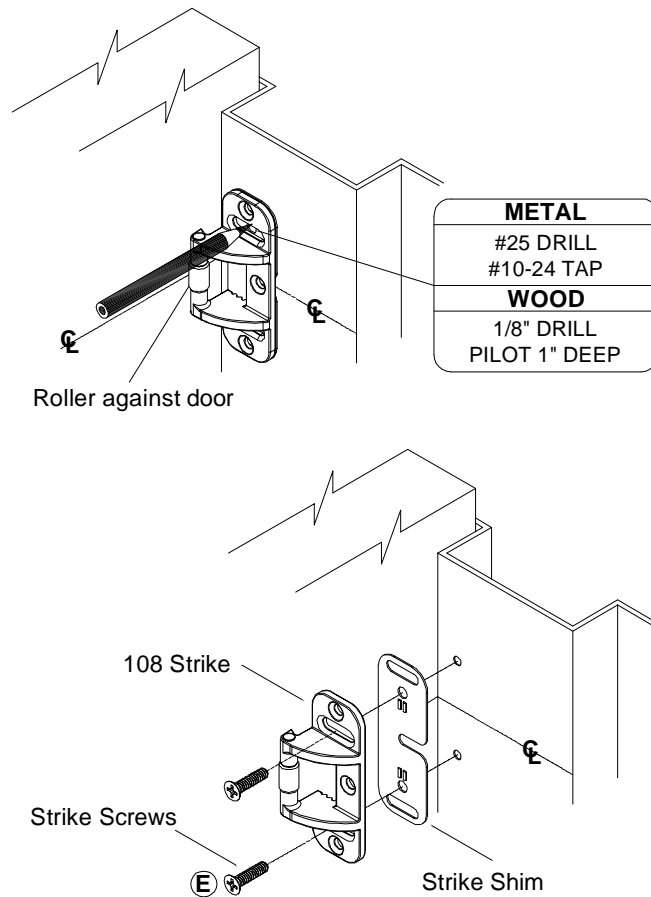
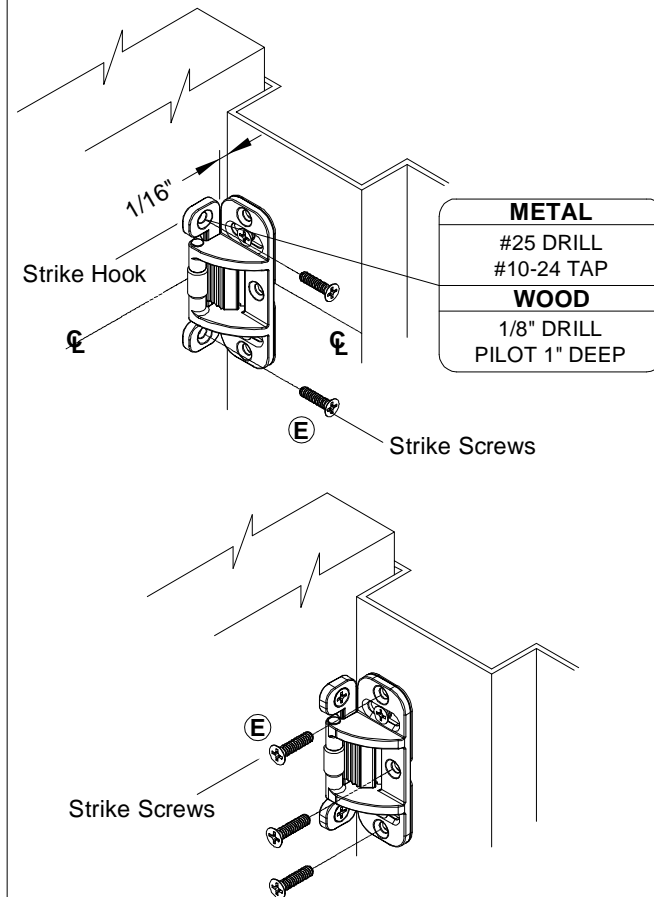


## 108 STRIKE INSTALLATION

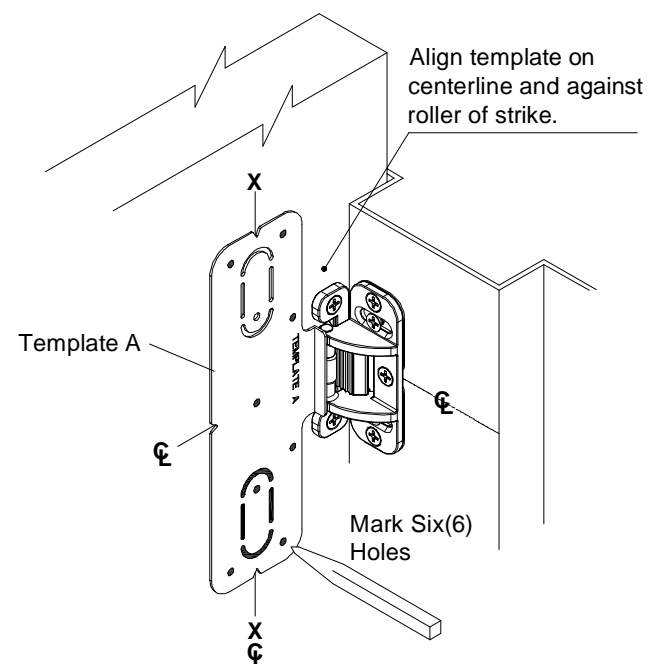
### 1 PREPARE AND INSTALL SCREWS THROUGH 2 STRIKE SLOTS.



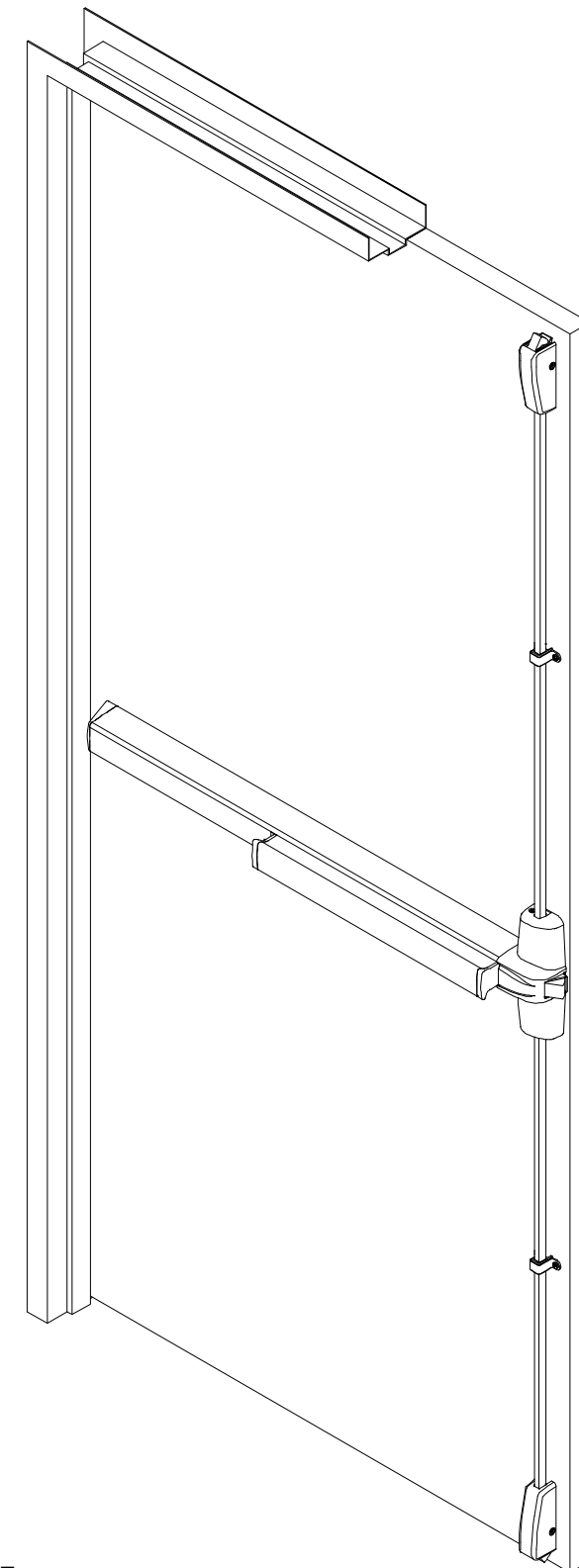
### 2 INSTALL STRIKE HOOK AND ADDITIONAL STRIKE SCREWS.

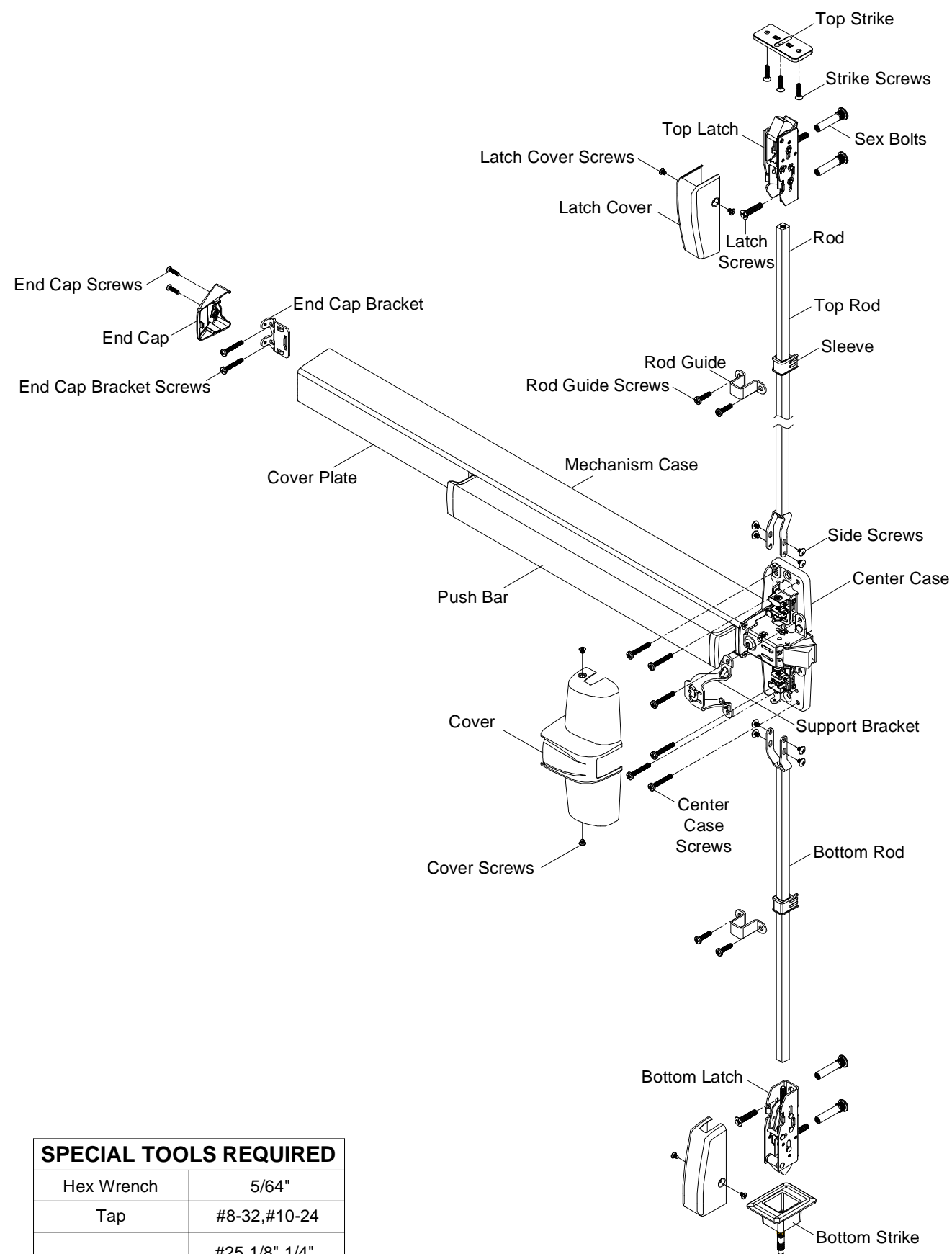


### 3 TEMPLATE ALIGNS AS SHOWN.



## 1500 /F1500 SERIES THREE-POINT LATCHING DEVICE INSTALLATION INSTRUCTIONS



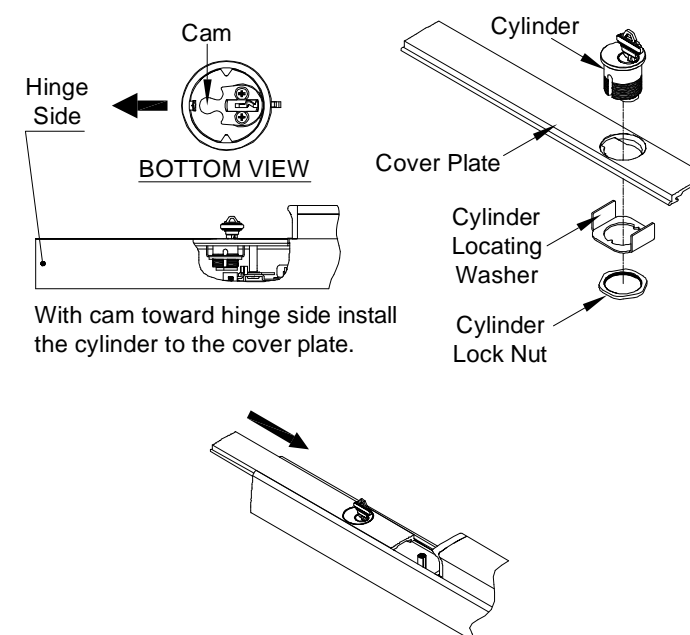


#### SPECIAL TOOLS REQUIRED

Hex Wrench	5/64"
Tap	#8-32, #10-24
Drill Bits	#25, 1/8", 1/4", 5/16", 13/32"
Spade Drill	5/8" (For Wood Door)

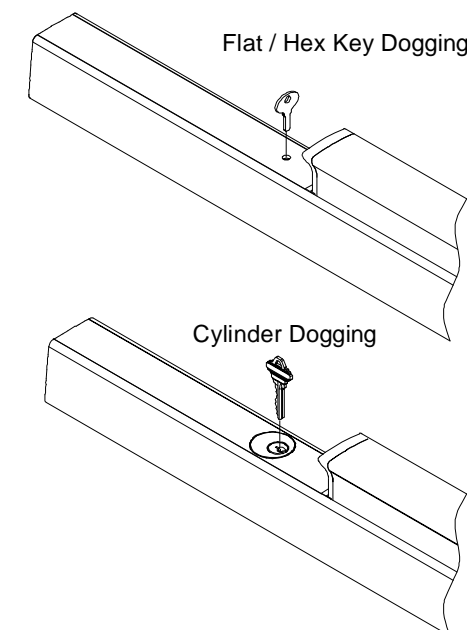
## OPTIONAL DOGGING

### CYLINDER DOGGING



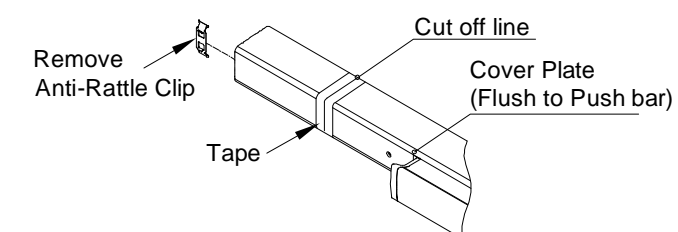
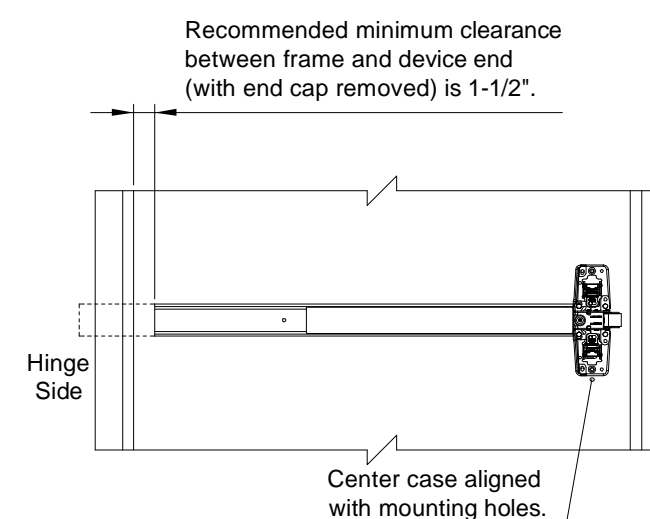
Slide cover plate in position in the mechanism case.

### DOGGING CHECK

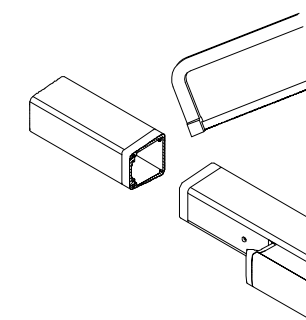


Depress push bar and turn flat / hex wrench or key one full turn for dogging check.

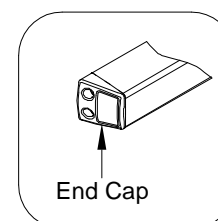
## CUT DEVICE (IF REQUIRED)



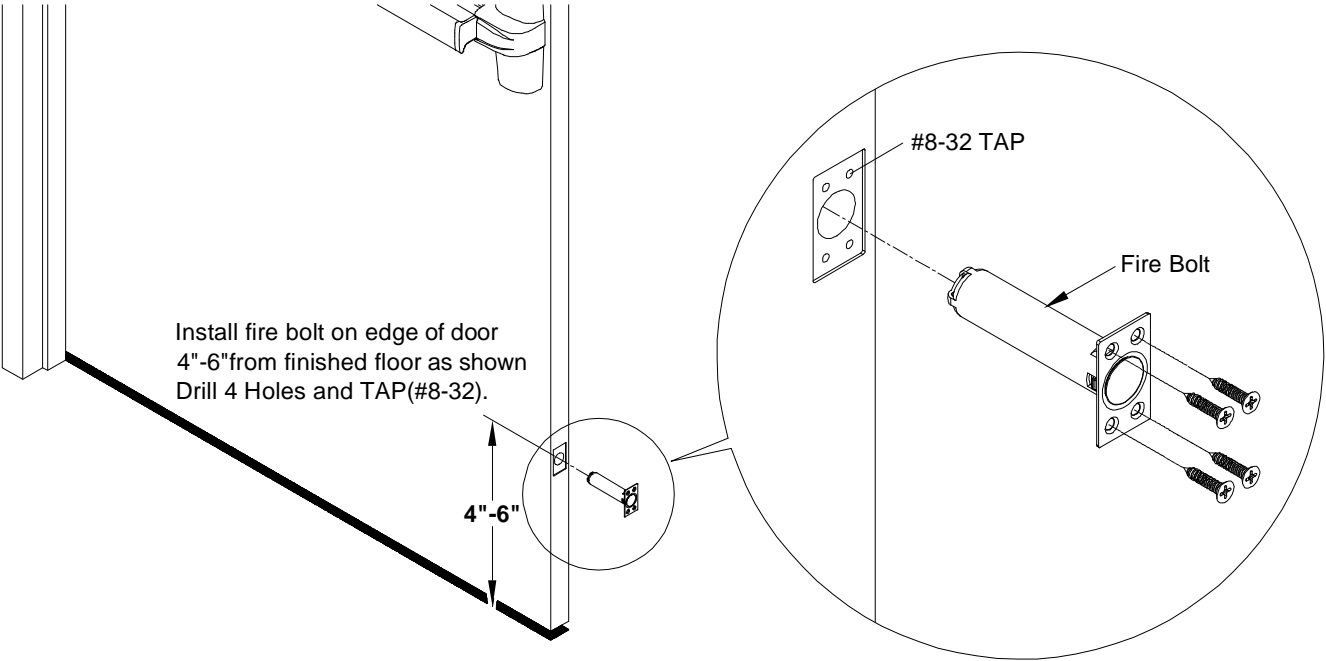
1. With anti-rattle clip removed, tape and mark area being cut.



2. Cut off device and deburr.  
**NOTE:** Device must be cut square for proper end cap fit.

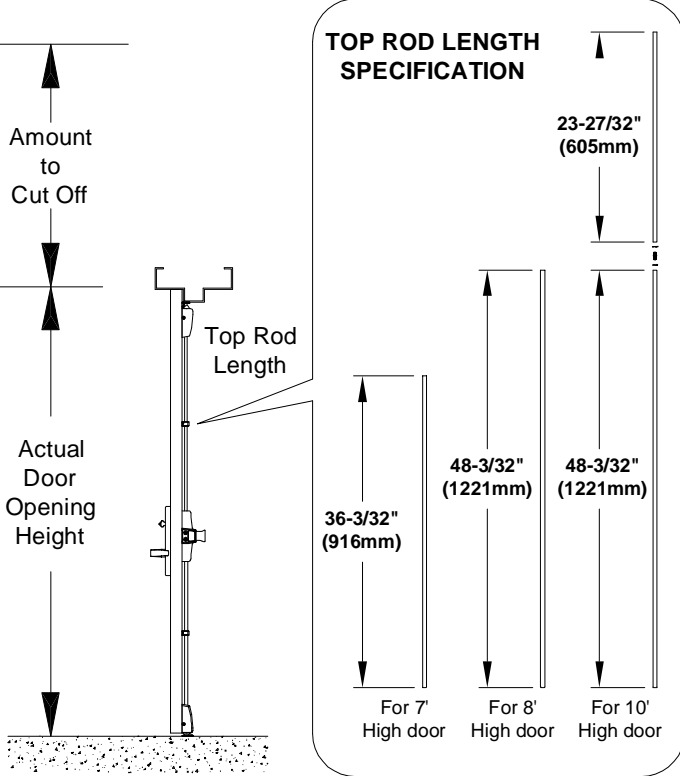
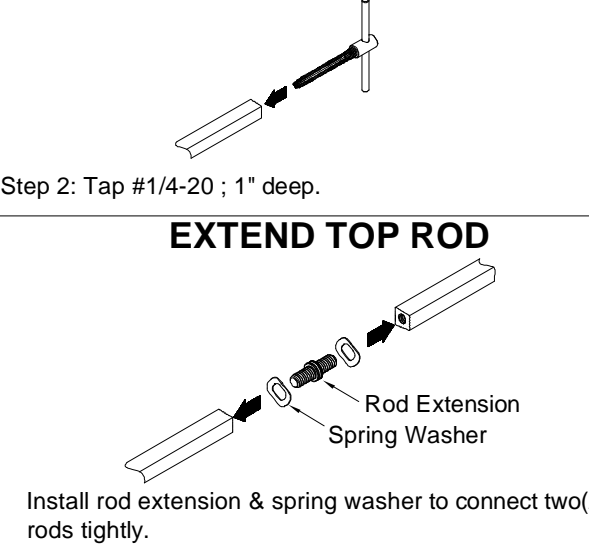
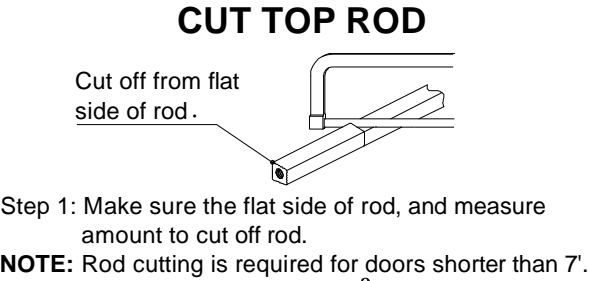


# INSTALL FIRE BOLT

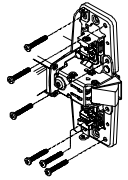
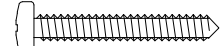

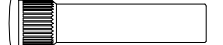
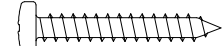
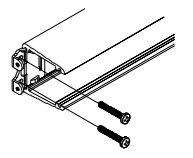

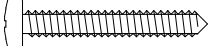

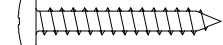
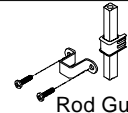
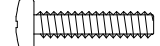

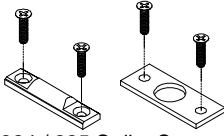
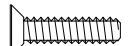
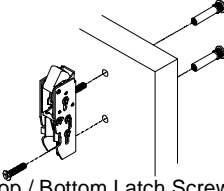

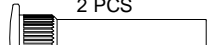
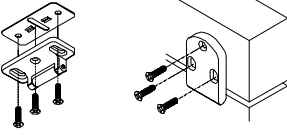
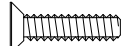
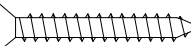
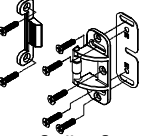
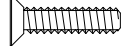
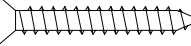
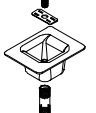

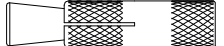
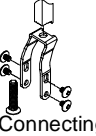
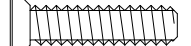









NOTE: Fire rated device with less bottom rod (LBR) applications must use FIRE BOLT.

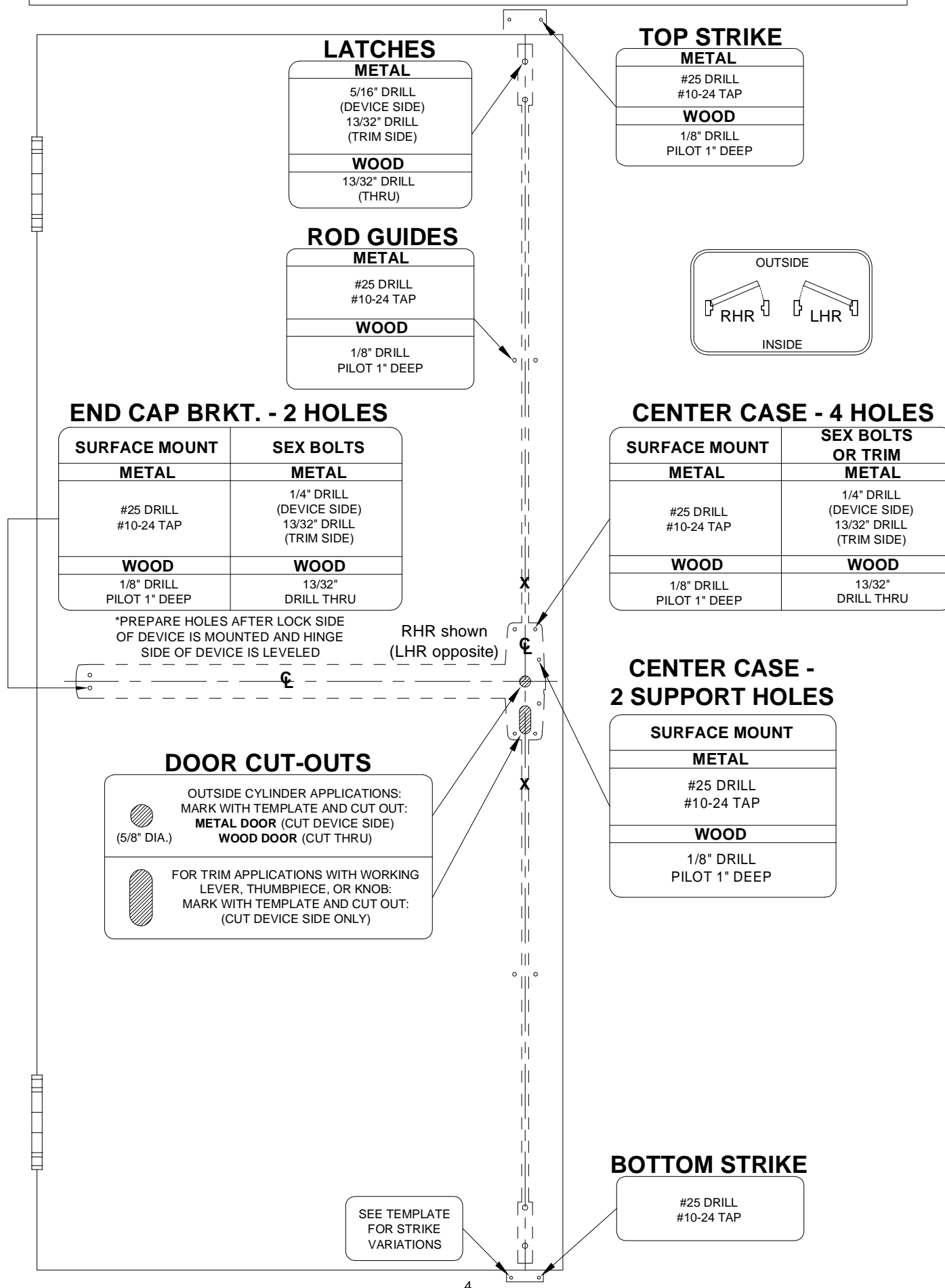
# CUT TOP ROD / EXTEND TOP ROD



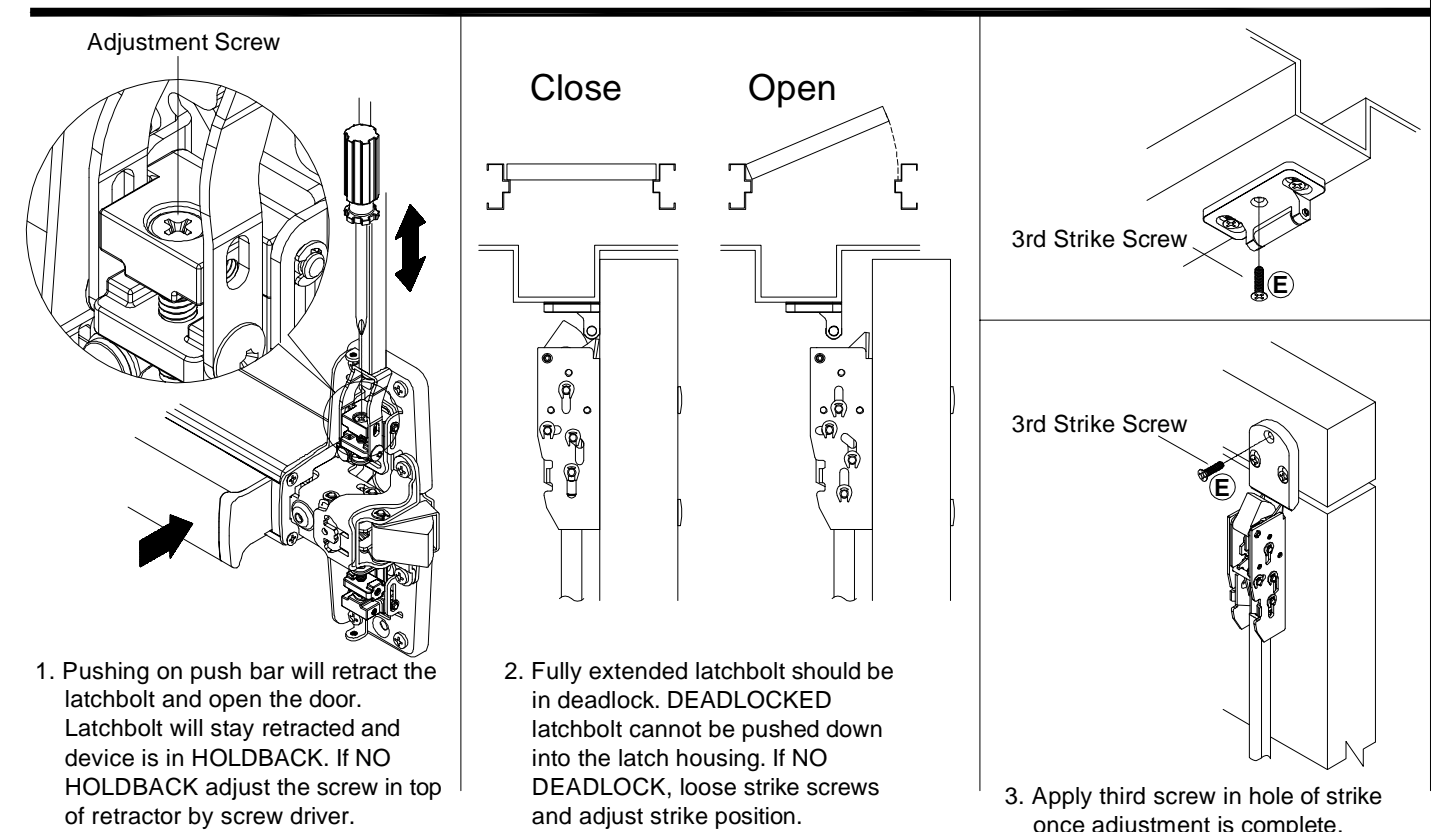
# SCREW CHART

APPLICATION	METAL	SEX BOLTS	WOOD
 Center Case Screws	 C No.10-24 x 1-11/32" 6 PCS	 G No.10-24 x 1-11/32" 6 PCS  G No.10-24 x 1-3/32" 6 PCS	 A No.10-12 x 1-11/32" 6 PCS
 End Cap Bracket Screws	 C No.10-24 x 1-11/32" 2 PCS	 C No.10-24 x 1-11/32" 2 PCS  G No.10-24 x 1-3/32" 2 PCS	 A No.10-12 x 1-11/32" 2 PCS
 Rod Guide Screws	 D No.10-24 x 25/32" 4 PCS		 A No.10-12 x 1-11/32" 4 PCS
 224 / 225 Strike Screws	 E No.10-24 x 11/16" 2 PCS		
 Top / Bottom Latch Screws		 F No.1/4-20 x 1-1/6" 2 PCS  H No.1/4-20 x 1-3/32" 4 PCS	
 106 / 215 Strike Screws	 E No.10-24 x 11/16" 3 PCS		 B No.10-12 x 1-11/32" 3 PCS
 108 Strike Screws	 E No.10-24 x 11/16" 7 PCS		 B No.10-12 x 1-11/32" 7 PCS
 227 Strike Screws	 N No.1/4-20 x 5/8" 1 PCS	 O No.1/4-20 x 5/8" 1 PCS	
 Side Screws & Connecting Screws	 F No.1/4-20 x 1-1/6" 2 PCS	 L No.8-32 x 7/32" 8 PCS	
 End Cap Screws	 J	 No.8-32 x 5/8" 2 PCS	
 Cover Screws	 I	 No.8-32 x 5/32" 6 PCS	

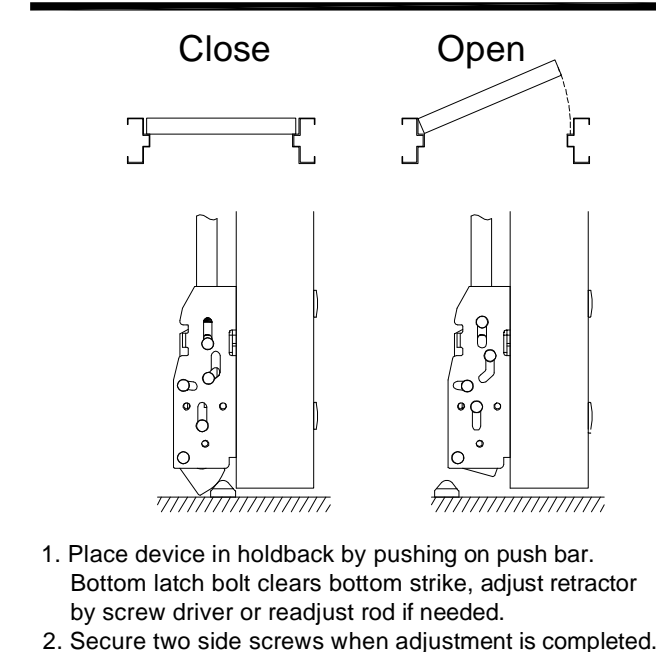
# DOOR PREPARATION CHART



## 12 CHECK TOP LATCH FOR HOLDBACK AND DEADLOCK.

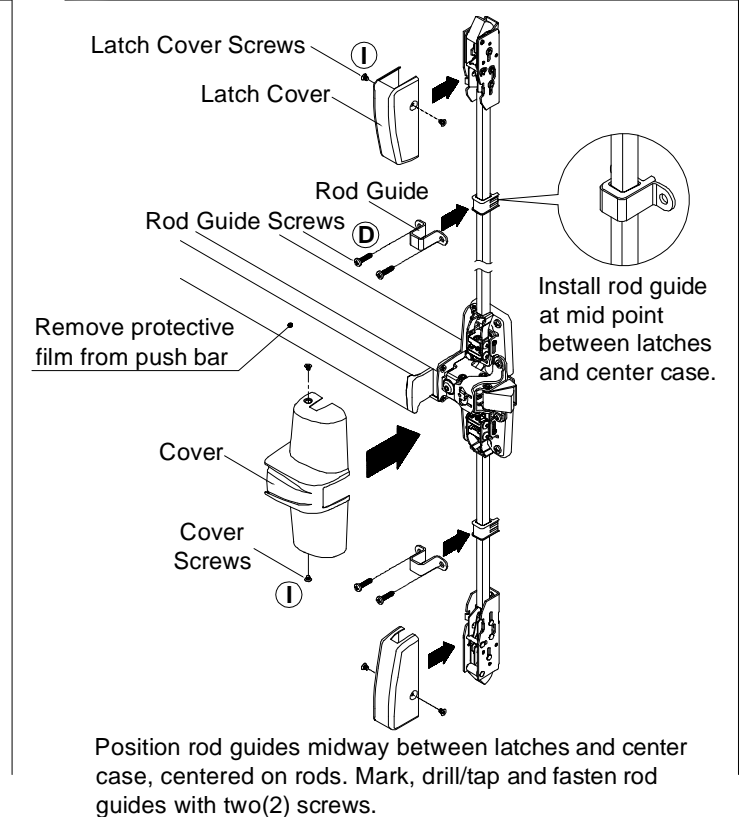


## 15 ADJUST BOTTOM ROD WITH DOOR OPEN (TOP LATCH RETRACTED).



Open and close door a few times and check for deadlocking when door is closed.

## 16 INSTALL ROD GUIDES AND COVERS WITH SCREWS.



11 INSTALL TOP LATCH AND ROD.  
(Continued)

Connecting Screws  
Connecting Bar  
Notch  
Rod  
Tab  
Rod  
Connecting Bar  
Connecting Screw (F)

**NOTE:** Match notch of connecting bar with tab of rod before tighten connecting screw.

3. Put connecting screw through round hole of connecting bar and thread into top rod and tighten. **See Figure 3**

4. Assemble sleeve with rod. Thread top rod onto top latch until first hole in connecting bar align with first hole in retractor and fasten side screw.

1 DRAW HORIZONTAL DEVICE AND STRIKE CENTERLINE.

Hinge Side  
39-5/8" to Finished Floor or Threshold  
RHR shown (LHR opposite)

Close door, mark horizontal centerline on inside face of door and on lock side door stop 39-5/8" from finished floor as shown (continue horizontal centerline to outside face of door if trim is used).

2 ALIGN STRIKE ON HORIZONTAL CENTERLINE (C) AND MARK TWO(2) SLOTTED HOLES.

<b>METAL</b> #25 DRILL #10-24 TAP
<b>WOOD</b> 1/8" DRILL PILOT 1" DEEP

Roller against door  
C

Use strike as template and place on door stop and against inside face of door, so the horizontal centerline on strike lines up with the horizontal centerline on door stop and door. Mark centers and drill / tap holes as required.

13 SECURE TWO(2) SIDE SCREWS.

Connecting Bar  
Tighten Four(4) Side Screws  
Second Side Screws

Apply second side screws through second holes in connecting bar with second holes in retractor and tighten two side screws.

14 INSTALL BOTTOM LATCH AND ROD.

Retractor  
First Holes  
Side Screws  
Second Holes  
Connecting Bar  
Side Screws  
Sleeve  
Rod  
Sex Bolts (H)  
Bottom Latch  
Latch Screws (F)

1. Install bottom latch with two(2) screws(Sex bolts).  
2. Put connecting screw through round hole of connecting bar and thread into bottom rod and tighten.  
3. Assemble sleeve with rod, thread the bottom rod onto the stud in the bottom latch until the first holes in the end of connecting bar align with first hole in retractor and fasten side screws.

(For LBR devices omit preparation for bottom Latch and rod.)

3 INSTALL STRIKE AND SHIM.

Strike Shim  
106 Strike  
Strike Screws (E)

Prepare two(2) holes and install a screw through each slot.

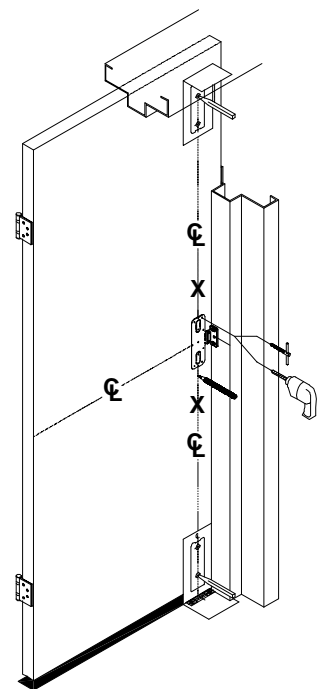
For 108 strike see back cover of this instruction.

4 POSITION TEMPLATE AGAINST STRIKE AND ON C AND MARK DOOR.

Align template on centerline and against roller of strike.  
Template A  
C  
Mark Six(6) Holes  
X

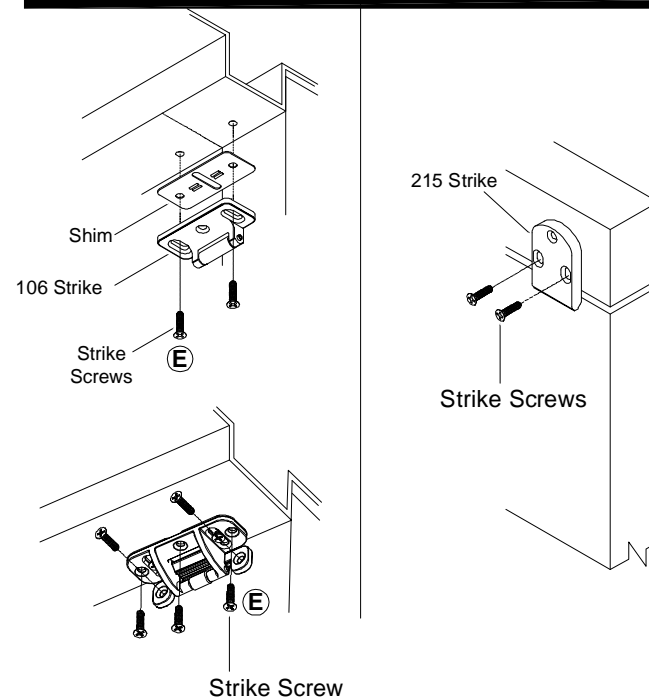
Tape "TEMPLATE A"(and trim template if trim is using) to the door so that the centerlines on the template line up with centerlines on the door. Mark centers and drill/tap the required holes as indicated on the template.

## 5 ALIGN TOP & BOTTOM TEMPLATES ALONG CENTERLINE, THEN MARK AND PREPARE DOOR.



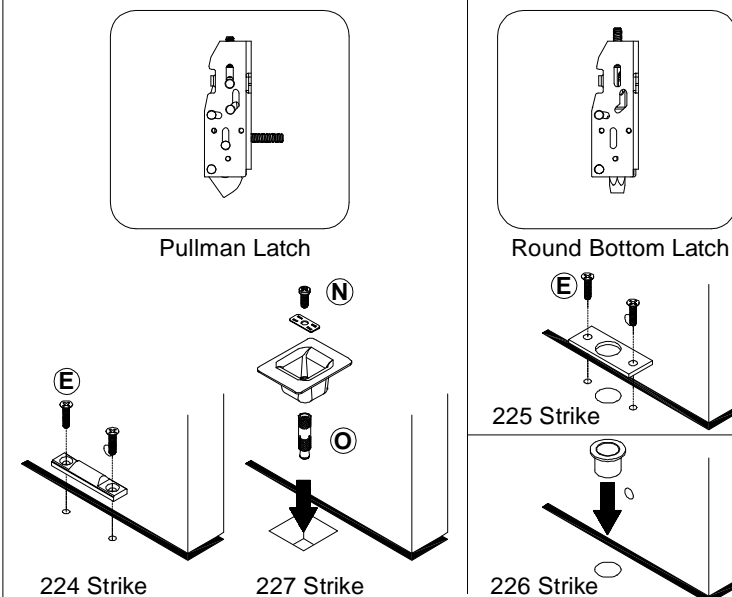
1. Fold strike template and place on door stop and inside face of door, so the vertical centerline on template lines up with the vertical centerline on door stop and door.
2. Tape template on door stop and the door face.
3. Mark centers and drill/tap holes as indicated on the template. See "DOOR PREPARATION CHART" on page 4 for drill/tap, and cut-out information.

## 6 INSTALL TOP STRIKE AND SHIM.



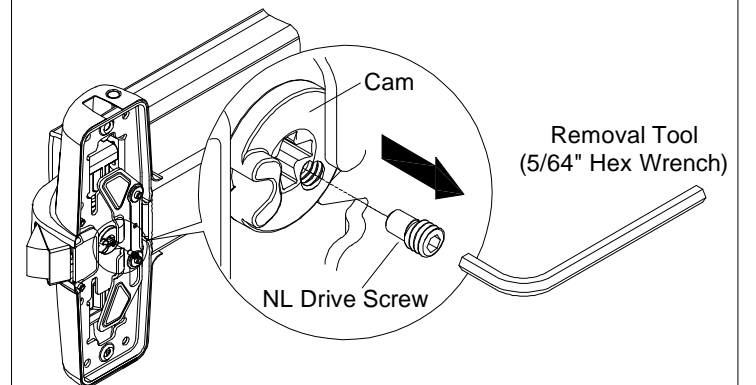
Apply third screw in hole of strike once adjustment is complete.

## 7 INSTALL BOTTOM STRIKE.



1. Mark floor for fasteners, prepare floor according to the type of strike and fastener furnished. Provide clearance in floor for bolt.
2. For threshold application: Provide hole in threshold according to type of strike and fasteners furnished.

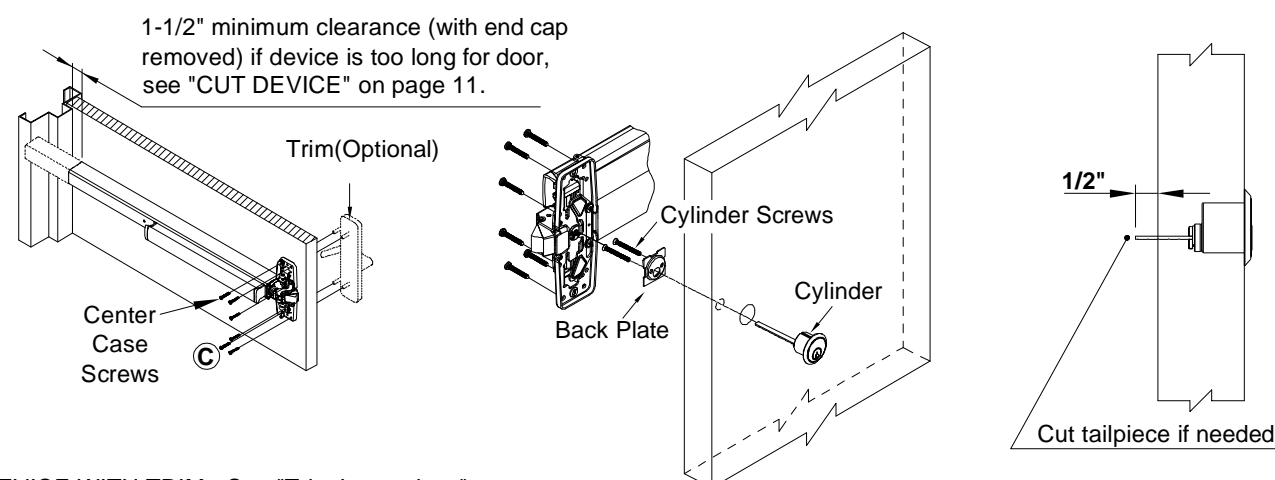
## 8 DETERMINE USE OF NL DRIVE SCREW.



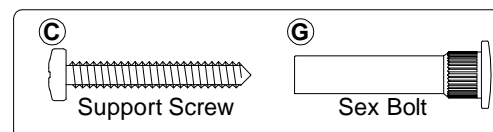
NL driver screw is factory assembled in cam on back of device center case, when the NL drive screw is left in back of center case, the outside cylinder will function only as a Night Latch.

- NOTE:**
1. **DO NOT** remove NL drive screw for Pull Plate or Escutcheon with night latch cylinder.
  2. **REMOVE** NL drive screw from back of center case when installing trim that has a functional lever, knob, or thumbpiece AND an outside cylinder to lock and unlock the trim.

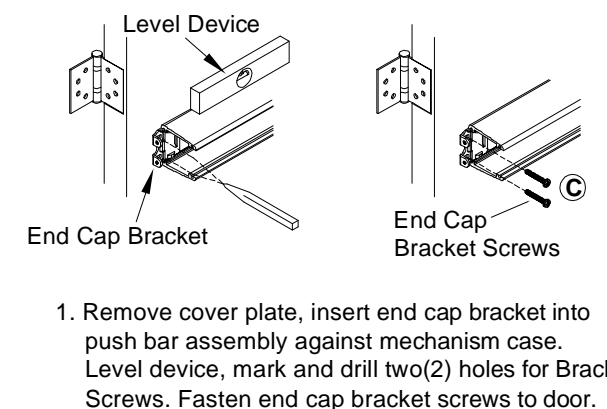
## 9 INSTALL TRIM (IF USING) AND SECURE DEVICE CENTER CASE TO DOOR.



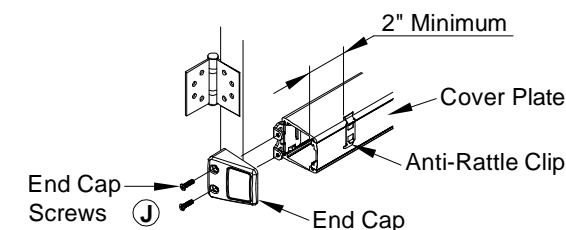
1. **DEVICE WITH TRIM** - See "Trim Instructions".
  2. **CYLINDER ONLY** - Install cylinder with cylinder back plate as shown. Make sure the tailpiece is extending 1/2" from the inside face of door. Insert tailpiece into cam in the center case and mount it to the door with six(6) center case screws.
  3. **EXIT ONLY** - Mount center case to the door with six(6) center case screws.
- For FIRE EXIT DEVICES :**
- Two(2) sex bolts and support screws are required for composite (wood, plastic and steel covered), wood core, sheet metal and hollow metal doors without reinforcement unless door manufacturer has an alternate mounting method. Fire doors with steel reinforcement, mount devices with machine screws.



## 10 INSTALL MOUNTING BRACKET AND END CAP.



1. Remove cover plate, insert end cap bracket into push bar assembly against mechanism case. Level device, mark and drill two(2) holes for Bracket Screws. Fasten end cap bracket screws to door.



2. Insert cover plate, slide anti-rattle clip in position (2" minimum from end), and attach end cap with two(2) end cap screws.

## 11 INSTALL TOP LATCH AND ROD.

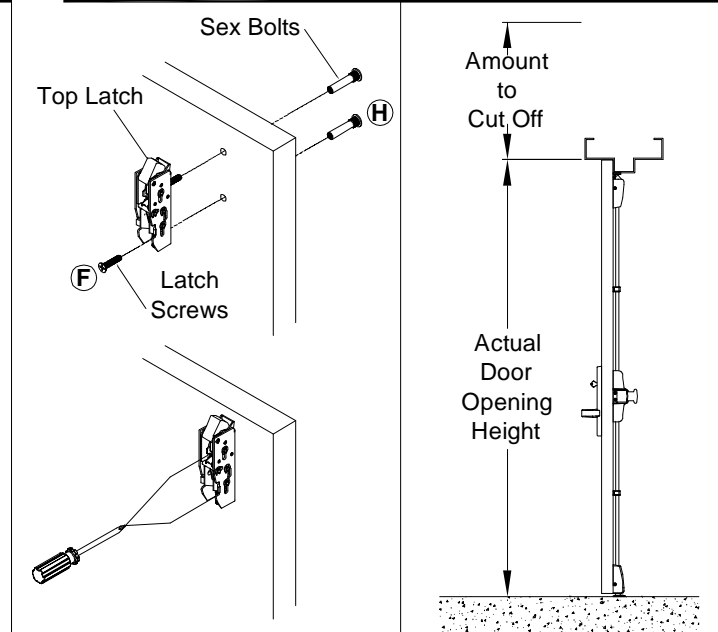


Figure 1

Figure 2

1. Install top latch with two(2) screws (sex bolts). Adjust strike so that device latches without binding. **See Figure 1**
2. Determine rod lengths as shown in **Figure 2**. If necessary; cut end of rod and tap. See "CUT TOP ROD / EXTEND TOP ROD" on page 10.