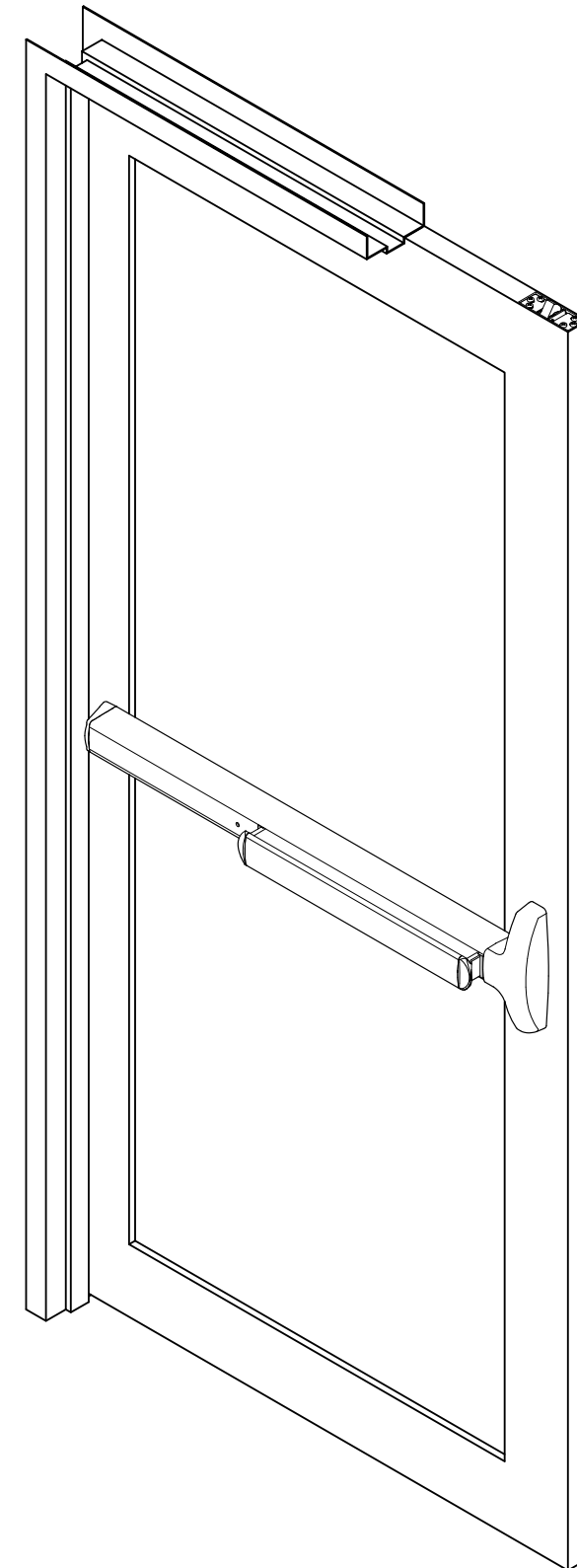
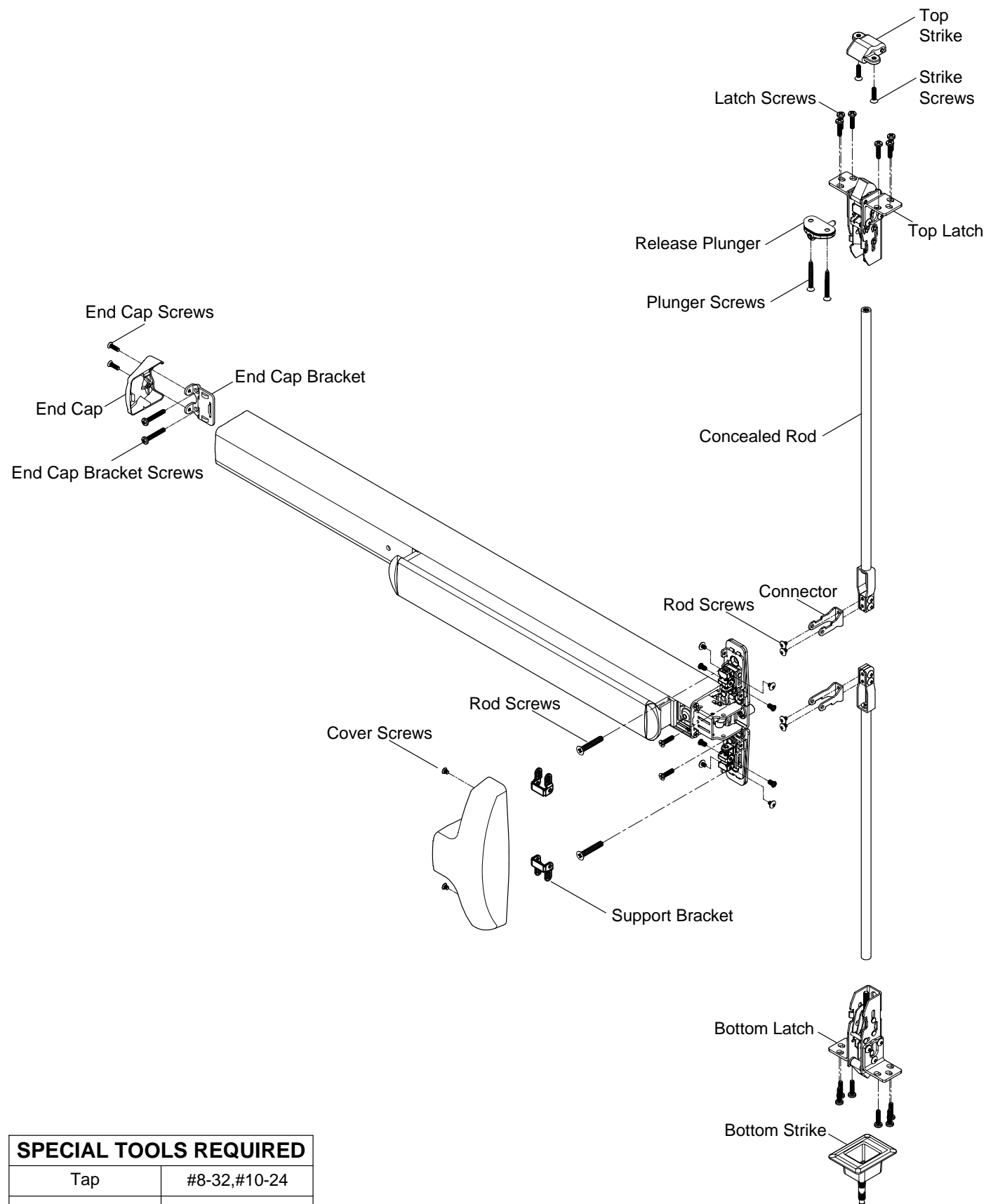
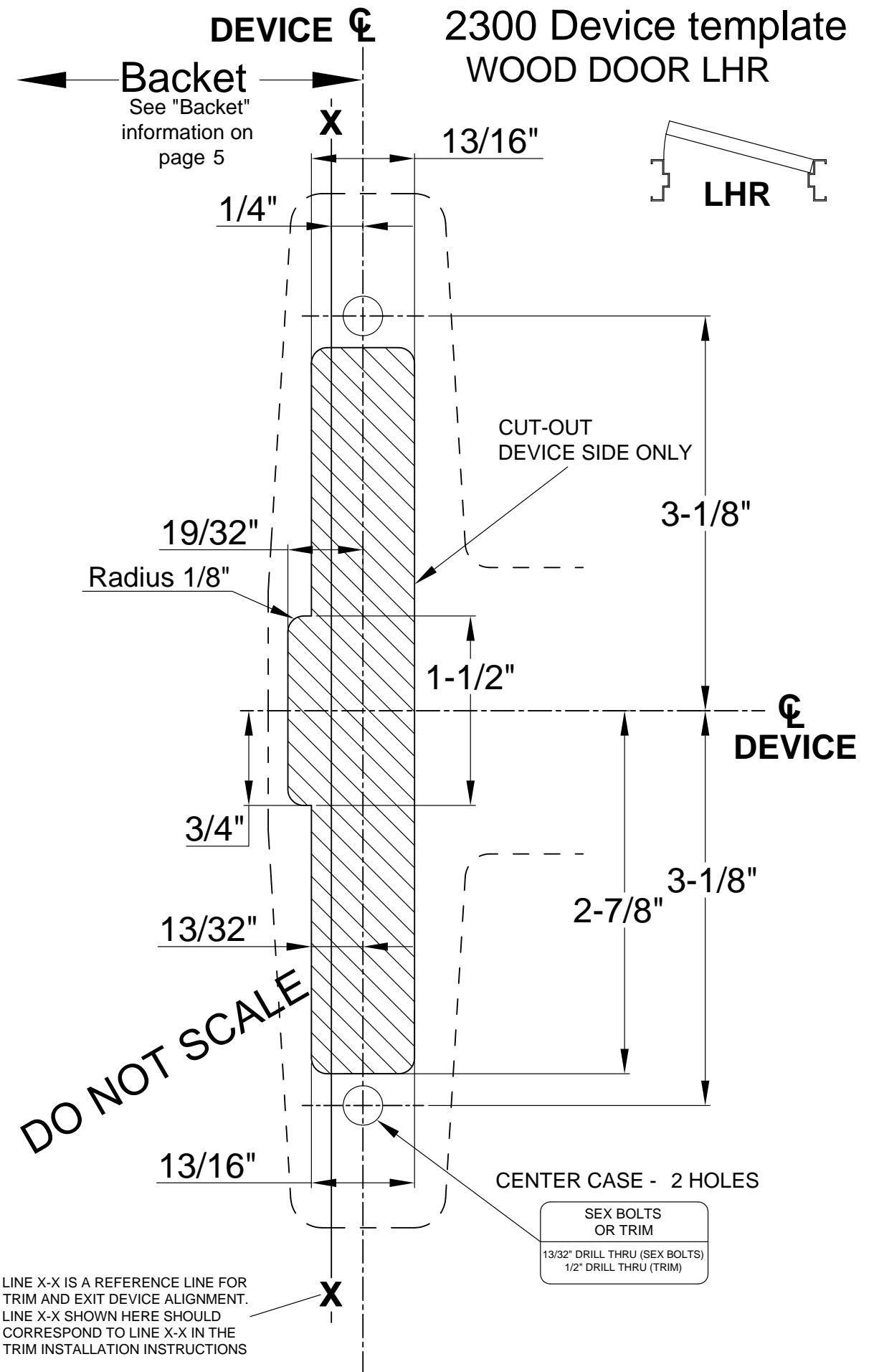


**2300/F2300 SERIES  
CONCEALED VERTICAL ROD DEVICE  
INSTALLATION INSTRUCTIONS**

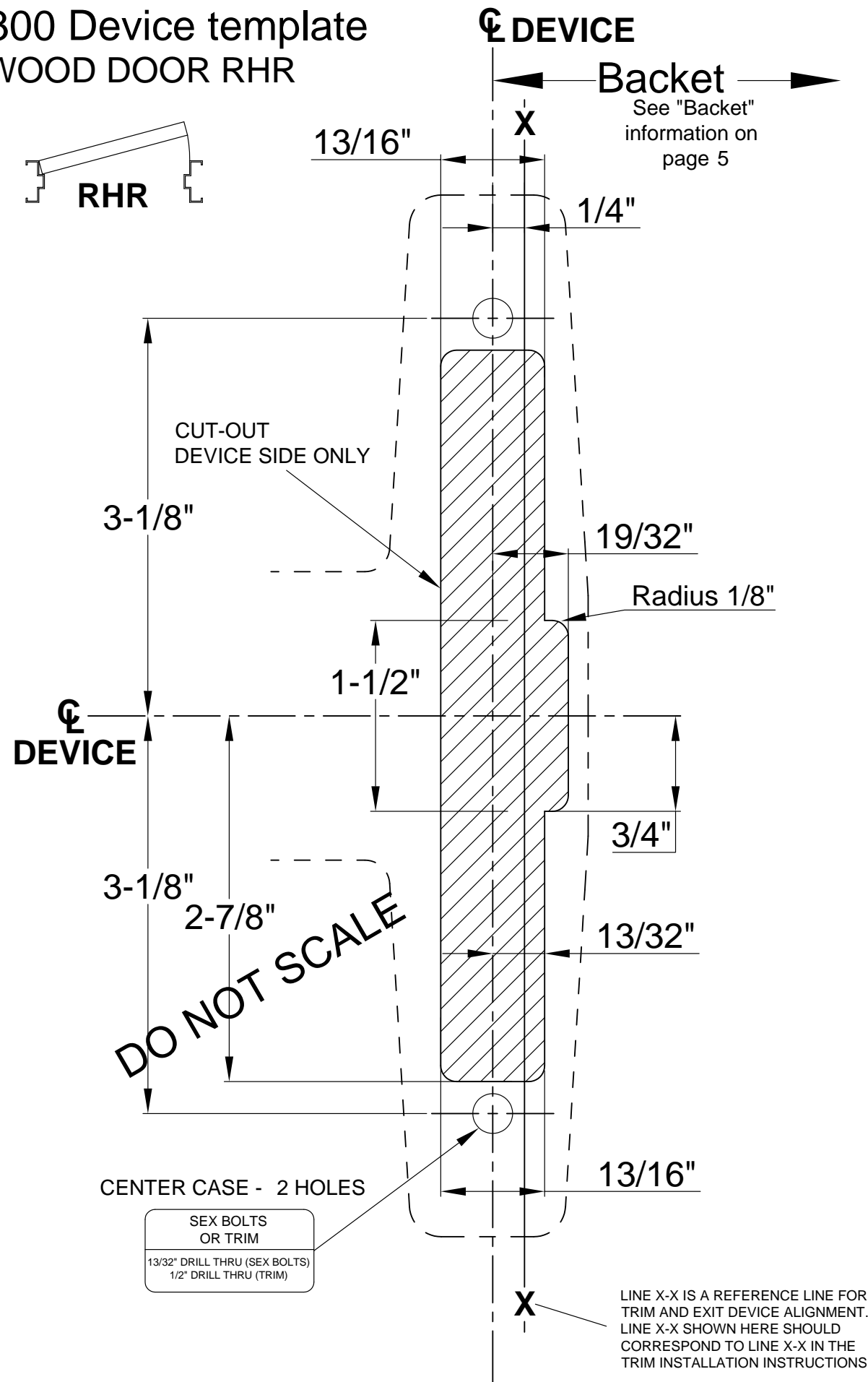
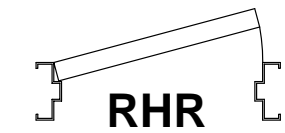




SPECIAL TOOLS REQUIRED	
Tap	#8-32, #10-24
Drill Bits	#25, 1/8", 1/4", 5/16", 13/32", #7
Spade Drill	5/8" (For Wood Door)



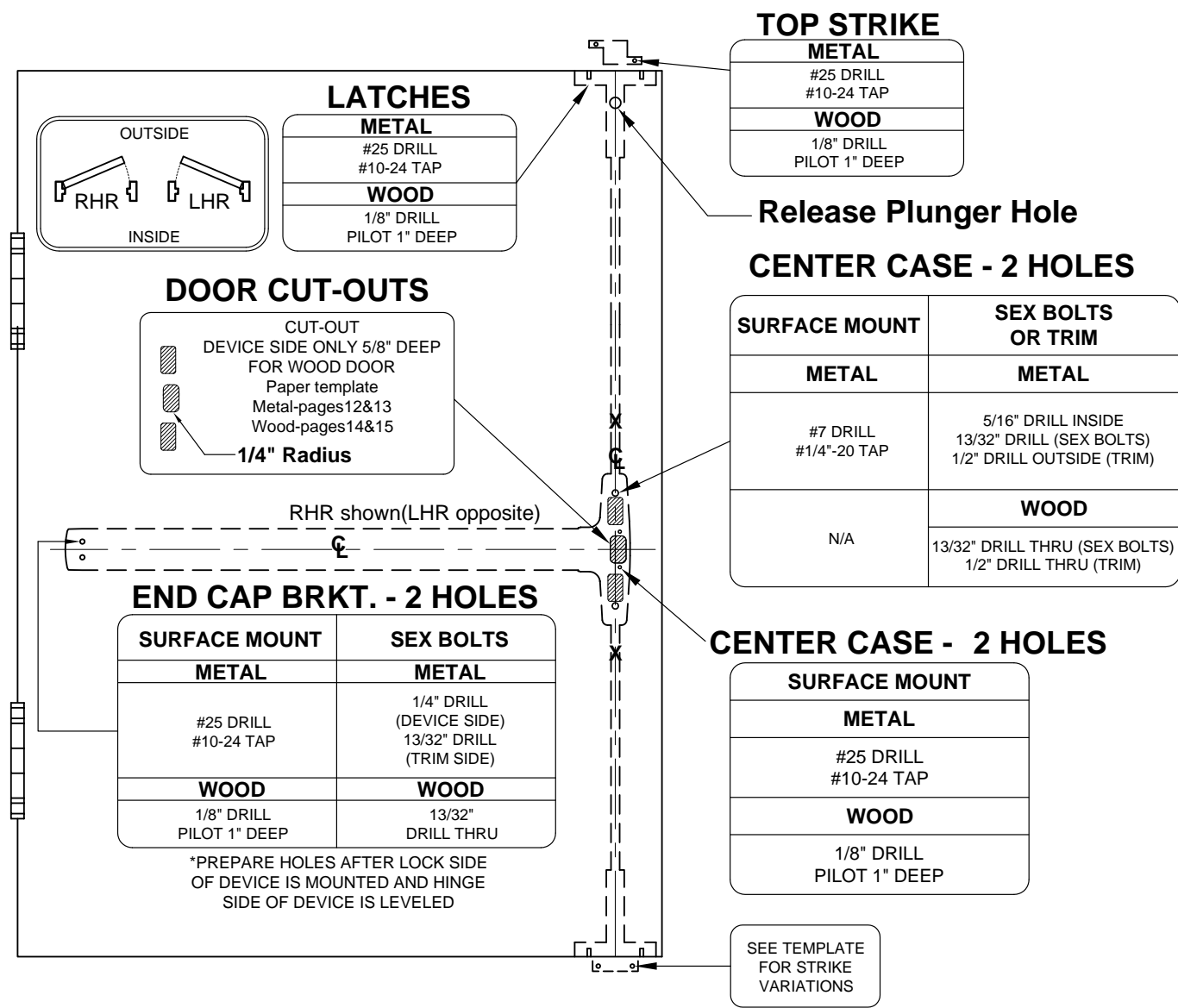
# 2300 Device template WOOD DOOR RHR



## SCREW CHART

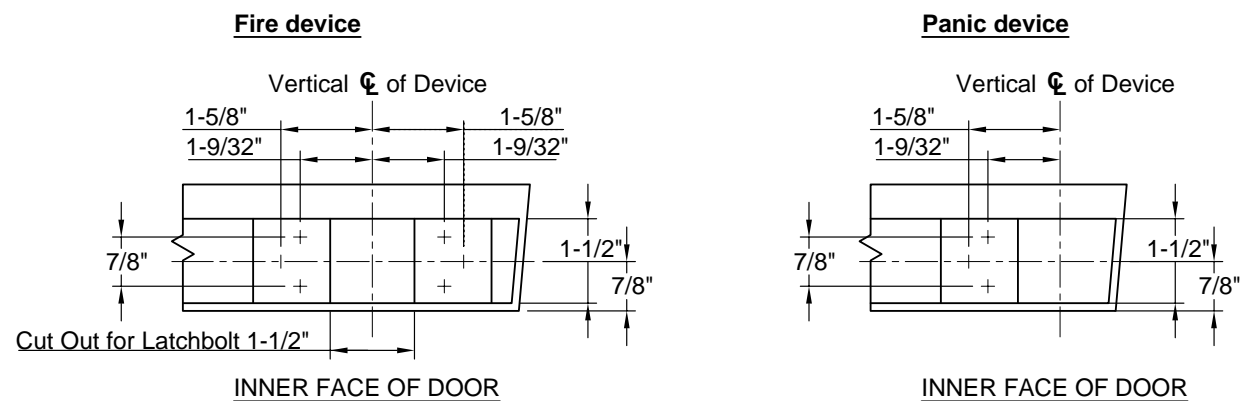
APPLICATION	METAL	SEX BOLTS	WOOD
Center Case Screws	<b>F</b> 1/4-20 x 1-1/8" 2 PCS	<b>F</b> 1/4-20 x 1-1/8" 2 PCS <b>H</b> 1/4-20 x 1-3/32" 2 PCS	Trim mount or sex bolts
Center Case Screws	<b>E</b> No.10-24 x 11/16" 2 PCS		<b>B</b> No.10-12 x 1-11/32" 2 PCS
End Cap Bracket Screws	<b>C</b> No.10-24 x 1-11/32" 2 PCS	<b>C</b> No.10-24 x 1-11/32" 2 PCS <b>G</b> No.10-24 x 1-3/32" 2 PCS	<b>A</b> No.10-12 x 1-11/32" 2 PCS
Plunger Screws		<b>P</b> No.10-24 x 1-5/8" 2 PCS	
216 Strike Screws	<b>E</b> No.10-24 x 11/16" 2 PCS		<b>B</b> No.10-12 x 1-11/32" 2 PCS
225 Strike Screws	<b>E</b> No.10-24 x 11/16" 2 PCS		
Top / Bottom Latch Screws	<b>D</b> No.10-24 x 25/32" 6 PCS		<b>A</b> No.10-12 x 1-11/32" 6 PCS
227 Strike Screws	<b>N</b> No.1/4-20 x 5/8" 1 PCS	<b>O</b> No.1/4-20 x 5/8" 1 PCS	
Side Screws Top / Bottom Rod Screws	<b>L</b> No.8-32 x 7/32" 4 PCS	<b>M</b> No.8-32 x 5/16" 2 PCS	
End Cap Screws	<b>J</b> No.8-32 x 5/8" 2 PCS		
Cover Screws	<b>I</b> No.8-32 x 5/32" 2 PCS		

# DOOR PREPARATION CHART



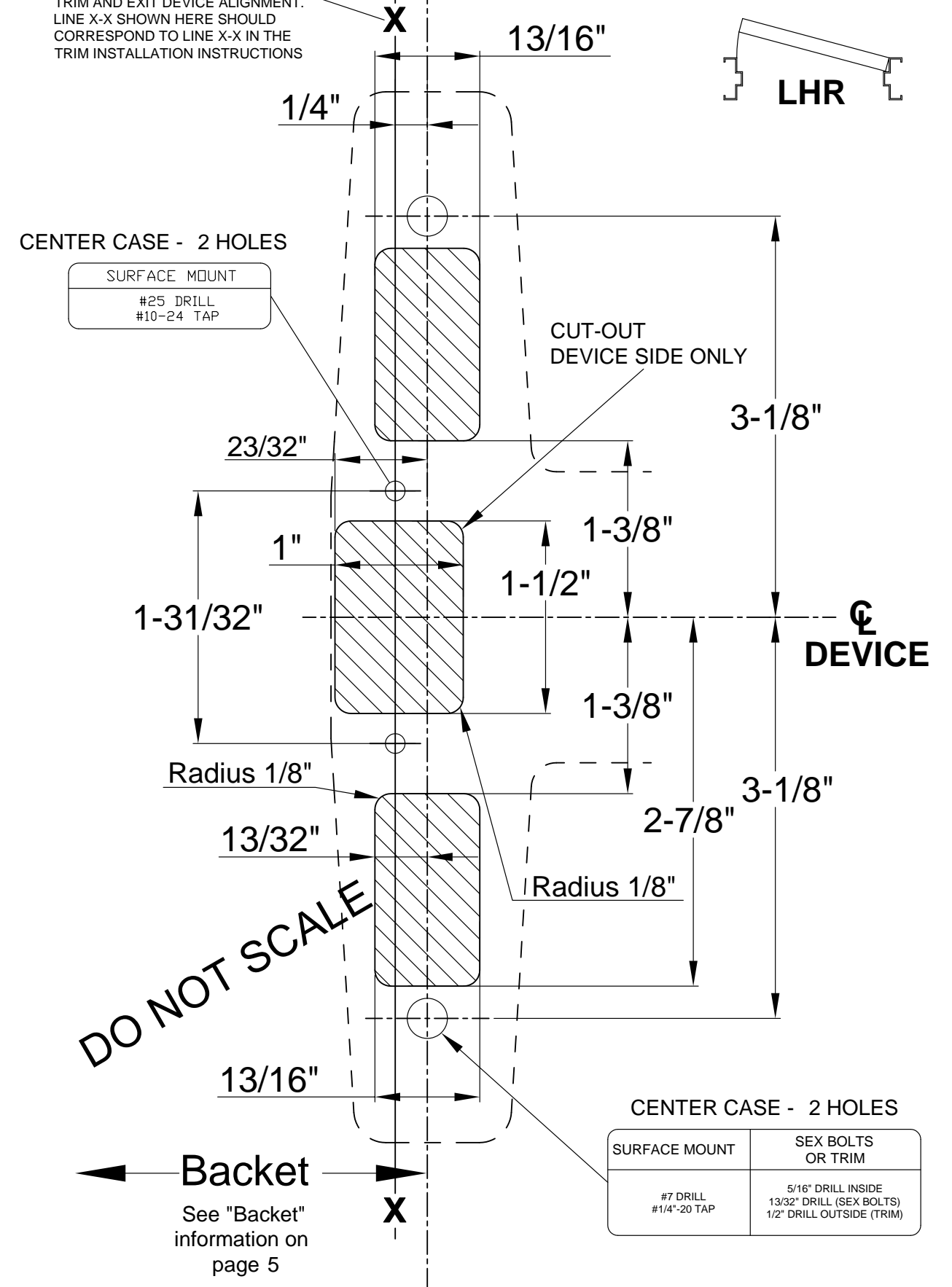
## LATCH HOLE PREPARATION

(Drill Top and Bottom of Door)

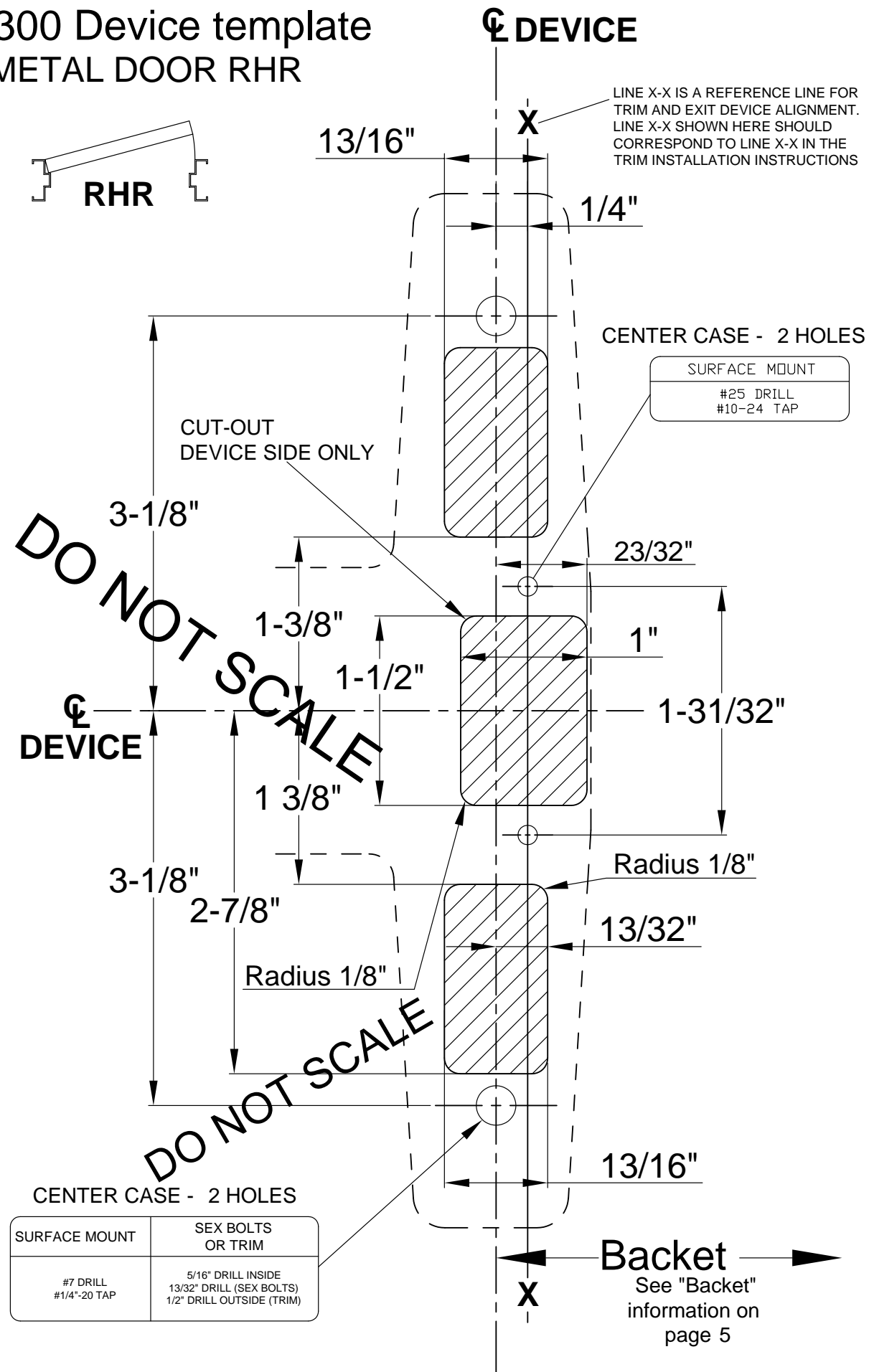


## 2300 Device template METAL DOOR LHR

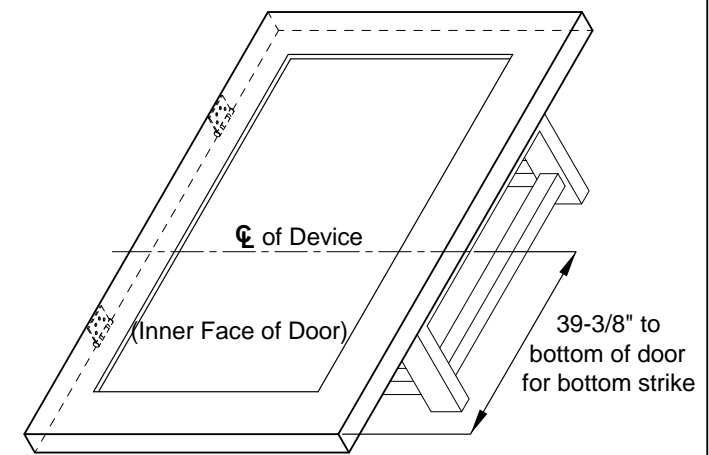
LINE X-X IS A REFERENCE LINE FOR TRIM AND EXIT DEVICE ALIGNMENT. LINE X-X SHOWN HERE SHOULD CORRESPOND TO LINE X-X IN THE TRIM INSTALLATION INSTRUCTIONS



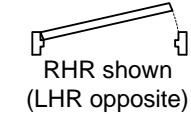
# 2300 Device template METAL DOOR RHR



## 1 DRAW HORIZONTAL DEVICE CENTER LINE (CL).

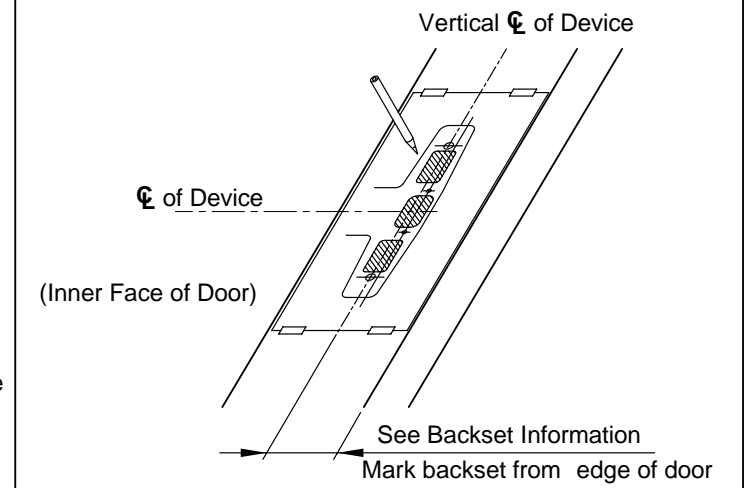


If threshold is present centerline of device must be at a distance of 39-5/8" from finished floor. (bottom door gap must be 1/4")



Lay door in place and draw horizontal device center line as shown.

## 2 DRAW VERTICAL CL & MARK BACKSET.

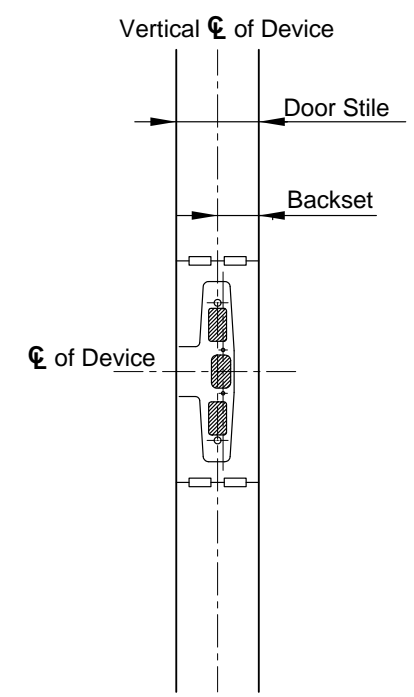


Position template as shown, then mark vertical center line for device center case.

## Backset Information

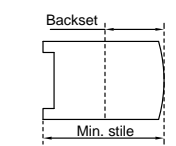
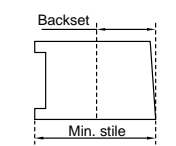
### Backset Table

Door Type	Backset	Min. stile	Application
Wood Door	1-5/16"	2-1/8" - 2-3/4"	
Metal	1-1/2"	2-3/4" - 3-3/4"	Two vertical rod devices
	1-7/8"	3-3/4" - 5"	
	2-1/2"	5" to flush	
Metal	1-1/2"	2-1/2" - 3-3/4"	Single door
	1-7/8"	3-3/4" - 5"	
	2-1/2"	5" to flush	
	2-3/4"	3-5/8" to flush	Fire applications



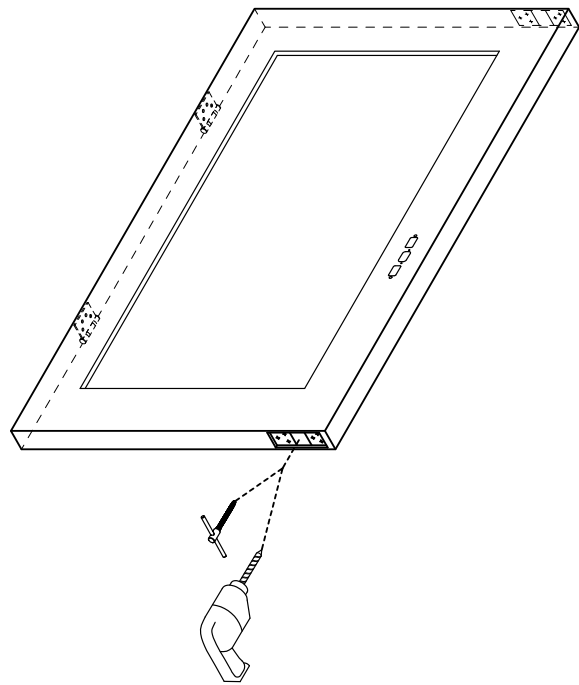
Beveled edge door

Rounded edge door



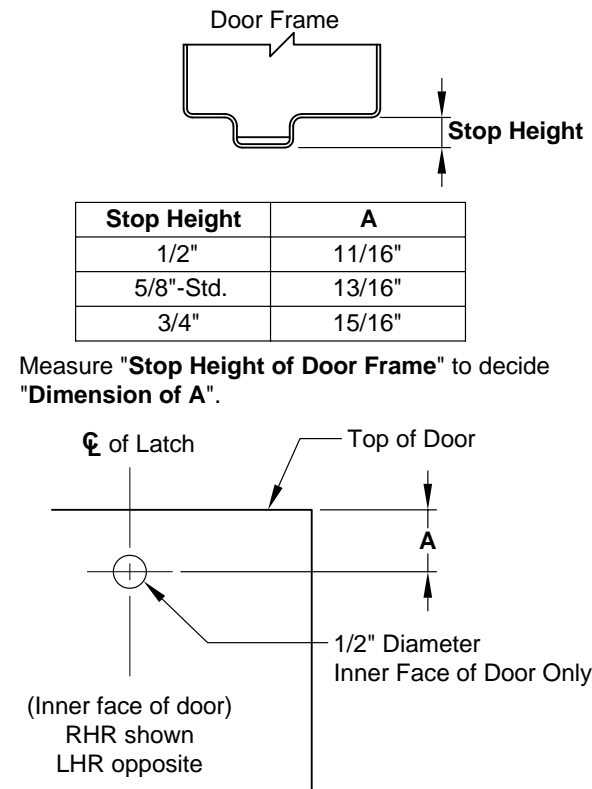
Backset must be measured from outer edge of door as shown. Recommended for rectangular glass stop stiles less than 2-1/8".

### 3 PREPARE DOOR FOR DEVICE AND TOP & BOTTOM LATCH.

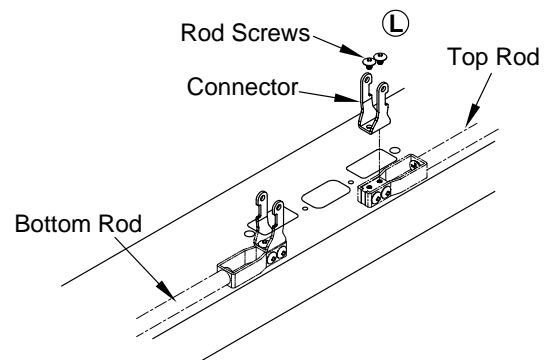


See "DOOR PREPARATION CHART" on page 4 for drill tap, and cut-out information.

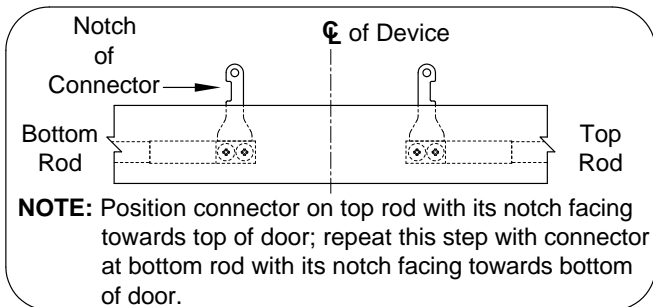
### 4 DRILL TOP OF DOOR FOR RELEASE PLUNGER.



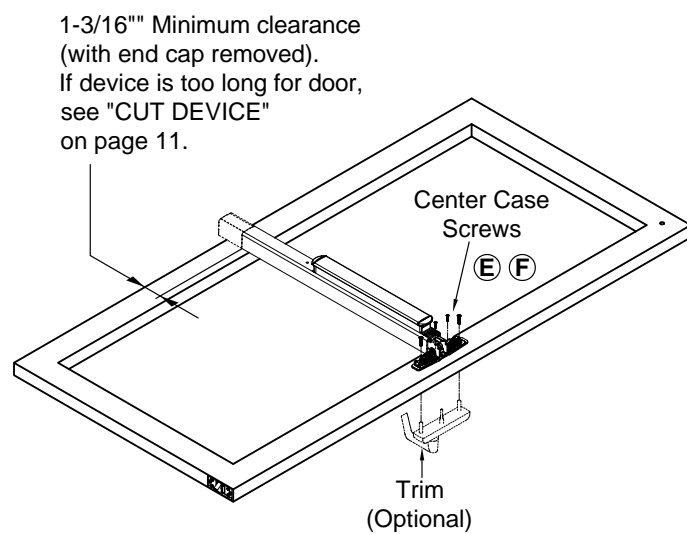
### 7 INSTALL CONNECTORS.



After adjusting the lengths, install connectors on both concealed rods with rod screws.



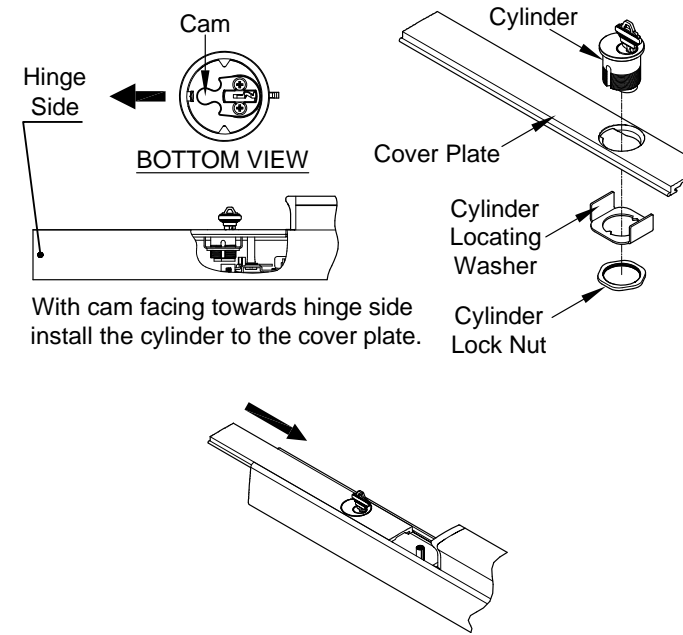
### 8 INSTALL TRIM (IF USING) AND SECURE DEVICE CENTER CASE TO DOOR.



1. DEVICE WITH TRIM - See "Trim Instructions".
2. EXIT ONLY - Mount center case to the door with four(4) center case screws.

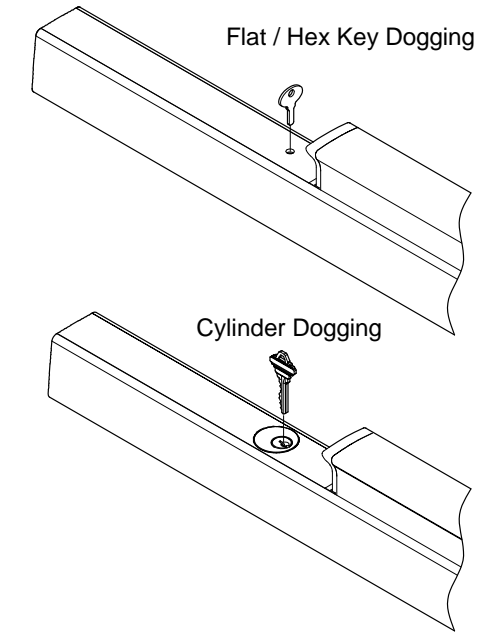
## OPTIONAL DOGGING

### CYLINDER DOGGING



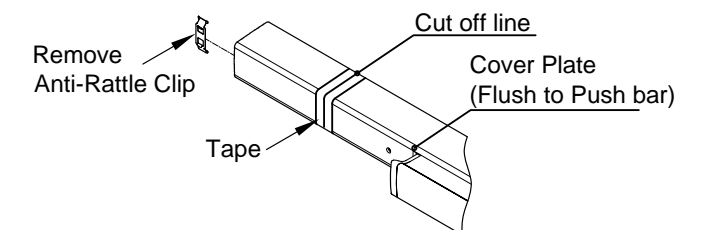
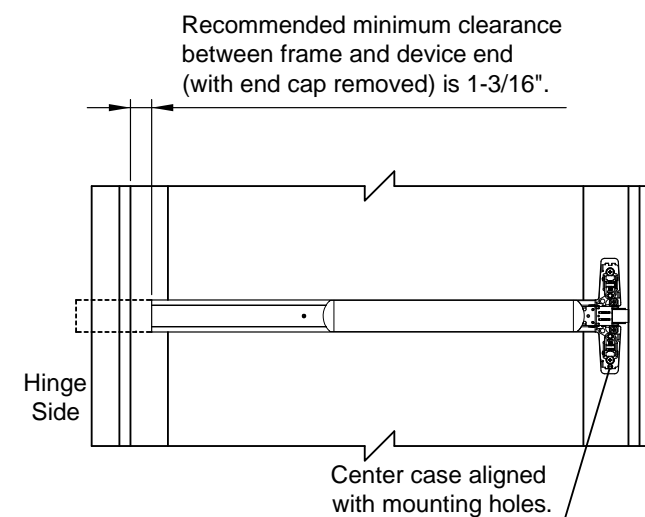
Slide cover plate in position in the mechanism case.

### DOGGING CHECK

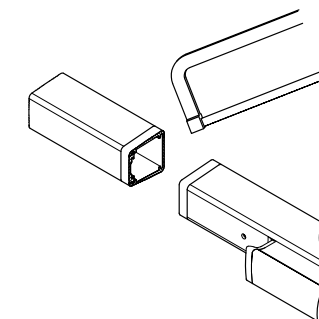


Depress push bar and turn flat / hex wrench or key one full turn for dogging check.

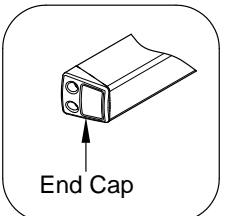
## CUT DEVICE (IF REQUIRED)



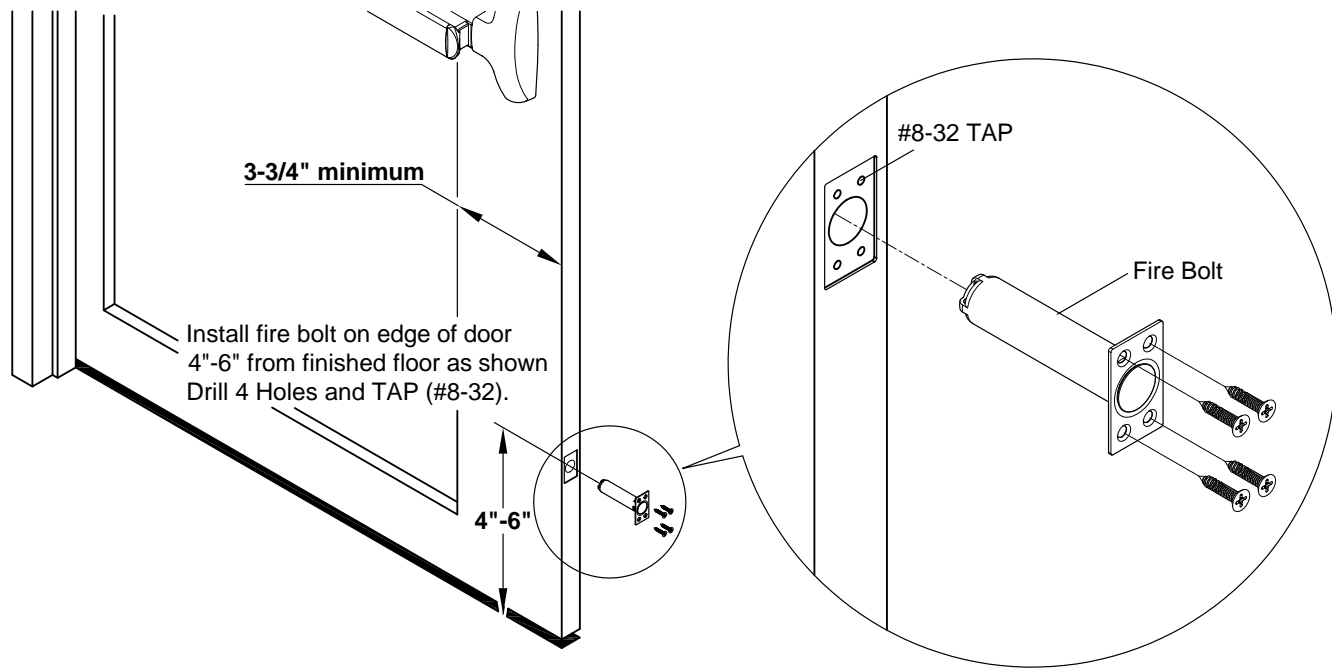
1. With anti-rattle clip removed, tape and mark area being cut.



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

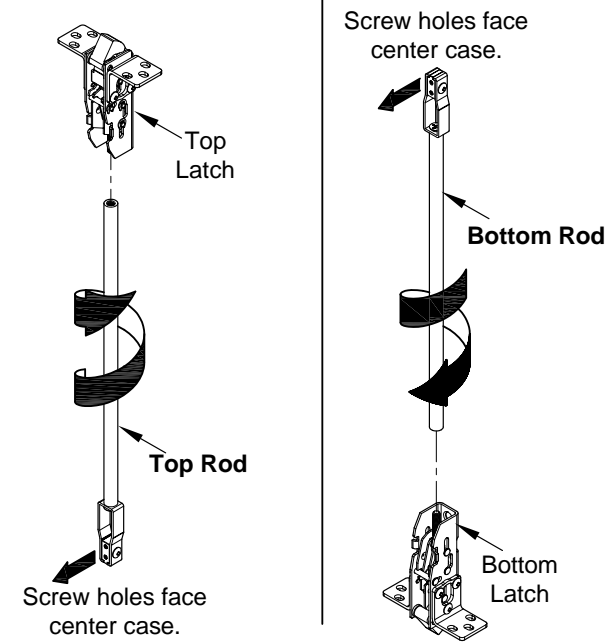


## INSTALL FIRE BOLT



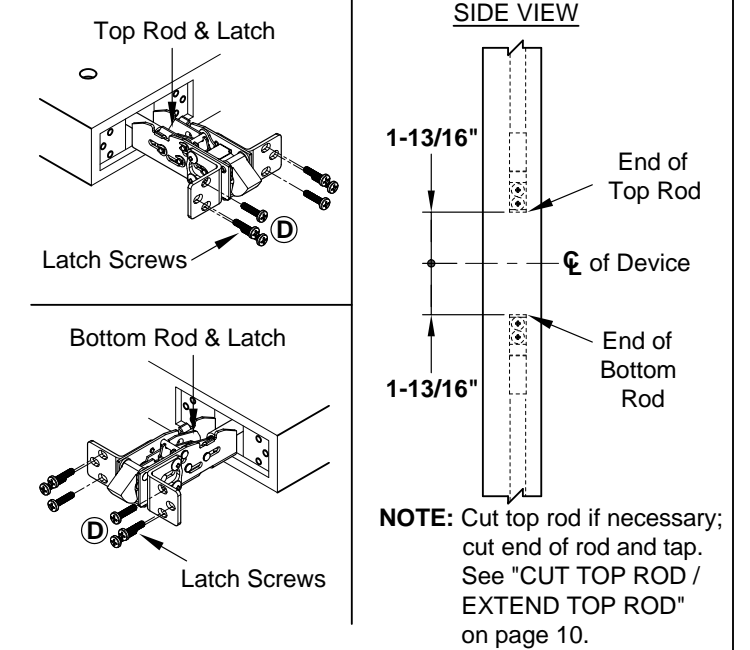
**NOTE:** Fire rated device with less bottom rod (LBR) applications must use FIRE BOLT.

## 5 ATTACH RODS TO LATCHES.



Thread rod onto latch stud until screw holes in rod bars face center case.

## 6 INSTALL RODS AND LATCH.

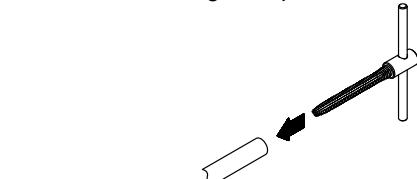


1. Install top latch and latch screws at top of door.
2. Install bottom latch and latch screws at bottom of door.
3. Fine tune the overall length by threading latch in or out of rod.

## CUT TOP ROD / EXTEND TOP ROD

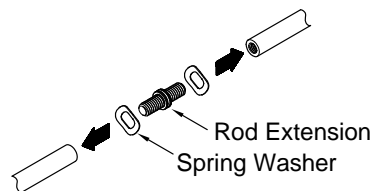
### CUT TOP ROD

- Step 1: Make sure the section cut is perpendicular to the rod length, and measure amount to cut off rod.
- NOTE:** Rod cutting is required for doors shorter than 7'.

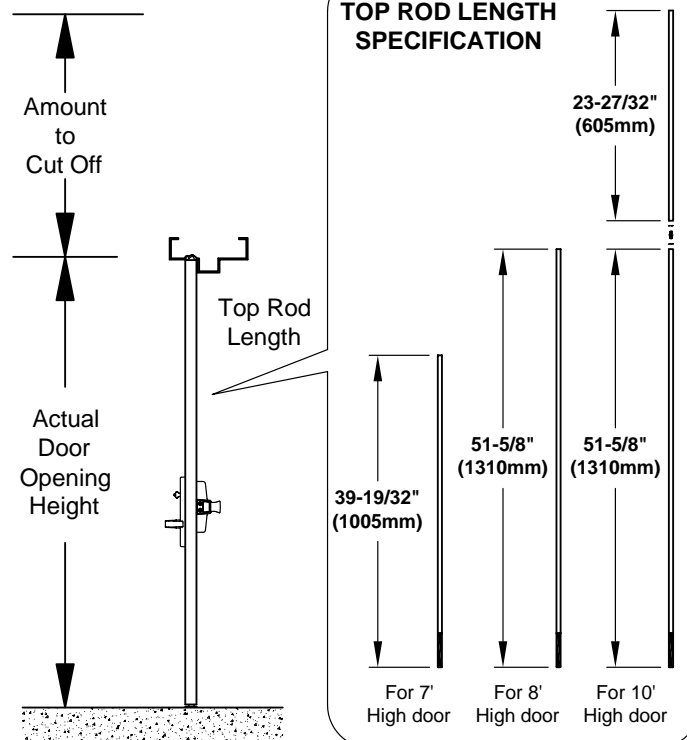


Step 2: Tap #1/4-20 ; 1" deep.

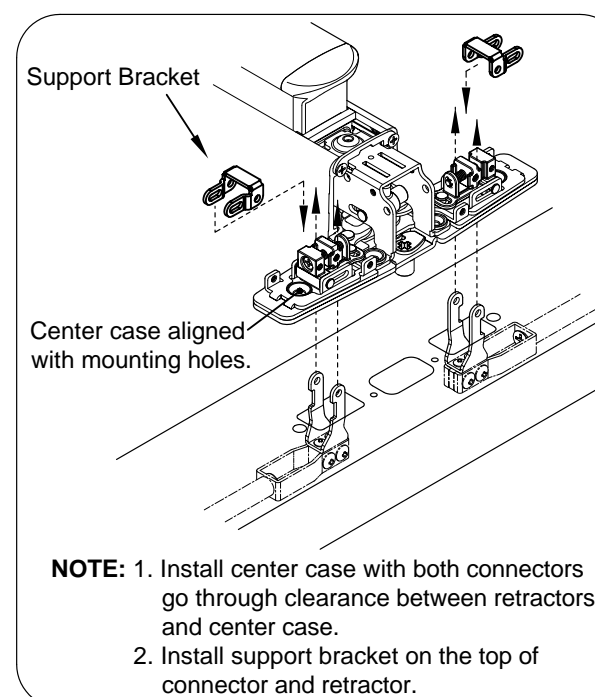
### EXTEND TOP ROD



Install rod extension & spring washer to connect two(2) rods tightly.

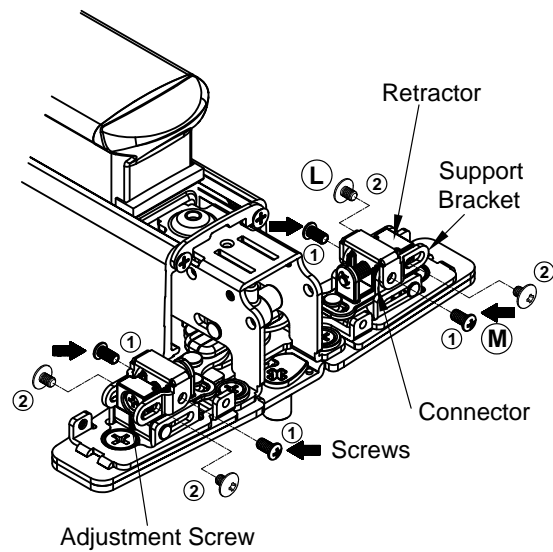


## 9 INSTALL MOUNTING BRACKET AND END CAP.



- End Cap Bracket Screws
- Device must be horizontally leveled.
- End Cap Bracket
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.
- Cover Plate
- Anti-Rattle Clip
- 2" Minimum
- End Cap Screws
- End Cap
2. Insert cover plate, slide anti-rattle clip in position (2" minimum from end), and attach end cap with two(2) end cap screws.

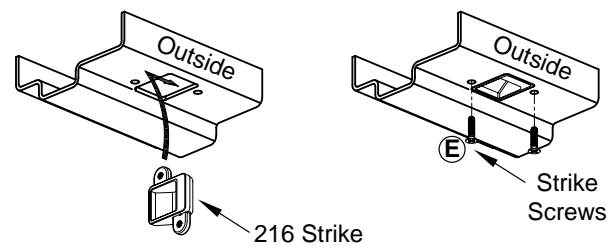
## 10 INSTALL SIDE SCREWS.



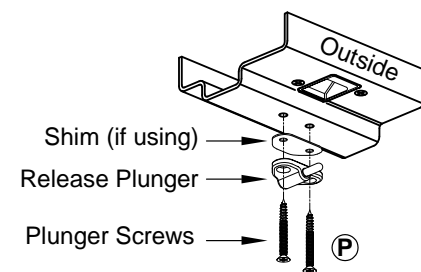
1. Deadbolt should be stuck out.
2. Turning side screws through support bracket, connector and retractor, then tighten the screw.
3. Steady screw 2. through support bracket on retractor.

Note: Steady screw 2., then adjust deadbolt before tighten it.

## 11 HANG DOOR AND INSTALL TOP STRIKE & RELEASE PLUNGER.

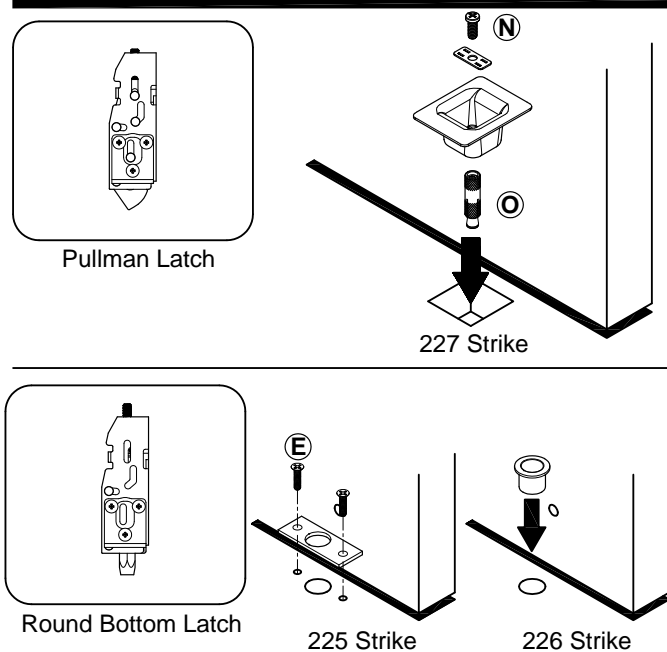


See "FRAME PREPARATION" on page 9 for cut-out and holes. After preparing, install top strike into door frame and mount two(2) strike screws.



See "FRAME PREPARATION" on page 9 for holes. After preparing, install release plunger with two(2) plunger screws.

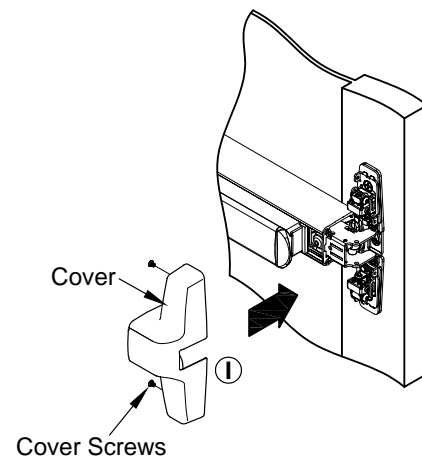
## 12 INSTALL BOTTOM STRIKE.



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.

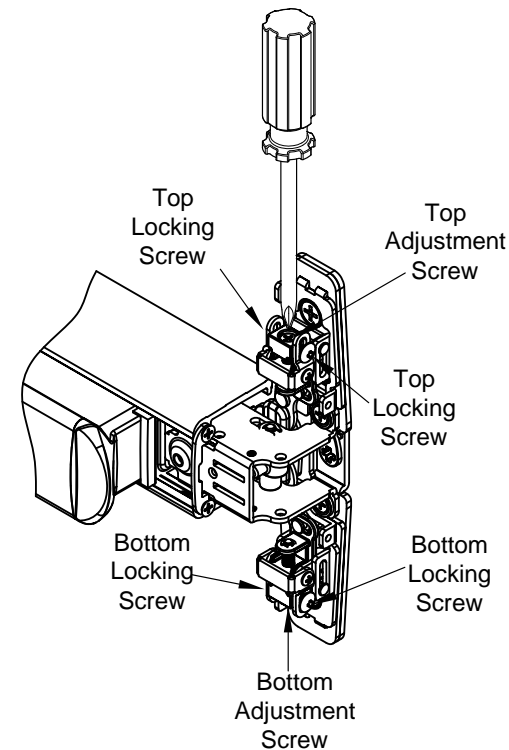
## 13 ADJUST RODS AND INSTALL CASE COVER.

1. For Rod Adjustments SEE PAGE 9

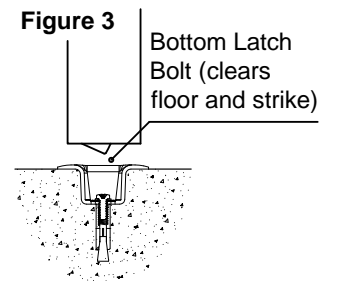
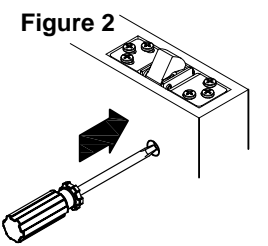
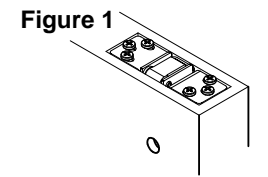


2. Attach cover to center case with two(2) center case screws.

## ADJUST LATCHES AND SECURE TOP & BOTTOM LOCKING SCREWS.



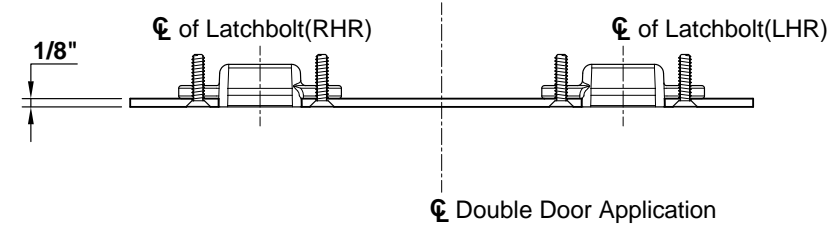
1. Depress push bar to retract the latch bolt and open the door.
2. Check top latch for HOLDBACK (Latchbolt stays retracted in latch case). See Figure 1
3. Loosen top locking screw.
4. Rotate top adjustment screw until top latchbolt is fully retracted.
5. Release top latchbolt. See Figure 2
6. Check top latchbolt for DEADLOCK (Latchbolt should not push in).
7. Rotate top adjustment screw until top latchbolt is in DEADLOCK.
8. Tighten top locking screw.
9. Depress push bar and retract latchbolt.
10. Make sure top latchbolt stays retracted as shown. See Figure 1
11. Loosen bottom locking screw.
12. With top latchbolt still retracted, adjust bottom rod by rotating bottom adjustment screw, so latchbolt clears floor and bottom strike in HOLDBACK. See Figure 3
13. Release top latchbolt. See Figure 2
14. Check bottom latchbolt for DEADLOCK.
15. Tighten bottom locking screw.
16. Open and close door several times and check device operation and DEADLOCK & HOLDBACK function.



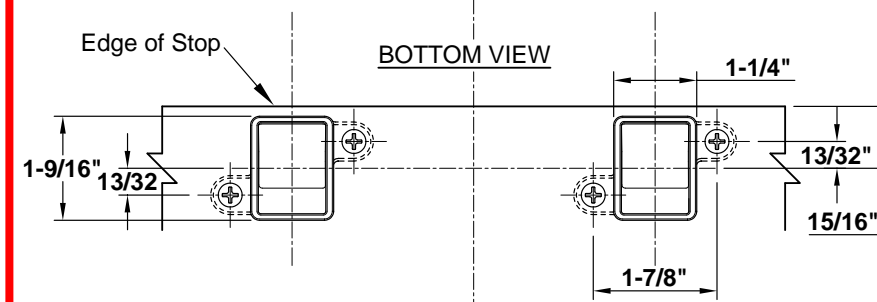
## FRAME PREPARATION

### 216 STRIKES

#### FRONT VIEW

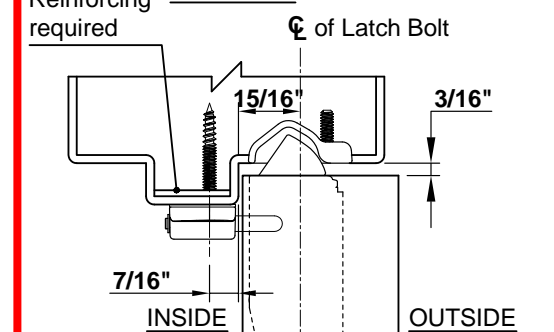


#### BOTTOM VIEW

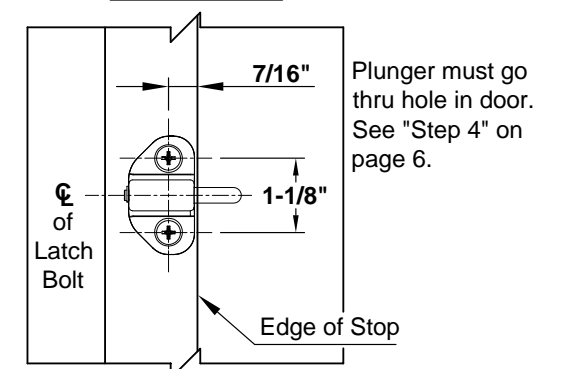


### RELEASE PLUNGER

#### SIDE VIEW



#### BOTTOM VIEW



Plunger must go thru hole in door. See "Step 4" on page 6.