemblies into door. (Figure 15)
- B. Attach top latch with two (2) #10-24 X 1/2" PRHMS.
- C. Install bottom bolt case with two (2) #10-24 X 1/2" PRHMS.
- D. Thread set screw into yoke pins (Insert with hex socket end inside pin). Thread #8-32 x 2" PHPMS screws into slotted end of yoke pins until seated to hex head set screw. (Detail 1 - Figure 14)
- E. Install two (2) yoke pin assemblies into arm and bracket assemblies.





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## **Concealed Vertical Rod Exit Devices**

## Installation Instructions



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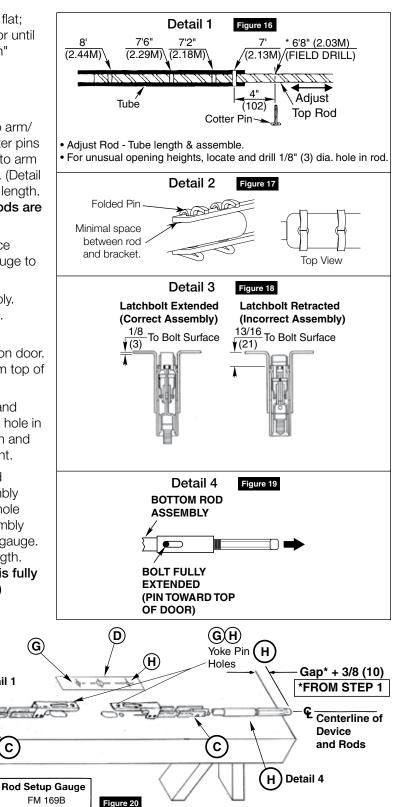
#### 10

## ED4800M & ED4800MA Rod Assembly and Preliminary Adjustment

- A. Remove door from opening. Set flat; device side up. (Do not hang door until Section 14 "Complete Installation" beginning on page 11.)
- B. Set length of top rod assembly. (Detail 1 - Figure 16)
- C. Connect top and bottom rods to arm/ bracket assemblies. (Two (2) cotter pins each) Fold cotter pins over flush to arm and bracket assembly as shown. (Detail 2 - Figure 17) Clip off excess pin length. NOTE: Secure cotter pins so rods are rigid and inflexible.
- D. Align rod setup gauge over device cutouts and centerlines. Tape gauge to door face.
- E. Connect top latch to rod assembly. Latchbolt must be fully extended. (Detail 3 - Figure 18)
- F. Set top latch assembly in place on door. Maintain 1/8" (3mm) location from top of door as shown. (Figure 20)
- G. Align yoke pin holes in top arm and bracket assembly with alignment hole in rod setup gauge. Adjust top latch and rod assembly for proper alignment.
- H. Thread deadbolt into bottom rod assembly. Set bottom rod assembly in place on door. Align yoke pin hole in bottom arm and bracket assembly with alignment hole in rod setup gauge. Adjust bottom bolt for proper length. NOTE: Be certain bottom bolt is fully extended, (Detail 4 - Figure 19)

4 Free Threads

(Typ. Ref.)



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G

(Hold) 1/8

Detail 3

E

8

(G)

B)Detail 1

Α

С

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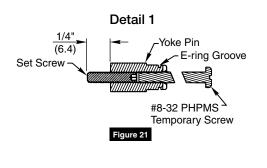
## **Concealed Vertical Rod Exit Devices**

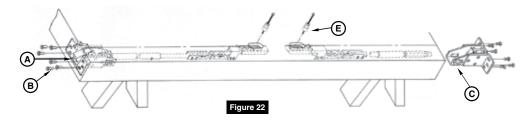
## Installation Instructions



### 11 ED4800M & ED4800MA Install Rods

- A. Slide rod assemblies into door. (Figure 22)
- B. Attach top latch with six (6) #10-24 X 1/2" PFHMS.
- C. Install bottom bolt case with six (6) #10-24 X 1/2" PFHMS.
- D. Thread set screw into yoke pins (Insert with hex socket end inside pin). Thread #8-32 x 2" PHPMS screws into slotted end of yoke pins until seated to hex head set screw. (Detail 1 - Figure 21)
- E. Install two (2) yoke pin assemblies into arm and bracket assemblies.





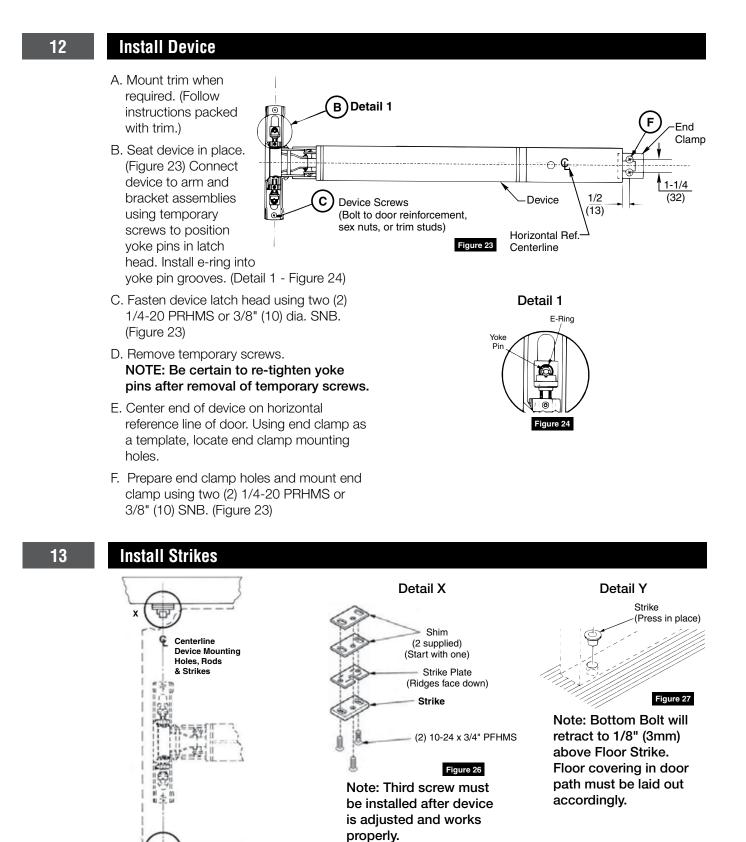
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### **Concealed Vertical Rod Exit Devices**

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Figure 25

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## **Concealed Vertical Rod Exit Devices**

### Installation Instructions



#### 14

## Complete Installation (4800M & ED4800MA Shown)

A. Rehang door plumb and true to opening. Set strike roller between tripping lever and bolt. **DO NOT PRELOAD BOLT.** Shim strike as needed. (Figure 28)

NOTE: Rods should move freely inside door. Bolts extend automatically and should deadlock when door closes and top strike hits tripping lever. Top bolt should retract flat. Bottom bolt should travel 1/2" (13) and engage 3/8" (9.5) into strike in down position without dragging on floor surface in up position.

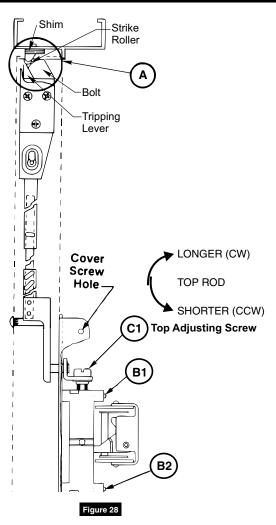
Test device action by touchbar, by trim, and by dogging. Adjust as needed.

- B. Rod Adjustment for Proper Bolt Throw
  - 1. Use 3/32" (2.4) hex wrench to loosen set screws B1 and B2. (Figure 28)
  - 2. Adjust top rod first with adjusting screw C1. (Figure 28) With device in dogged position (panic devices) or touchbar fully depressed (fire devices) adjust top rod so that top latchbolt is flush and hold back feature is engaged. Lengthen top rod an additional 1/2 turn for proper latchbolt positioning.

NOTE: If adjusting screws bottom out before proper device operation, door and device must be removed so larger adjustments may be made by threading rod in or out, or by moving cotter pin to different hole in rod. (Section 8, page 6)

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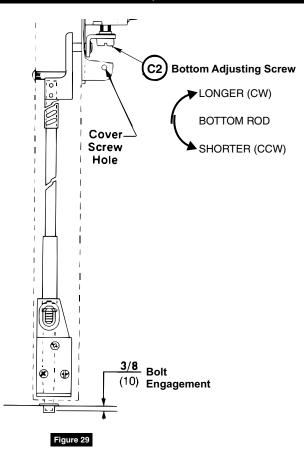


### Complete Installation Continued (4800M & ED4800MA Shown)

- 3. Adjust bottom rod with adjusting screw C2. (Figure 29) With top latch retracted in hold back position, and touchbar dogged or fully depressed, adjust bottom rod so that deadbolt clears strike by 1/16" (1.6). The bottom rod should be in position in active case with square head of connector hanging in the Guide. (See note in Step 2).
- 4. Check device operation by opening and closing the door. An additional minor adjustment may be required for full retraction and correct strike engagement.

NOTE: To avoid thread damage and provide positive locking, be sure set screws engage flats on adjusting screws.

- C. After acceptable device function, install third screw in top strike to lock strike in position with 10-24 x 3/4" PFHMS.
- D. Install device cover and end cap with (2) 8-32 PFHMS each.



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