47986706

7827

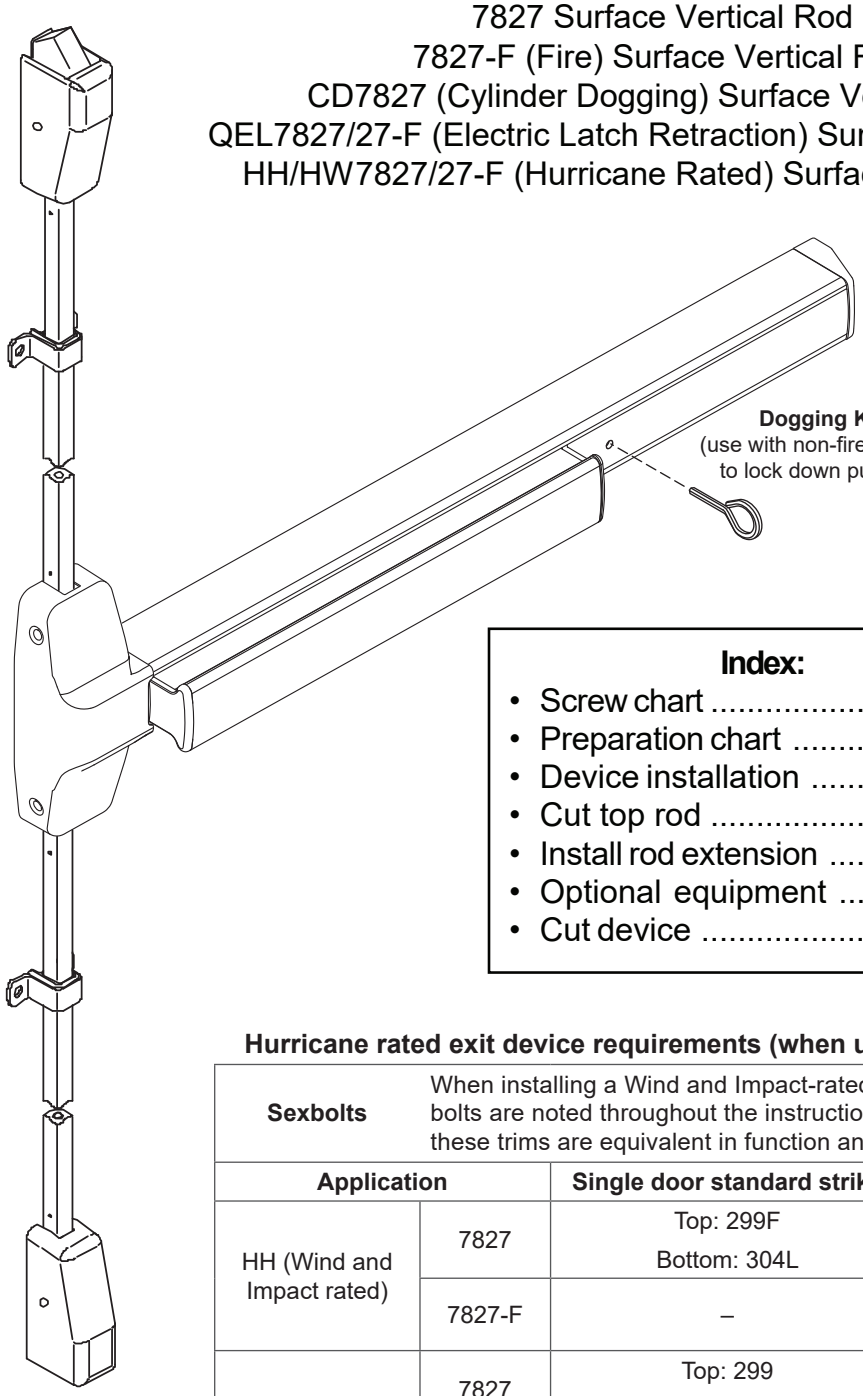
VON DUPRIN

Surface Vertical Rod Exit Device

Installation Instructions

Devices covered by these instructions:

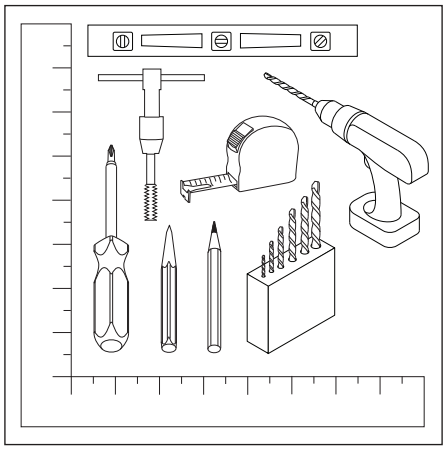
7827 Surface Vertical Rod Exit Device
7827-F (Fire) Surface Vertical Rod Exit Device
CD7827 (Cylinder Dogging) Surface Vertical Rod Exit Device
QEL7827/27-F (Electric Latch Retraction) Surface Vertical Rod Exit Device
HH/HW7827/27-F (Hurricane Rated) Surface Vertical Rod Exit Device



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

Index:

- Screw chart 2
- Preparation chart 3
- Device installation 4-6
- Cut top rod 7
- Install rod extension 7
- Optional equipment 8
- Cut device 8



Special tools needed:
5/64" hex wrench
#10-24 tap
Drill bits: #25, 1/8", 1/4", 5/16", 13/32"

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)	7827	Top: 299F Bottom: 304L	–	Top: 299F Bottom: 304L
	7827-F	–	–	
HW (Wind Only)	7827	Top: 299 Bottom: 304L	–	Top: 299 Bottom: 304L
	7827-F	–	–	Top: 299F Bottom: 304L

ALLEGION

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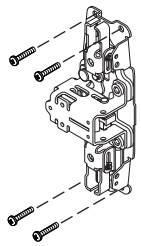
SCREW CHART

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)

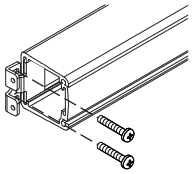
#10 x 1-1/4" Wood screw — Surface mount (wood)

- 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)

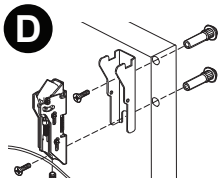
#10-24 X 1-1/8" — Sex bolts 2-1/4" door

#10 x 1-1/4" Wood screw — Surface mount (wood)

C

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

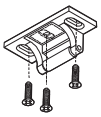
D



1/4-20 X 3/4" — 1-3/4" door

1/4-20 X 1-1/4" — 2-1/4" door

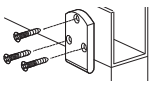
E



#10-24 X 3/4" — Metal frame

#10 x 1-1/2" Wood screw — Wood frame

F



#10-12 x 10-24 x 1-1/4" Combination — Metal or wood frame

G

#10-12 x 10-24 x 1-1/4" Combination — Variable floor surfaces

H

#8-32 X 1/4" — Latch covers

I

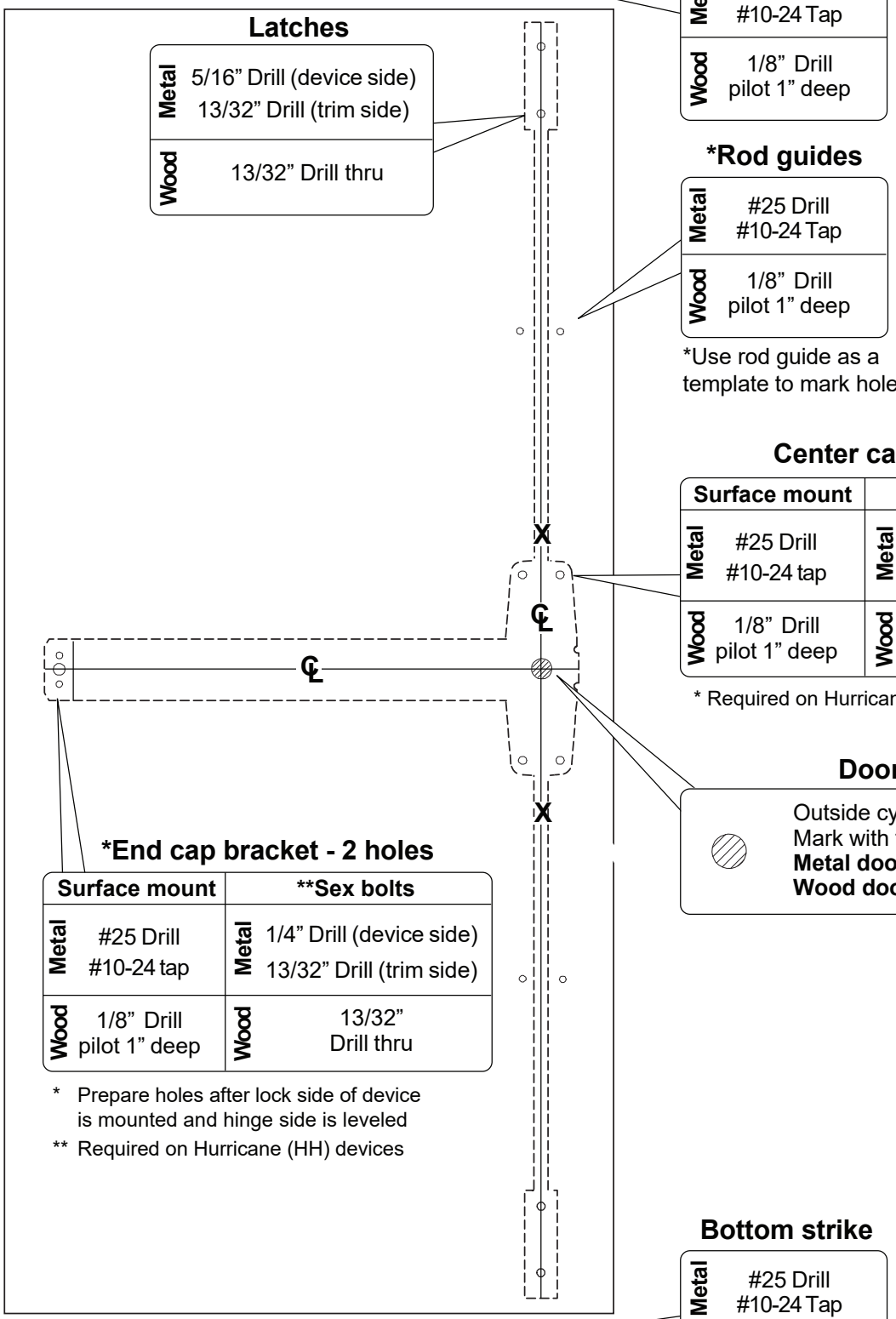
#10-12 x 10-24 x 1" Combination — Metal or wood door

J

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

PREPARATION CHART

Go to instructions on next page before using Preparation Chart



Top strike

Metal	#25 Drill #10-24 Tap
Wood	1/8” Drill pilot 1” deep

Latches

Metal	5/16” Drill (device side) 13/32” Drill (trim side)
Wood	13/32” Drill thru

*Rod guides

Metal	#25 Drill #10-24 Tap
Wood	1/8” Drill pilot 1” deep

*Use rod guide as a template to mark holes

Center case - 4 holes

Surface mount		*Sex bolts or trims	
Metal	#25 Drill #10-24 tap	Metal	1/4” Drill (device side) 13/32” Drill (trim side)
Wood	1/8” Drill pilot 1” deep	Wood	13/32” Drill thru

* 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)

*End cap bracket - 2 holes

Surface mount		**Sex bolts	
Metal	#25 Drill #10-24 tap	Metal	1/4” Drill (device side) 13/32” Drill (trim side)
Wood	1/8” Drill pilot 1” deep	Wood	13/32” Drill thru

* Prepare holes after lock side of device is mounted and hinge side is leveled

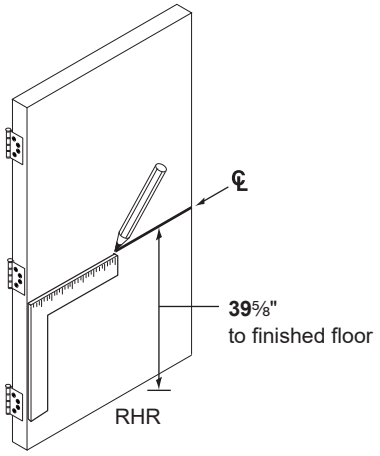
** Required on Hurricane (HH) devices

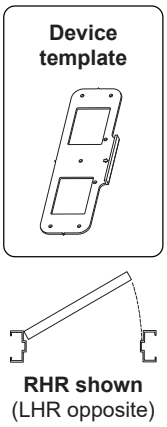
Bottom strike

Metal	#25 Drill #10-24 Tap
Wood	1/8” Drill pilot 1” deep

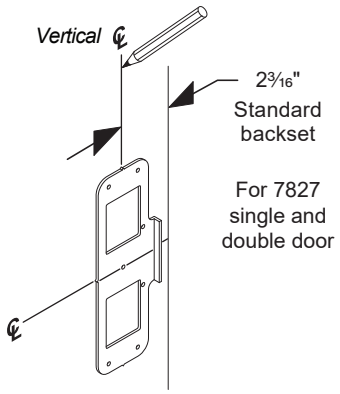
See template for strike variations

1 Draw Horizontal Center Line (℄) and Assemble Device Template





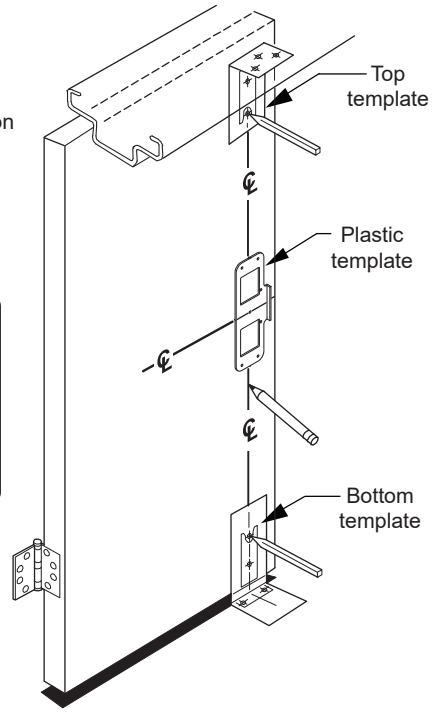
2 Position Template as Shown and Mark Vertical ℄



3 Align Top and Bottom Templates Along ℄ and Prepare Door

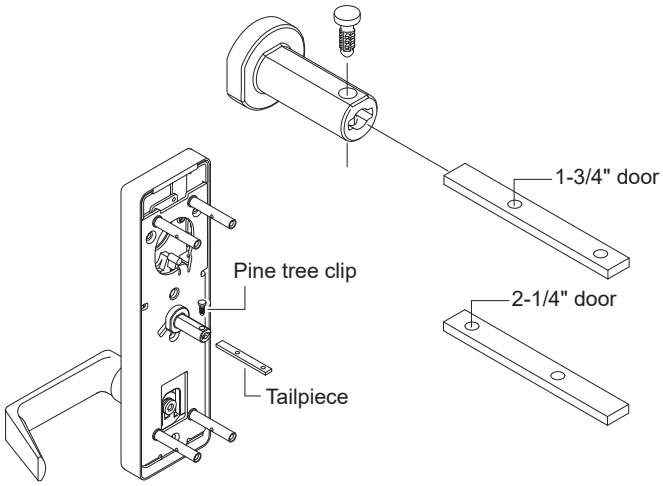
See "**Preparation Chart**" on page 3 for drill, tap, and cut-out information

See trim instructions for pull side door preparation. Line **X-X** in trim instructions is same as vertical device ℄.



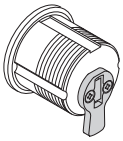
4 Adjust Tailpiece if Needed

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.



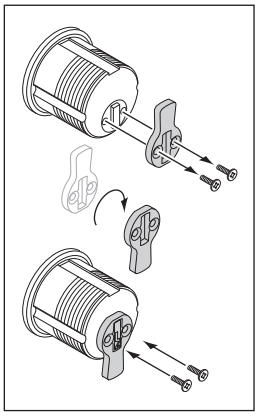
5 If Using a Cylinder, Remove Cam and Rotate 180˚

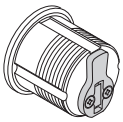
Cam must be in position shown **with key removed**. If necessary, remove cam screws, place cam is correct position, and reinstall cam screws.



Standard Orientation with key removed.

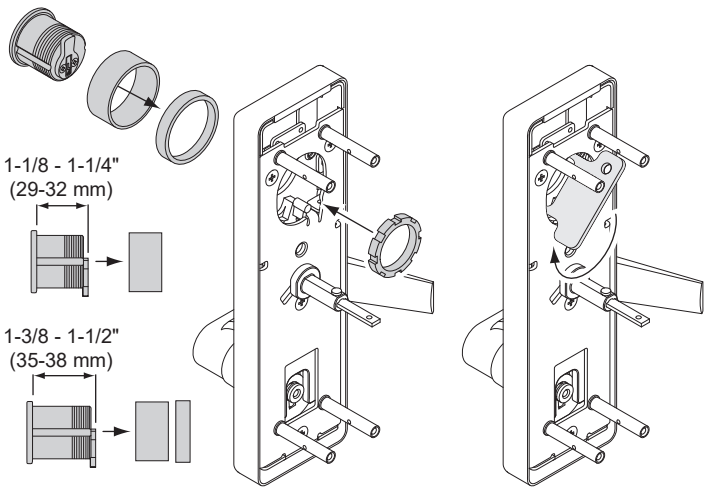
Rotate cam if necessary as shown here.





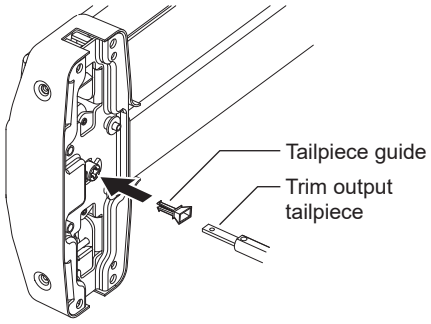
For NL and E-trims, use this orientation.

6 If Necessary, Install Cylinder

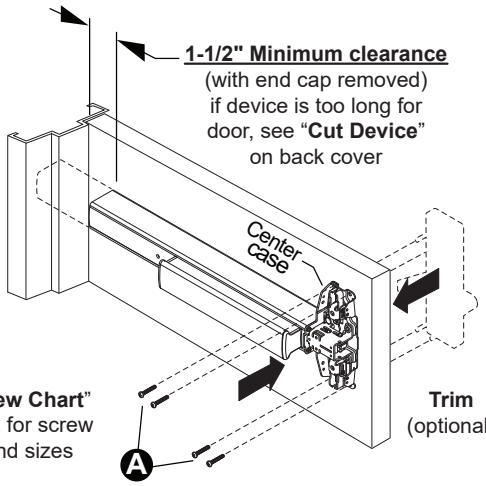


7 If Using a Cylinder with a Tailpiece, Prepare Device and Cylinder

a. Install tailpiece guide.

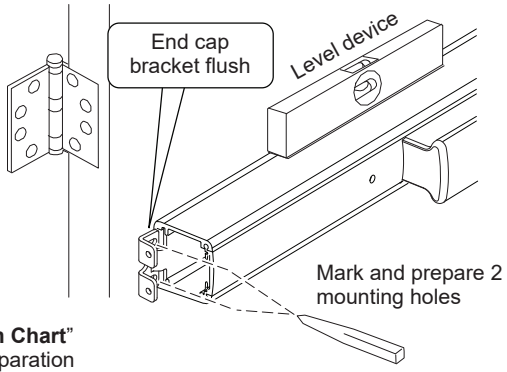


8 Install Trim (if using) and Secure Device Center Case to Door



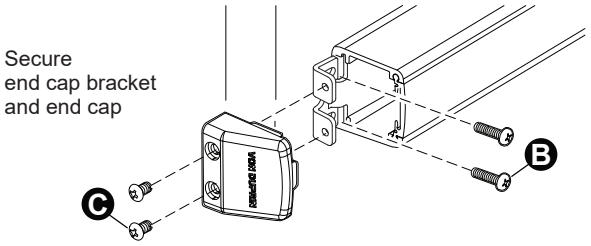
See "**Screw Chart**" on page 2 for screw types and sizes

9 Mark and Prepare 2 Holes for End Cap Bracket

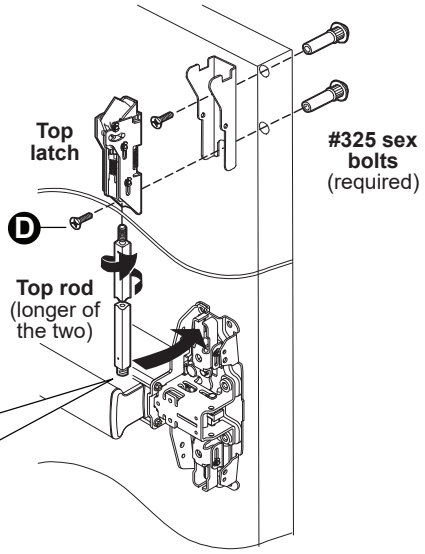


See "**Preparation Chart**" on page 3 for preparation information

10 Install End Cap Bracket and End Cap



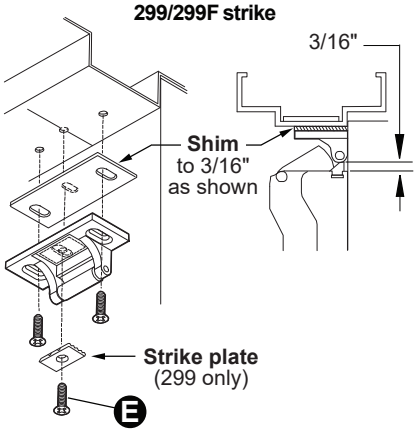
11 Install Top Latch and Rod

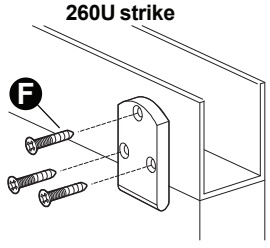


If top rod is too long, see "**Cut Top Rod**" on page 7

If top rod is too short, see "**Install Rod Extension**" on page 7

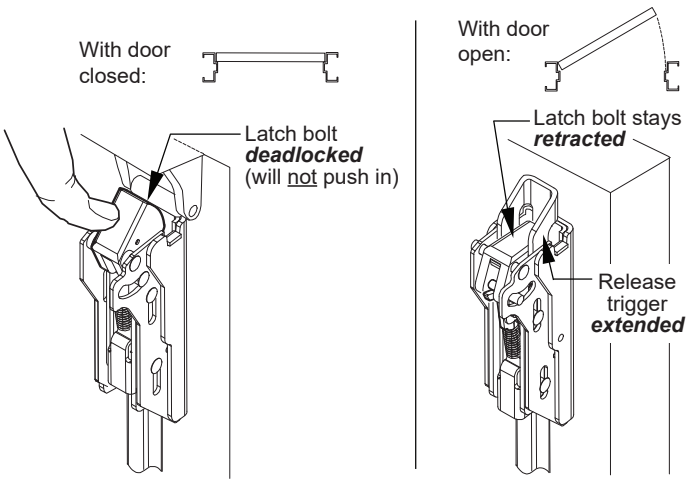
12 Install Top Strike



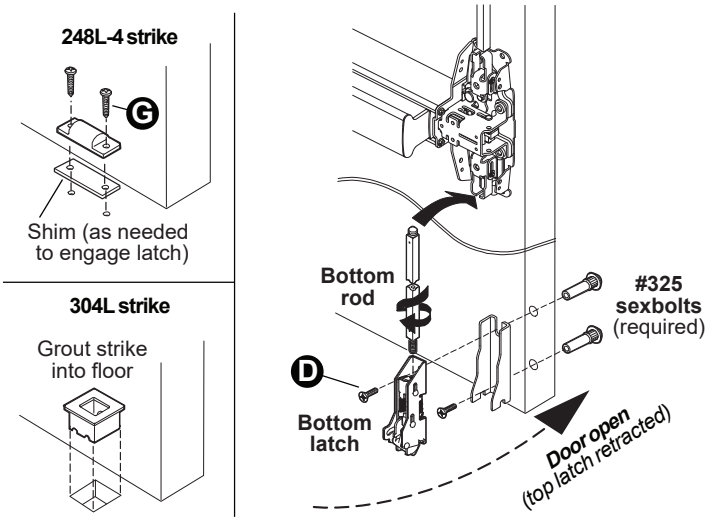


499F strike (for LBR devices)
See instruction 911009

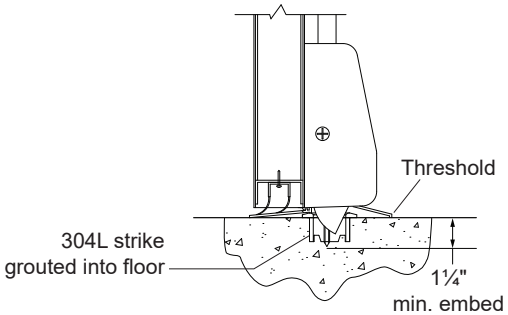
13 Adjust Top Rod (Screw Rod Into or Out of Latch) Until Adjusted as Shown



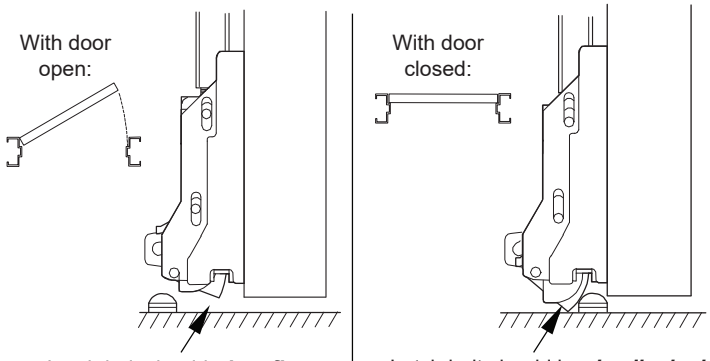
14 Install Bottom Strike, Latch, and Rod



Hurricane applications use threshold with 304L bottom strike

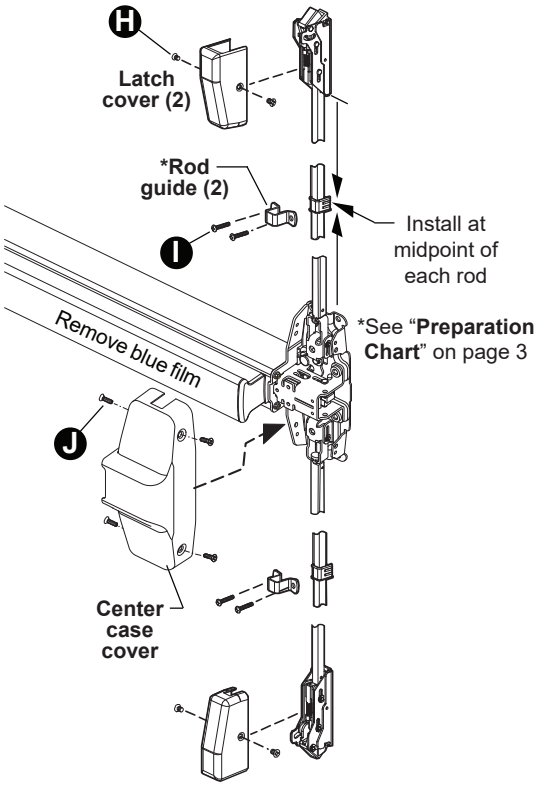


15 Adjust Bottom Rod with Door Open (Top Latch Retracted)



Open and close door a few times and check for deadlatching when door is closed. Readjust rods if needed.

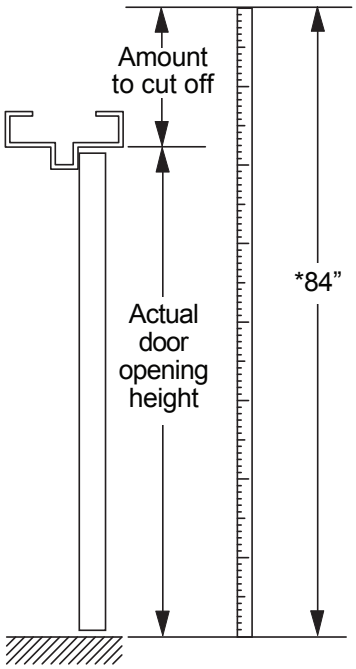
16 Install Rod Guides and Covers



CUT TOP ROD

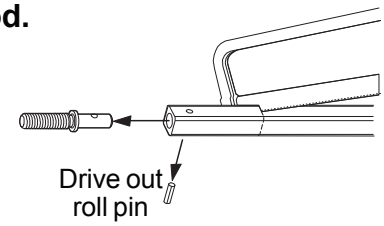
1. Measure amount to cut off rod as shown below.

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

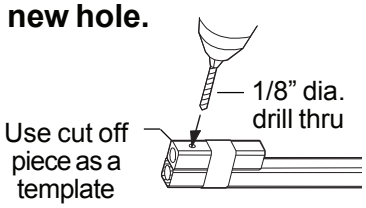


*Rods are factory sized for 7' (84") door. Measure actual door opening height and subtract that number from 84" to get amount to cut off top rod.

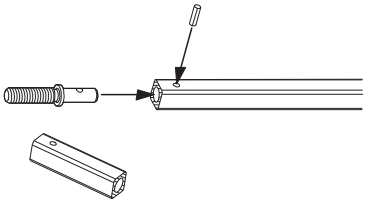
2. Cut rod.



3. Drill new hole.

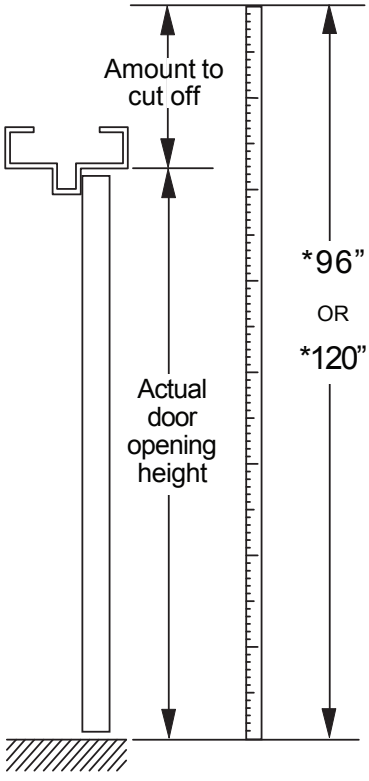


4. Reinstall rod end and roll pin.



INSTALL ROD EXTENSION

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

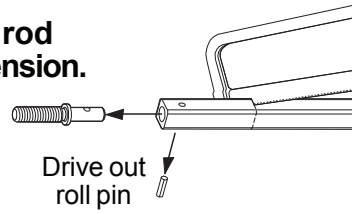


***Standard door heights:**

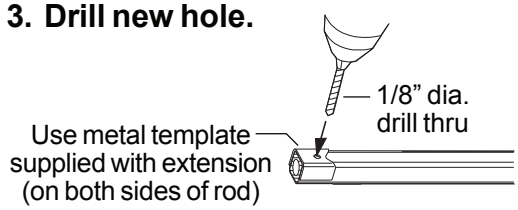
With no extension	7’ (84”)
With 1’ extension	8’ (96”)
With 3’ extension	10’ (120”)

*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.

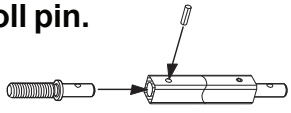
2. Cut rod extension.



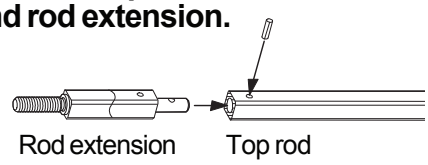
3. Drill new hole.



4. Reinstall rod end and roll pin.



5. Connect top rod and rod extension.



OPTIONAL EQUIPMENT - CONTINUED

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.

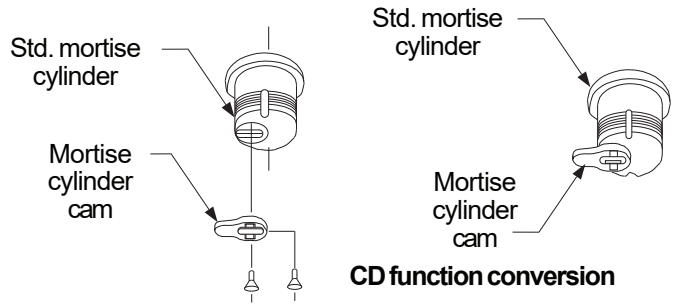


Figure 1

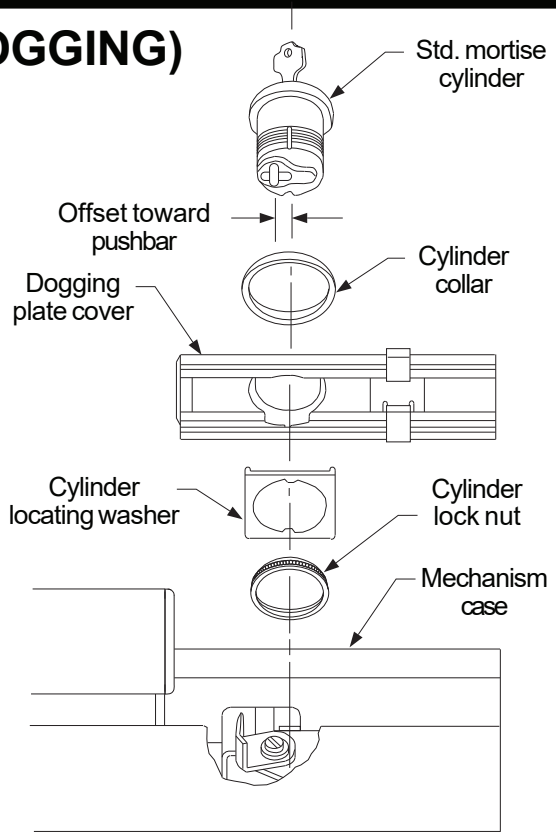
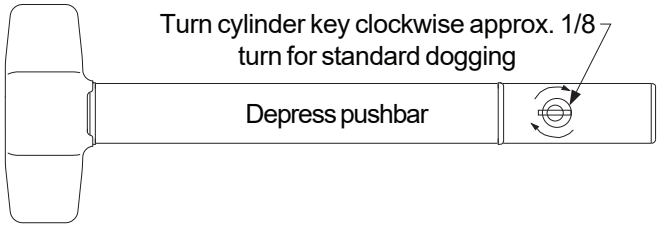


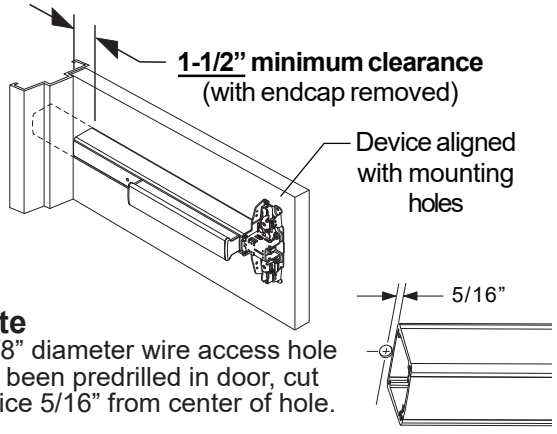
Figure 2

Dogging procedure



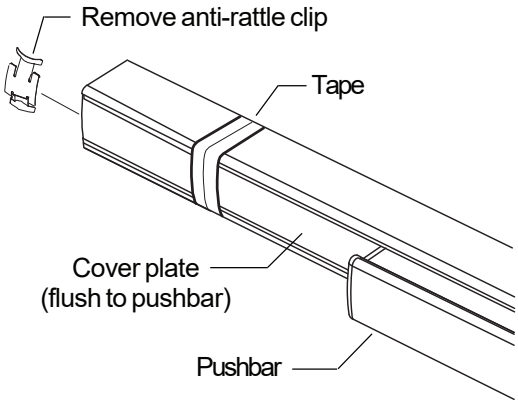
CUT DEVICE

1 Measure amount to cut off device.

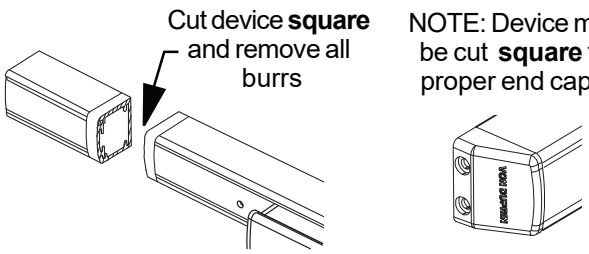
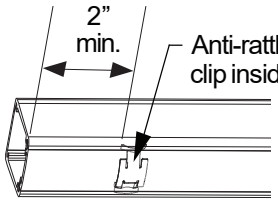


Note
If 5/8" diameter wire access hole has been predrilled in door, cut device 5/16" from center of hole.

2 Tape and mark area being cut.



3 Cut device square.



4 Slide anti-rattle clip into device.