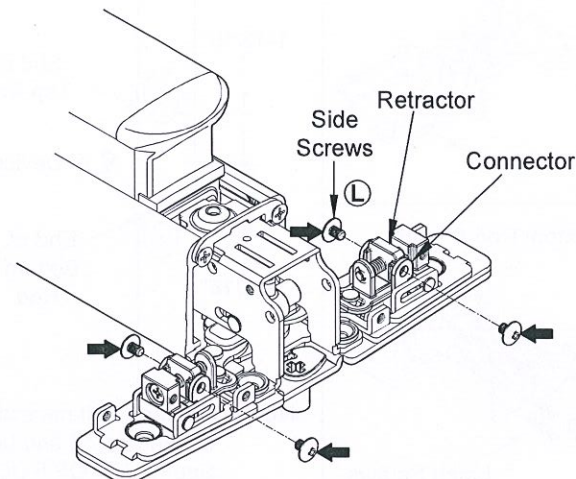


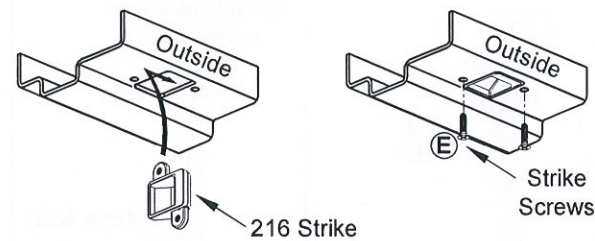
10 INSTALL SIDE SCREWS.



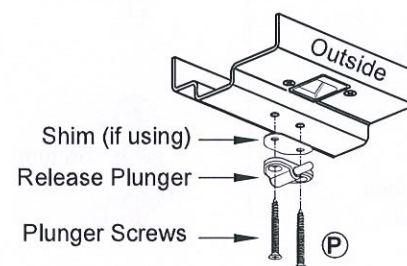
1. Make sure both latchbolts are extended.
2. Apply "side screws" through round holes in connector with threaded holes in retractors and tighten.

NOTE: Must install side screws on both sides of connectors and retractors.

11 HANG DOOR AND INSTALL TOP STRIKE & RELEASE PLUNGER.

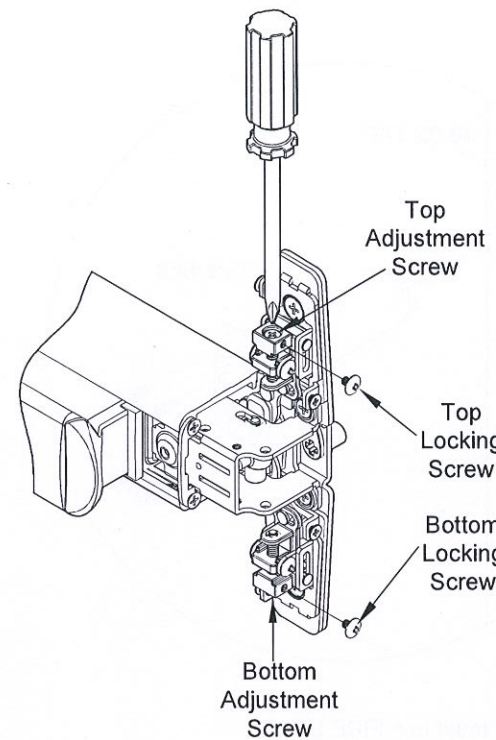


See "FRAME PREPARATION" on page 9 for cut-out and holes. After preparing, install top strike into door frame and mount two(2) strike screws.

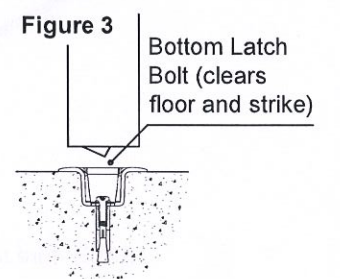
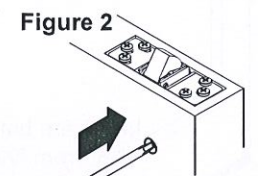
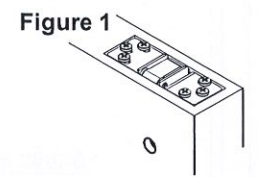


See "FRAME PREPARATION" on page 9 for holes. After preparing, install release plunger with two(2) plunger screws.

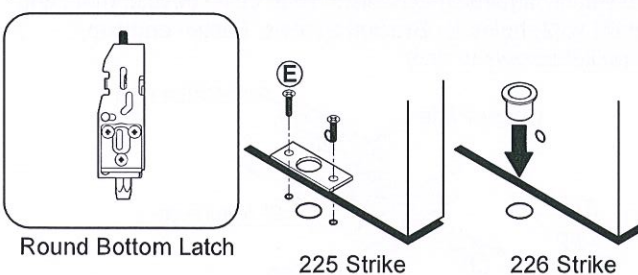
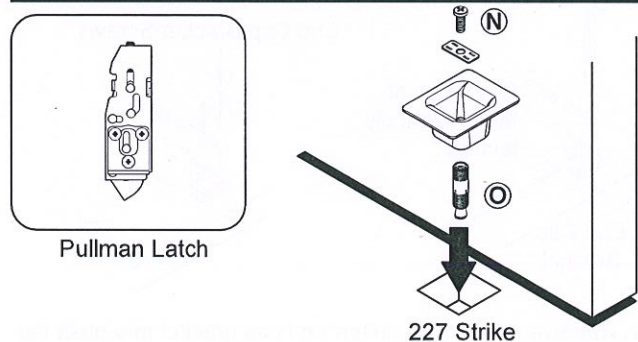
ADJUST LATCHES AND SECURE TOP & BOTTOM LOCKING SCREWS.



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.



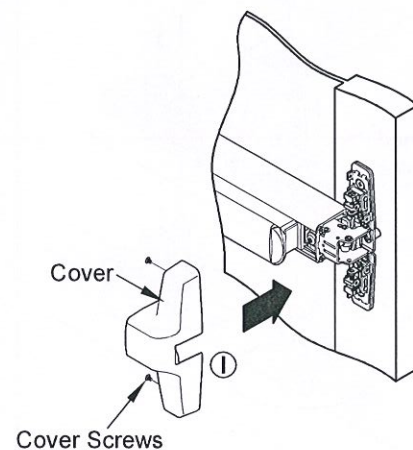
12 INSTALL BOTTOM STRIKE.



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

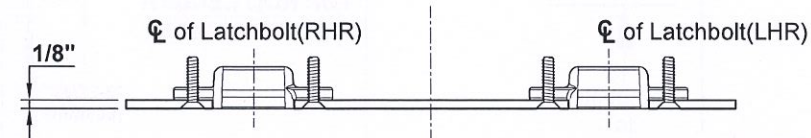


2. Attach cover to center case with two(2) center case screws.

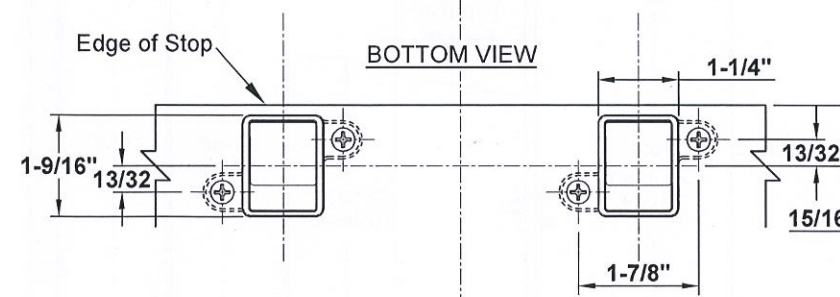
FRAME PREPARATION

216 STRIKES

FRONT VIEW

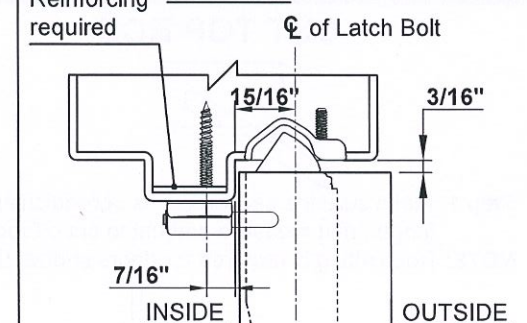


Double Door Application

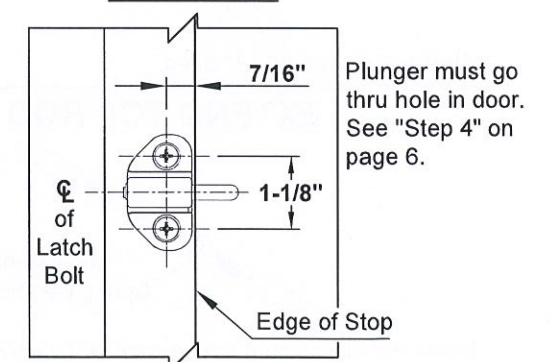


RELEASE PLUNGER

SIDE VIEW

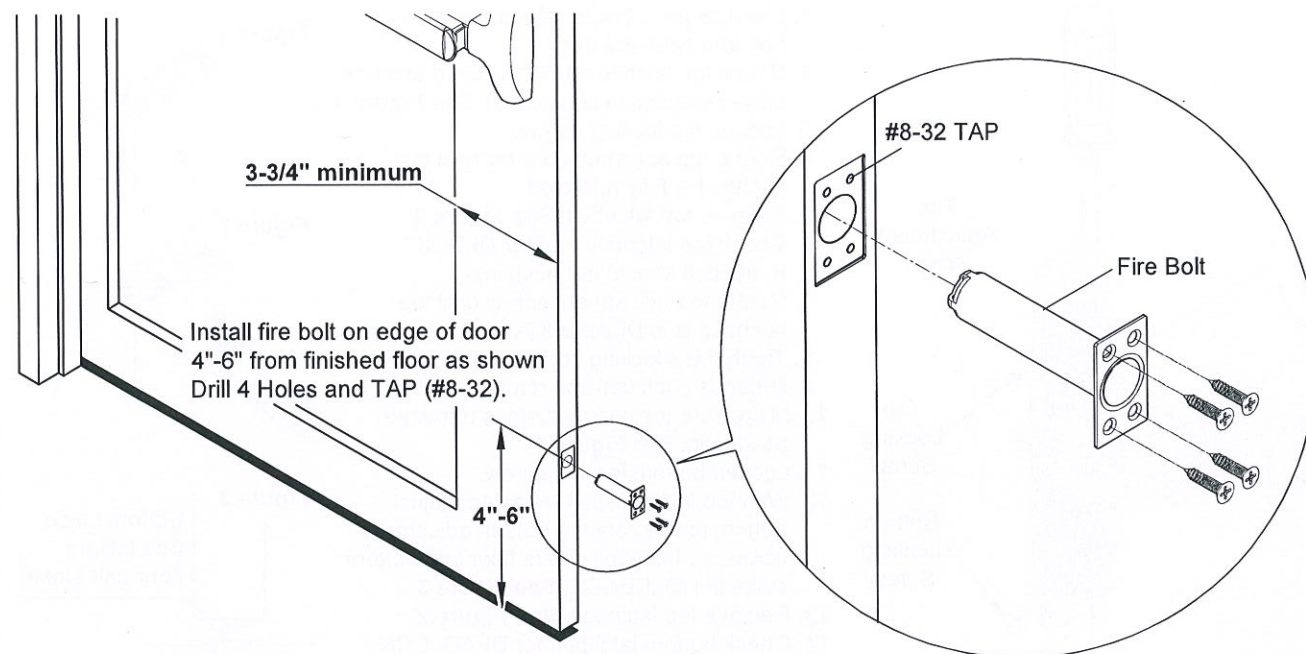


BOTTOM VIEW



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

INSTALL FIRE BOLT



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

CUT TOP ROD / EXTEND TOP ROD

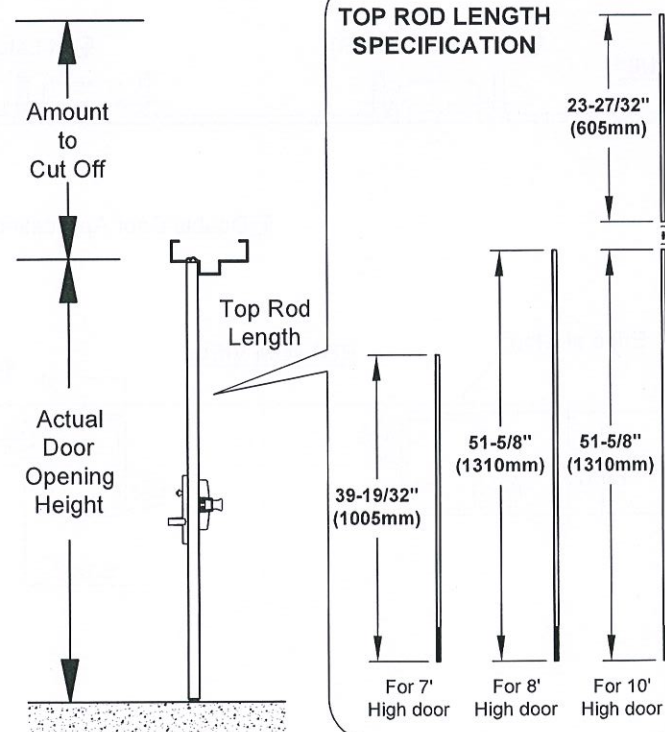
CUT TOP ROD

- 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'.

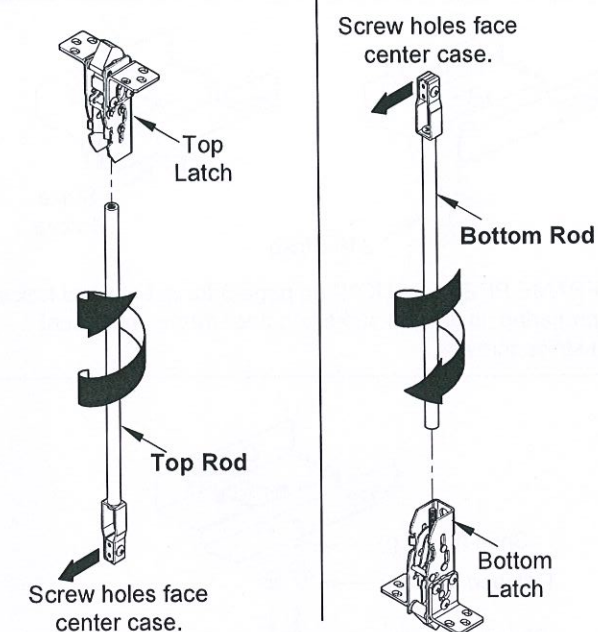
- Step 2: Tap #1/4-20 ; 1" deep.

EXTEND TOP ROD

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

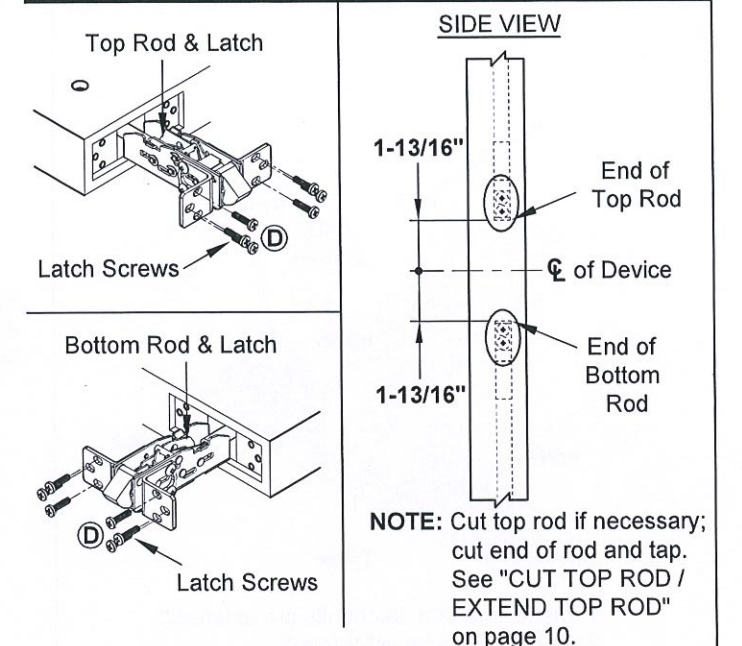


5 ATTACH RODS TO LATCHES.



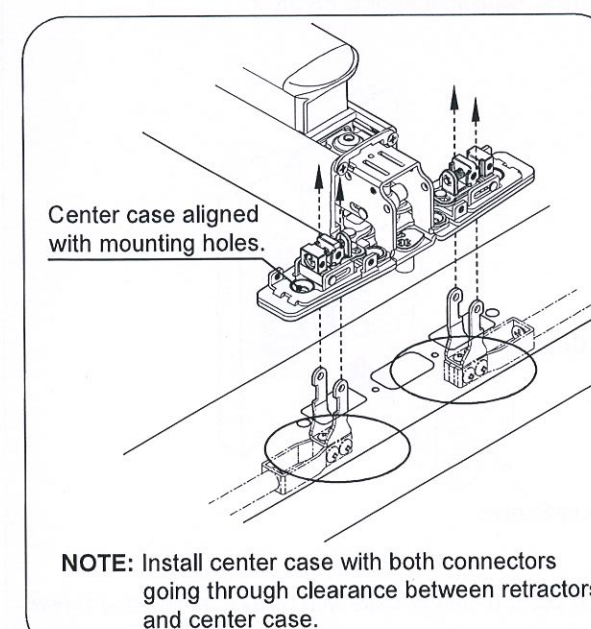
Thread rod onto latch stud until screw holes in rod bars face center case.

6 INSTALL RODS AND LATCH.



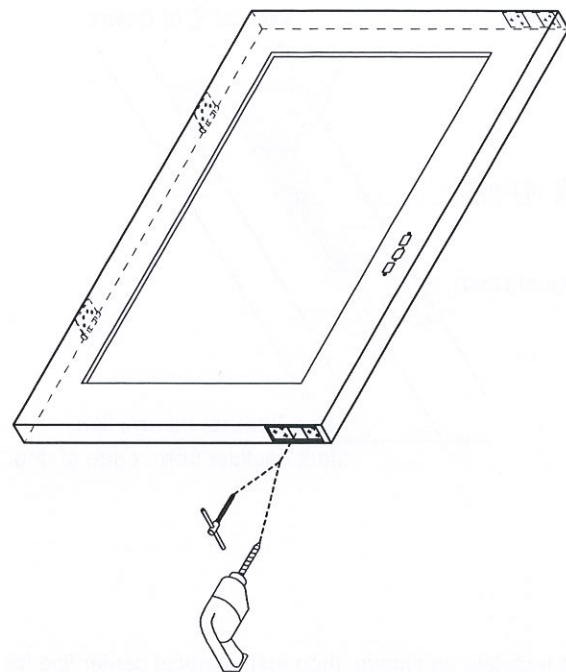
1. Install top latch and latch screws at top of door.
2. Install bottom latch and latch screws at bottom of door.
3. Fine tune the overall length by threading latch in or out of rod.

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

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.

Door Frame

Stop Height

Stop Height	A
1/2"	11/16"
5/8"-Std.	13/16"
3/4"	15/16"

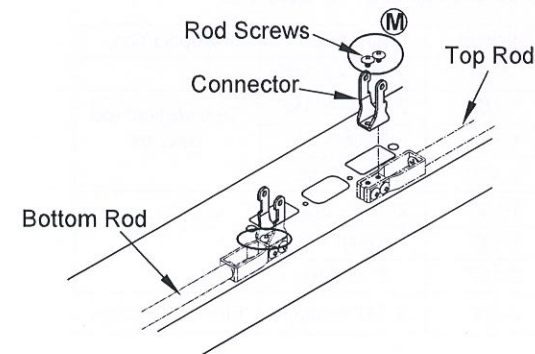
Measure "Stop Height of Door Frame" to decide "Dimension of A".

Top of Door

1/2" Diameter Inner Face of Door Only.

(Inner face of door) RHR shown LHR opposite

7 INSTALL CONNECTORS.



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

Notch of Connector

⌀ of Device

Bottom Rod

Top Rod

NOTE: Position connector on top rod with its notch facing towards top of door; repeat this step with connector at bottom rod with its notch facing towards bottom of door.

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

1-3/16" Minimum clearance (with end cap removed). If device is too long for door, see "CUT DEVICE" on page 11.

Center Case Screws (E F)

Trim (Optional)

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

Cam

Hinge Side

Bottom View

Cylinder

Cover Plate

Cylinder Locating Washer

Cylinder Lock Nut

With cam facing towards hinge side install the cylinder to the cover plate.

Slide cover plate in position in the mechanism case.

DOGGING CHECK

Flat / Hex Key Dogging

Cylinder Dogging

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

CUT DEVICE (IF REQUIRED)

Recommended minimum clearance between frame and device end (with end cap removed) is 1-3/16".

Hinge Side

Center case aligned with mounting holes.

Remove Anti-Rattle Clip

Cut off line

Cover Plate (Flush to Push bar)

Tape

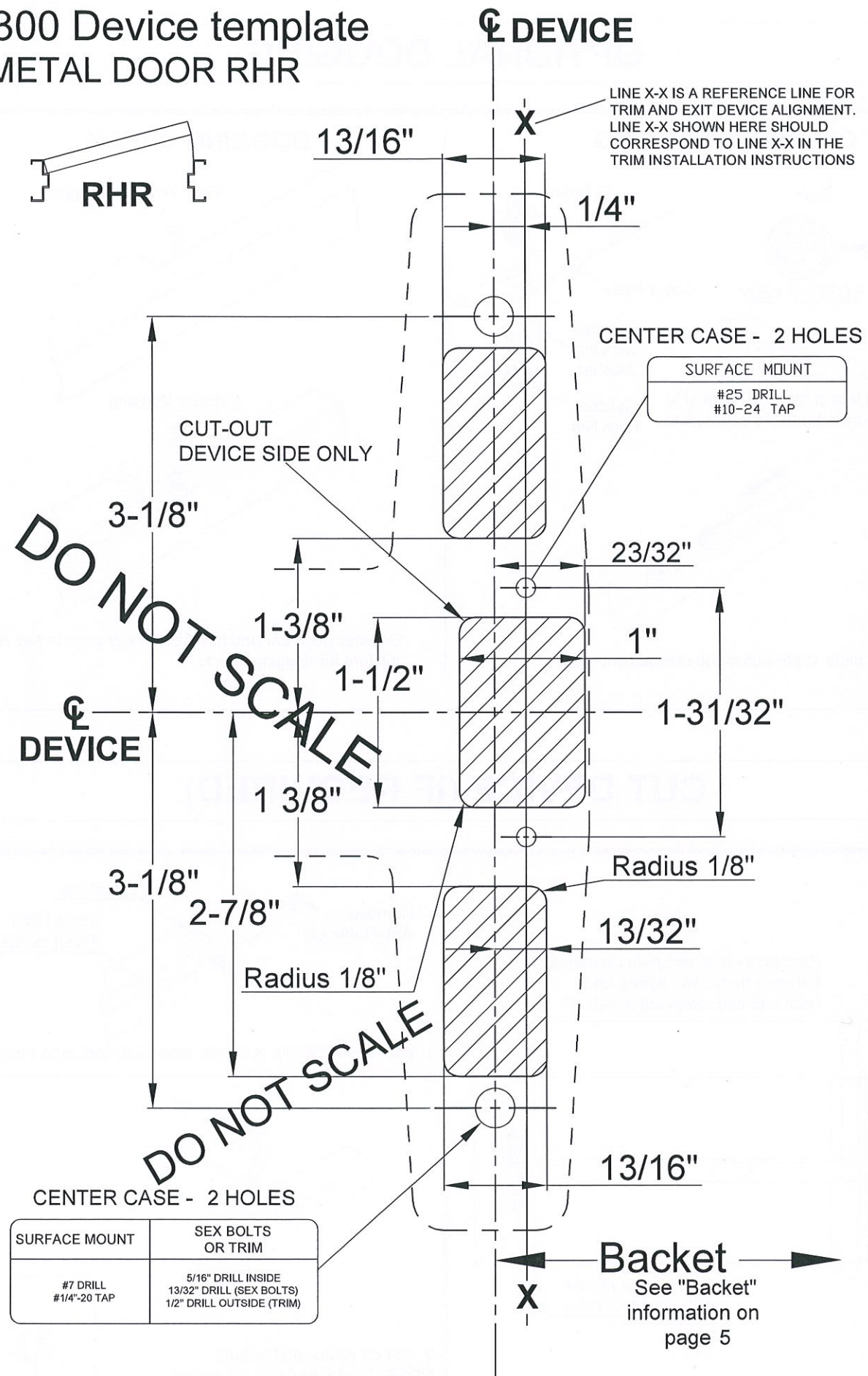
1. With anti-rattle clip removed, tape and mark area being cut.

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

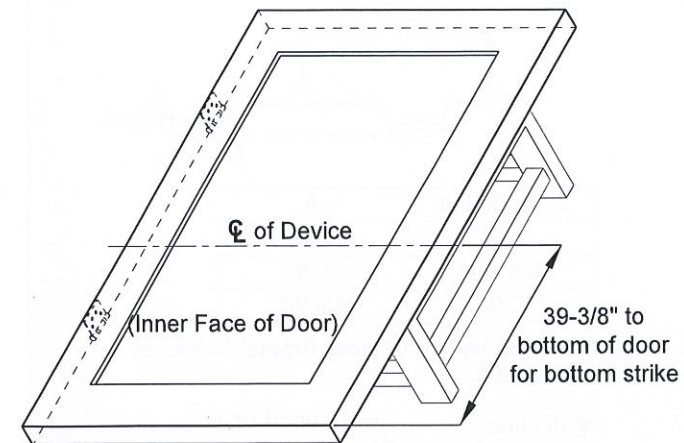
End Cap

2300 Device template

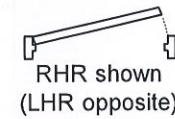
METAL DOOR RHR



1 DRAW HORIZONTAL DEVICE CENTER LINE(℄).

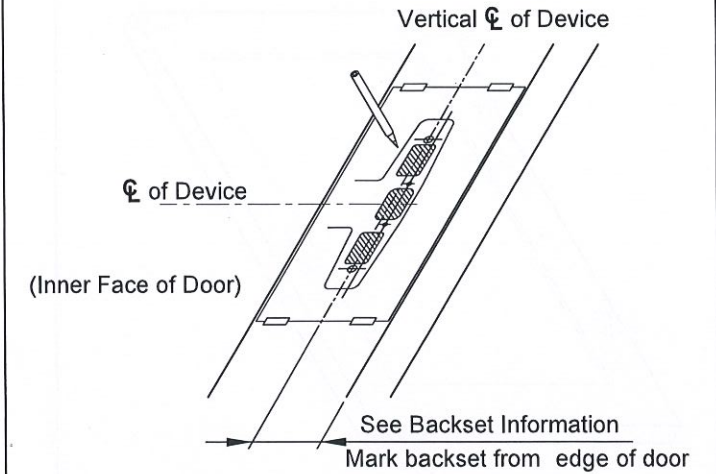


If threshold is present centerline of device must be at a distance of 39-5/8" from finished floor.
(bottom door gap must be 1/4")



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

2 DRAW VERTICAL C & MARK BACKSET.

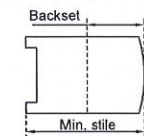
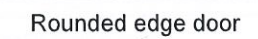
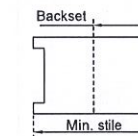
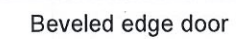
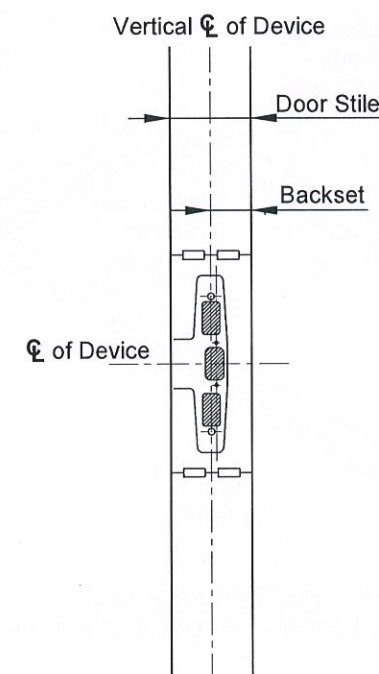


Position template as shown, then mark vertical center line for device center case.

Backset Information

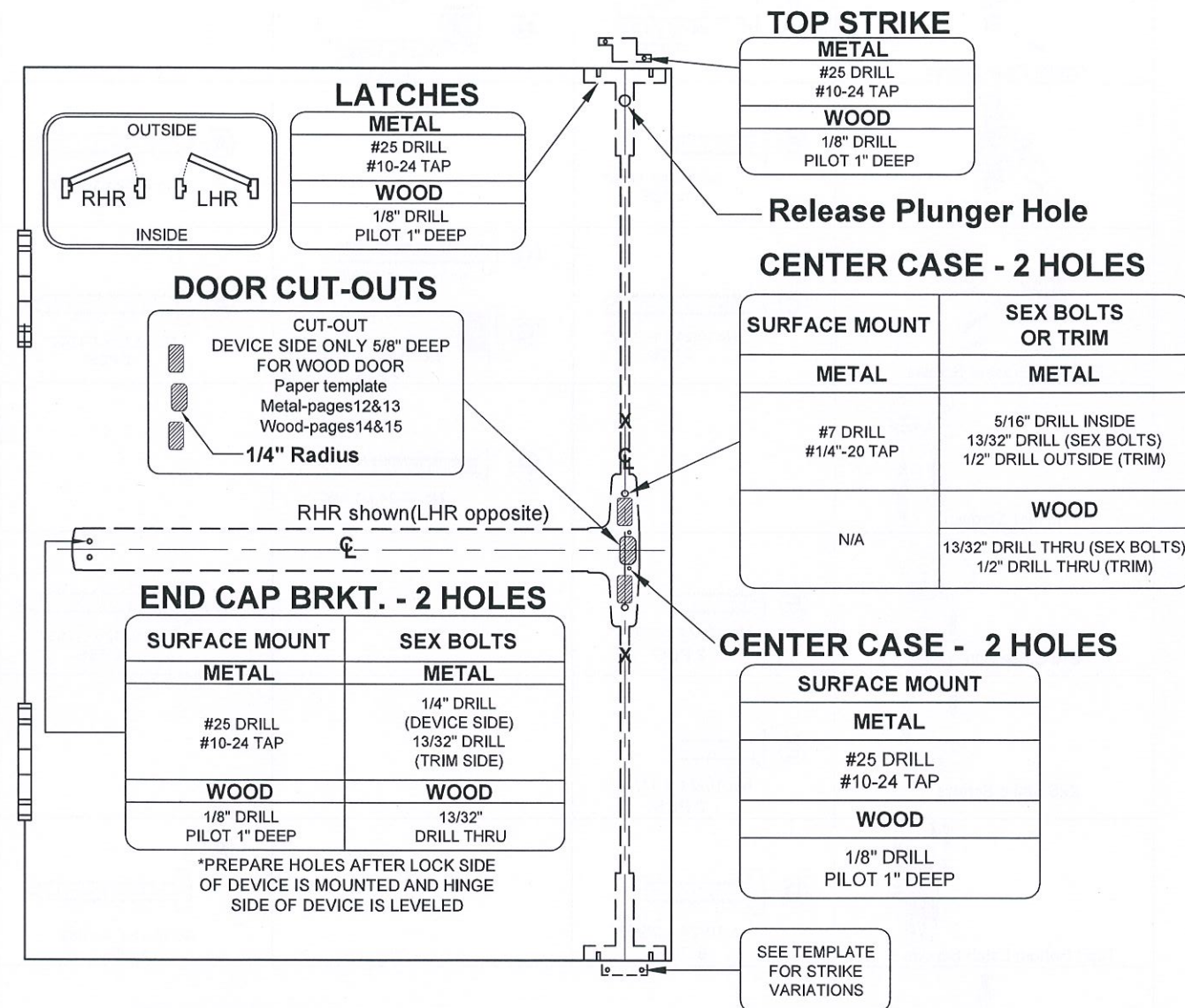
Backset Table

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	
	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



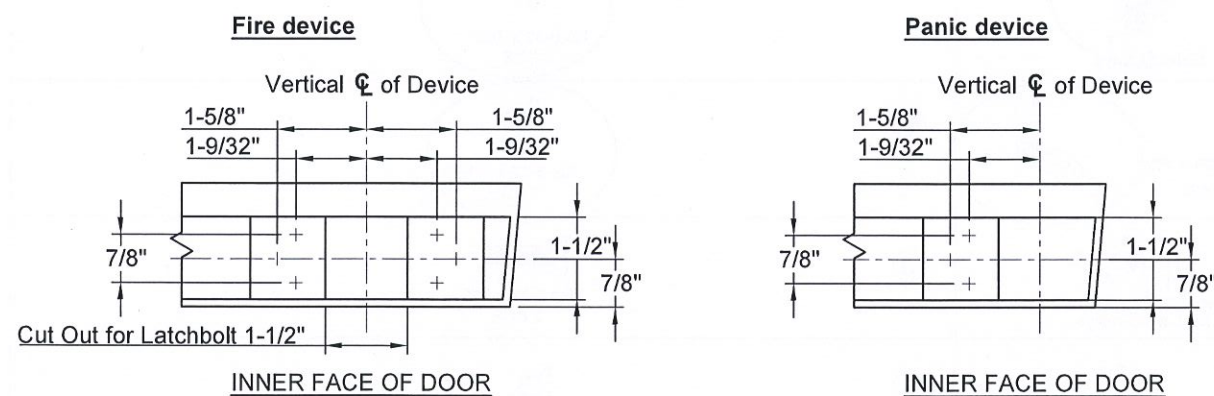
Backset must be measured from outer edge of door as shown. Recommended for rectangular glass stop stiles less than 2-1/8".

DOOR PREPARATION CHART

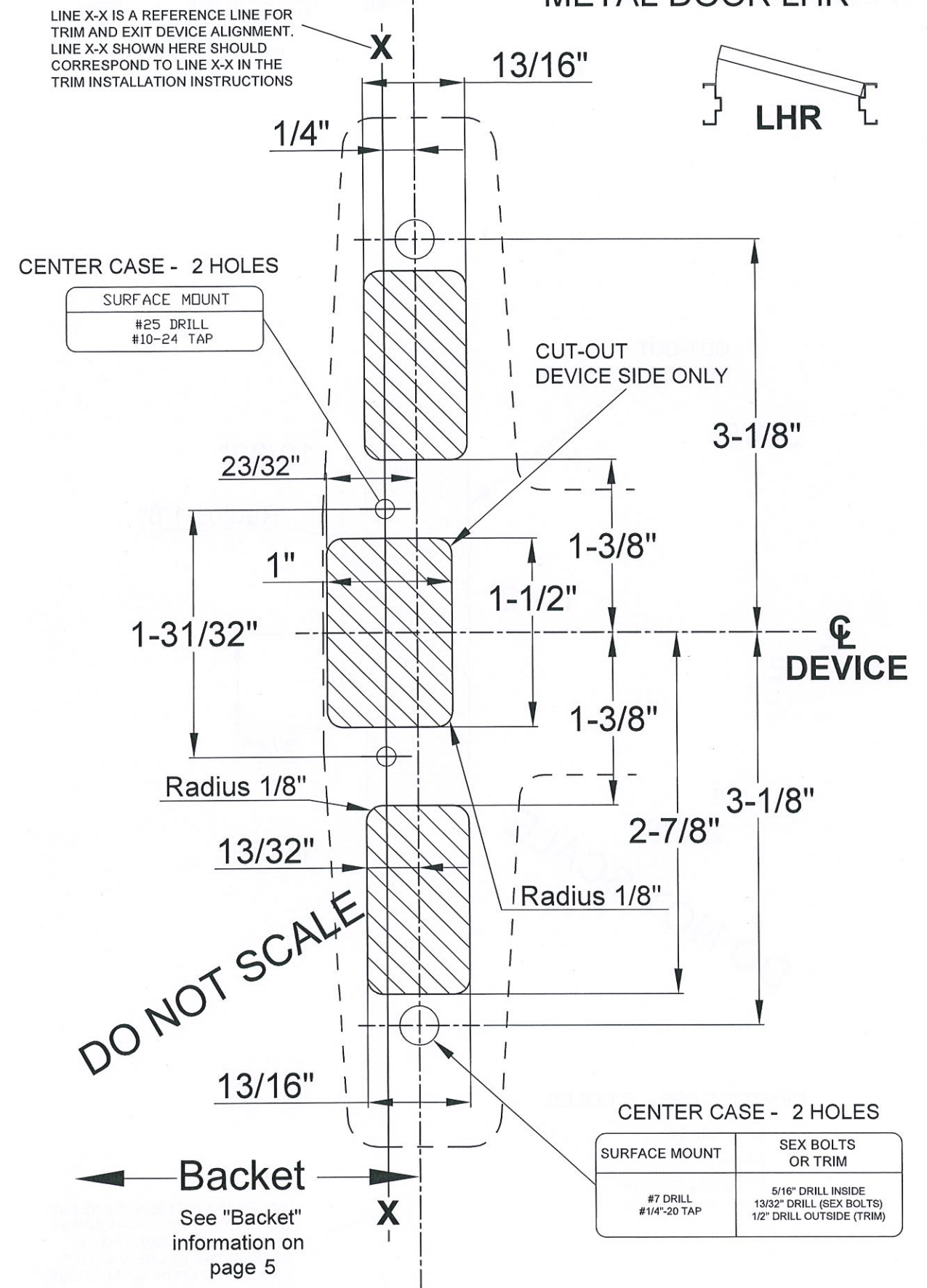


LATCH HOLE PREPARATION

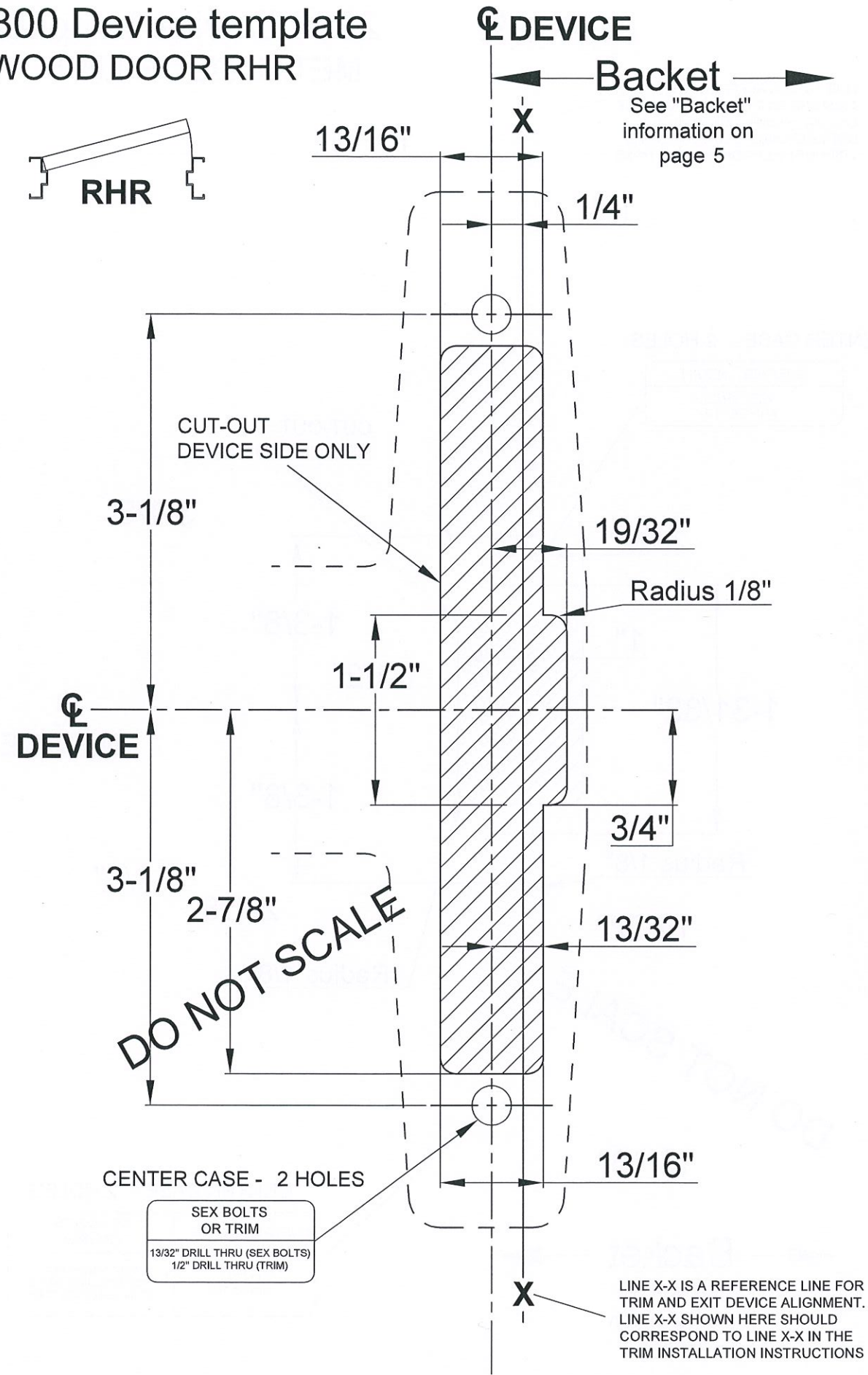
(Drill Top and Bottom of Door)



2300 Device template METAL DOOR LHR

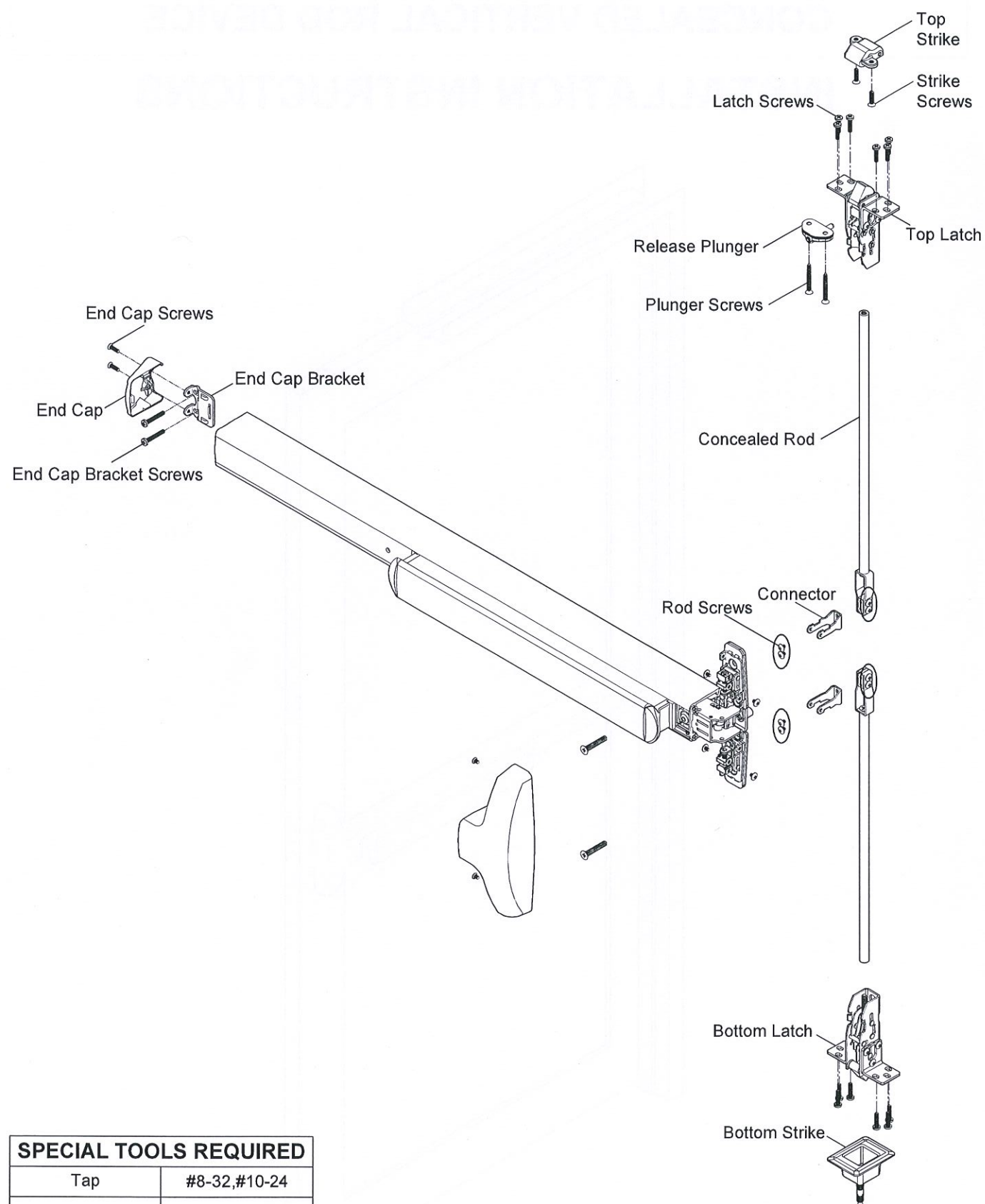


2300 Device template WOOD DOOR RHR

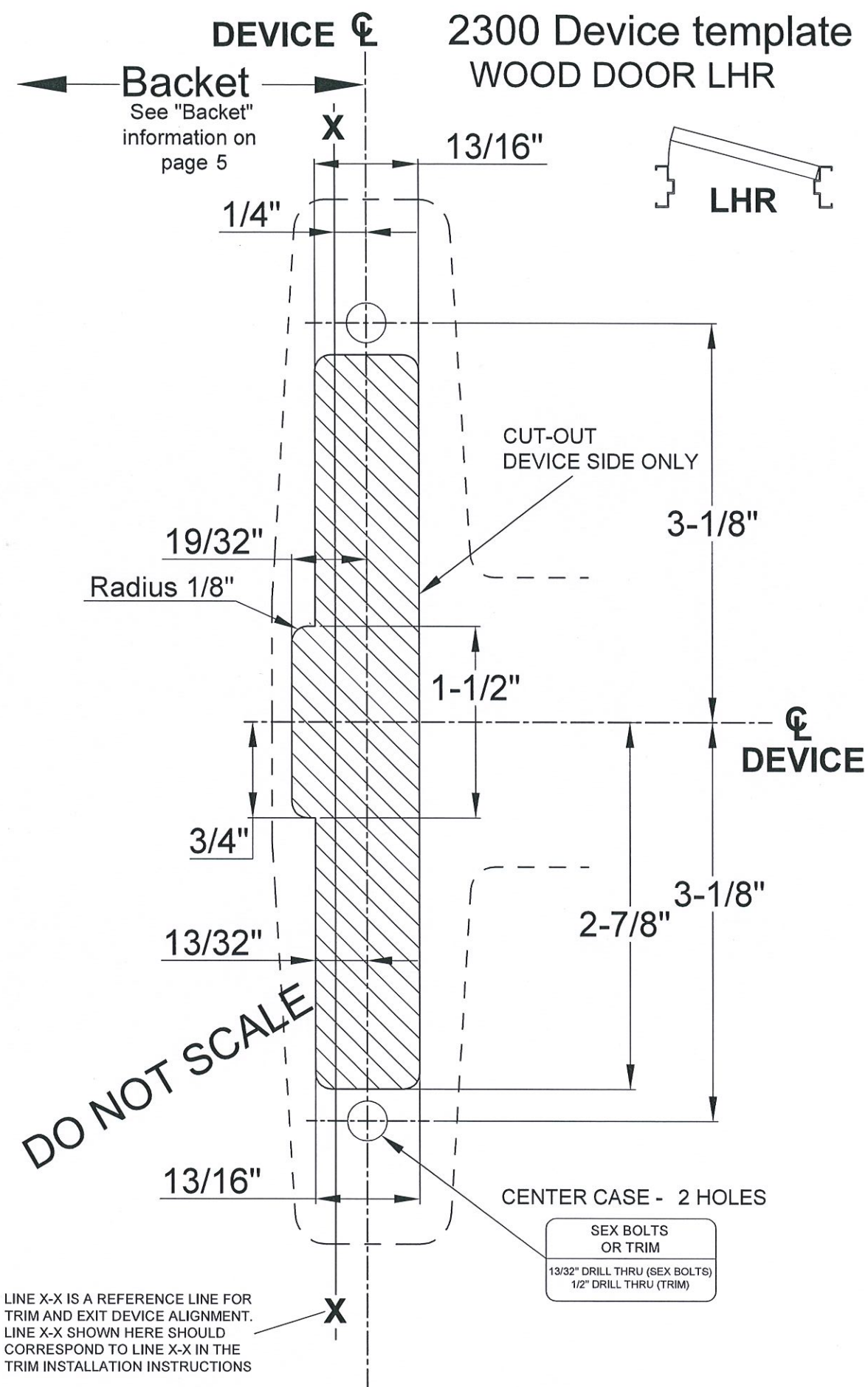


SCREW CHART

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



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/F2300 SERIES
CONCEALED VERTICAL ROD DEVICE
INSTALLATION INSTRUCTIONS**

