47986707

7847

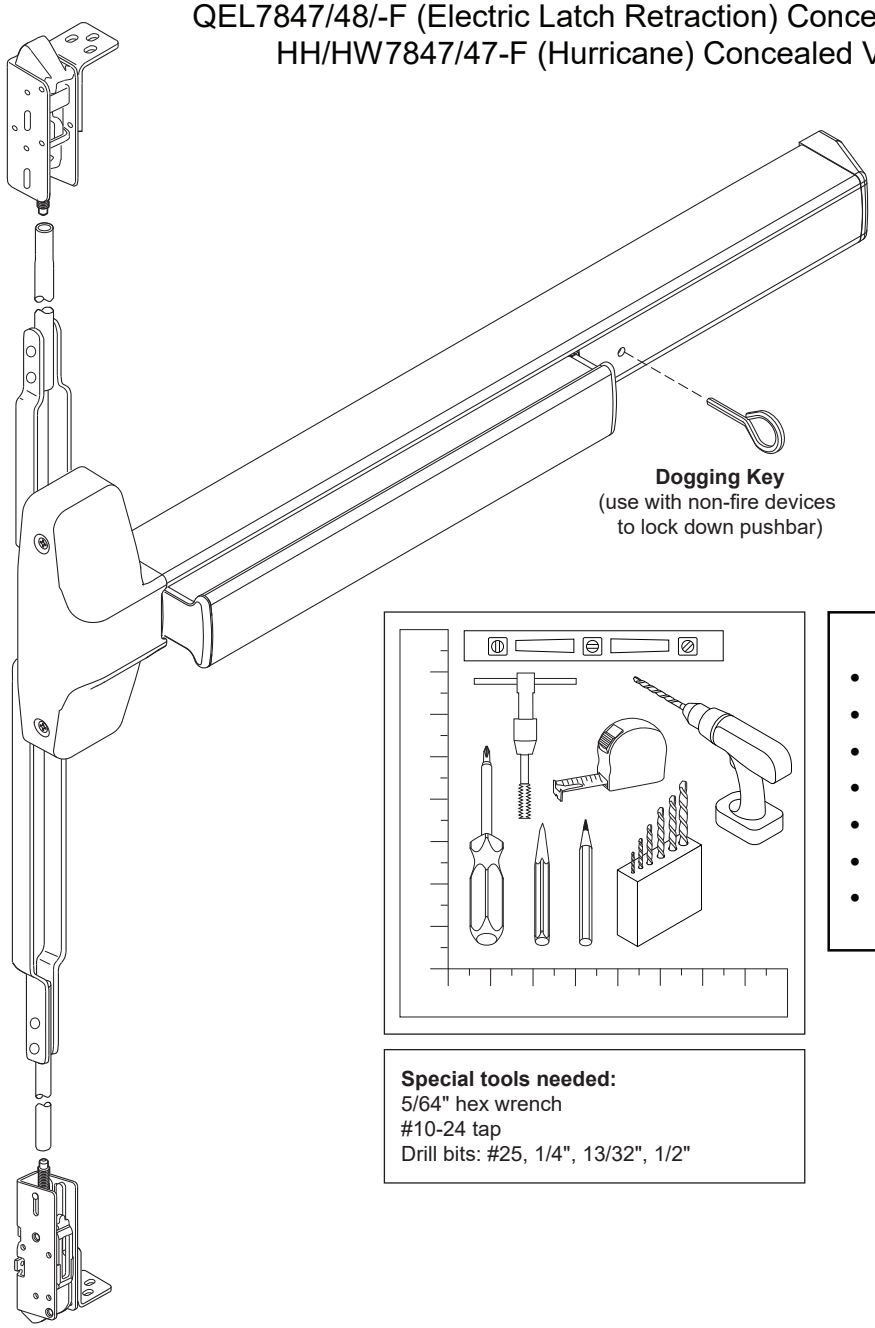
VON DUPRIN

Concealed Vertical Rod Exit Device
Metal Door Applications

Installation Instructions

Devices covered by these instructions:

7847/48 Concealed Vertical Rod Exit Device
7847-F/48-F (Fire) Concealed Vertical Rod Exit Device
CD7847/48 (Cylinder Dogging) Concealed Vertical Rod Exit Device
QEL7847/48/-F (Electric Latch Retraction) Concealed Vertical Rod Exit Device
HH/HW7847/47-F (Hurricane) Concealed Vertical Rod Exit Device



Dogging Key
(use with non-fire devices
to lock down pushbar)

Special tools needed:
5/64" hex wrench
#10-24 tap
Drill bits: #25, 1/4", 13/32", 1/2"

Index:

- Screw chart 2
- Door preparation chart 3
- Device installation 4-6
- Adjust rods 7
- Frame preparation chart 7
- Optional equipment 8
- Cut device 8

For hurricane rated device requirements, see page 4.

ALLEGION

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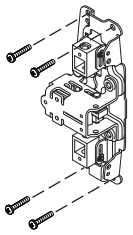
SCREW CHART

A



#10-24 x 1" — Surface mount or Sex bolts (1-3/4" door)

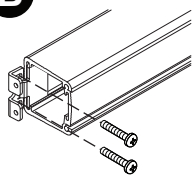
#10-24 x 1-1/2" — Sex bolts (2-1/4" door)

- Packaged with trim -

#10-24 x 3/4" — 785 trims (1-3/4" door)

#10-24 x 1" — 785 trims (2-1/4" door)

B



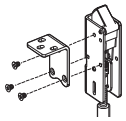
#10-24 x 3/4" — Surface mount or Sex bolts (1-3/4" door)

#10-24 x 1-1/8" — Sex bolts (2-1/4" door)

C

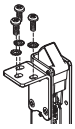
#10-16 X 3/8" Thread cutting — End cap

D



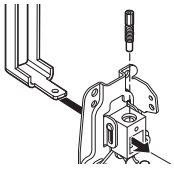
#10-32 X 1/4" — Bracket to latch

E



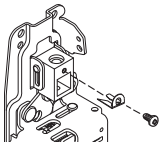
#10-24 X 1/2" — Bracket to door

F



Rod adjusting screw — Retaining clip

G



#8-32 X 5/16" — Retaining clip

H

#10-24 X 1/2" — 338 strike

I

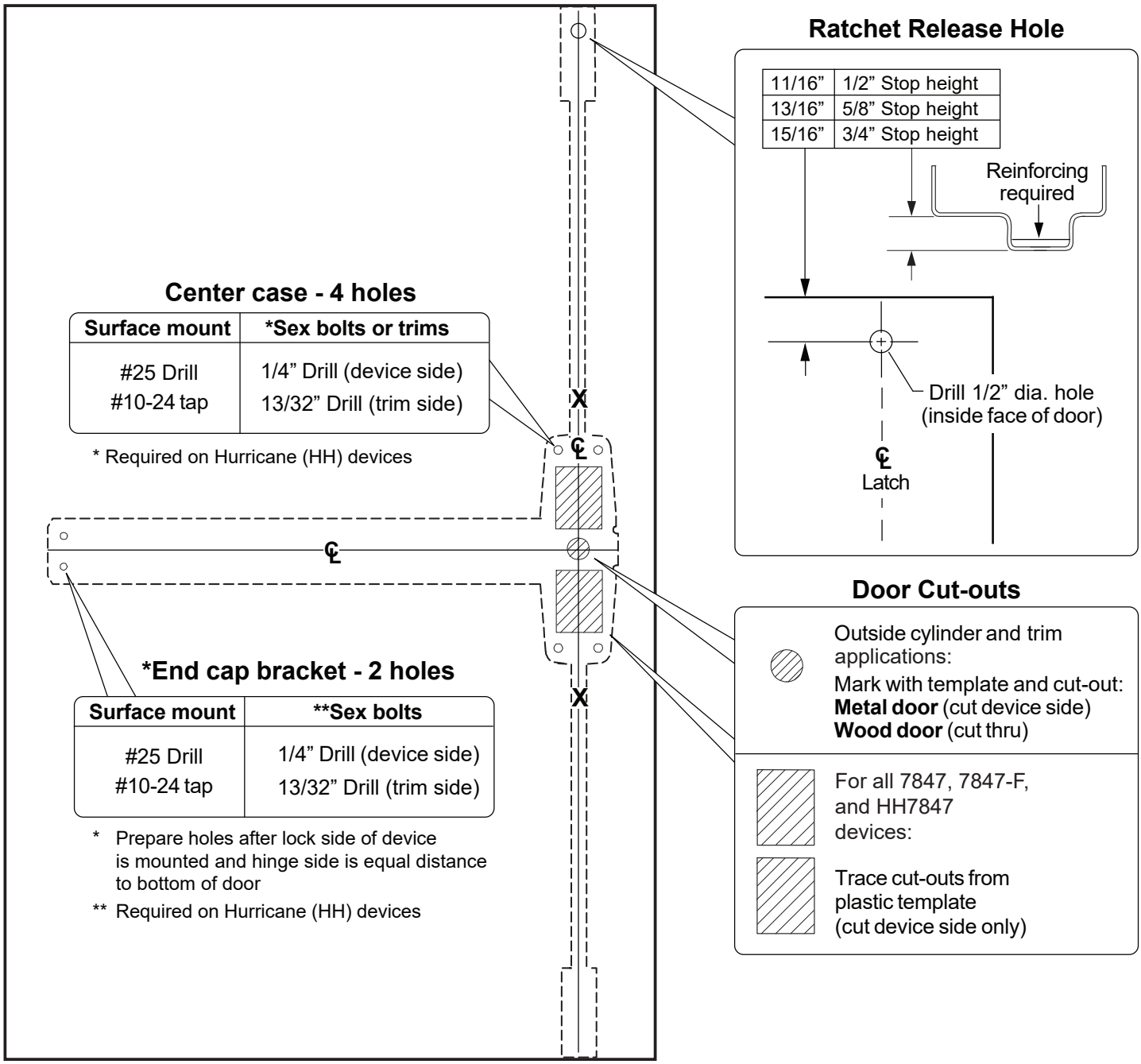
#10-24 X 1-1/2" — Ratchet release

J

#8-18 x 3/8" Thread cutting — Center case cover

DOOR PREPARATION CHART

Go to instructions on next page before using preparation chart



Ratchet Release Hole

11/16”	1/2” Stop height
13/16”	5/8” Stop height
15/16”	3/4” Stop height

Reinforcing required

Drill 1/2” dia. hole (inside face of door)

℄ Latch

Center case - 4 holes

Surface mount	*Sex bolts or trims
#25 Drill #10-24 tap	1/4” Drill (device side) 13/32” Drill (trim side)

* Required on Hurricane (HH) devices

*End cap bracket - 2 holes

Surface mount	**Sex bolts
#25 Drill #10-24 tap	1/4” Drill (device side) 13/32” Drill (trim side)

* Prepare holes after lock side of device is mounted and hinge side is equal distance to bottom of door

** Required on Hurricane (HH) devices

Door Cut-outs

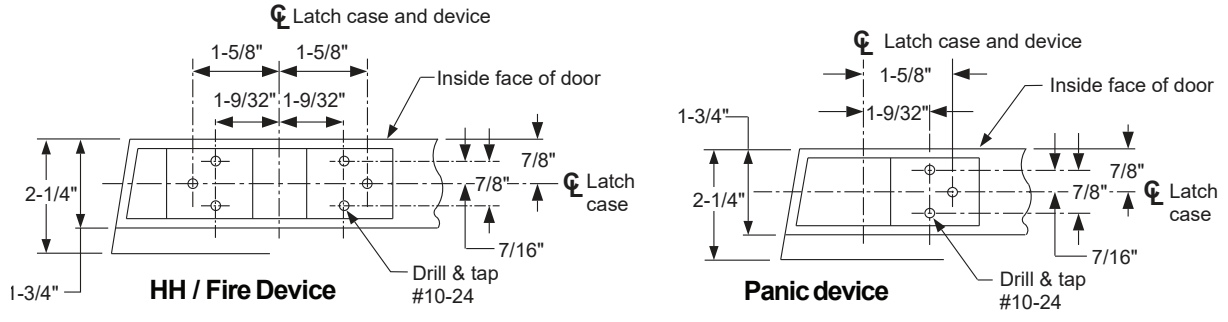
Outside cylinder and trim applications:
Mark with template and cut-out:
Metal door (cut device side)
Wood door (cut thru)

For all 7847, 7847-F, and HH7847 devices:

Trace cut-outs from plastic template (cut device side only)

Latch Cases

(Drill top and bottom of door)

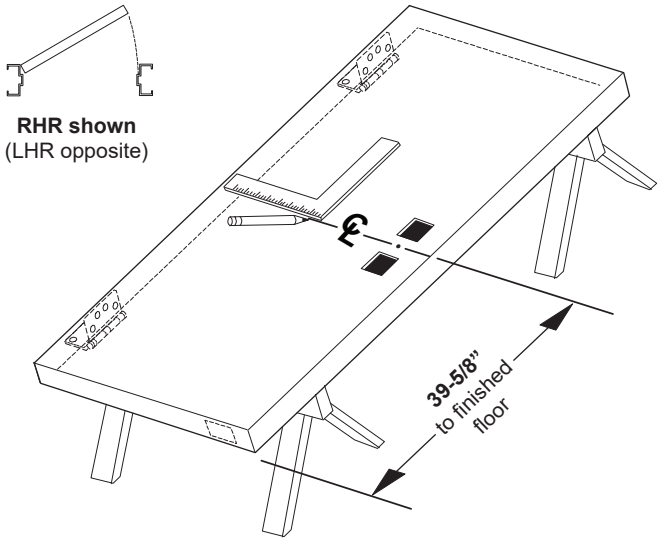


HURRICANE RATED DEVICE REQUIREMENTS

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

Sexbolts	When installing a Wind and Impact-rated hurricane device (HH), sex bolts must be used. Sex bolts are noted throughout the instructions where applicable. If through-bolting trims are used, these trims are equivalent in function and are used in place of sex bolts.			
Application		**Single door standard strike**	**Mullion**	**Double door standard strike**
HH (Wind and Impact rated) or HW (Wind Only)	HH7847, 7847	Top: 338 Bottom: 304L	–	Top: 338 Bottom: 304L
	7847-F	–	–	

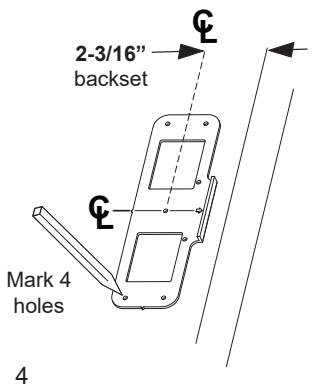
1 Draw Horizontal Device Center Line (℄)



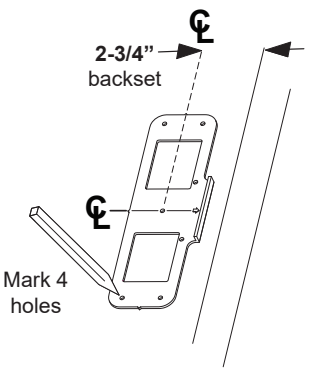
2 Determine Correct Backset, then Mark 4 Holes for Device Center Case Using Template

Mark centerline using measuring tape. Place template on centerline mark.

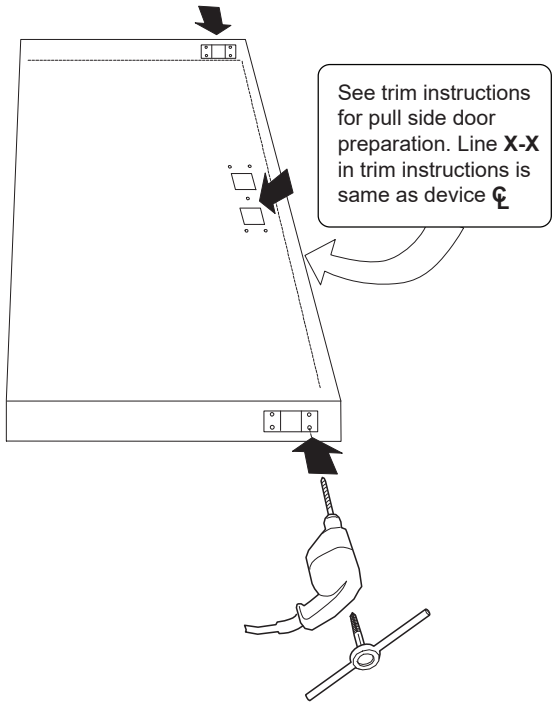
7847
(non-fire rated device)
single or double door



7847-F
(fire rated device)
or **HH7847**
(hurricane rated device)

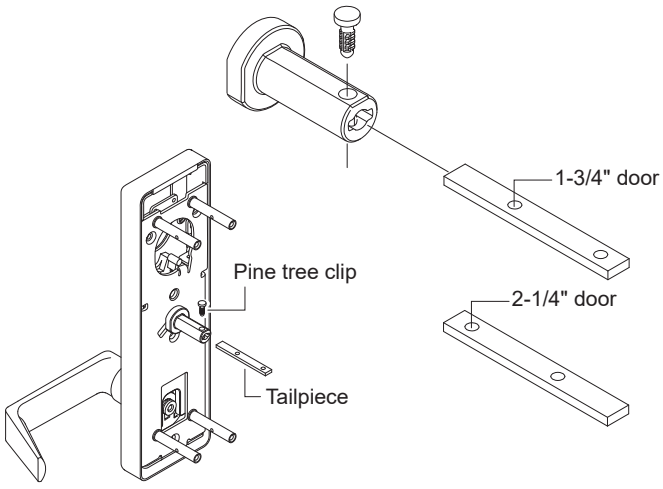


3 Prepare Door per Preparation Chart on Page 3



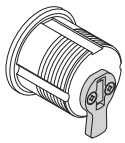
4 Adjust Tailpiece if Needed

Make sure tailpiece is installed at correct length for 1-3/4" thick or 2-1/4" thick door. If necessary, remove pine tree clip, rotate tailpiece, and reinstall pine tree clip.



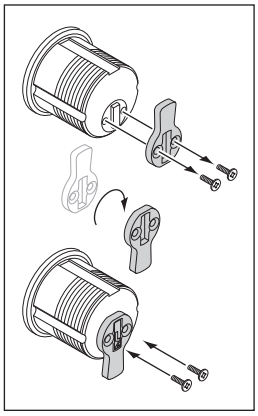
5 If Using a Cylinder, Remove Cam and Rotate 180˚

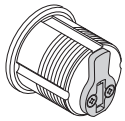
Cam must be in position shown **with key removed**. If necessary, remove cam screws, place cam is correct position, and reinstall cam screws.



Standard Orientation with key removed.

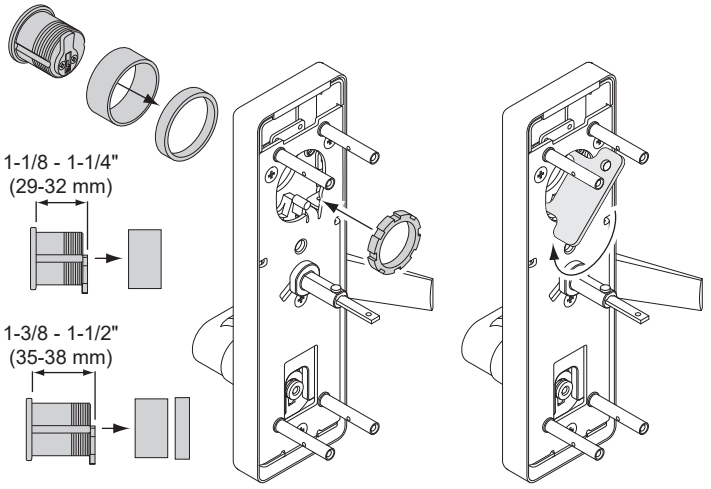
Rotate cam if necessary as shown here.





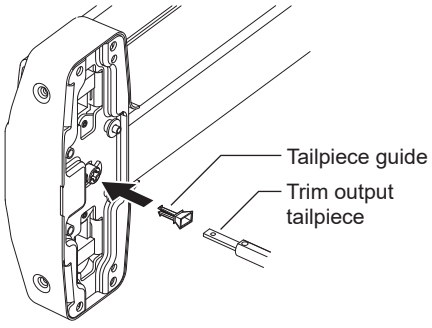
For NL and E-trims, use this orientation.

6 If Necessary, Install Cylinder.



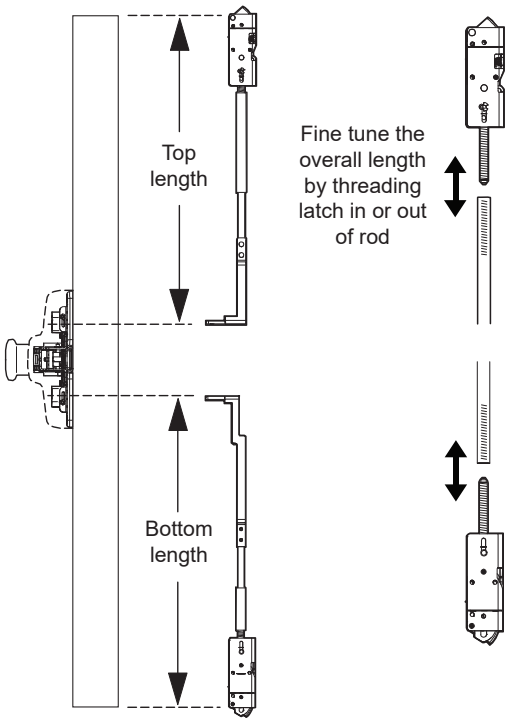
7 If Using a Cylinder with a Tailpiece, Prepare Device and Cylinder

a. Install tailpiece guide.



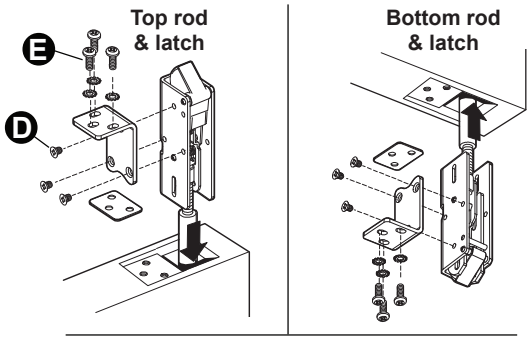
8 Assemble Rods and Latches and Adjust Length for Proper Door Height

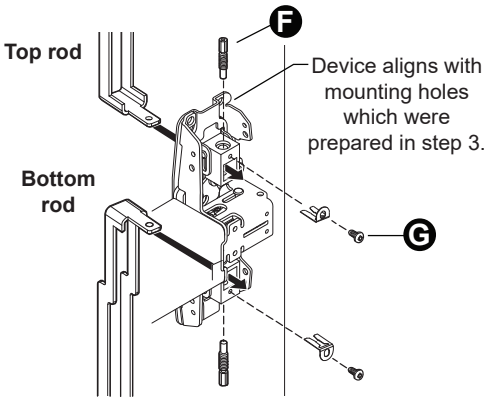
Follow red and blue instruction cards on rods to set initial rod length



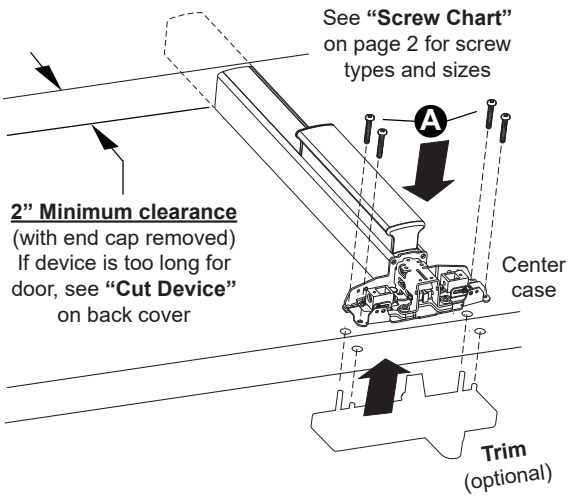
9 Install Rods and Latches as Shown

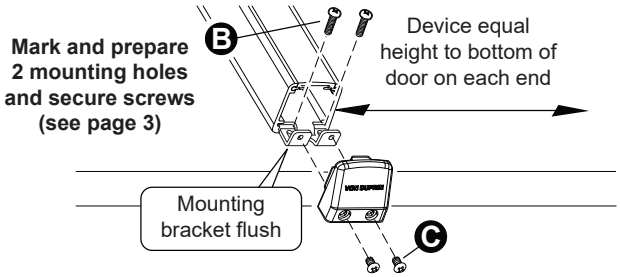
Note: Fire / HH devices use brackets on both sides of latches





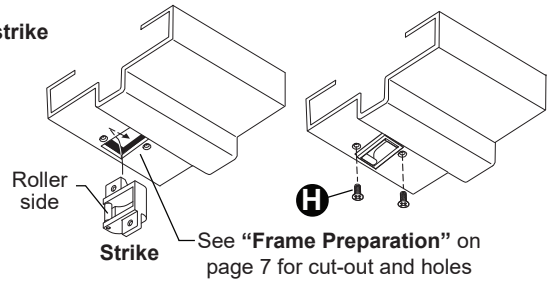
10 Secure Device to Door as Shown, then Hang Door on Frame

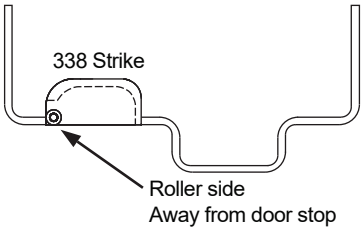




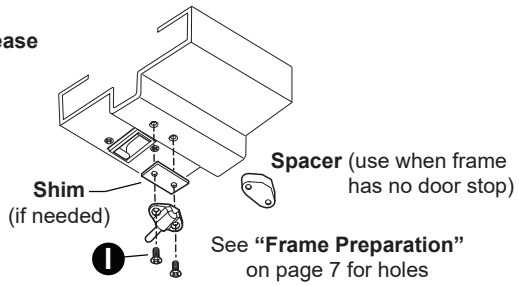
11 Install Top Strike and Ratchet Release

338 Top strike



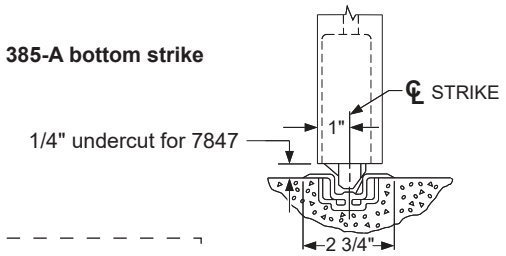


Ratchet release

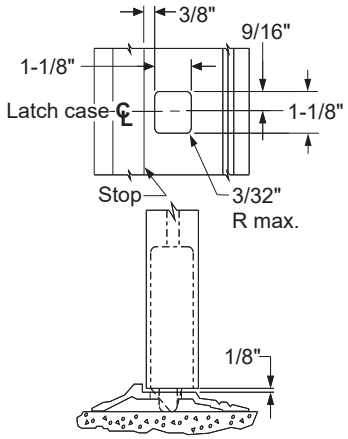


12 Install Bottom Strike or Prepare Threshold

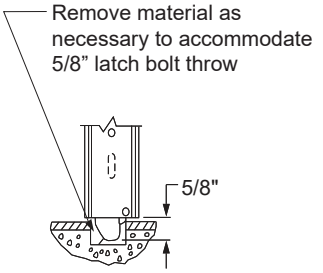
385-A bottom strike



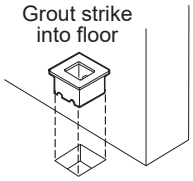
Threshold application



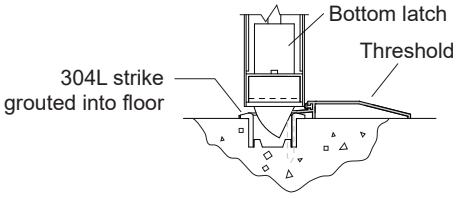
Flat threshold application



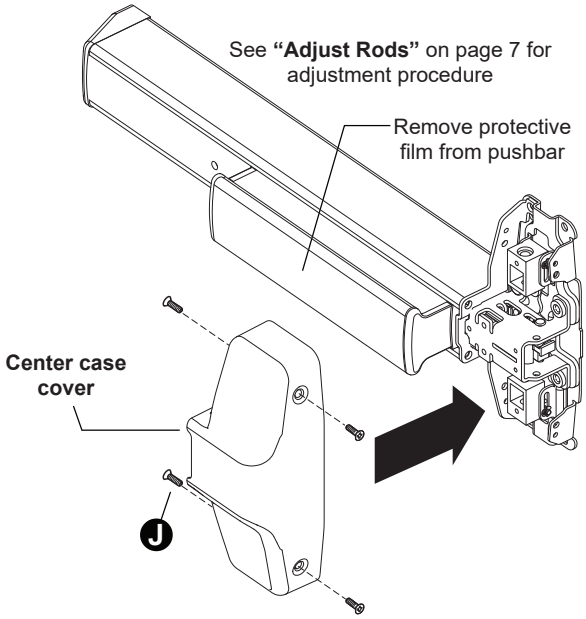
304L strike



Hurricane applications use threshold with 304L bottom strike



13 Adjust Rods and Install Center Case Cover



ADJUST RODS

1. Open door and release top latch bolt as shown (Figure 1).

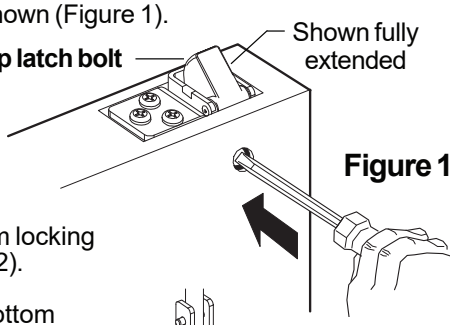


Figure 1

2. Loosen bottom locking screw (Figure 2).
3. Disconnect bottom vertical rod by removing bottom adjusting screw.
4. Loosen top locking screw.
5. Rotate top adjusting screw clockwise until top latch bolt is fully extended (Figure 1).
6. Check top latch bolt for deadlocking (latch bolt should not push in).
7. Turn top locking screw in. Do not over-tighten

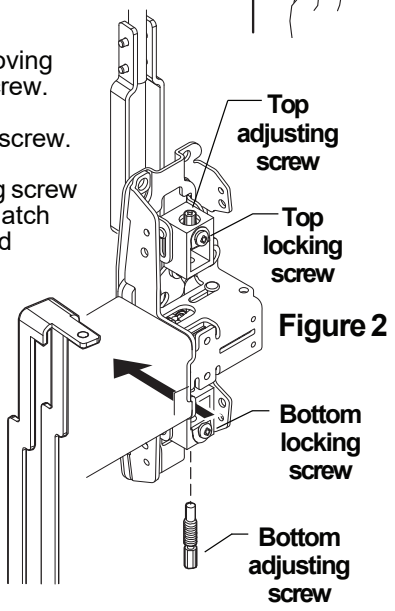


Figure 2

8. Depress pushbar and release.
9. Make sure top latch bolt stays retracted as shown.

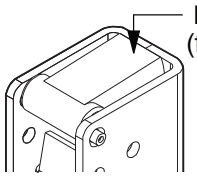


Figure 3

10. Install bottom adjusting screw through bottom rod (Figure 2).
11. With top latch bolt still retracted, adjust bottom rod so latch bolt clears floor and bottom strike.

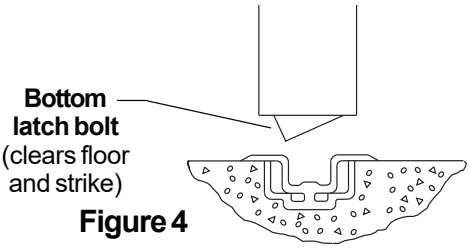


Figure 4

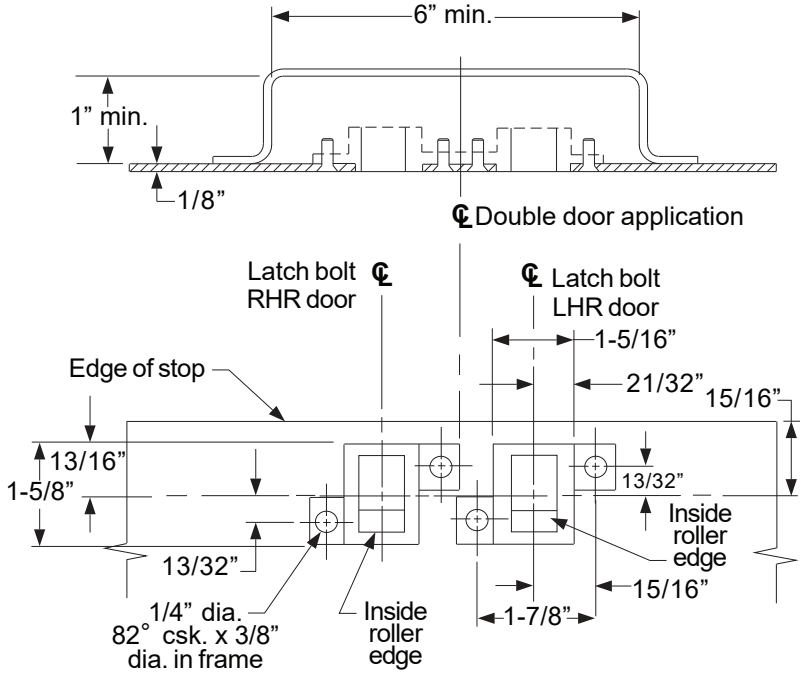
12. Turn bottom locking screw in. Do not over-tighten.
13. Check device operation by opening and closing door several times from the outside.

Redo adjustment procedure if :

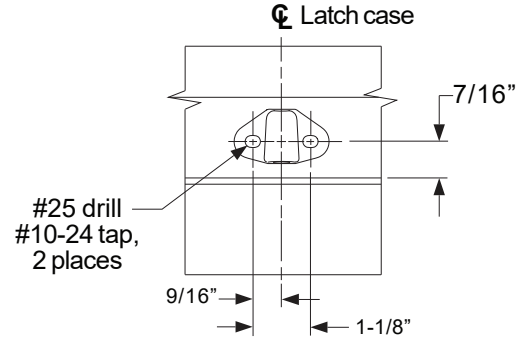
- Top latchbolt is not held retracted
- Bottom latchbolt does not clear floor and bottom strike

FRAME PREPARATION

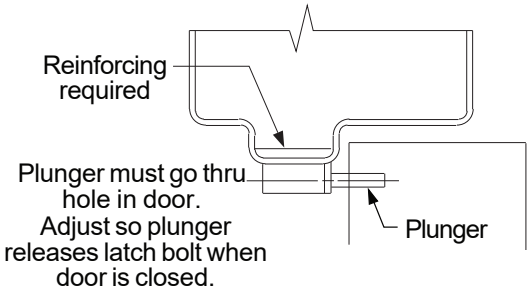
TOP STRIKE



RATCHET RELEASE



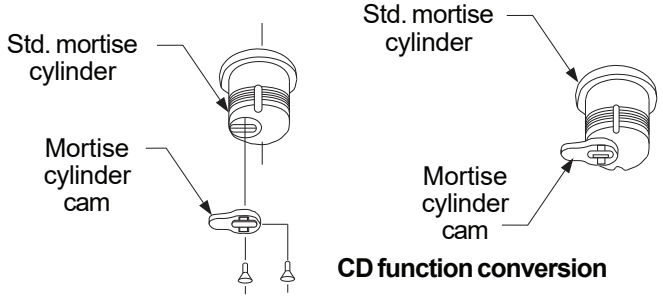
DO NOT USE SLOTS FOR POSITIONING.
DRILL HOLES AS INDICATED HERE.



OPTIONAL EQUIPMENT - CONTINUED

CD (CYLINDER DOGGING)

1. Remove mortise cylinder cam and reinstall in reverse (Figure 6).
2. Insert key and rotate cam to install the cylinder to the cover plate (Figure 7).
3. Remove key to slide cover plate in position in the mechanism case.



CD function conversion

Figure 6

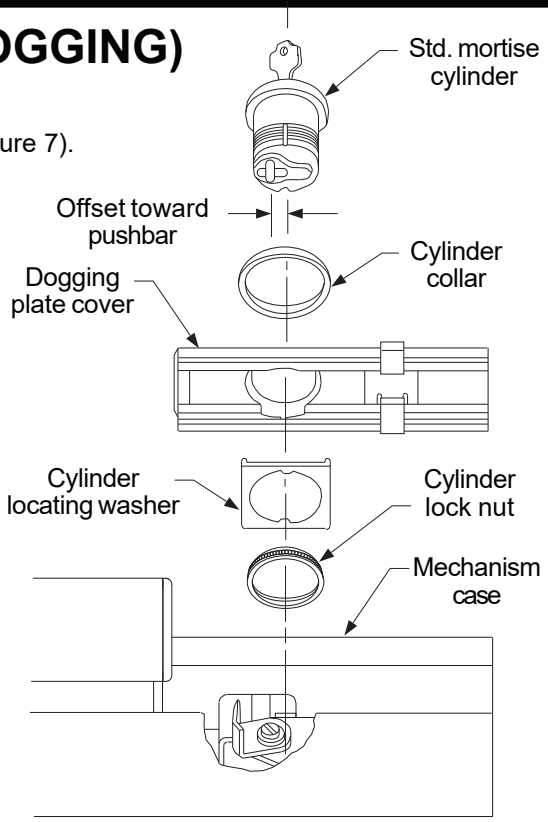
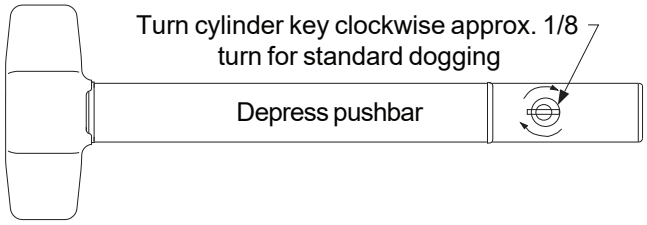


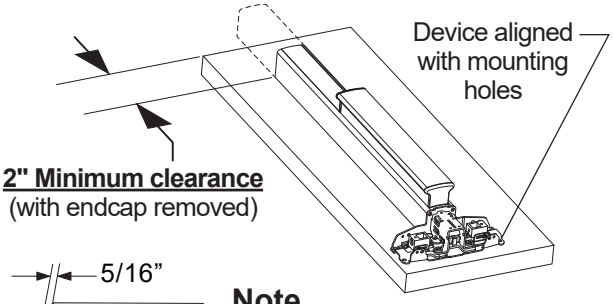
Figure 7

Dogging procedure



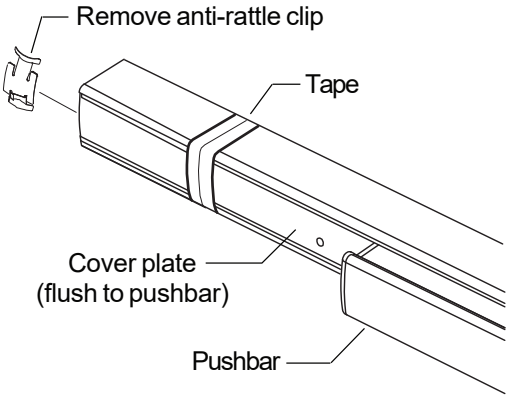
CUT DEVICE

1 Measure amount to cut off device.

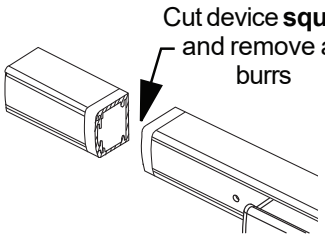


Note
If 5/8" diameter wire access hole has been predrilled in door, cut device 5/16" from center of hole.

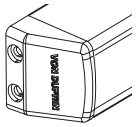
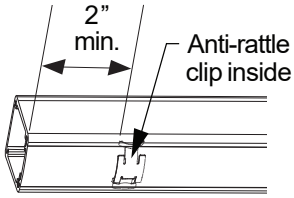
2 Tape and mark area being cut.



3 Cut device square.



NOTE: Device must be cut **square** for proper end cap fit



4 Slide anti-rattle clip into device.