



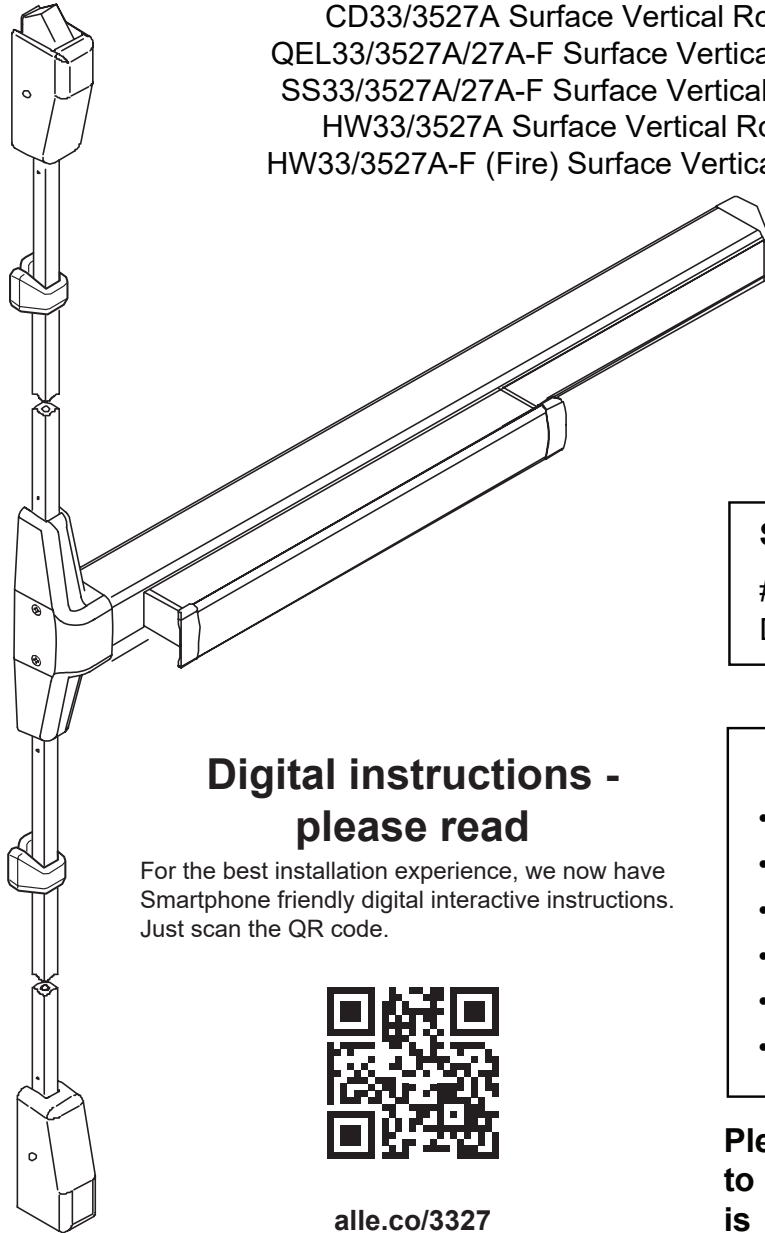
911403-00

33/3527A

VON DUPRIN®

Surface Vertical Rod Exit Device

Installation Instructions



Devices covered by these instructions:

- 33/3527A Surface Vertical Rod Exit Device
- 33/3527A-F (Fire) Surface Vertical Rod Exit Device
- CD33/3527A Surface Vertical Rod Exit Device
- QEL33/3527A/27A-F Surface Vertical Rod Exit Device
- SS33/3527A/27A-F Surface Vertical Rod Exit Device
- HW33/3527A Surface Vertical Rod Exit Device
- HW33/3527A-F (Fire) Surface Vertical Rod Exit Device

Special tools needed:

- #10-24 and #8-32 tap
- Drill bits: #25, 1/8", 1/4", 5/16", 13/32"

**Digital instructions -
please read**

For the best installation experience, we now have Smartphone friendly digital interactive instructions. Just scan the QR code.



alle.co/3327

Index:

- Screw chart 2
- Device installation 3-6
- Cut top rod 7
- Install rod extension 7
- Optional equipment 8
- Templates 9-14

Please give these instructions to building owner after device is installed.

Hurricane rated exit device requirements (when used with approved Allegion door applications)

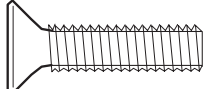
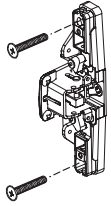
Application	Single door, standard strike	Mullion	Double door, standard strike
HW (Wind Only)	33/3527A	Top: 299, Bottom: 304L	Top: 299, Bottom: 304L
	33/3527A-F	-	Top: 299F, Bottom: 304L

Customer Service

1-877-671-7011 www.allegion.com/us

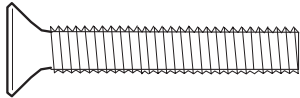
SCREW CHART

A



1/4-20 x 1" _____

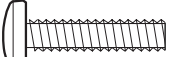
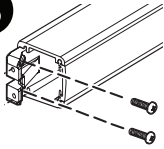
Trim mount or sex bolts:
(1-3/4" door)



1/4-20 x 1-1/2" _____

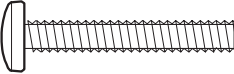
(2-1/4" door)

B



#10-24 X 3/4" _____

Surface mount or
Sex bolts (1-3/4" door)



#10-24 X 1-1/8" _____

Sex bolts (2-1/4" door)

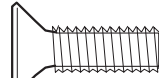
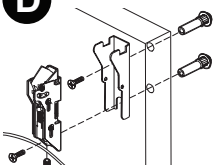
C



#10-16 X 3/8" Thread cutting _____

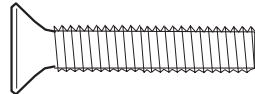
End cap

D



1/4-20 X 3/4" _____

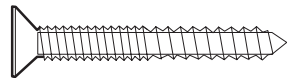
1-3/4" door



1/4-20 X 1-1/4" _____

2-1/4" door

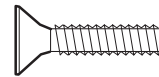
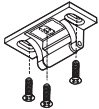
E



#10-12 x 10-24 x 1-1/4" combination _____

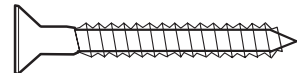
Metal or wood frame

F



#10-24 X 3/4" _____

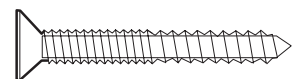
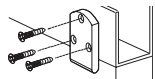
Metal frame



#10-24 X 1-1/4" wood screw _____

Wood frame

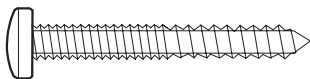
G



#10-12 x 10-24 x 1-1/4" combination _____

Metal or wood frame

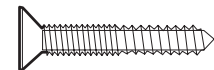
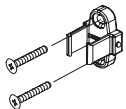
H



#10-12 x 10-24 x 1-1/4" combination _____

Variable floor surfaces

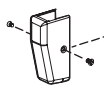
I



#8-16 x 8-32 x 1" combination _____

Metal or wood door

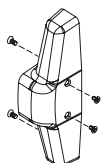
J



#8-32 X 1/4" _____

Latch covers

K

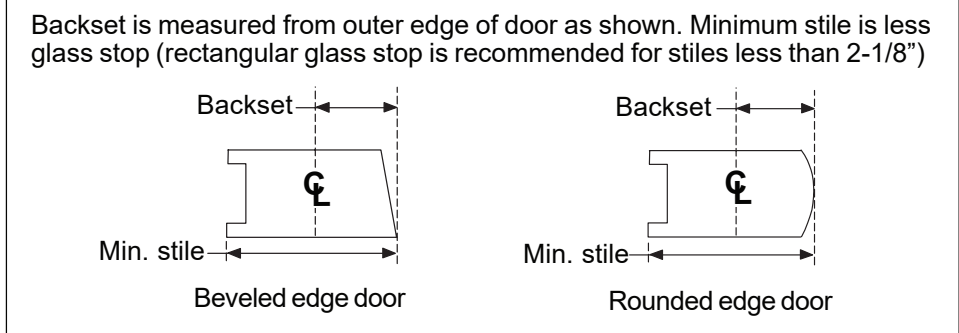
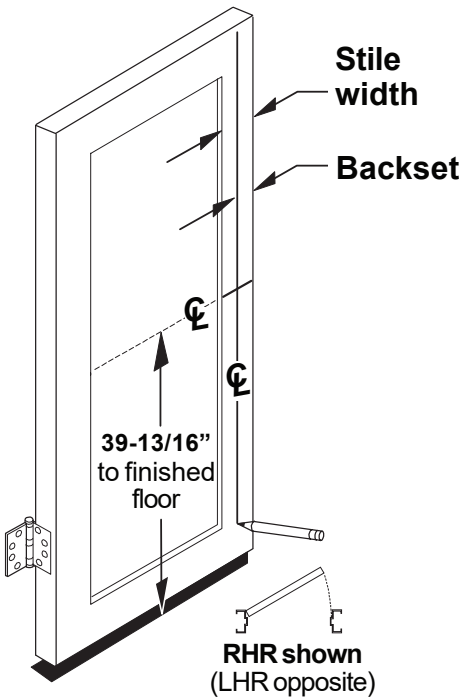


#8-18 x 3/8" thread cutting _____

Center case cover

1

Figure backset and draw device center lines (☉) on door as shown.



Backset	Min. stile	Application
1-3/16"	2"- 2-3/4"	Two vertical rod devices
1-1/2"	2-3/4"- 3-3/4"	
1-7/8"	3-3/4"- 5"	
2-1/2"	5" to flush	
1-11/32"	2"- 2-3/4"	Single door
1-1/2"	2-3/4"- 3-3/4"	
1-7/8"	3-3/4"- 5"	
2-1/2"	5" to flush	
2-7/32"	3" min.	Vertical rod and rim device

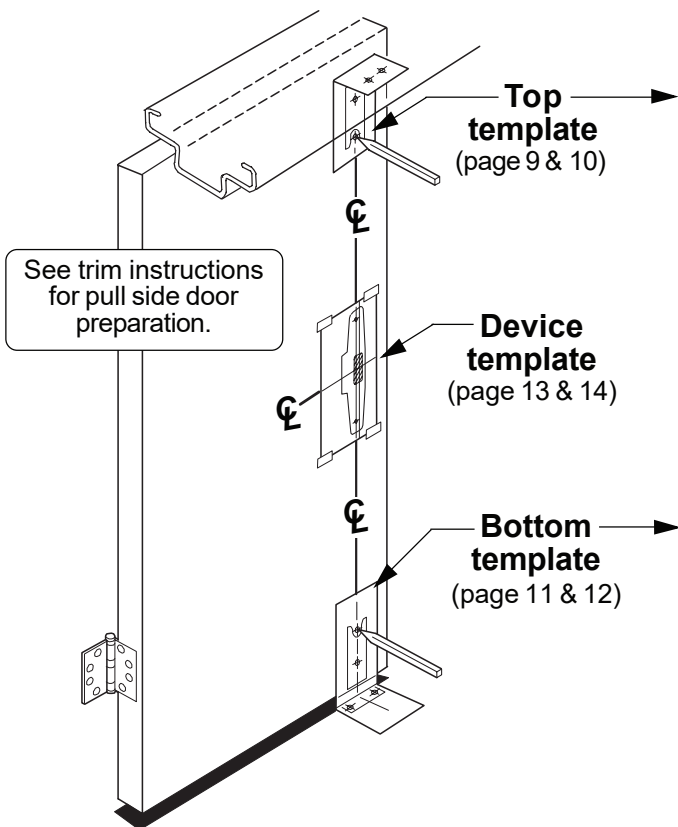
Note: For 299/299F top strike use minimum backsets shown below.

Double doors: 1-3/8" min. backset
2-3/16" min. stile

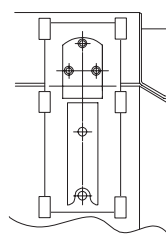
Single door: 1-7/8" min. backset
2-11/16" min. stile

2

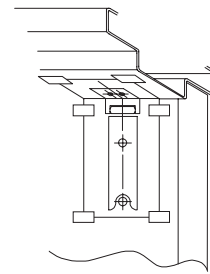
Tape templates to door and prepare door and frame per templates.



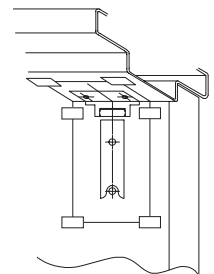
260U strike



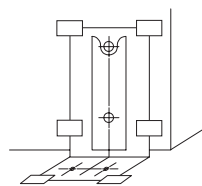
266 strike



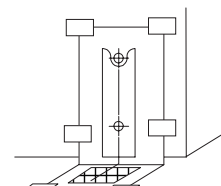
*299/299F strike



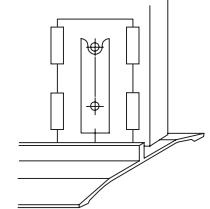
248L-4 strike



304L strike



Latch track



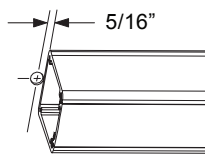
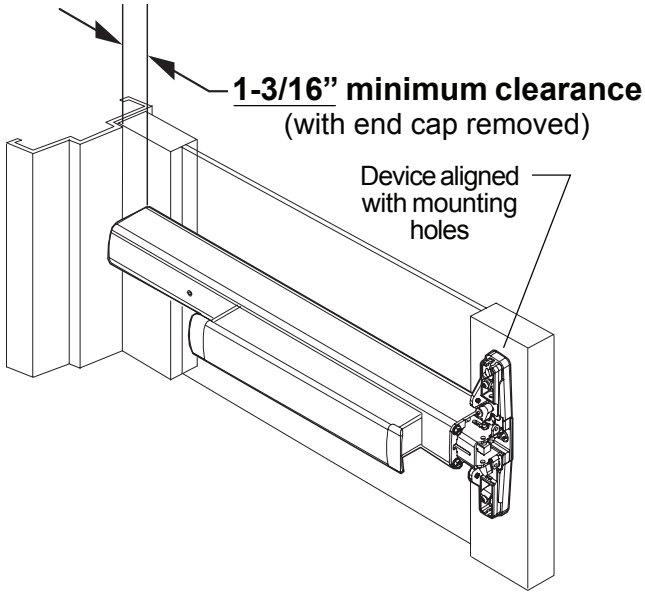
*For 299/299F top strike use minimum backsets shown below.

Double doors: 1-3/8" min. backset, 2-3/16" min. stile

Single door: 1-7/8" min. backset, 2-11/16" min. stile

3

Measure to determine length to cut device.



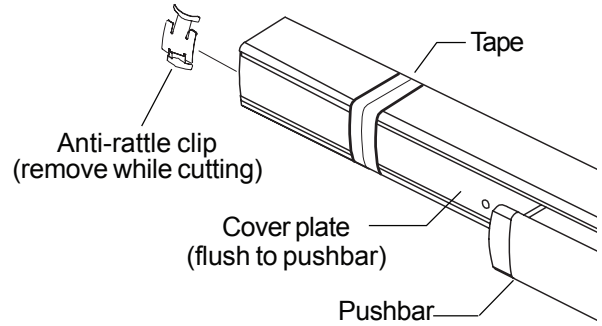
Note

If 5/8" diameter wire access hole has been predrilled in door, cut device 5/16" from center of hole.

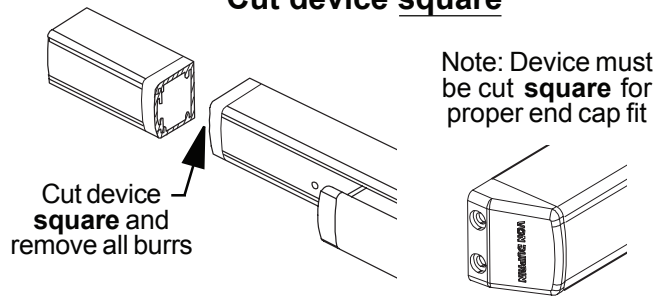
4

Cut device to length.

Prepare device for cutting

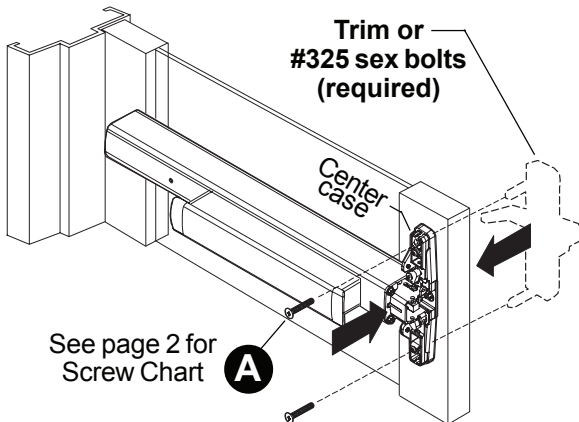
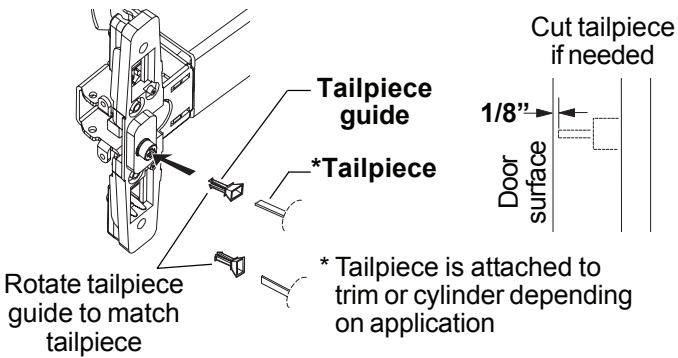


Cut device square



5

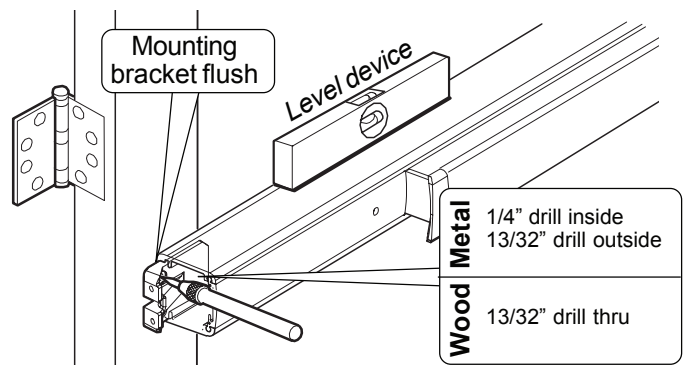
Install tailpiece guide and trim (or sex bolts) and secure device center case to door.



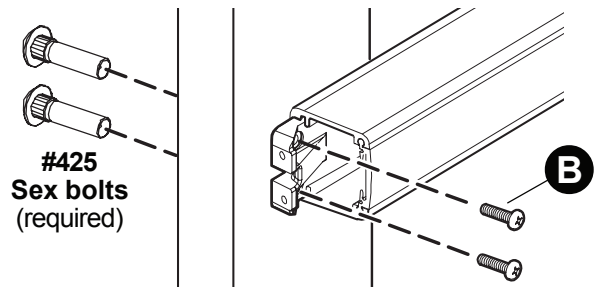
6

Install hinge stile mounting bracket.

Mark and prepare 2 mounting holes

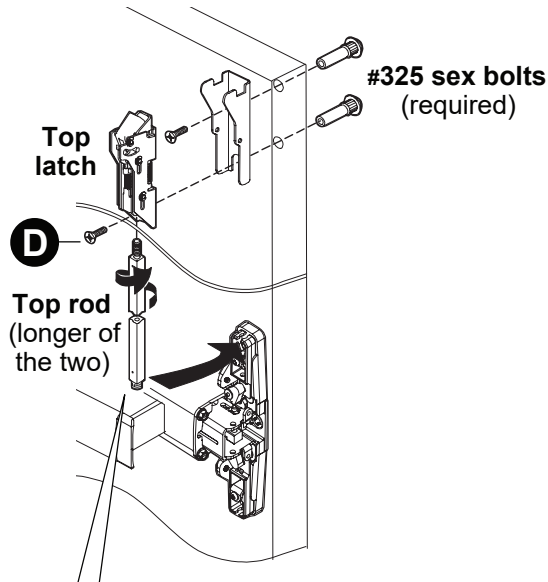


Secure mounting bracket



7

Install top latch and rod.



If top rod is too long, see "Cut top rod" on page 7

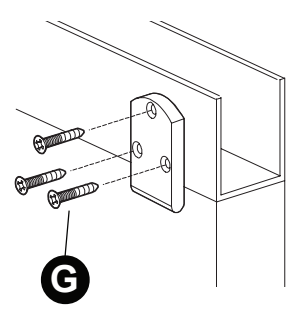
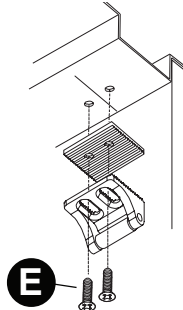
If top rod is too short, see "Install rod extension" on page 7

8

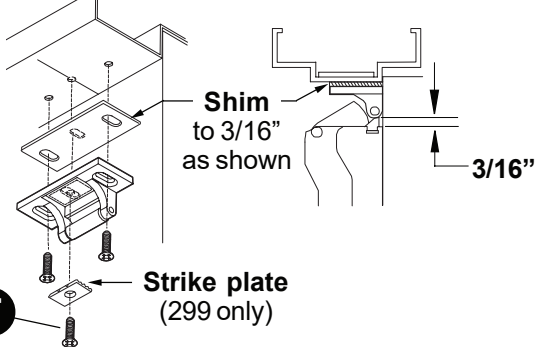
Install top strike.

266 strike
For panic device application only

260U strike
For panic device application only



299/299F strike



9

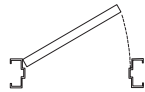
Adjust top rod until latch bolt acts as shown.

Adjust rod by threading rod into latch clockwise to shorten, or counterclockwise to lengthen.

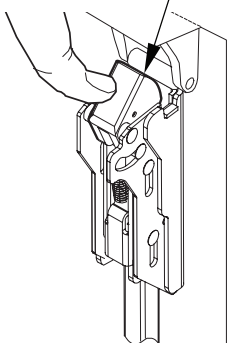
With door closed:



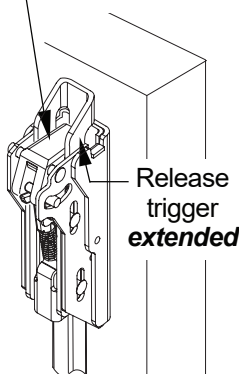
With door open:



Latch bolt **deadlocked**
(will not push in)



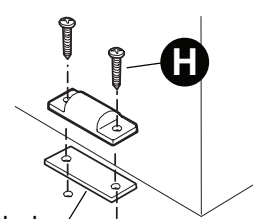
Latch bolt stays **retracted**



10

Install bottom strike, latch, and rod.

248L-4 strike



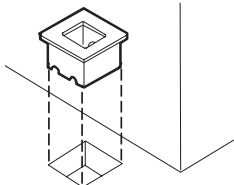
Use 248L-4 strike for panic device application only.

Use 304L for fire doors.

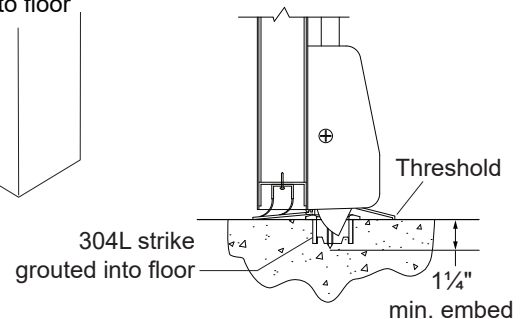
Shim (as needed to engage latch)

304L strike

Grout strike into floor

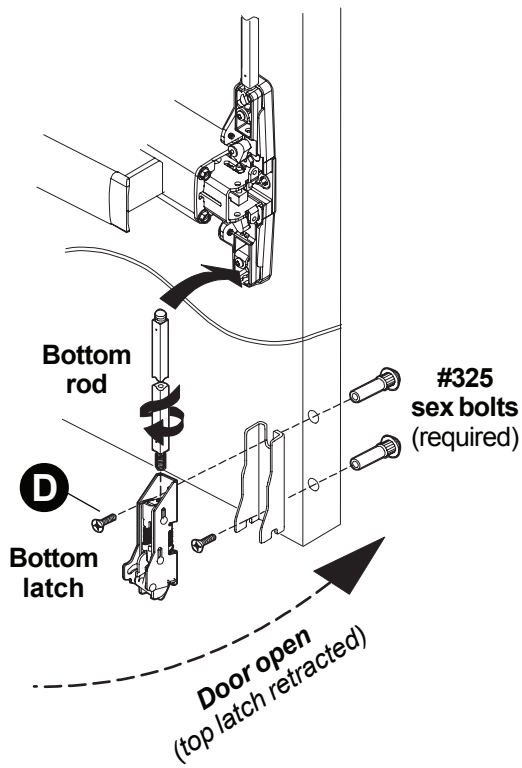


Hurricane applications use threshold with 304L bottom strike



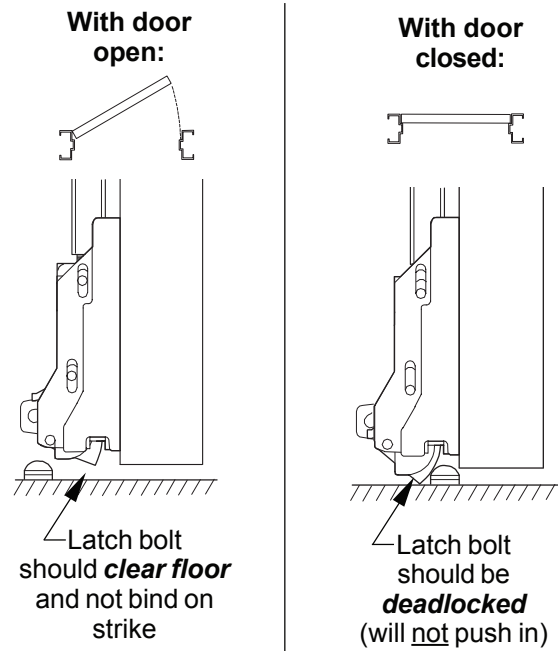
11

Install bottom rod.



12

Adjust bottom rod with door open (top latch retracted).

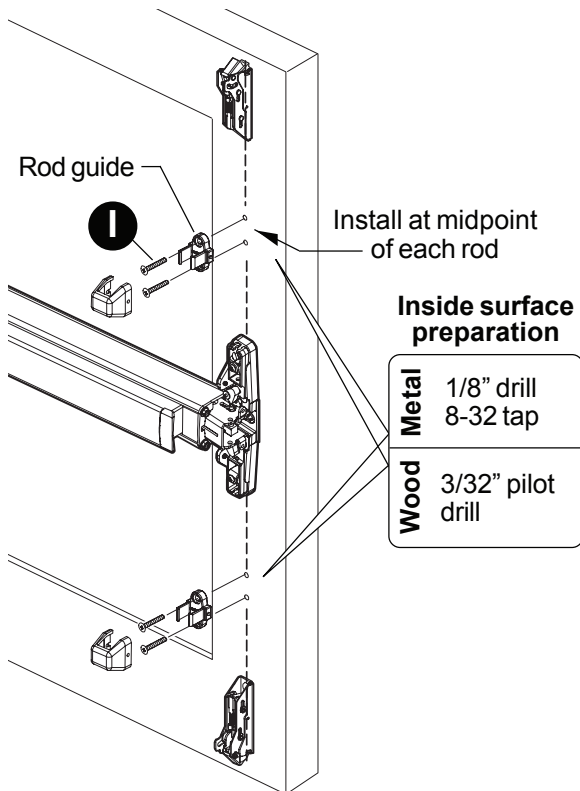


Open and close door a few times and check for deadlocking when door is closed

Readjust rods if needed

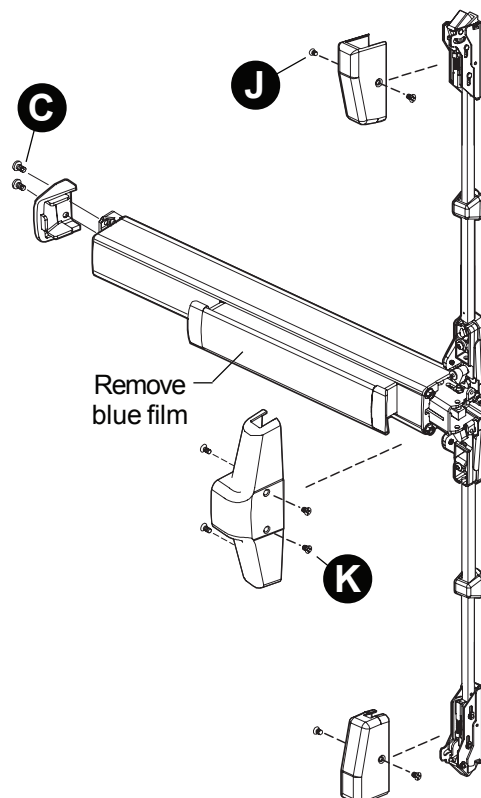
13

Install rod guides.



14

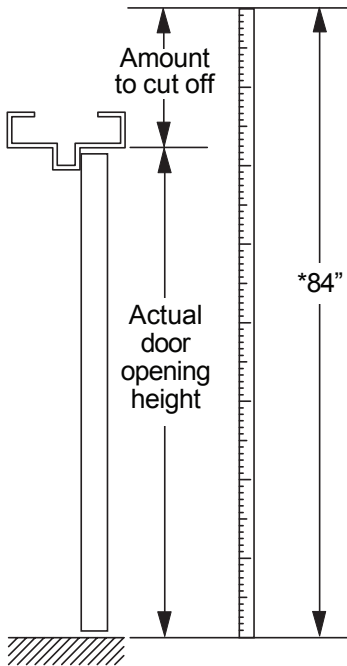
Install covers and end cap.



CUT TOP ROD

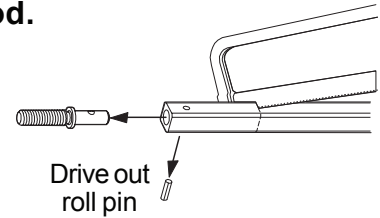
1. Measure amount to cut off rod as shown below.

Note: Rod cutting is required for doors shorter than 7'.

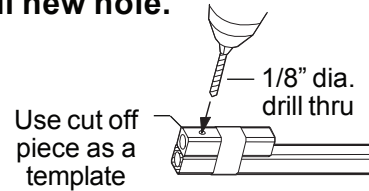


*Rods are factory sized for 7' (84") door. Measure actual door opening height and subtract that number from 84" to get amount to cut off top rod.

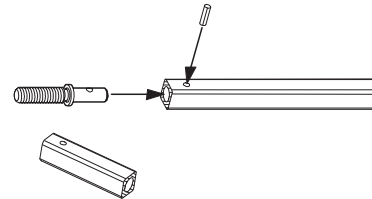
2. Cut rod.



3. Drill new hole.

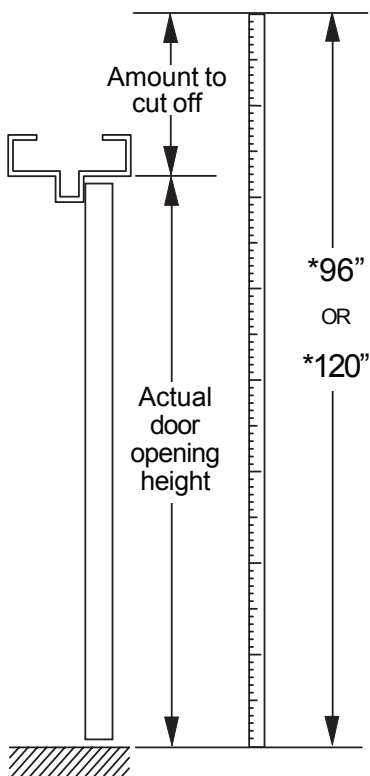


4. Reinstall rod end and roll pin.



INSTALL ROD EXTENSION

1. Measure door opening to determine amount to cut off rod extension.

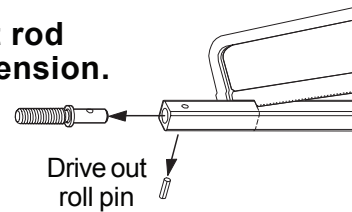


*Standard door heights:

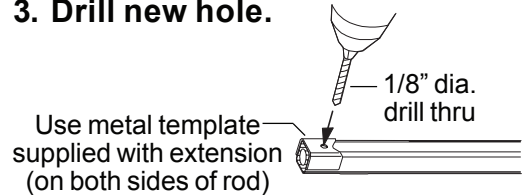
With no extension	7' (84")
With 1' extension	8' (96")
With 3' extension	10' (120")

*Rods are factory sized for door heights shown above. Measure actual door opening height and subtract that number from 96" (for 1' extension) or 120" (for 3' extension) to get amount to cut off extension.

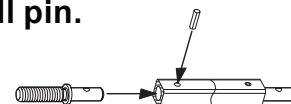
2. Cut rod extension.



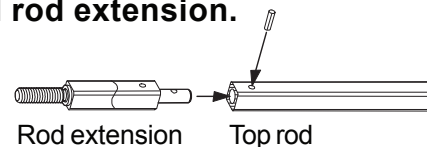
3. Drill new hole.



4. Reinstall rod end and roll pin.



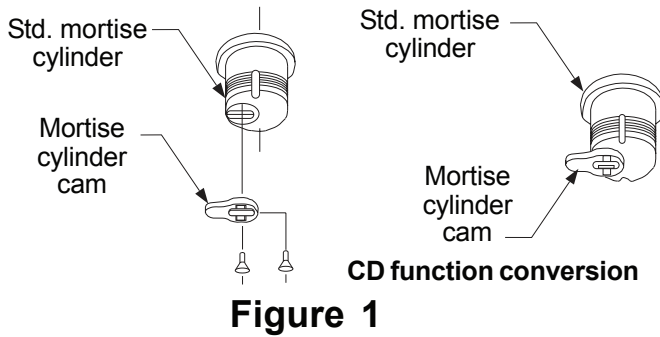
5. Connect top rod and rod extension.



OPTIONAL EQUIPMENT

CD (CYLINDER DOGGING)

1. Remove mortise cylinder cam and reinstall in reverse (Figure 1).
2. Insert key and rotate cam to install the cylinder to the cover plate (Figure 2).
3. Remove key to slide cover plate in position in the mechanism case.



Dogging procedure

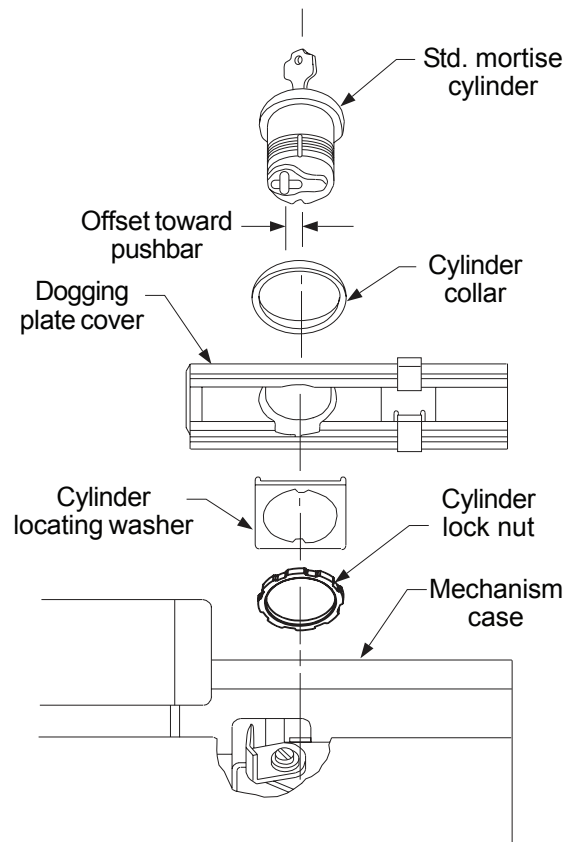
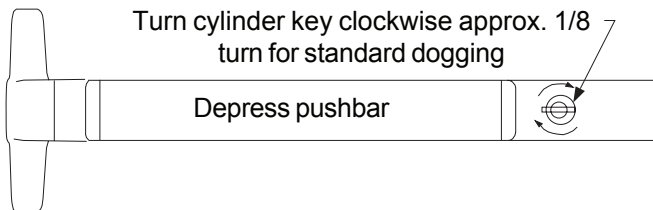
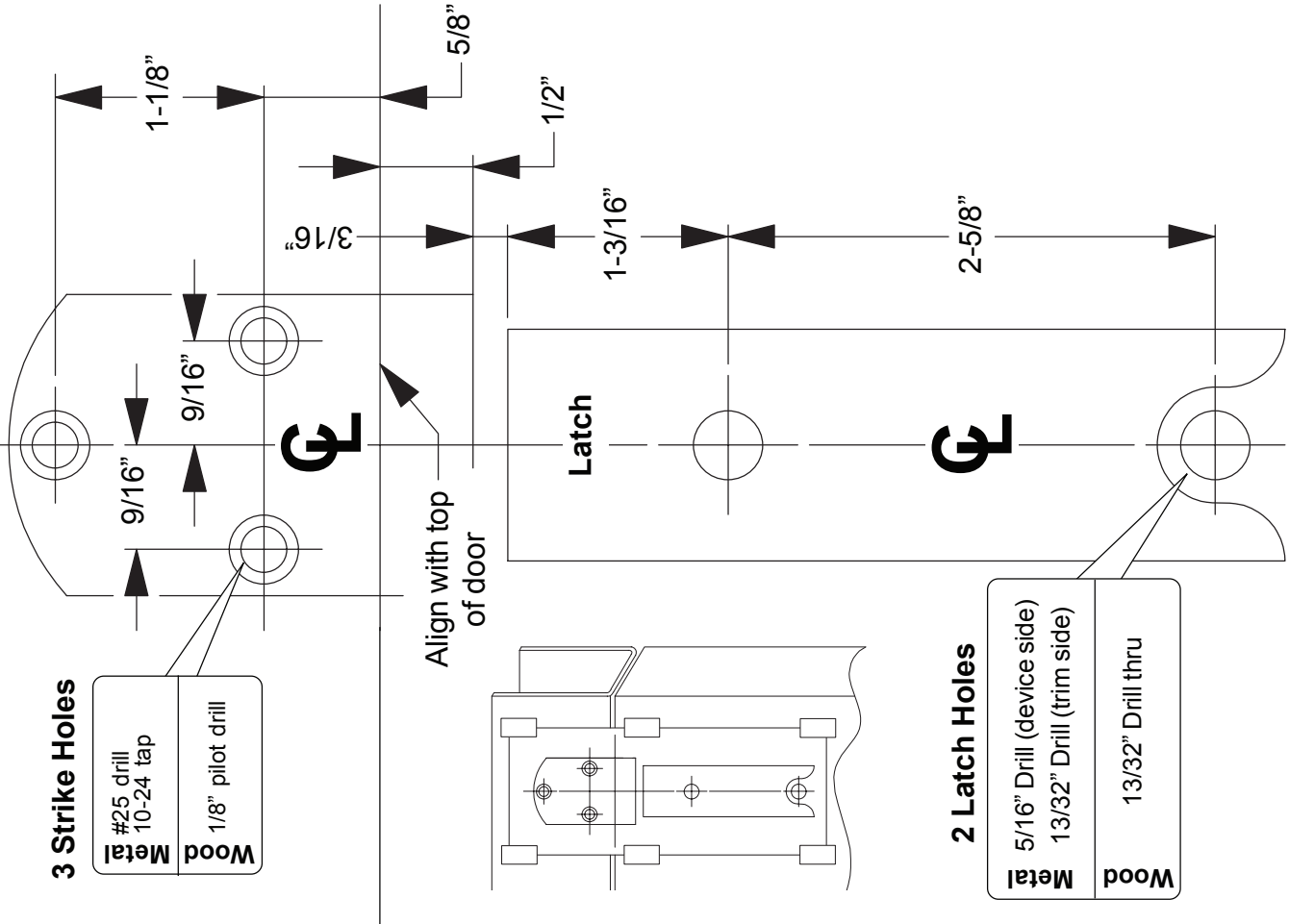


Figure 2

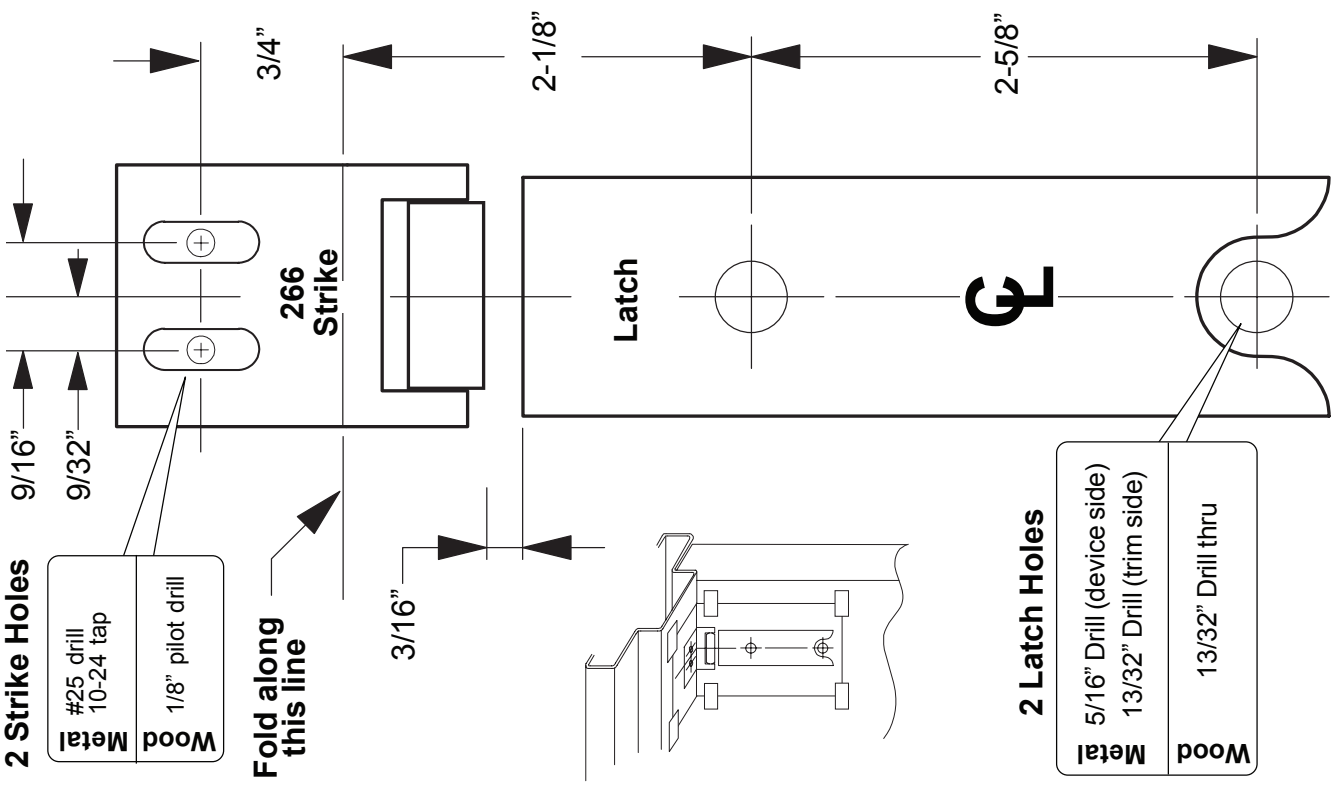
TOP LATCH AND 260U STRIKE

For panic device application only



TOP LATCH & 266 STRIKE

For panic device application only



TOP TEMPLATE

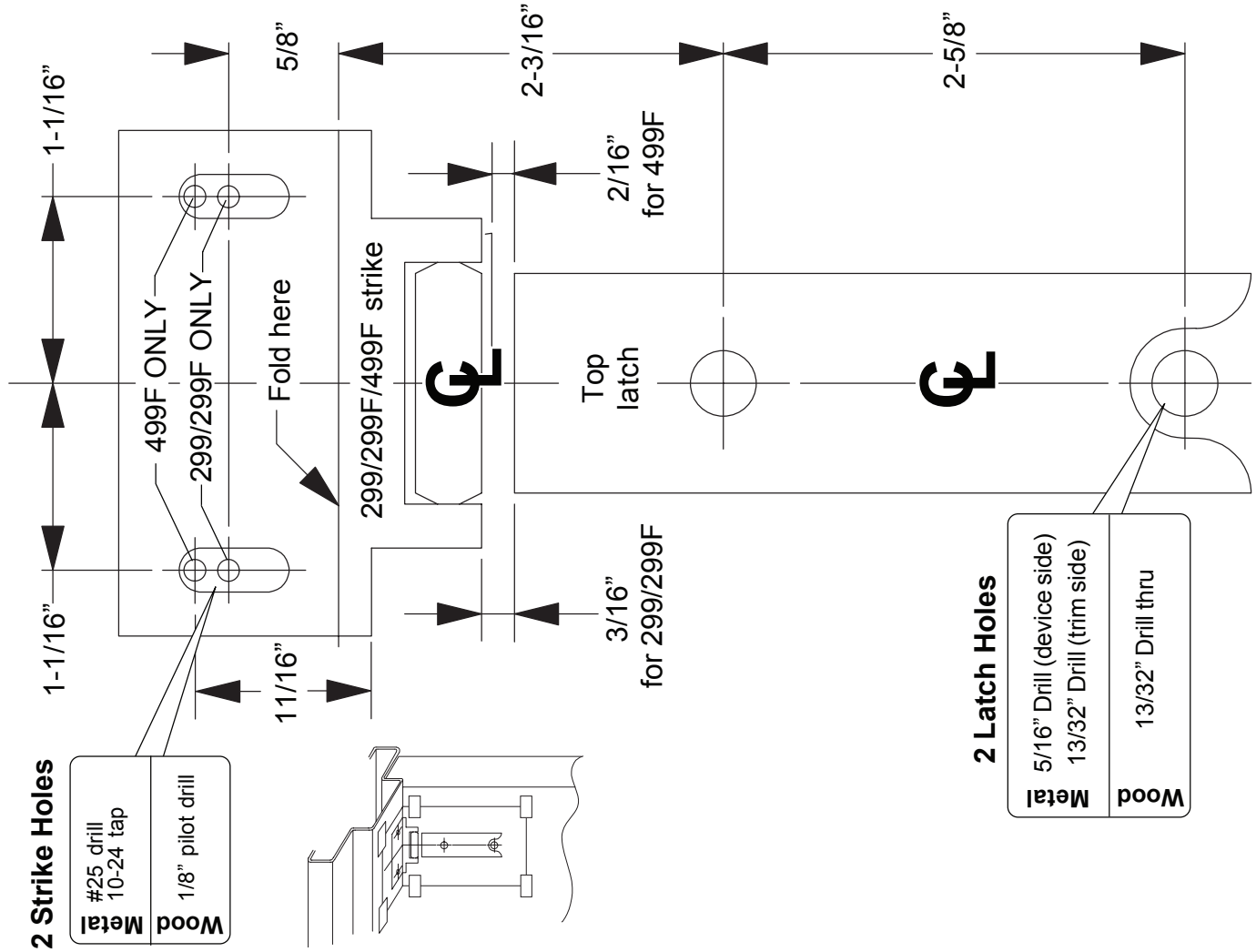
TOP TEMPLATE - CONTINUED

Note: For 299/299F top strike use minimum backsets shown below.

Double doors: 1-3/8" min. backset, 2-3/16" min. stile

Single door: 1-7/8" min. backset, 2-11/16" min. stile

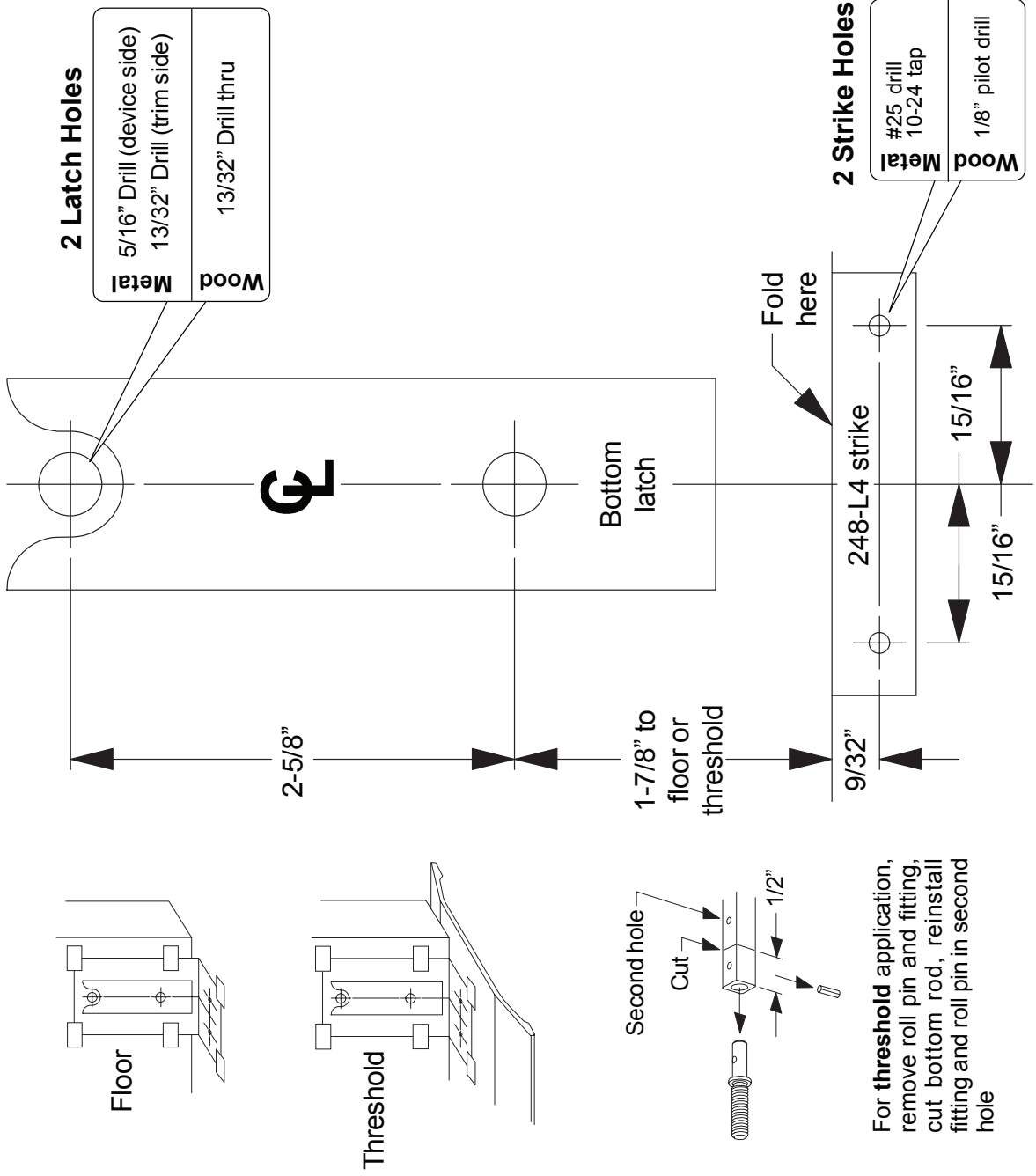
TOP LATCH & 299/299F/499F STRIKE



BOTTOM TEMPLATE

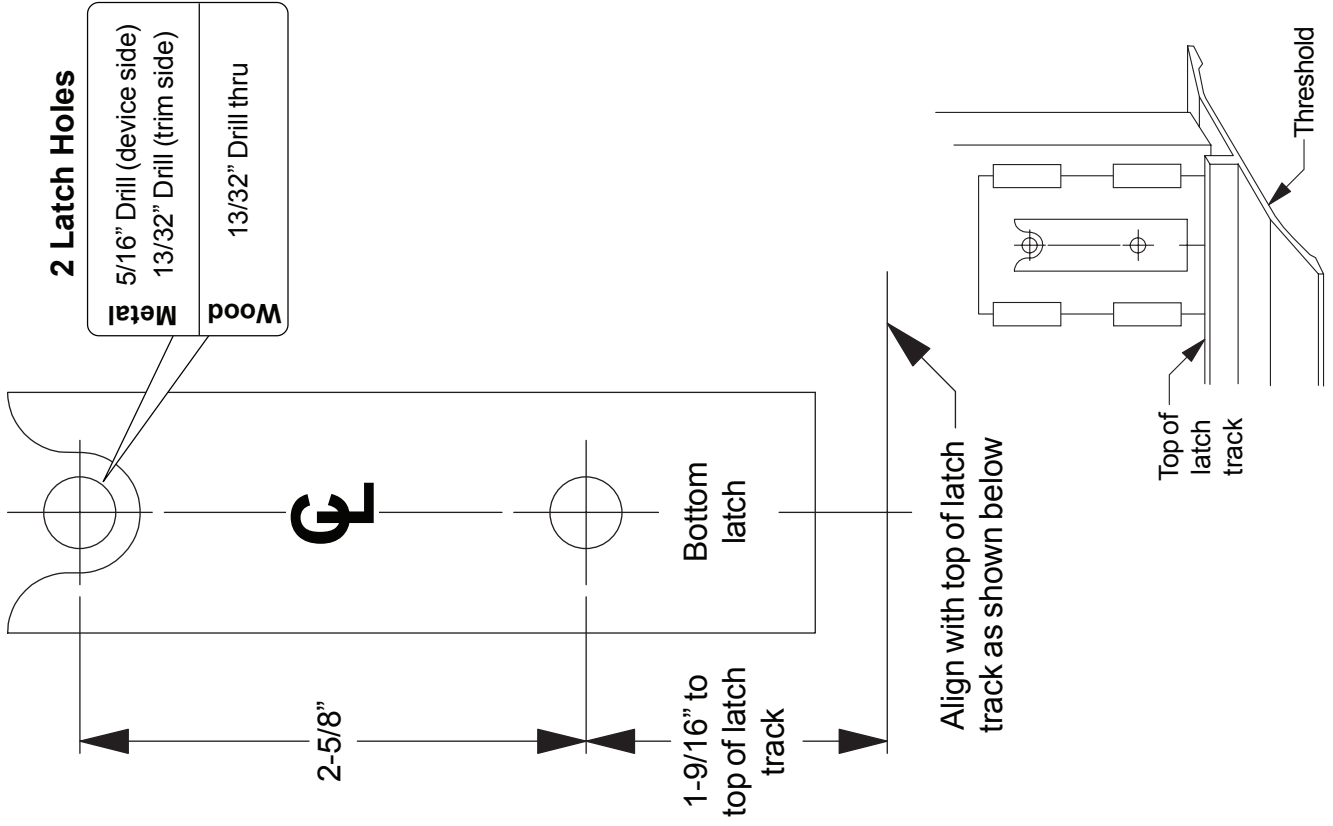
BOTTOM LATCH AND 248-L4 STRIKE

For panic device application only

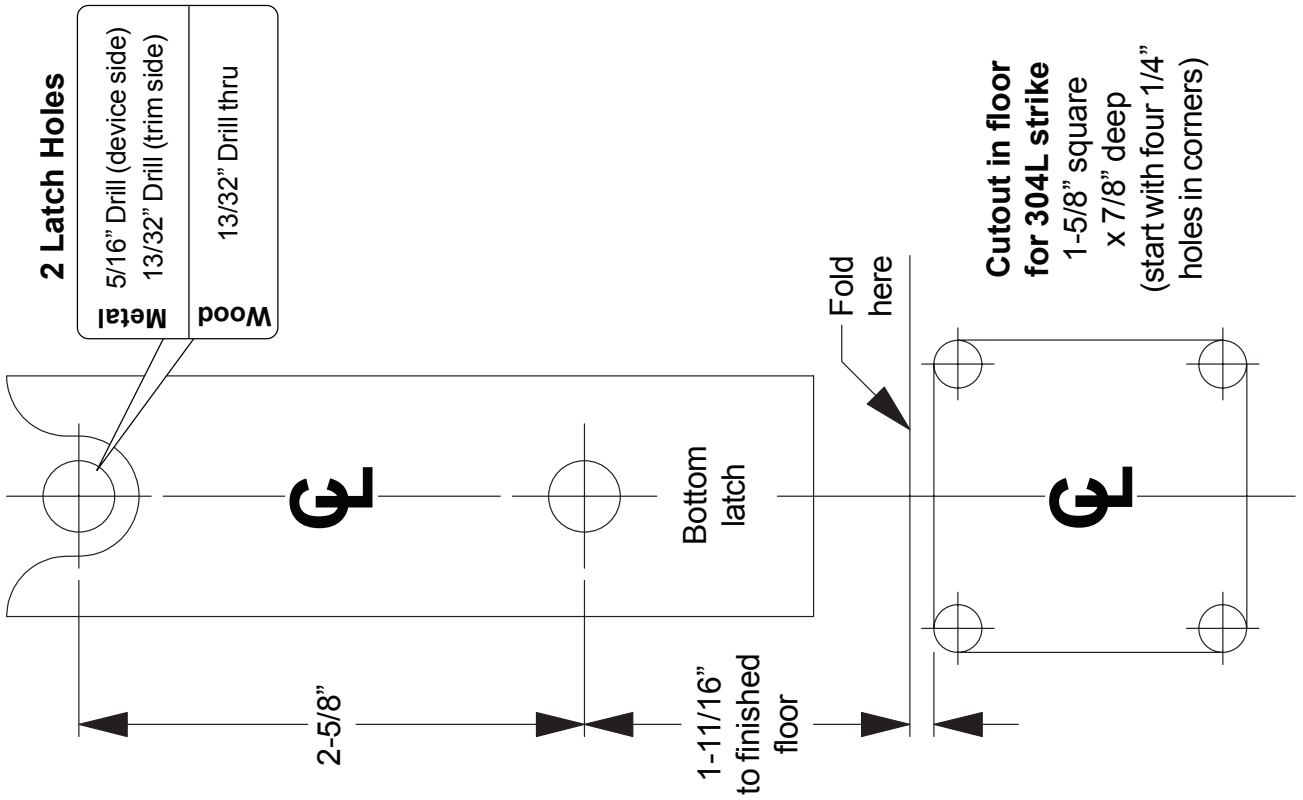


BOTTOM TEMPLATE - CONTINUED

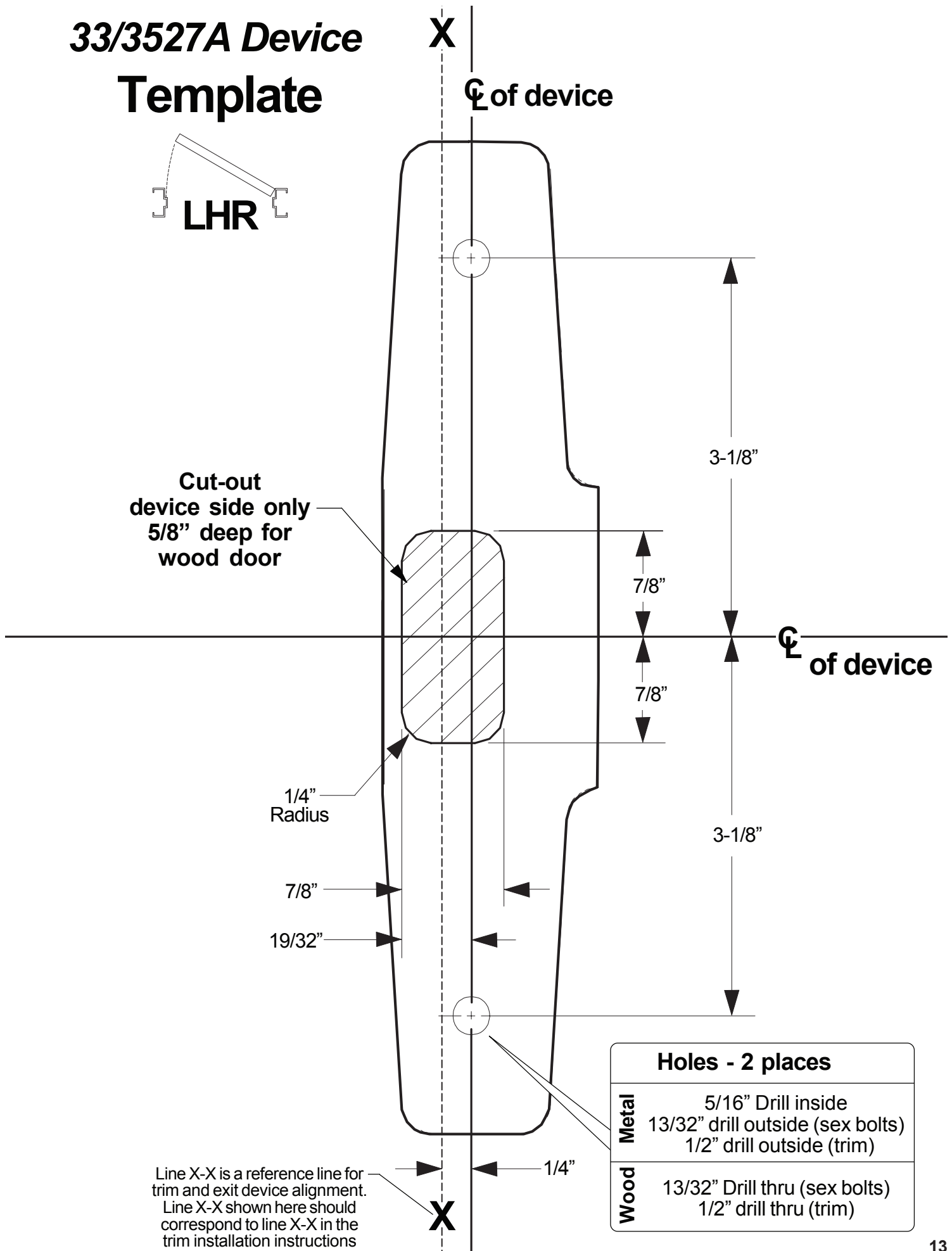
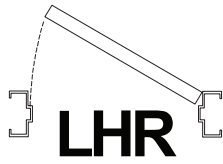
BOTTOM LATCH AND LATCH TRACK



BOTTOM LATCH AND 304L STRIKE



33/3527A Device Template



**Cut-out
device side only
5/8" deep for
wood door**

1/4" Radius

7/8"

19/32"

3-1/8"

7/8"

7/8"

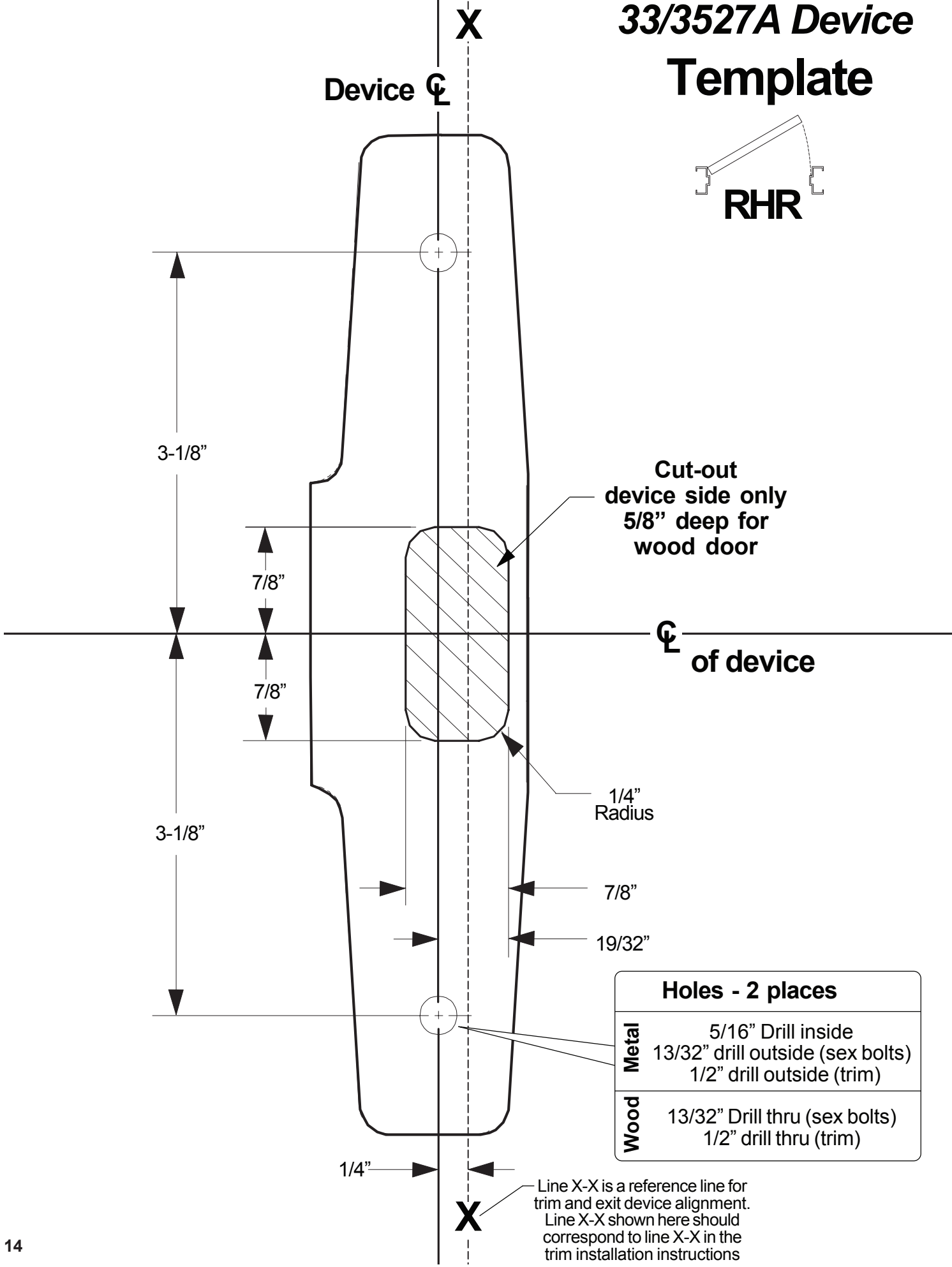
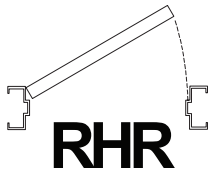
3-1/8"

1/4"

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

Holes - 2 places	
Metal	5/16" Drill inside 13/32" drill outside (sex bolts) 1/2" drill outside (trim)
Wood	13/32" Drill thru (sex bolts) 1/2" drill thru (trim)

33/3527A Device Template



Cut-out
device side only
5/8" deep for
wood door

☉
of device

1/4"
Radius

7/8"

19/32"

Holes - 2 places	
Metal	5/16" Drill inside
	13/32" drill outside (sex bolts) 1/2" drill outside (trim)
Wood	13/32" Drill thru (sex bolts)
	1/2" drill thru (trim)

1/4"

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

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