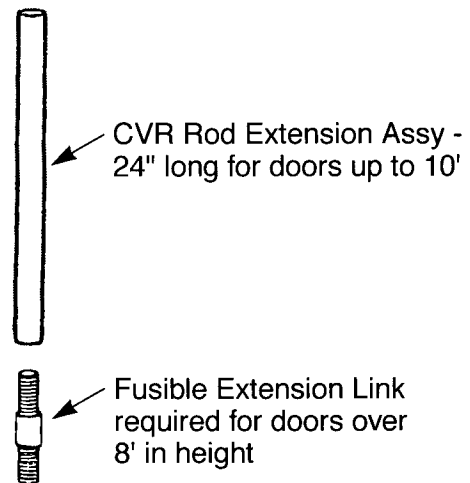
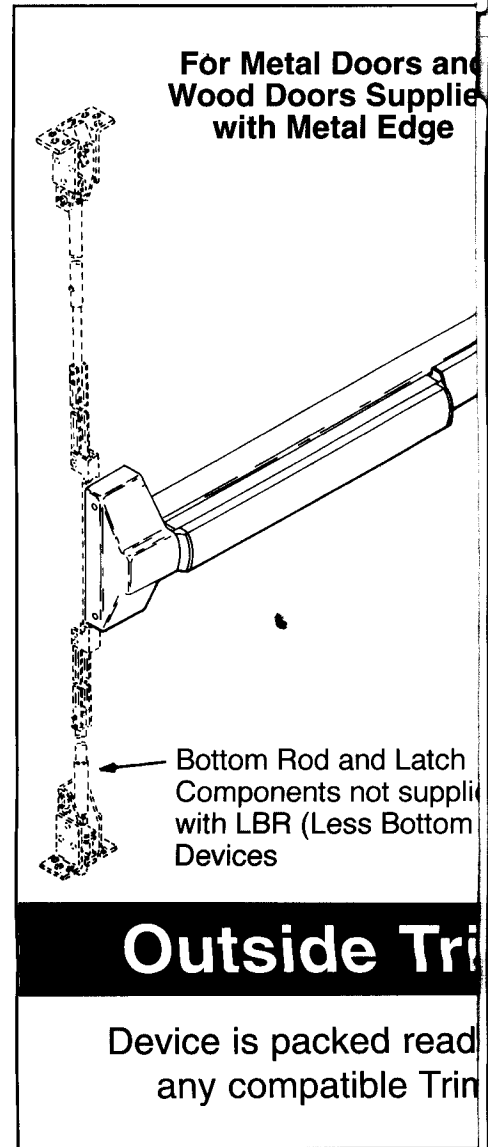
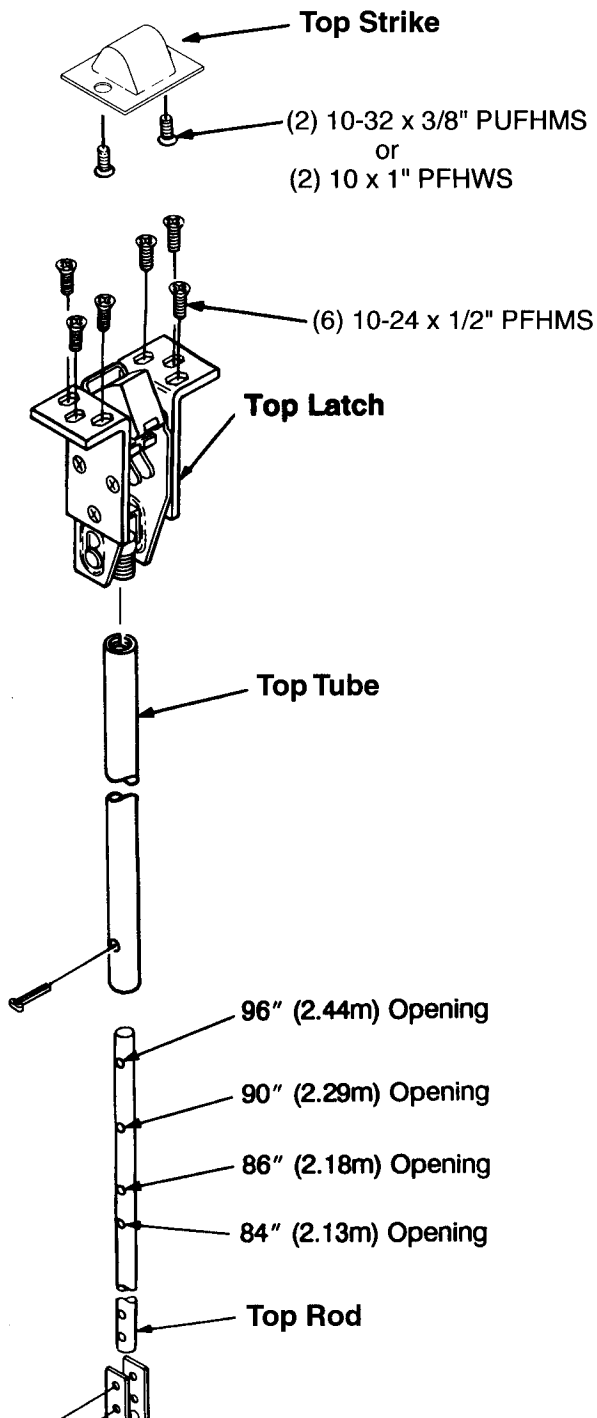


ED5860 (B) (F) Series Concealed Vertical Rod Exit Devices

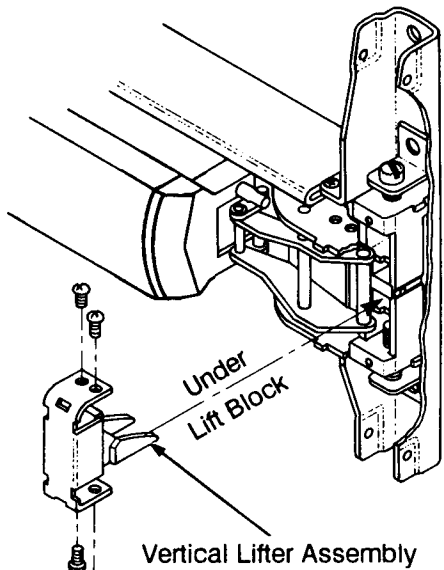
Installation Instructions

FM 544 1/98 (617416044)

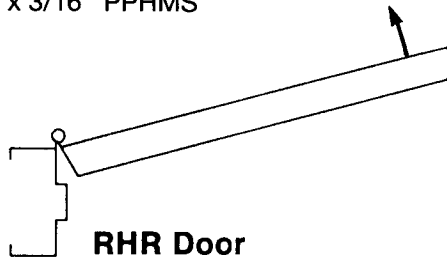


To Change Hands

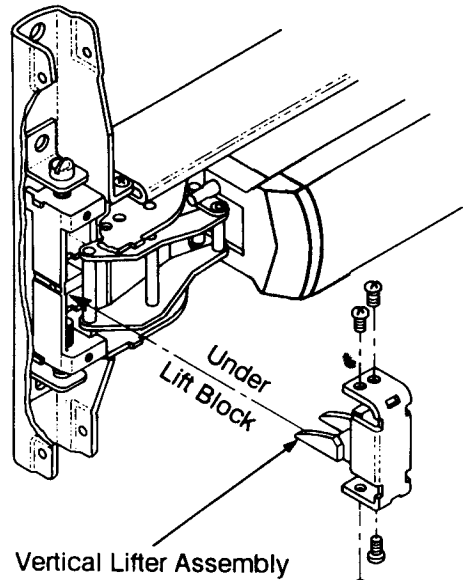
RHR Device



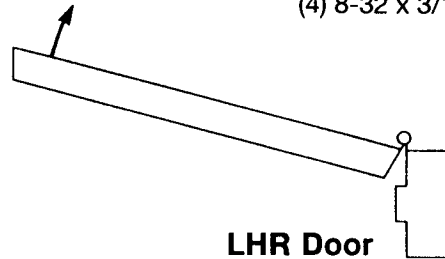
(4) 8-32 x 3/16" PPHMS



LHR Device



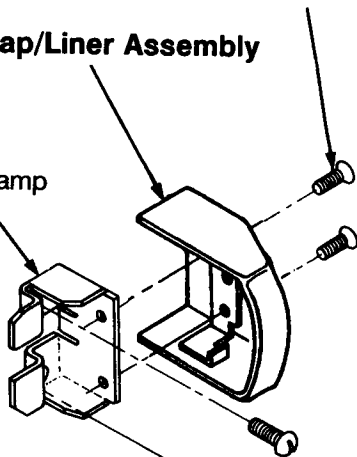
(4) 8-32 x 3/16" PPHMS



(2) 8-32 x 5/16" PUFHMS

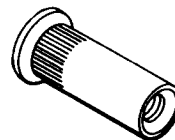
End Cap/Liner Assembly

End Clamp



(2) 1/4-20 x 3/4" PPHMS

1/4-20 Sex Nut Option



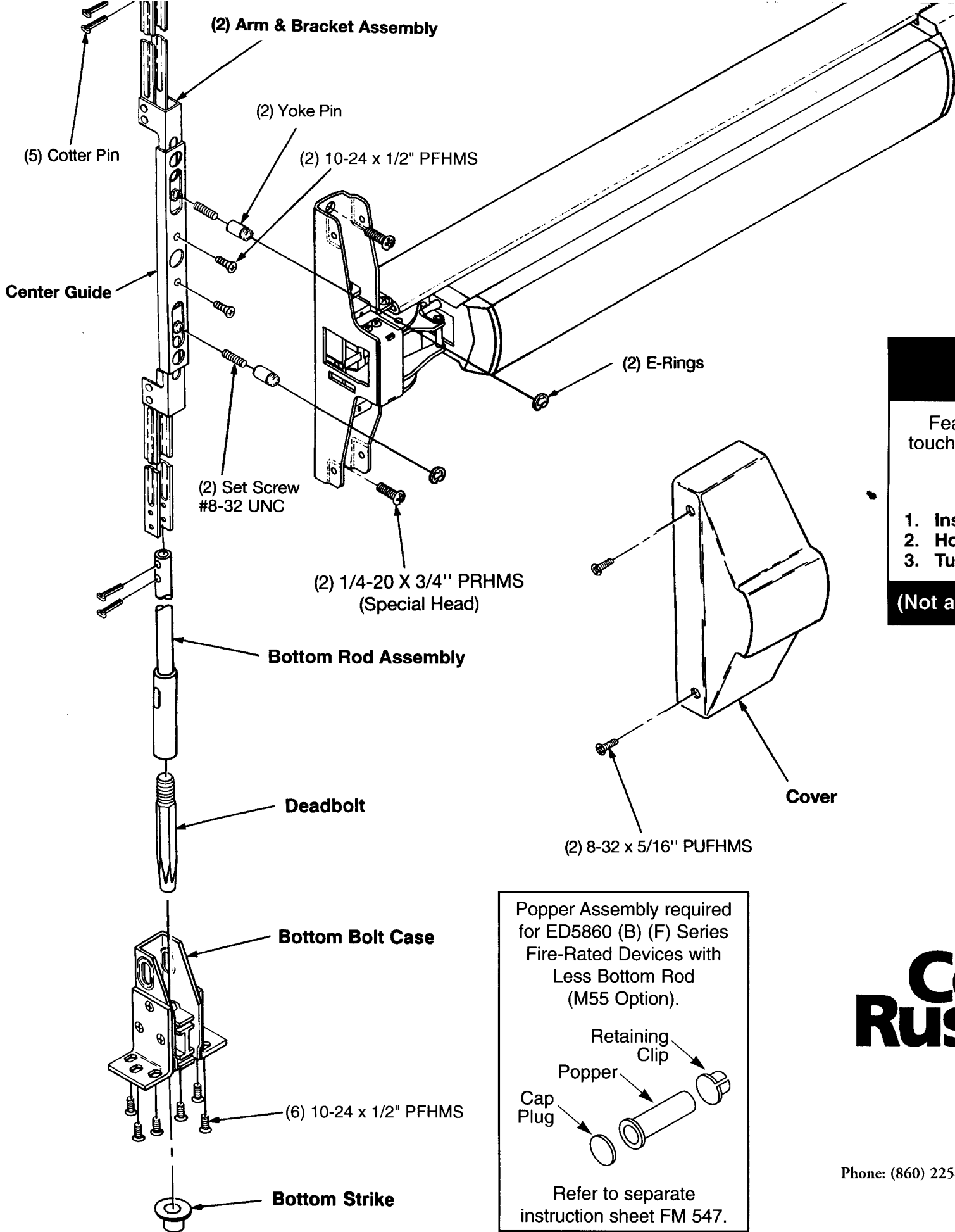
Recommended for unreinforced doors.

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

Rod Extension Options



2" (51mm)
6" (152mm)
12" (305mm)



Featur
touchpad

1. Insert
2. Hold t
3. Turn

(Not a fea

Popper Assembly required for ED5860 (B) (F) Series Fire-Rated Devices with Less Bottom Rod (M55 Option).

Retaining Clip

Popper

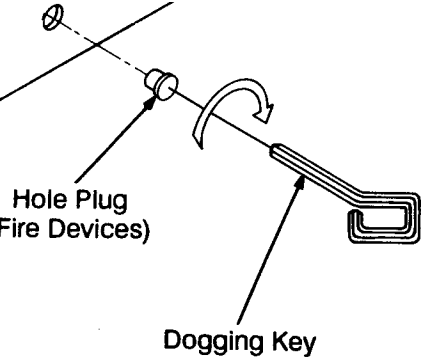
Cap Plug

Refer to separate instruction sheet FM 547.

**Co
Russ**

Phone: (860) 225-741

Mississauga, Ont
Phone: (905) 672-622



(2) 1/4 20 X 3/4 FPHMS (Special Head)

12 (305mm) (Specify Device Finish)

Dogging

to hold bolts retracted and depressed, for push-pull door operation.

To Dog Device

ogging key.
uchbar depressed.
y 1/4 turn clockwise.

ure of fire labeled devices.)

Check Before Starting

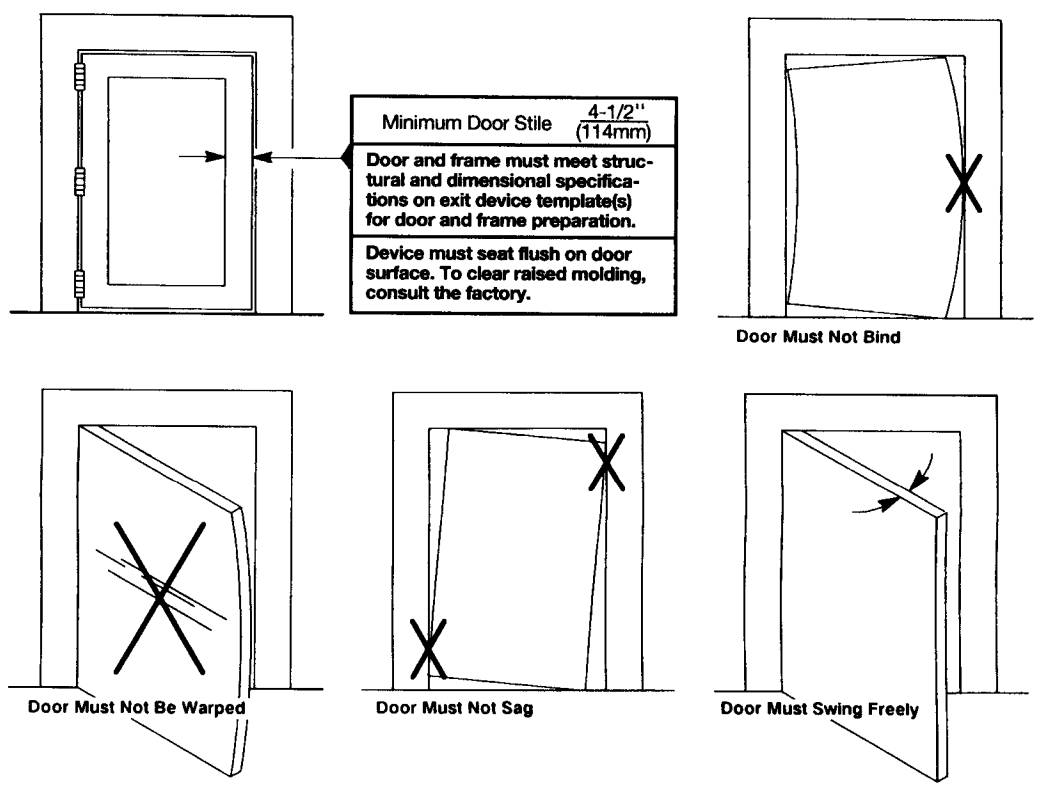
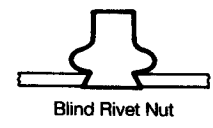
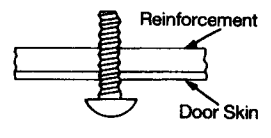
Unreinforced Doors or Frames

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

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

Unreinforced Frames: Use Blind Rivet Nuts.

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



Maintenance

1. Periodically remove covers and coat mechanisms with a silicone base lubricant. This is particularly 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.
3. Periodic checks (and adjustments) of rods is required, to compensate for changes in the opening (e.g.: door sagging).



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Mississauga, Ontario L4V1R5
Fax: (905) 672-9022

Installation Instructions

ED5860 (B)

1. Mark Door

Locate and Mark Horizontal and Vertical Reference Centerlines as shown.

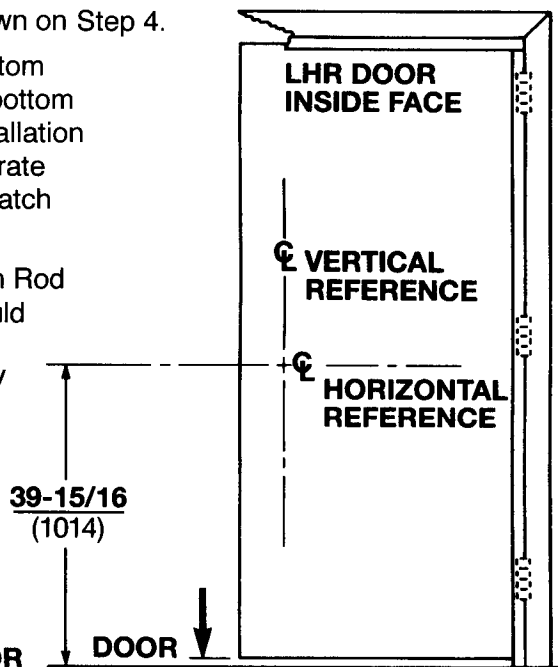
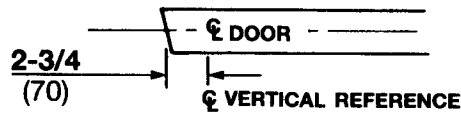
LHR door shown preparation is typical for both door hands.

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 4.

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

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

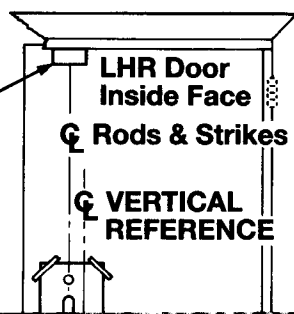


FINISHED FLOOR
Single Door or
Pair without Mullion

Measure Gap
Write Dimension Here: _____

2. Prepare Door Frame & Sill

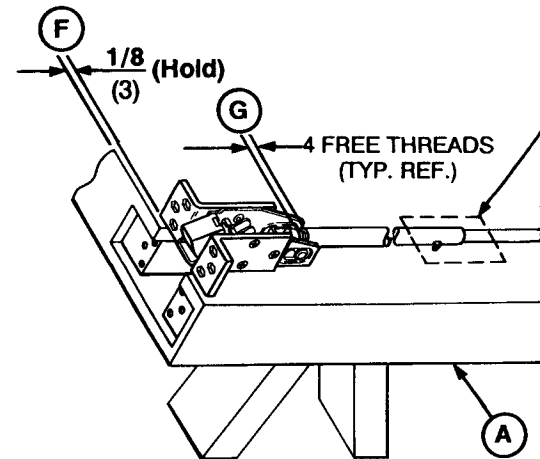
Top Strike Template
(Mounts on Frame Rabbet)



Device Template

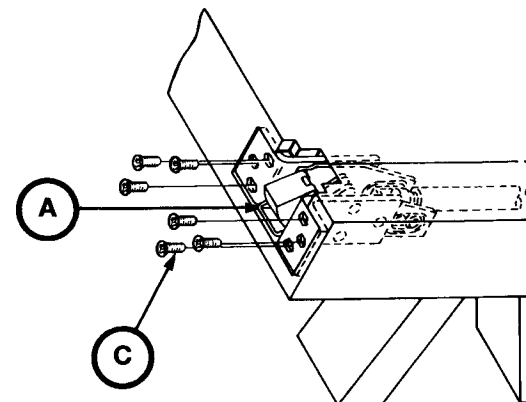
4. Rod Assembly

- Remove door from opening. Set flat, device (Do not hang until Step 8.)
- Set length of Top Rod Assembly (see Detail I)
- Connect Top & Bottom Rods to Arm/Bracket (2 Cotter Pins each), then connect to Center with temporary 8-32x1/4" PPHMS.
- Align Rod Setup Gauge over 2 temporary screws
- Match Gauge, Yoke & Device (door) centerline. Gauge/Yoke holes with holes countersunk on device.
- Set Top Latch in place.
- Connect Top Latch. Latchbolt must be extended (see Detail II).
- Set bolt in place.
- Remove Rod Setup Gauge. Check that yoke rods move freely and retract bolts correctly. Push lever behind bolt to extend top latch and lower to rest position.



5. Install Rods

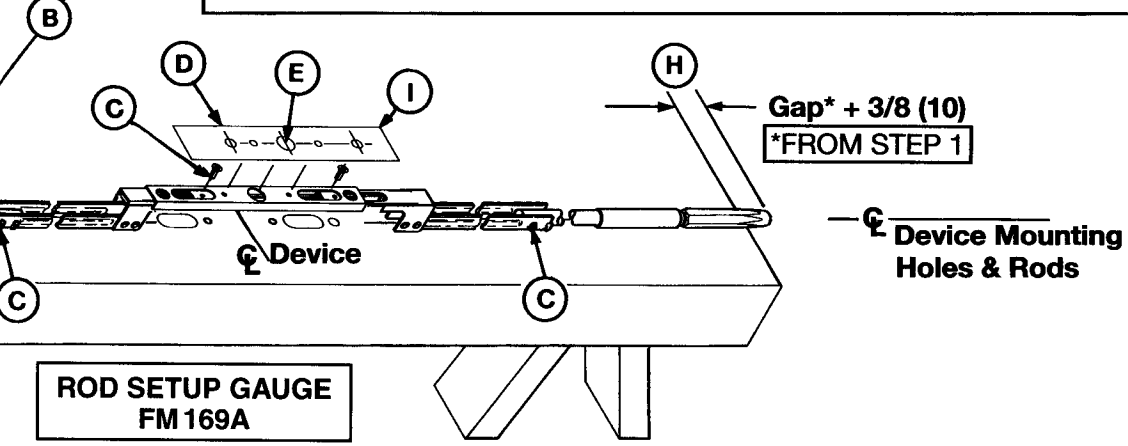
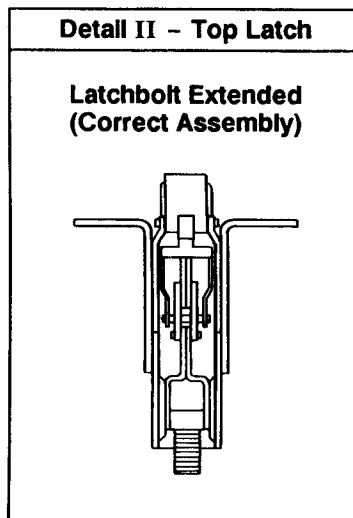
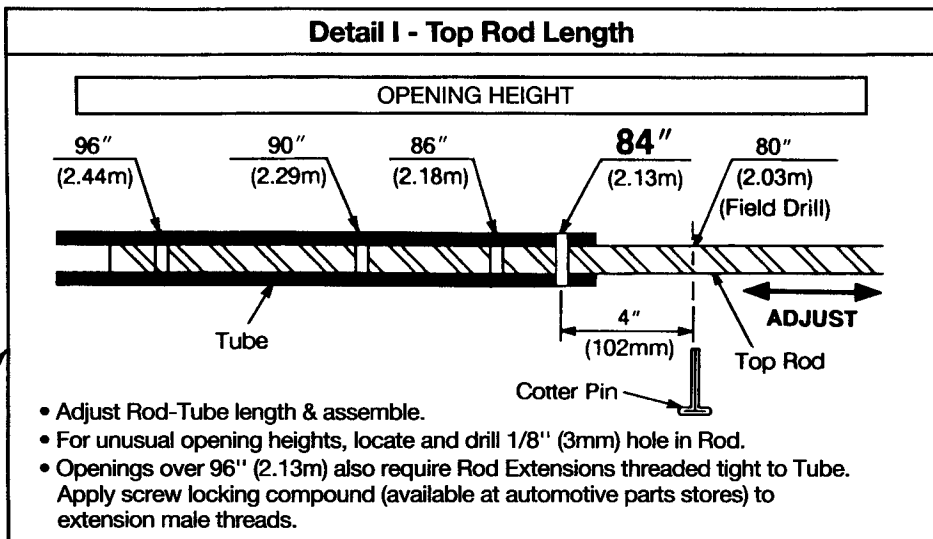
- Slide Rod Assembly into door.
- Fasten Center Channel with (2) 10-24 x 1/2" PFHMS.
- Attach Top Latch with (6) 10-24 x 1/2" PFHMS.



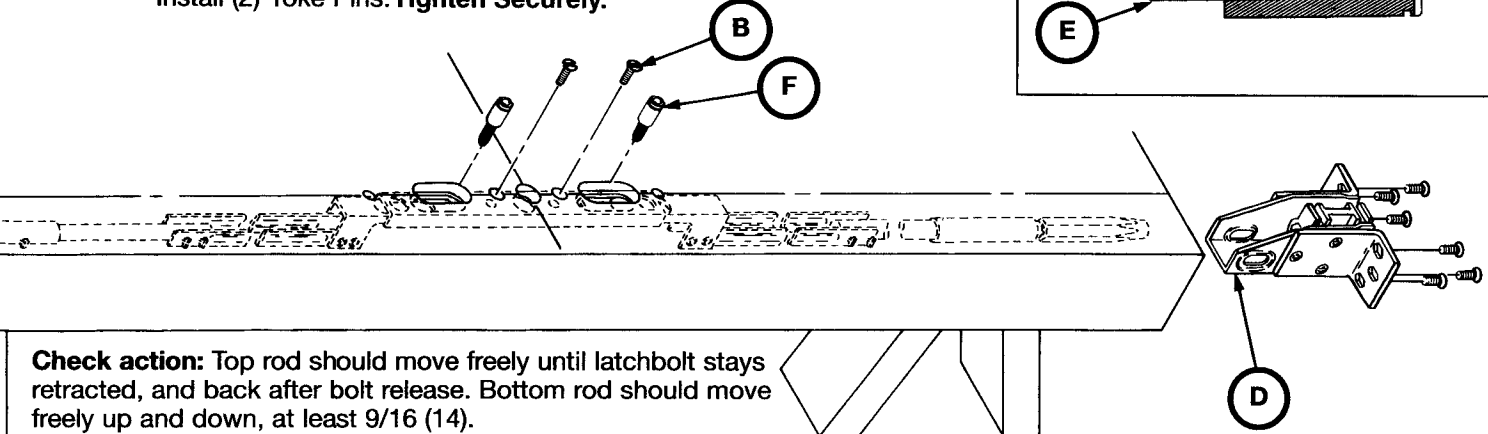
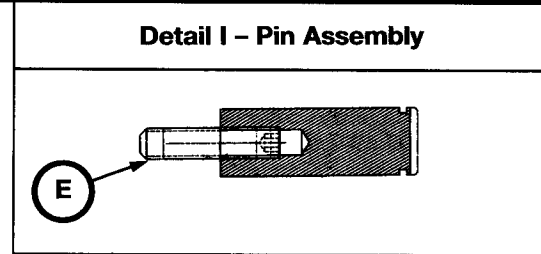
6. Install Device

(F) Series Concealed Vertical Rod Exit Devices & Preliminary Adjustment

de up.
Assemblies
Guide
ws.
s. Align
door.
ed (See
slides and
epress
r rods



- D. Install Bolt Case with (6) 10-24 x 1/2" PFHMS.
- E. Thread Set Screws into Yoke Pins (**Insert With Hex Socket End Inside Pin**). (See Detail I.)
- F. Remove Temporary 8-32 Screws from Center Guide and discard. Install (2) Yoke Pins. **Tighten Securely.**



Check action: Top rod should move freely until latchbolt stays retracted, and back after bolt release. Bottom rod should move freely up and down, at least 9/16 (14).

Floor Strike Template
(Mounts on Finished floor)

HORIZONTAL REFERENCE

FINISHED FLOOR

- Locate "Device Template" aligning VERTICAL REFERENCE and HORIZONTAL REFERENCE lines on door and template. Tape template to door face.
- Extend centerline of Rods and Strikes from "Device Template" to door top and bottom, on door face.
- Locate "Top Strike" and "Bottom Strike" templates, aligned with centerline of Rods and Strikes on door. Tape templates in place.
- Locate and tape Trim Template to door (See Instructions Packed with Trim).
- Spot and prepare holes:

Device and Bolt Case Plates:

- Each (2) 1/4-20 Machine Screws*, or
- (2) $\frac{3}{8}$ Dia. Sex Nuts & Bolts

(*) Metal reinforced door only.

Top Strike: (2) 10-24 Machine Screws,

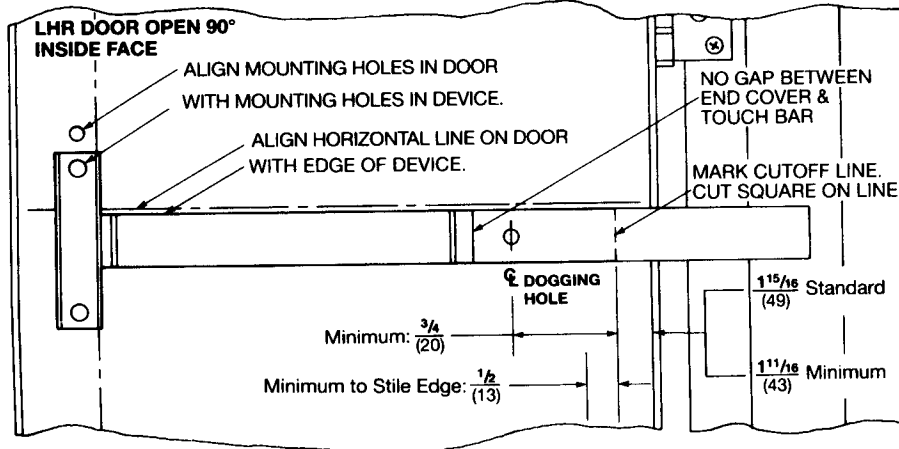
NOTE: Third Screw MUST ONLY be used to lock Strike in final position (Step 8E).

Bottom Strike: $\frac{5}{8}$ dia. $\frac{3}{4}$ deep hole.

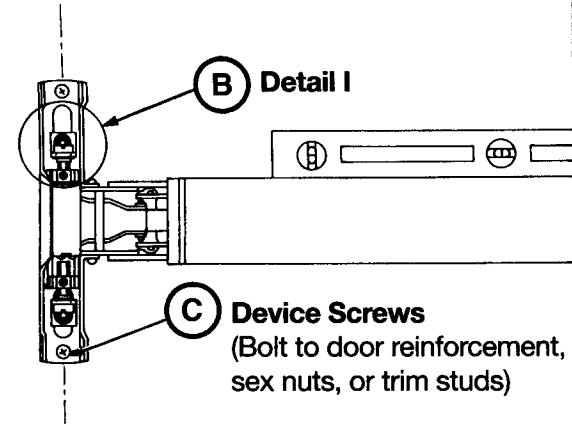
Note: Auxiliary door marker is included to verify correct door preparation. Reinforced doors and frames, with factory made cutouts, are recommended.

3. Size Device

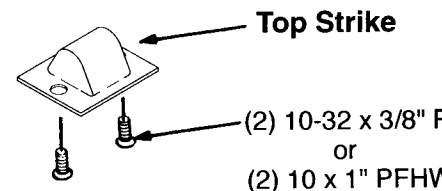
Device must be field cut to size, unless standard opening and device are 36" (0.91m).



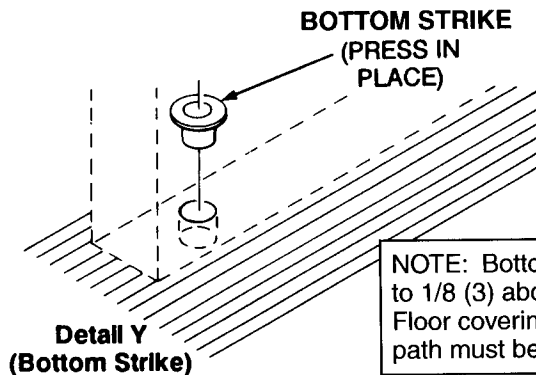
- Mount Trim (Follow Instructions Packed with Trim)
- Set Rod Adjusting Screws Half Way Through Slider, then Connect Rods to Slider (see Diagram)
- Seat Bar in Place. Fasten Device Head to Door
- Set Bar Level. Locate End Clamp Holes. Mark
- Prepare End Clamp Mounting Holes. Mount (2 # 1/4-20 PRHMS or $\frac{3}{8}$ dia. SNB).



7. Install Strikes



Detail X
(Upper Strike)



with Trim).

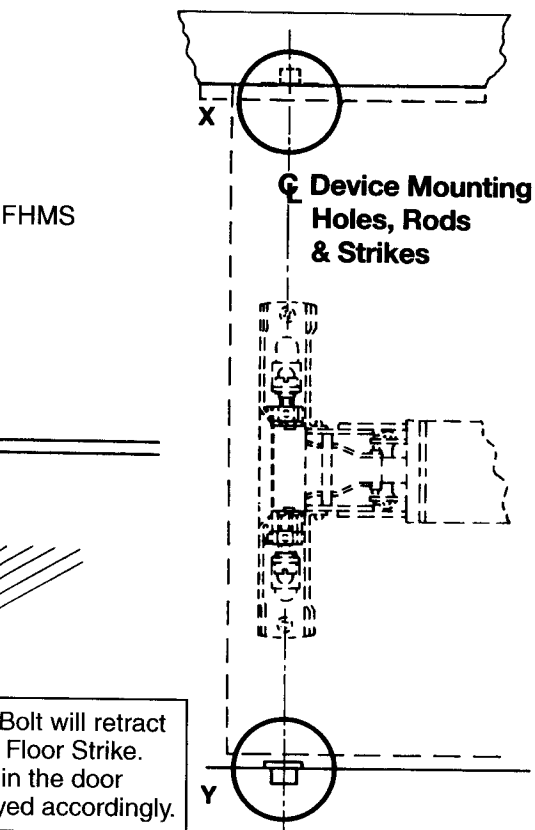
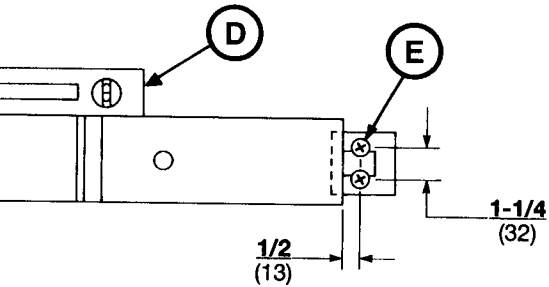
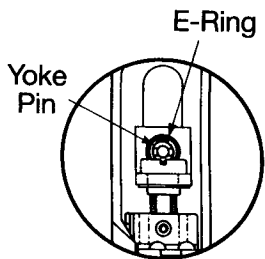
the

Detail I).

2 PRHMS or SNB).

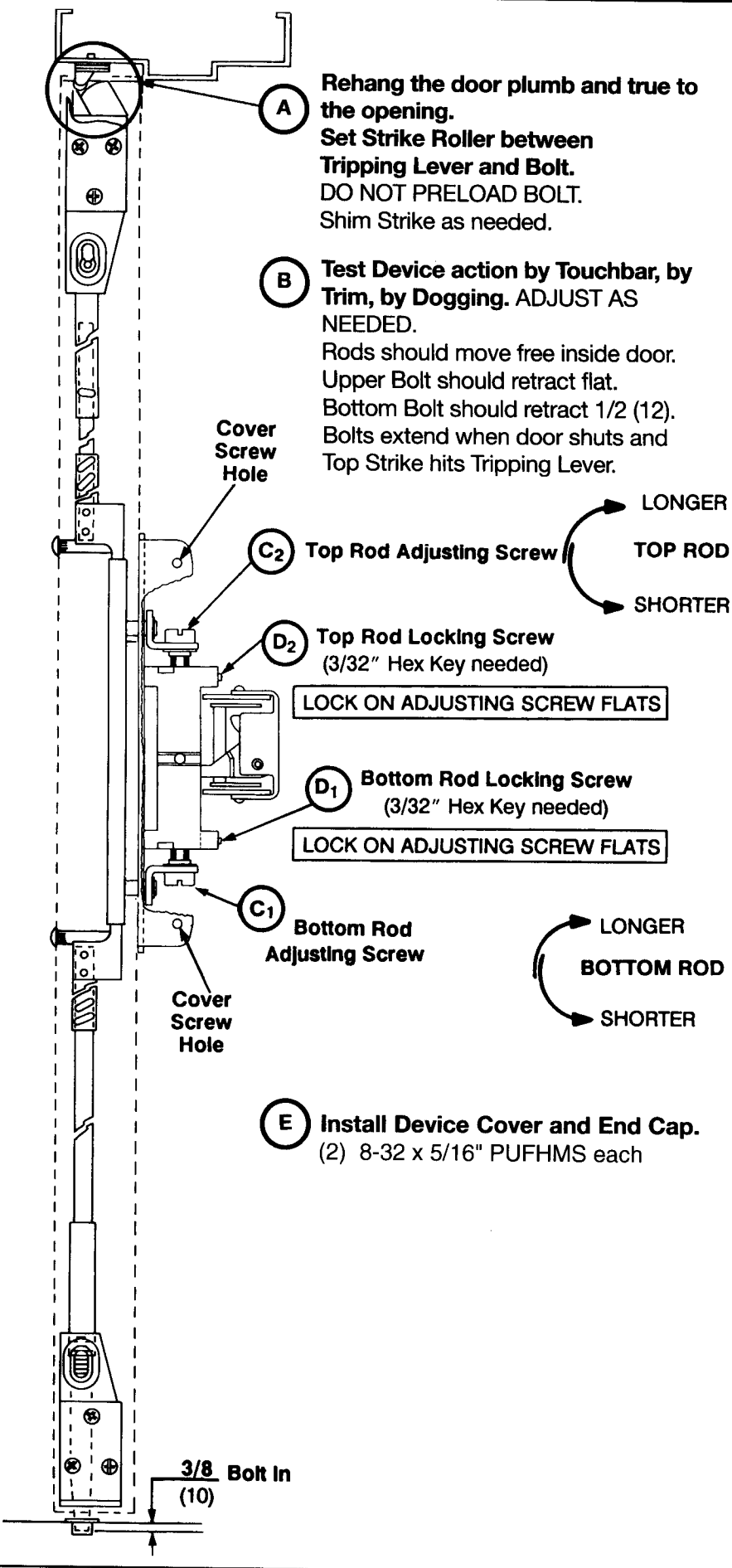
End Clamp.

Detail I
(Typical 2 Places)



Bolt will retract
Floor Strike.
in the door
ed accordingly.

re in inches (mm) unless otherwise noted.



A Rehang the door plumb and true to the opening.
Set Strike Roller between Tripping Lever and Bolt.
DO NOT PRELOAD BOLT.
Shim Strike as needed.

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

C₂ Top Rod Adjusting Screw
LONGER TOP ROD
SHORTER

D₂ Top Rod Locking Screw
(3/32" Hex Key needed)
LOCK ON ADJUSTING SCREW FLATS

D₁ Bottom Rod Locking Screw
(3/32" Hex Key needed)
LOCK ON ADJUSTING SCREW FLATS

C₁ Bottom Rod Adjusting Screw
LONGER BOTTOM ROD
SHORTER

E Install Device Cover and End Cap.
(2) 8-32 x 5/16" PUFHMS each

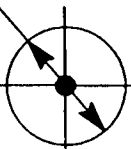
3/8 Bolt In
(10)

RHR Door
(Over for LHR Door)

BOTTOM STRIKE

OMIT FOR LESS
BOTTOM ROD
DEVICES
(M55 OPTION)

5/8 (16) Dia. x
3/4 (19) Deep



⊥ Rods &
Strikes

1-1/8
(29)

INSIDE
DOOR FACE
(Device Side)

DOOR EDGE

CUT LINE



ALIGN WITH DOOR
EDGE AND DOOR
FACE (DEVICE SIDE)

**Corbin
Russwin** 

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Mississauga, Ontario, Canada L4V1R5
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ED5860 (B) (F) Series Concealed Vertical Rod Exit Devices Installation Template

**RHR Door
(Over for LHR Door)**

Door Inside
Face Surface

(2) Holes A:
1/4-20 tap
(metal reinforced doors),
or
3/8 dia thru door for SNB
(9.50)
(all other doors).

DEVICE

1/4 (6) Dia. Thru This Face
82° Countersink to 3/8 (10) Dia.
(2 Holes)

CUT LINE

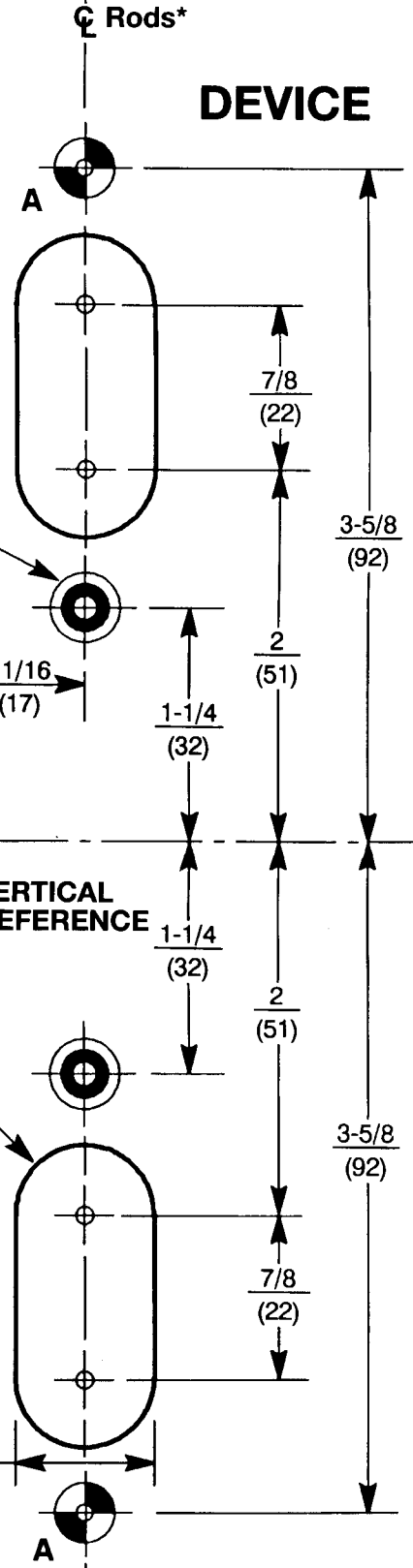


HORIZONTAL
REFERENCE & DEVICE

VERTICAL
REFERENCE

Thru This Face
(2 Slots)

(*) Mark ϕ Rods on door face.
Note that the centerline of the
rods and strikes, used to install
top and bottom bolts, is not the
Vertical Reference centerline.



Door Inside Face Surface

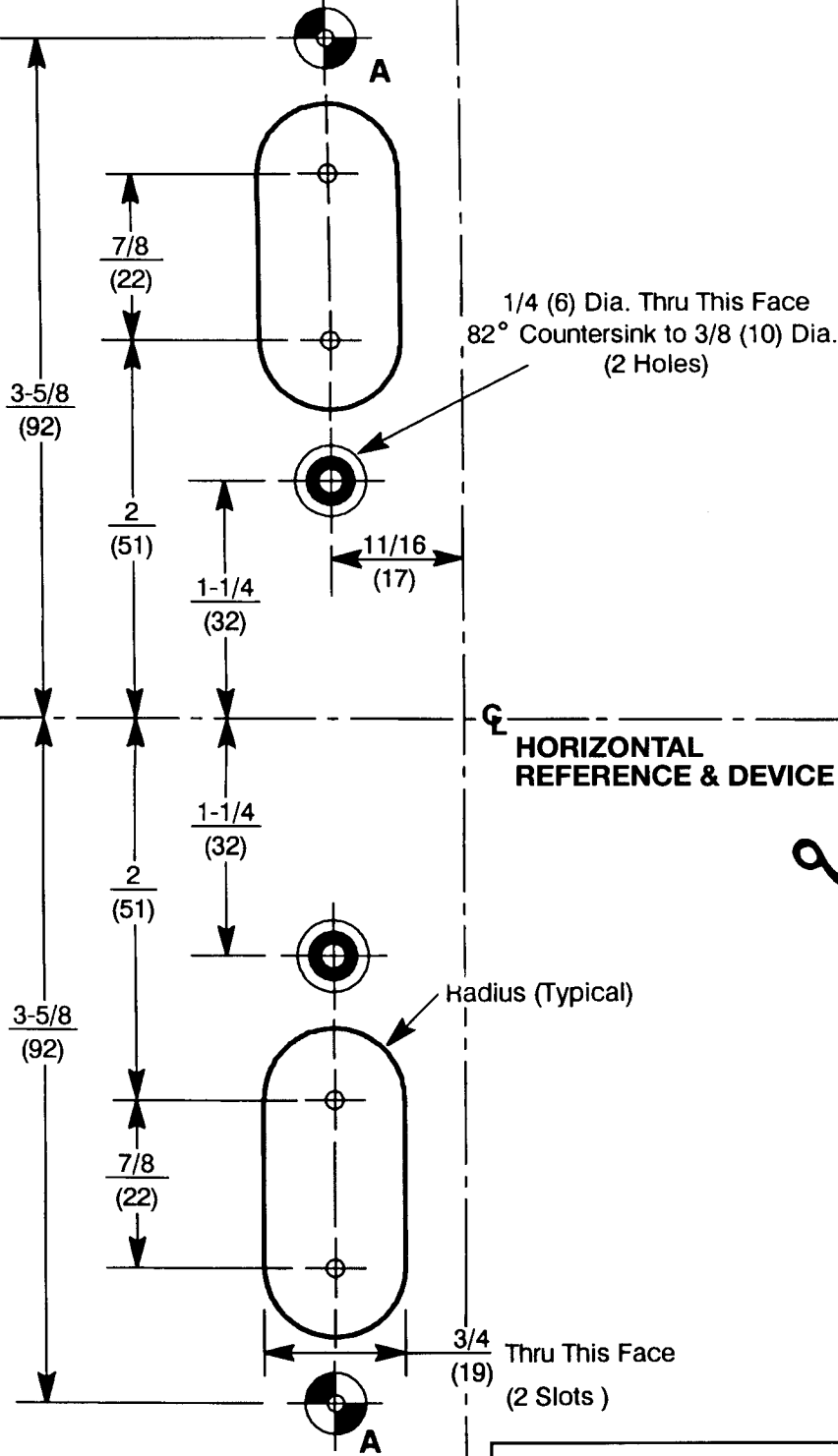
LHR Door
(Over for RHR Door)

AUXILIARY DOOR M
(Top & Bottom Latch)

DEVICE

☉ Rods*

☉ VERTICAL REFERENCE

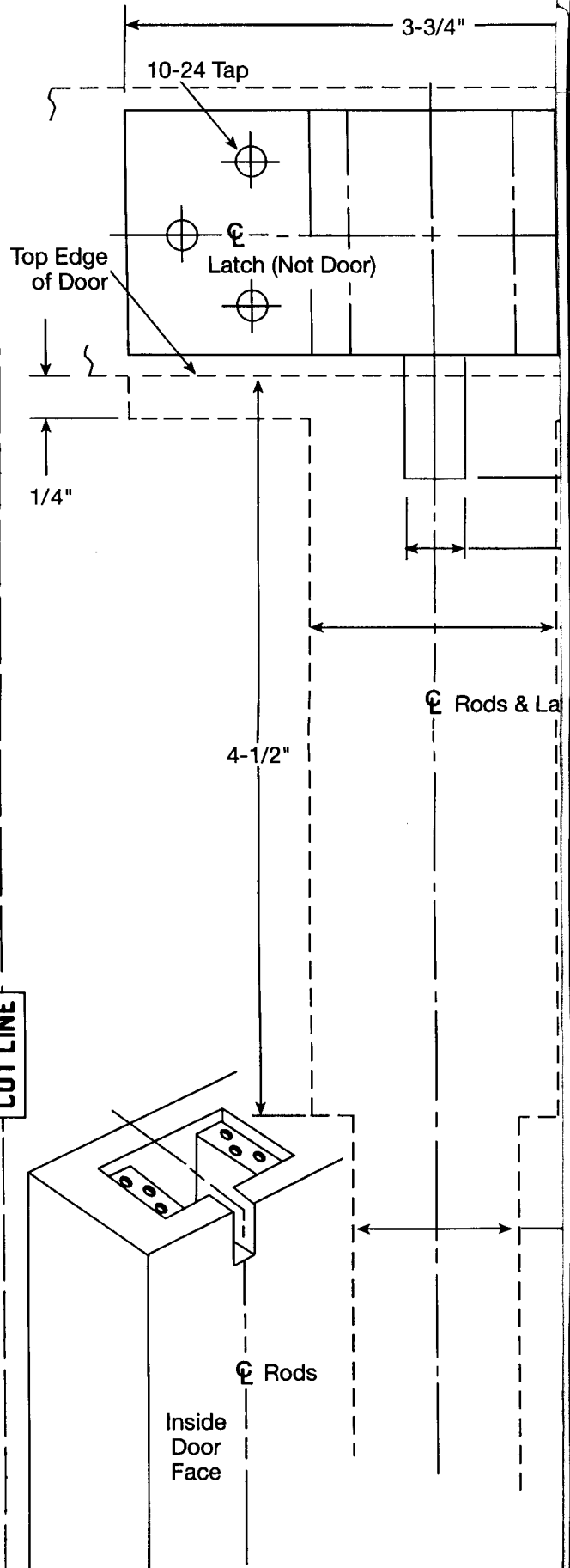


☉ HORIZONTAL REFERENCE & DEVICE

Radius (Typical)

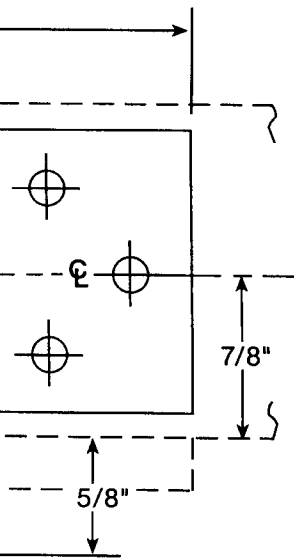
3/4 (19) Thru This Face (2 Slots)

(2) Holes A:
1/4-20 tap
(metal reinforced doors),
or
3/8 (9.50) dia thru door for SNB
(all other doors).



(*) Mark ☉ Rods on door face. Note that the centerline of the rods and strikes, used to install top and bottom bolts, is not the Vertical Reference centerline.

MARKER
(Mounts)



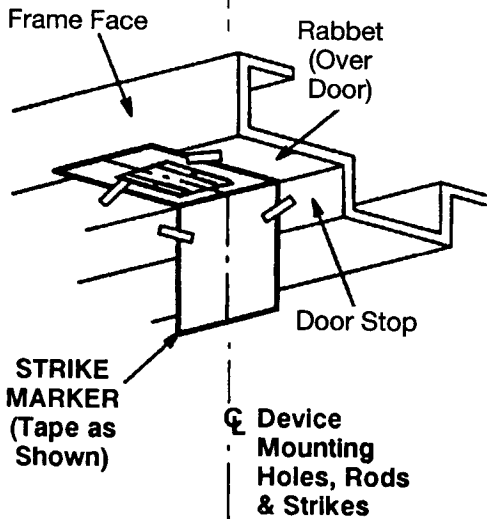
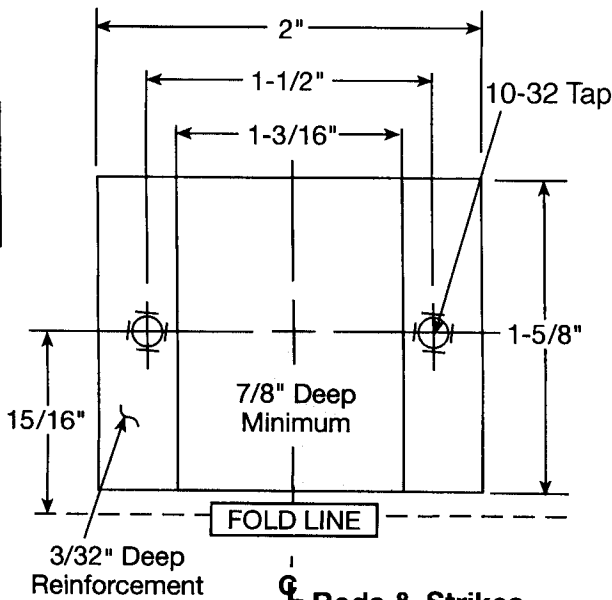
3/8"
1-1/2" Square
ches

Notes:

- 1-1/2 (38) square cavity, centered on rods, is needed to be 4-1/2" deep minimum in top and bottom of door, for full length optional.
- Top and bottom latch holes shown for reference. Position latch in place to locate holes.

1" Minimum

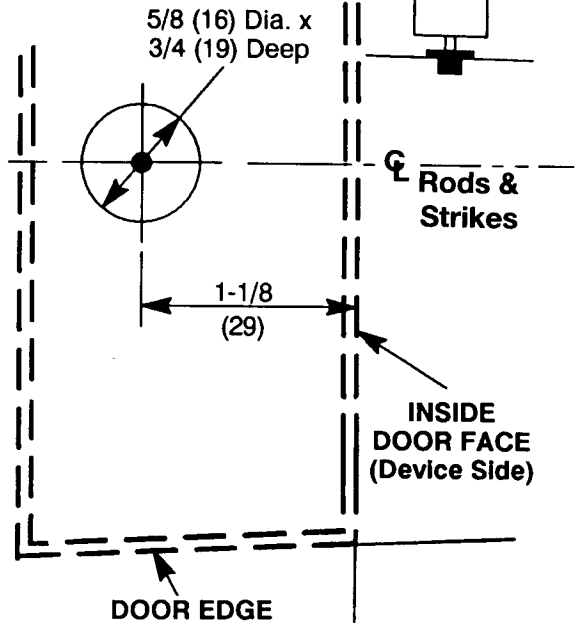
TOP STRIKE



LHR Door
(Over for RHR Door)

BOTTOM STRIKE

OMIT FOR LESS
BOTTOM ROD
DEVICES
(M55 OPTION)



ALIGN WITH DOOR
EDGE AND DOOR
FACE (DEVICE SIDE)

Instructions:

1. Use with Installation Instructions FM 544.
2. For LBR Devices, omit bottom latch and strike in installation steps.
3. Less Bottom Rod (LBR) Devices should not be used where security is a primary concern.
4. Unreinforced frames (total wall thickness less than $\frac{1}{8}$ (3.2) require) that 10-32 blind rivet nuts (by others) be used to bolt strike.
5. Dimensions given in inches (mm).
6. **CAUTION:** Office copiers and facsimile machines may change the size of a drawing and make the template inaccurate to use as a door marker. If this is not the original template packed with the device, use only the dimensions written on the template to locate the holes on the door (do not use the template as a door marker).

**ED5860 (B) (F) Series
Concealed Vertical Rod Exit Devices
Installation Template**