



911404-00

33/3547A

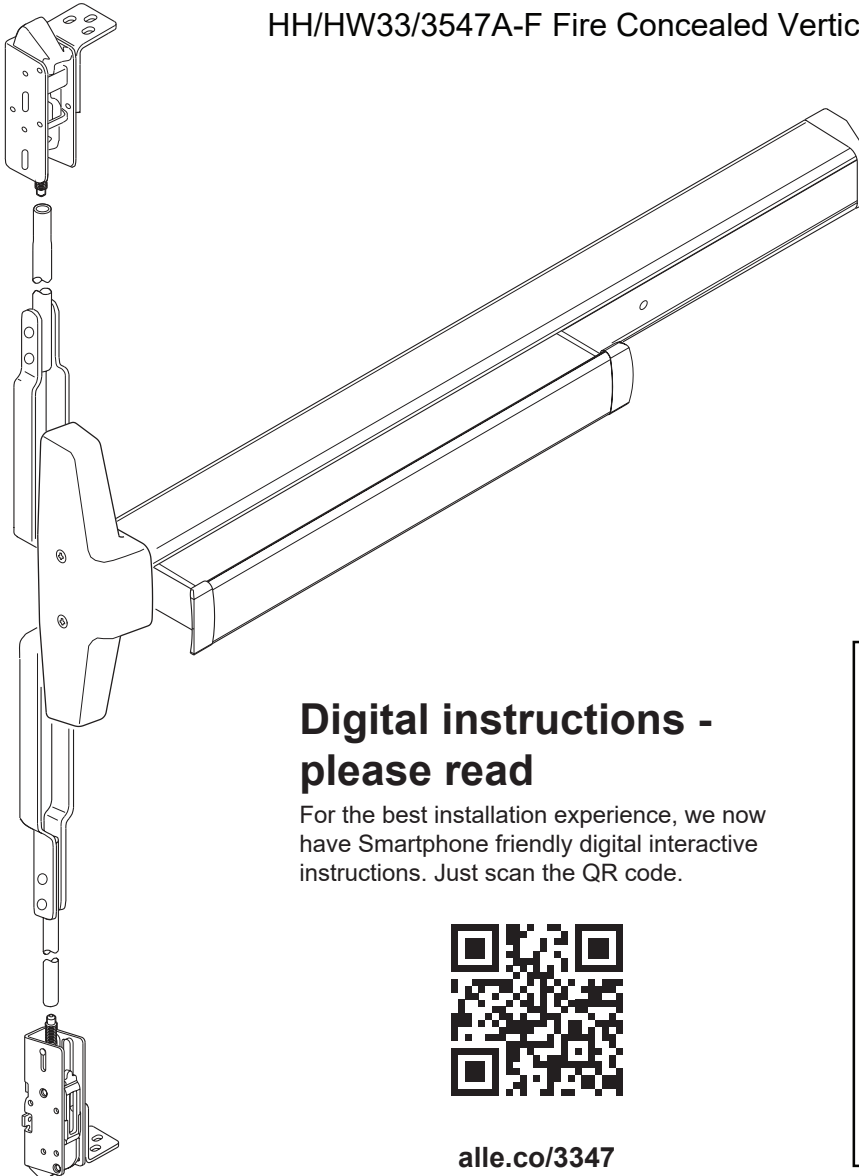
VON DUPRIN®

Concealed Vertical Rod Exit Device

Installation Instructions

Devices covered by these instructions:

- 33/3547A and 33/3548A Concealed Vertical Rod Exit Device
- 33/3547A-F and 33/3548A-F Fire Concealed Vertical Rod Exit Device
- CD33/3547A and CD33/3548A Concealed Vertical Rod Exit Device
- QEL33/3547A/47A-F and QEL33/3548A/48-F Concealed Vertical Rod Exit Device
- HH/HW33/3547A Concealed Vertical Rod Exit Device
- HH/HW33/3547A-F Fire Concealed Vertical Rod Exit Device



Digital instructions - please read

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



alle.co/3347

Special tools needed:

- #10-24 tap
- Drill bits: #25, 5/16", 13/32", 1/2"

Index:

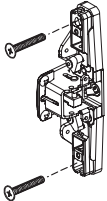
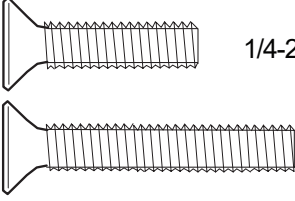
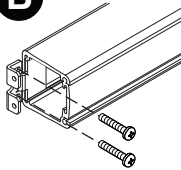
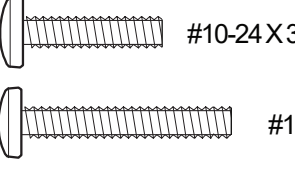


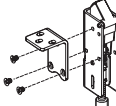

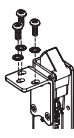
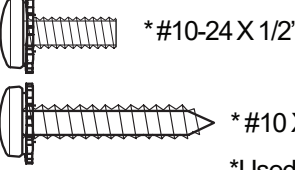


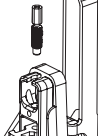
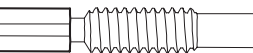
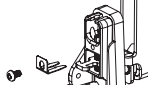

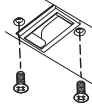
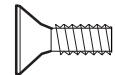

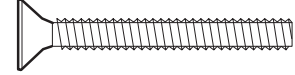
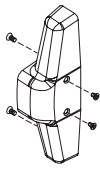

- Screw chart 2
- Device installation 3-5
- Adjust rods 6
- Frame preparation 7
- Optional equipment 8
- Backset information 9
- Metal door templates 11-12
- Wood door preparation 13-14
- Wood door templates 15-16

For hurricane rated device requirements, see page 3.



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

SCREW CHART

| | | | |
|--|---|---|--|
| A  |  | 1/4-20 x 1" _____ 1/4-20 x 1-1/2" _____ | Trim mount or sex bolts: (1-3/4" door) (2-1/4" door) |
| B  |  | #10-24 X 3/4" _____ #10-24 X 1-1/8" _____ | Surface mount or Sex bolts (1-3/4" door) 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" _____ * #10 X 1" Wood screw _____ *Used with external tooth lock washer | Bracket to door Bracket to door |
| F  |  | #10-32 X 3/8" Socket head _____ | Rod attachment |
| G  |  | Rod adjusting screw _____ | Rod length adjustment |
| H  |  | #8-32 X 5/16" _____ | Retaining clip |
| I  |  | #10-24 X 1/2" _____ | 338 Strike |
| J  |  | #10-24 X 1-1/2" _____ | Ratchet release |
| K  |  | #8-18 x 3/8" Thread cutting _____ | Center case cover |

HURRICANE RATED DEVICE REQUIREMENTS

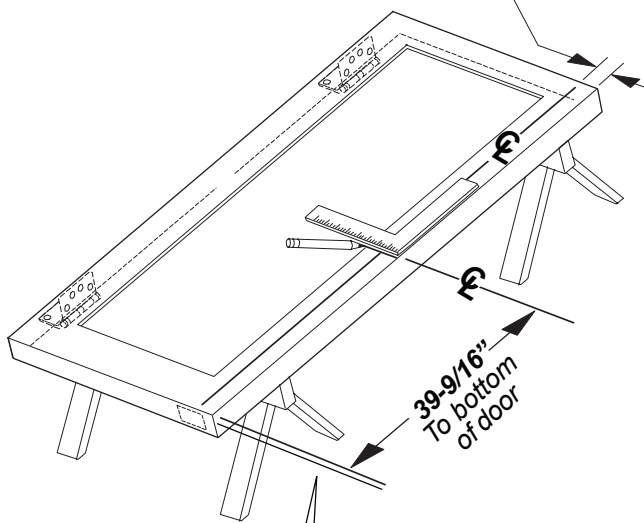
Hurricane rated exit device requirements (when used with approved Allegion door applications)

| 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) | HH33/3547A 33/3547A | Top: 338 Bottom: 304L | - | Top: 338 Bottom: 304L |
| | 33/3547A-F | - | - | |

1

Draw horizontal and vertical device center lines (☉).

See "Backset information" on page 9



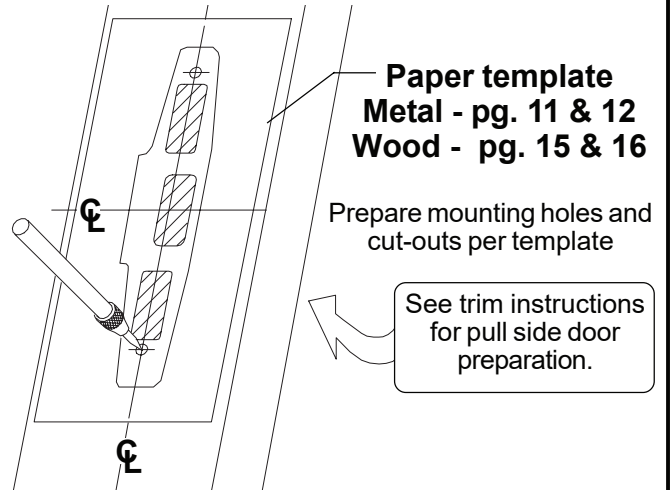
Once hung, door should have 1/4" undercut (gap) at bottom of door to finished floor

RHR shown
(LHR opposite)

2

Place paper device template on door and prepare door.

For wood doors - See pages 13 & 14 for special door preparation instructions.

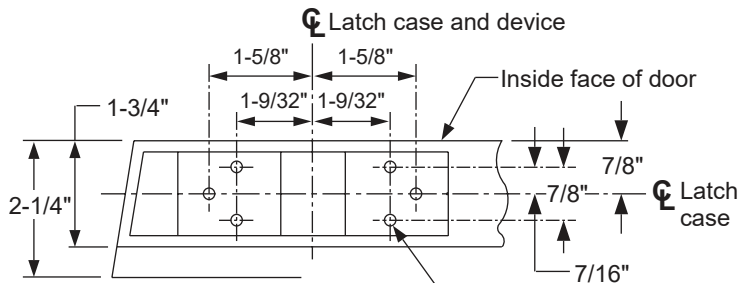


RHR shown
(LHR opposite)

3

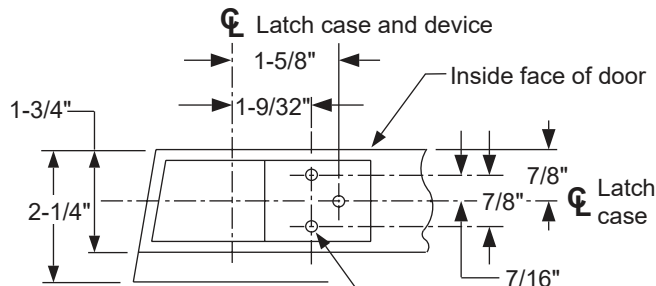
Prepare top and bottom of door for latch mounting brackets.

Latch cases (drill top and bottom of door)



HH / Fire device (metal door)

Drill & tap
#10-24 (metal door)
1/8" pilot drill (wood door)



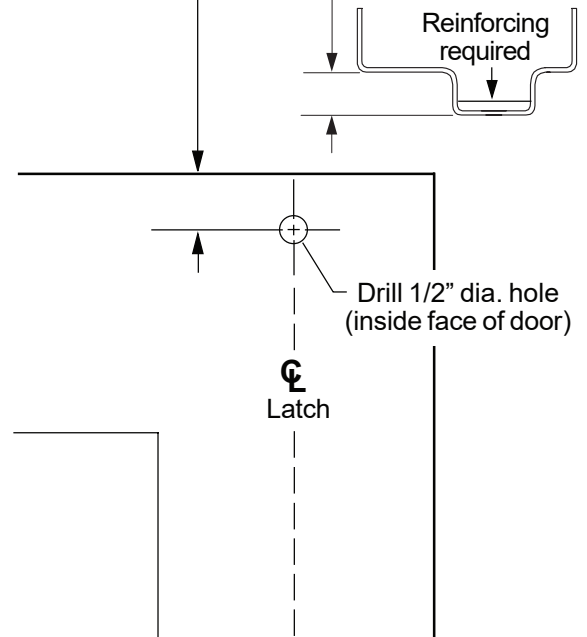
Panic device (metal door)
Panic and fire (wood door)

Drill & tap
#10-24 (metal door)
1/8" pilot drill (wood door)

4

Drill ratchet release hole in door.

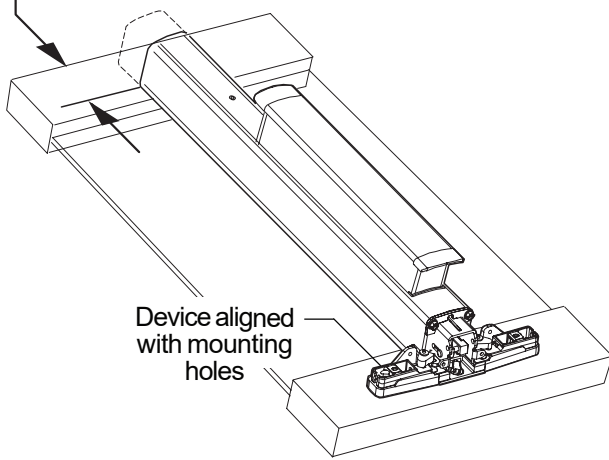
| | |
|--------|------------------|
| 11/16" | 1/2" Stop height |
| 13/16" | 5/8" Stop height |
| 15/16" | 3/4" Stop height |



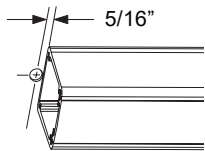
5

Measure to determine length to cut device.

1-3/16" minimum clearance
(with end cap removed)



Device aligned with mounting holes



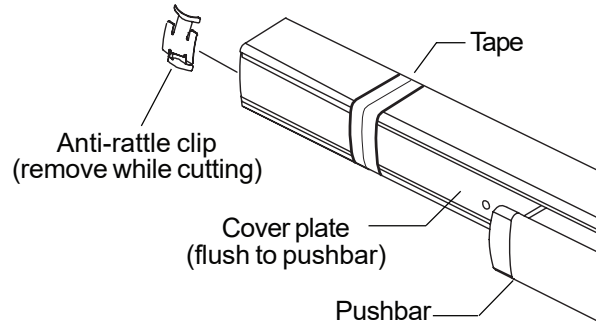
Note

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

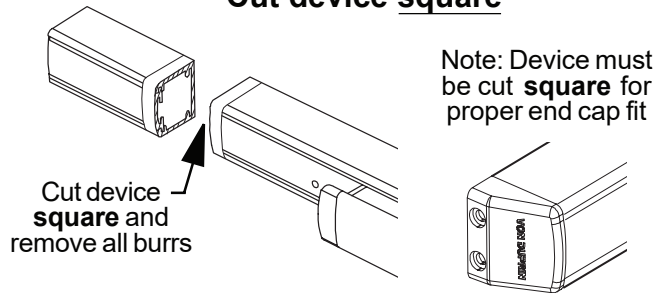
6

Cut device to length.

Prepare device for cutting



Cut device square



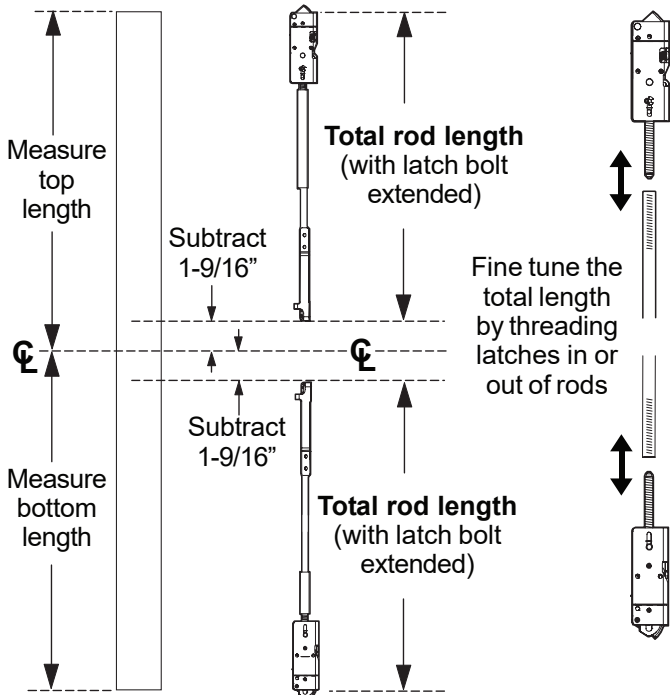
Note: Device must be cut **square** for proper end cap fit

Cut device **square** and remove all burrs

7

Assemble rods and latches and adjust length.

Follow white and brown instruction cards on rods to set initial rod length



Total rod length (with latch bolt extended)

Subtract 1-9/16"

Fine tune the total length by threading latches in or out of rods

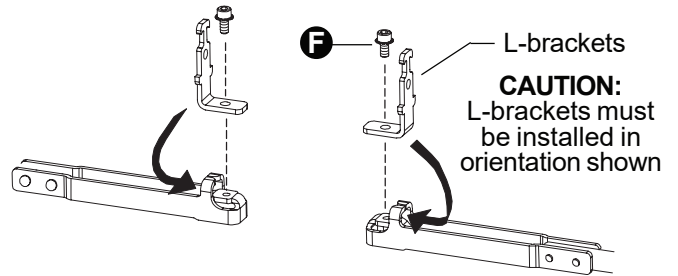
Subtract 1-9/16"

Total rod length (with latch bolt extended)

8

Install rods as shown.

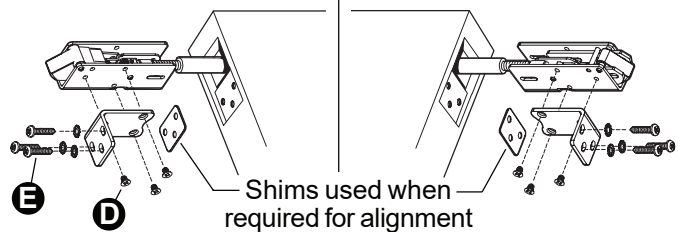
Rods are shipped with L-bracket attached. Insert rods with L-bracket pointing toward lock stile. Rotate rod until L-bracket protrudes through door cutout. If this is not possible, remove L-bracket and re-insert rod, then re-attach L-brackets.



NOTE: Fire/HH devices on metal doors use brackets on both sides of latches

Top latch & rod

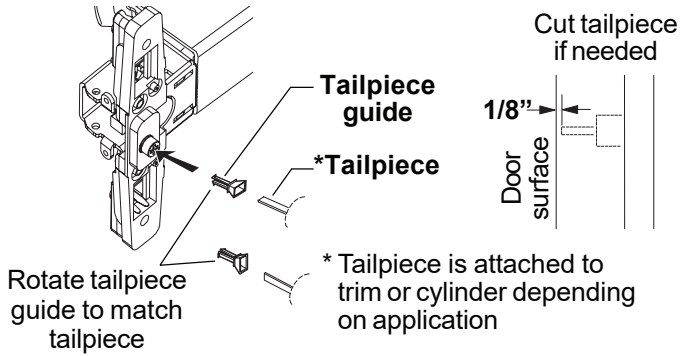
Bottom latch & rod



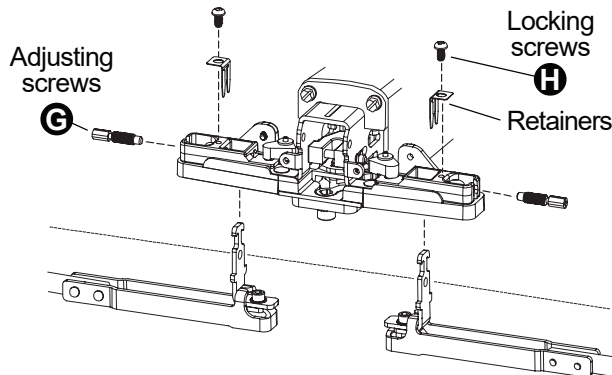
Shims used when required for alignment

9

Install tailpiece guide and attach rods to center case.

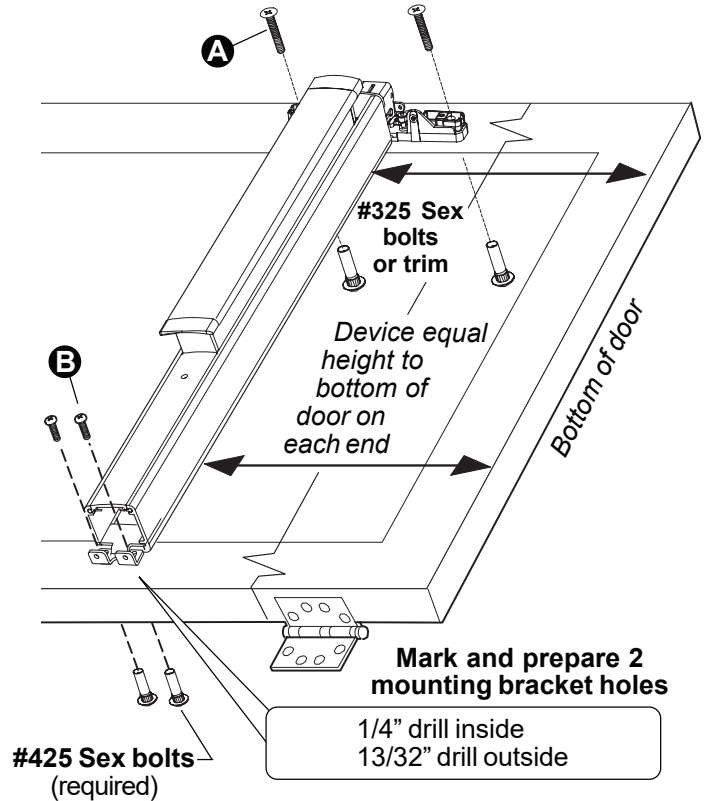


Place device over L-brackets and install adjusting screws, then install retainers and locking screws



10

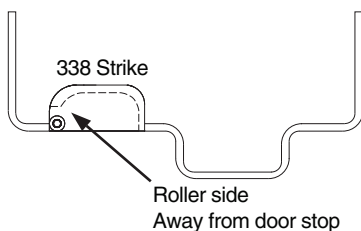
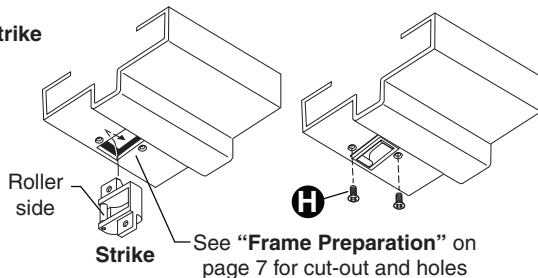
Secure device to door and mount door to frame.



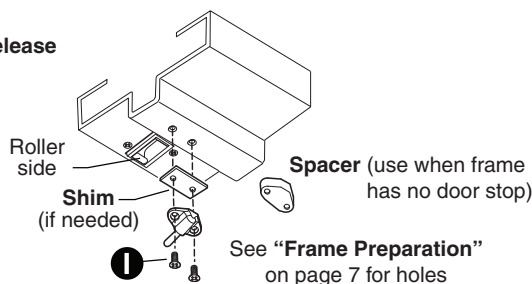
11

Install top strike and ratchet release.

338 Top strike



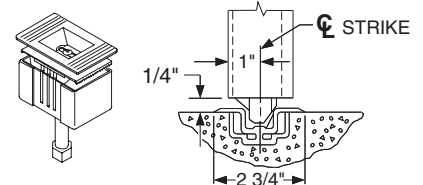
Ratchet release



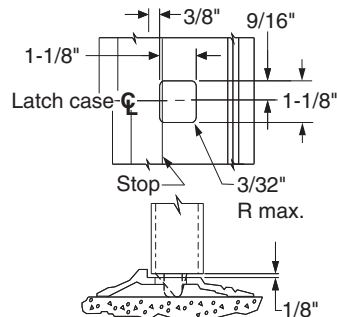
12

Install bottom strike or prepare threshold.

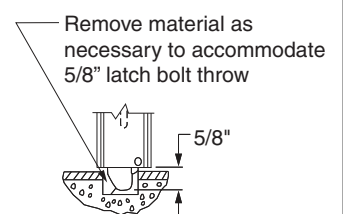
385-A bottom strike has two pieces. Grout bottom piece into floor and attach top piece to bottom with screw through slot.



Threshold application

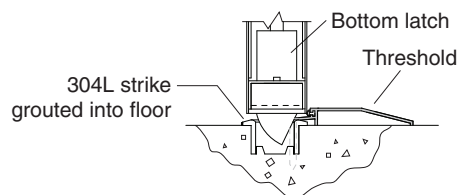


Flat threshold application



Note: Thresholds are not to be used with 33/3547A-F.

Hurricane applications use threshold with 304L bottom strike



ADJUST RODS

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

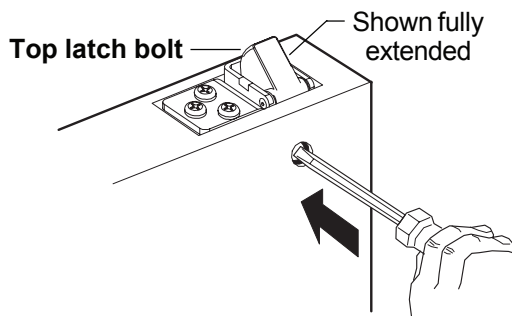


Figure 1

2. Remove bottom locking screw and retaining clip (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).

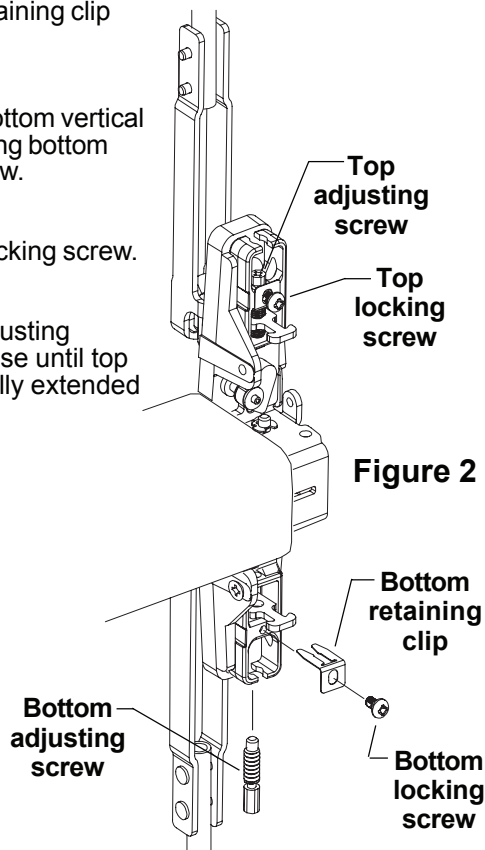
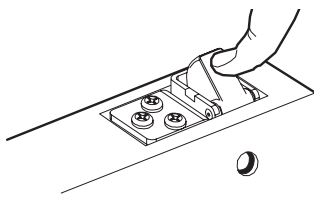


Figure 2

6. Check top latch bolt for deadlocking (latch bolt should not push in).



7. Turn top locking screw in against flat on adjusting screw. Do not over-tighten.

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

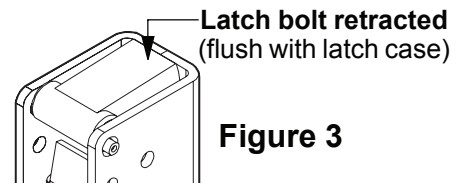


Figure 3

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

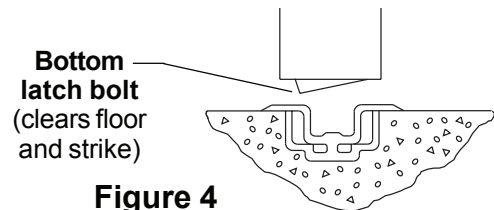


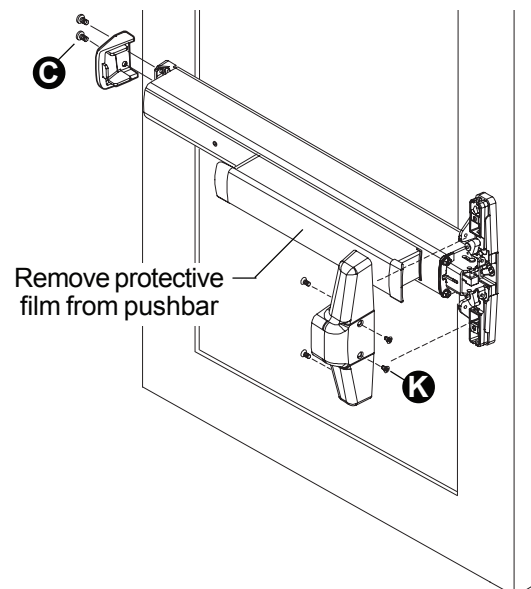
Figure 4

12. Close door and check bottom latch bolt for dead locking.
13. After bottom rod is fully adjusted per steps 11 and 12, turn bottom locking screw in against flat on adjusting screw. Do not over-tighten.
14. Check device operation by opening and closing door several times from the outside.

Redo adjustment procedure if :

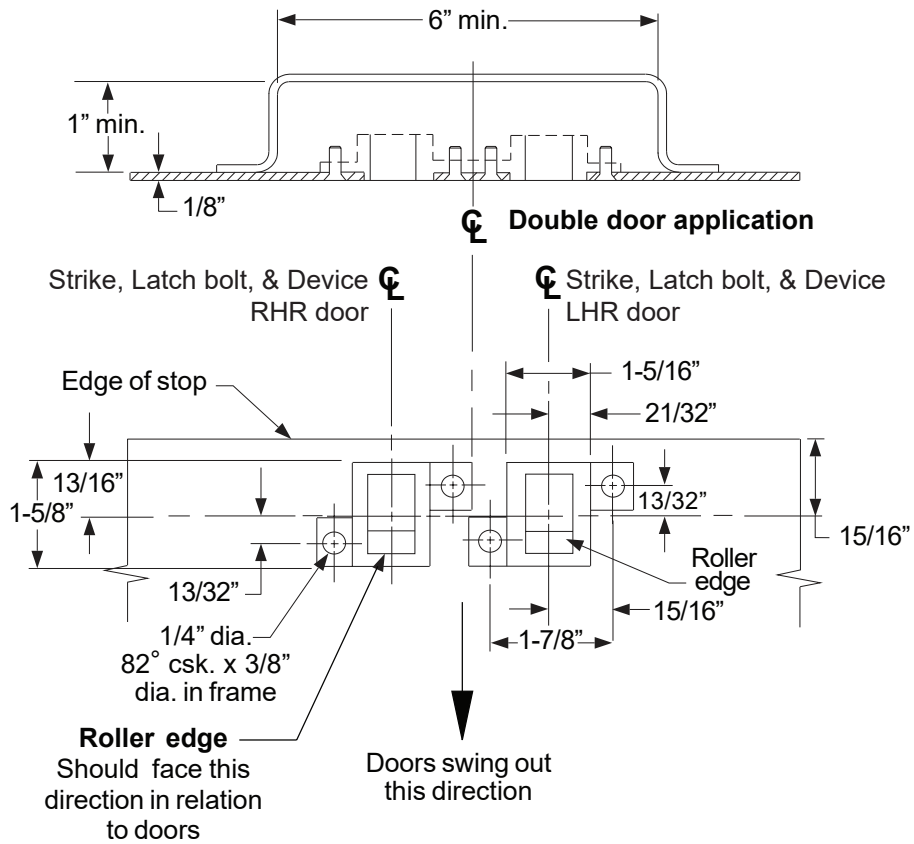
- Top latchbolt is not held retracted
- Bottom latchbolt does not clear floor and bottom strike

15. Install end cap and center case covers.

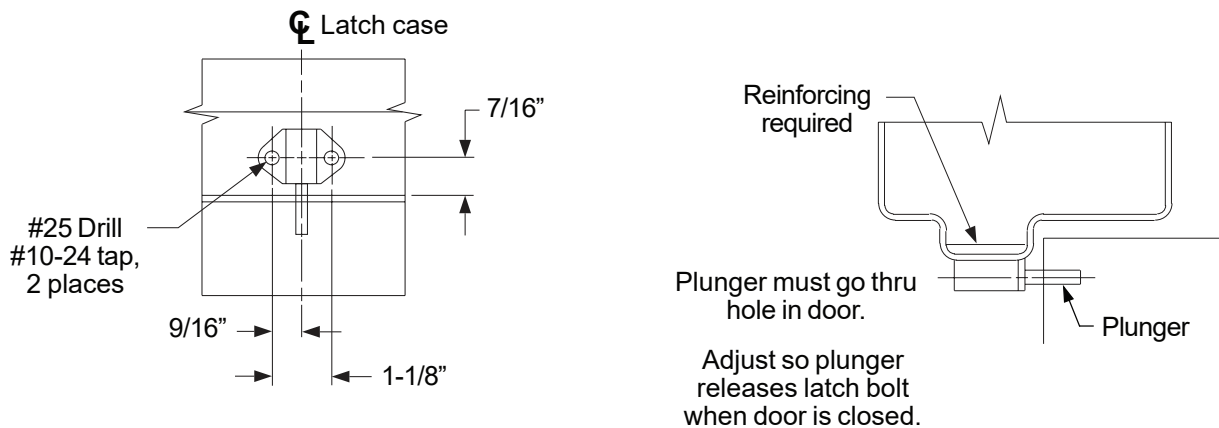


FRAME PREPARATION

338 Top strike



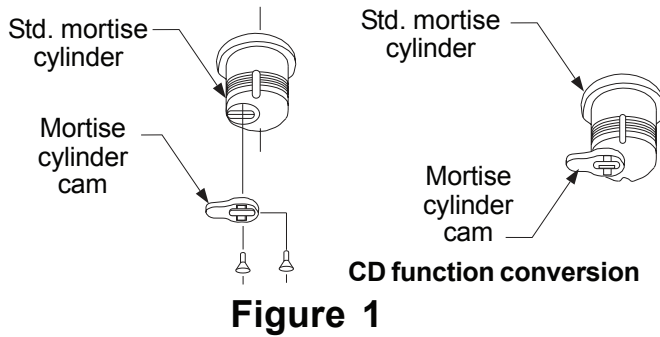
Ratchet release



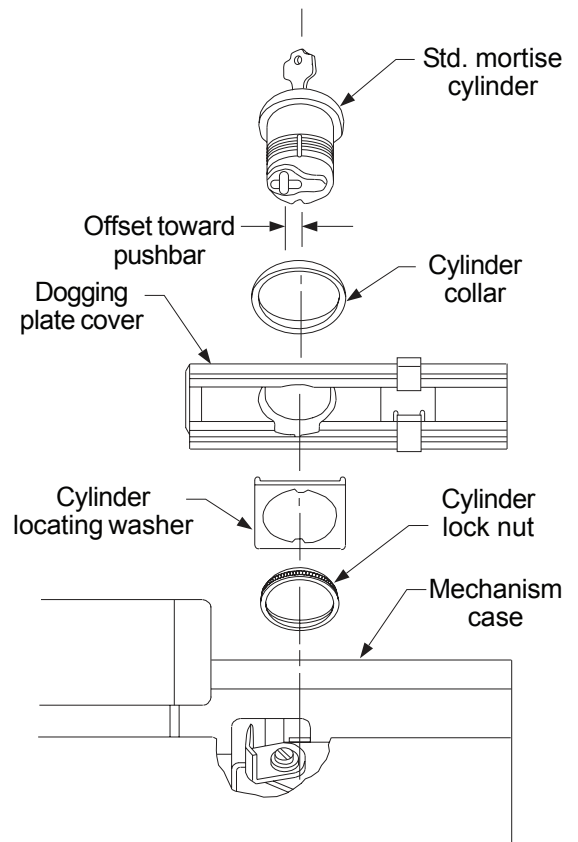
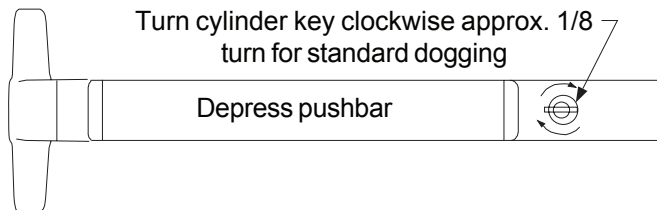
OPTIONAL EQUIPMENT

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.

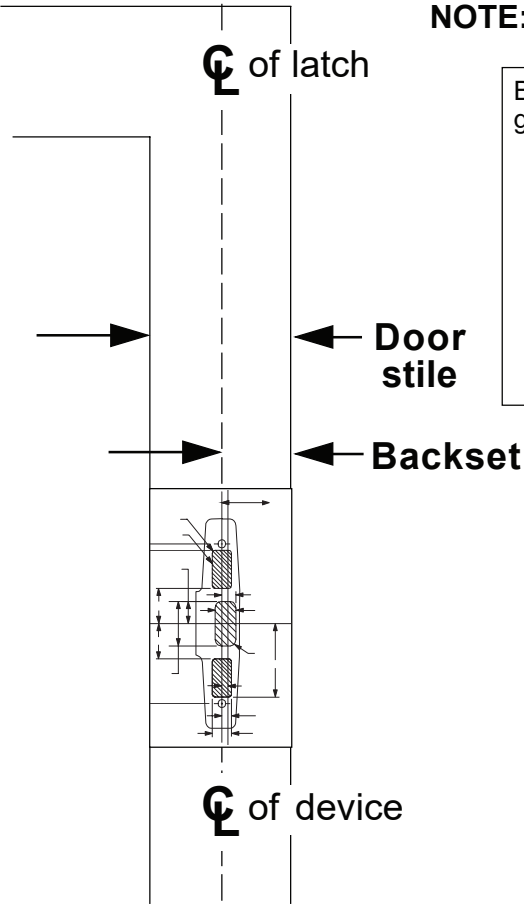


Dogging procedure

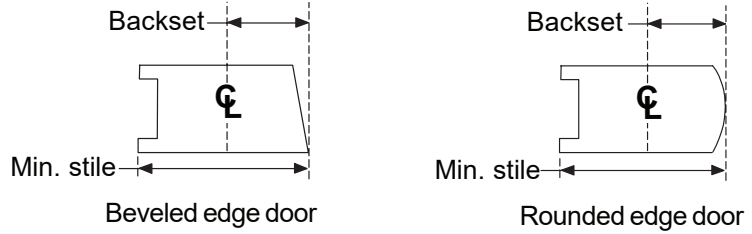


BACKSET INFORMATION

NOTE: For 2" stile doors see bottom half of page



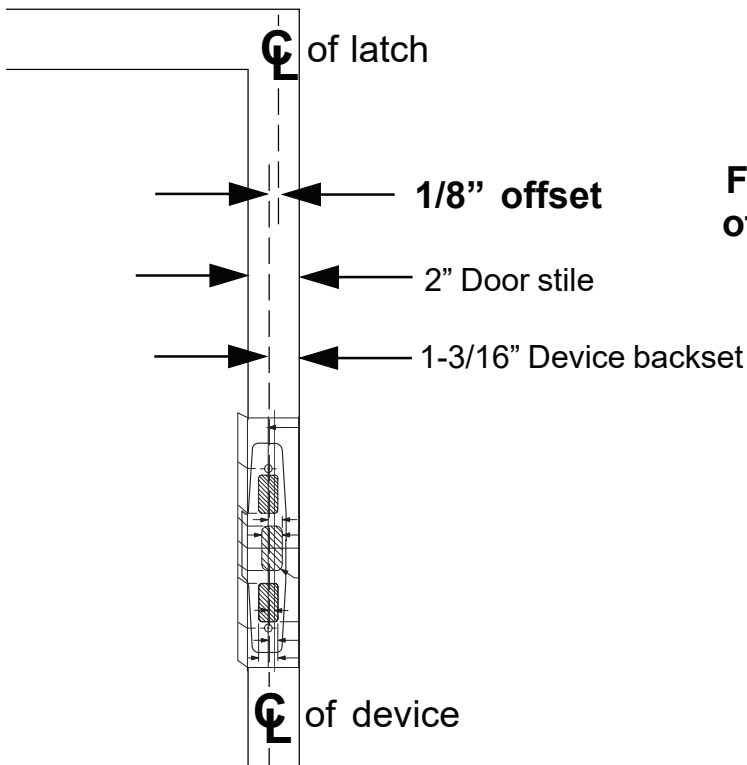
Backset is measured from outer edge of door as shown. Minimum stile is less glass stop (rectangular glass stop is recommended for stiles less than 2-1/8")



Backset Table

| Door type | Backset | Min. stile | Application |
|-----------|---------|-----------------|----------------------------------|
| Wood | 1-5/16" | NA | All |
| Metal | 1-3/16" | 2-1/8" - 2-3/4" | Two vertical rod devices (panic) |
| | 1-1/2" | 2-3/4" - 3-3/4" | |
| | 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 (panic) |
| | 1-7/8" | 3-3/4" - 5" | |
| | 2-1/2" | 5" to flush | |
| | 2-3/4" | 3-5/8" to flush | Fire and Hurricane applications |

SPECIAL INSTRUCTIONS FOR 2" STILE DOORS



For 2" stile doors ONLY! Latch CL is offset 1/8" from Device CL as shown

METAL DOOR RHR

33/3547A Device template

RHR

X

← **Backset** →

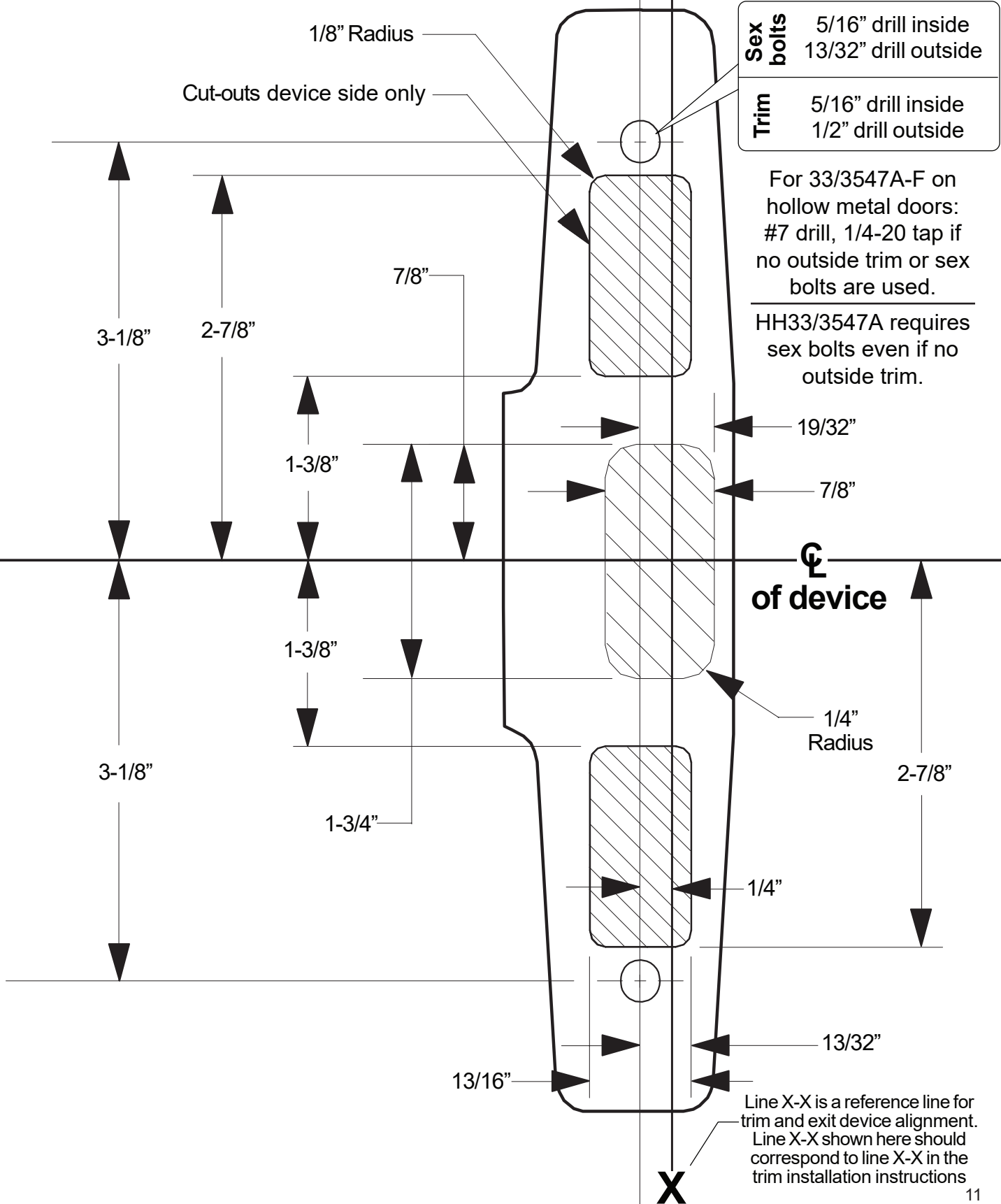
See "Backset Information" on page 9

Device ϕ

| | |
|------------------|--|
| Sex bolts | 5/16" drill inside 13/32" drill outside |
| Trim | 5/16" drill inside 1/2" drill outside |

For 33/3547A-F on hollow metal doors:
#7 drill, 1/4-20 tap if no outside trim or sex bolts are used.

HH33/3547A requires sex bolts even if no outside trim.



LHR

METAL DOOR LHR 33/3547A Device template

← **Backset** →

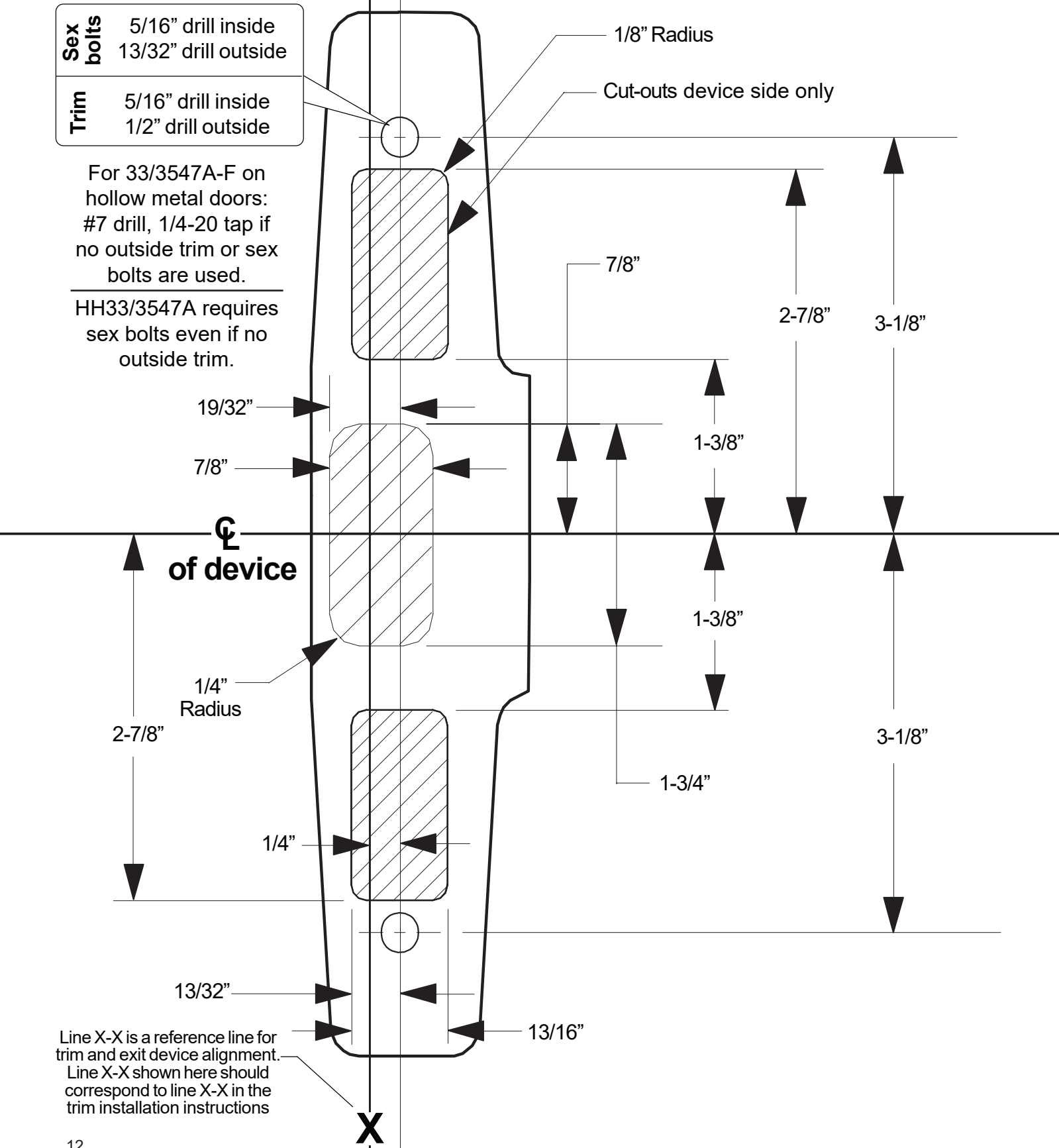
See "Backset Information" on page 9

☉ of device

| | |
|------------------|--|
| Sex bolts | 5/16" drill inside 13/32" drill outside |
| Trim | 5/16" drill inside 1/2" drill outside |

For 33/3547A-F on hollow metal doors:
#7 drill, 1/4-20 tap if no outside trim or sex bolts are used.

HH33/3547A requires sex bolts even if no outside trim.



1/8" Radius

Cut-outs device side only

7/8"

2-7/8"

3-1/8"

19/32"

7/8"

☉ of device

1-3/8"

1-3/8"

1/4" Radius

2-7/8"

1-3/4"

3-1/8"

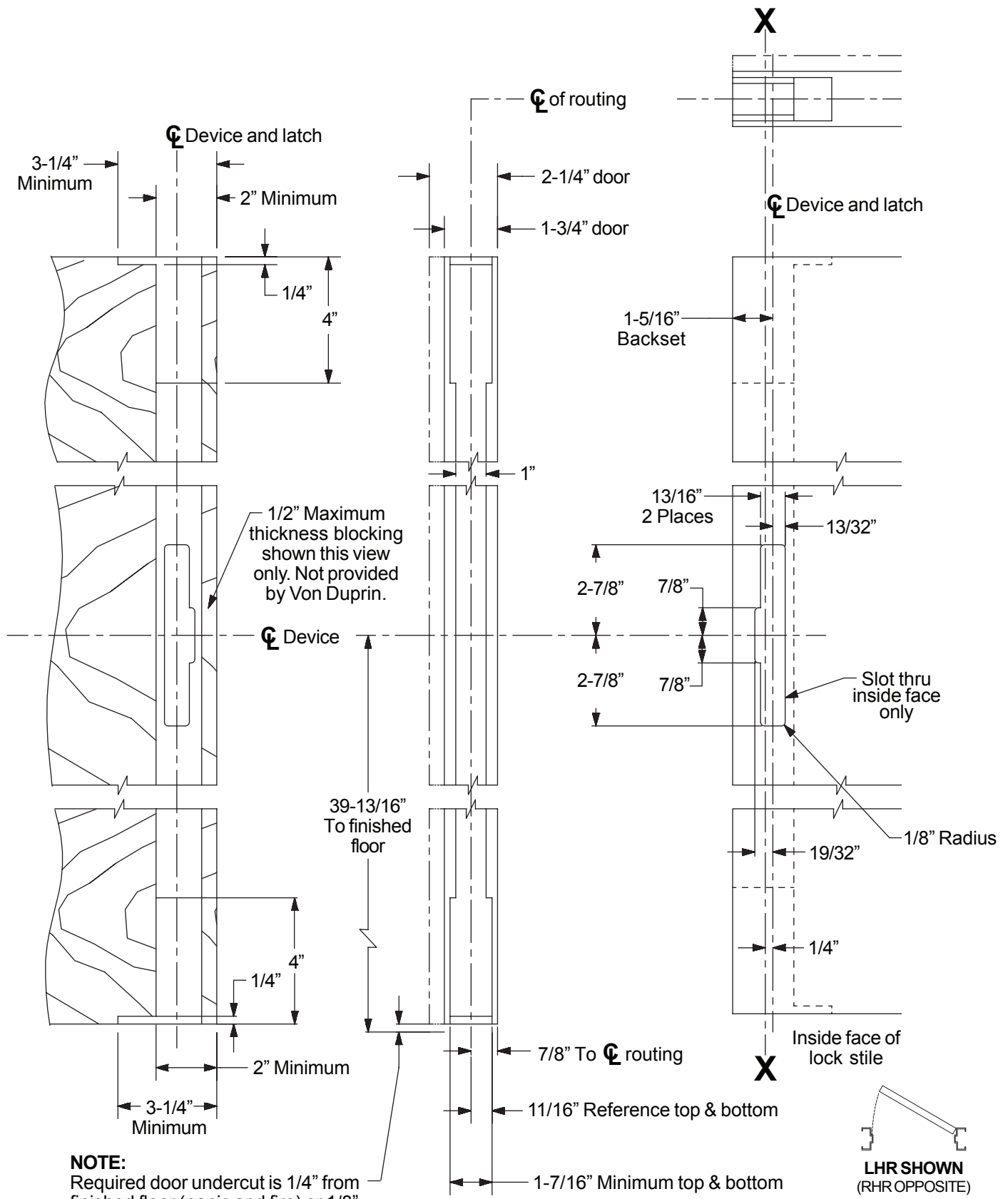
1/4"

13/32"

13/16"

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

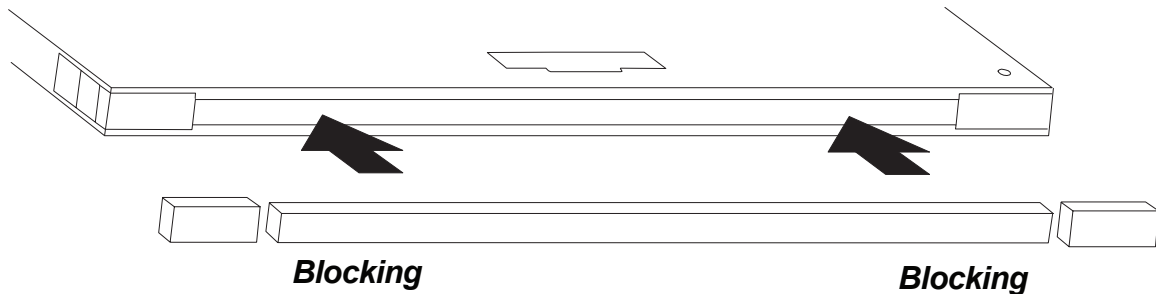
WOOD DOOR PREPARATION - DOOR ROUTING



WOOD DOOR PREPARATION - DOOR BLOCKING AND WRAP

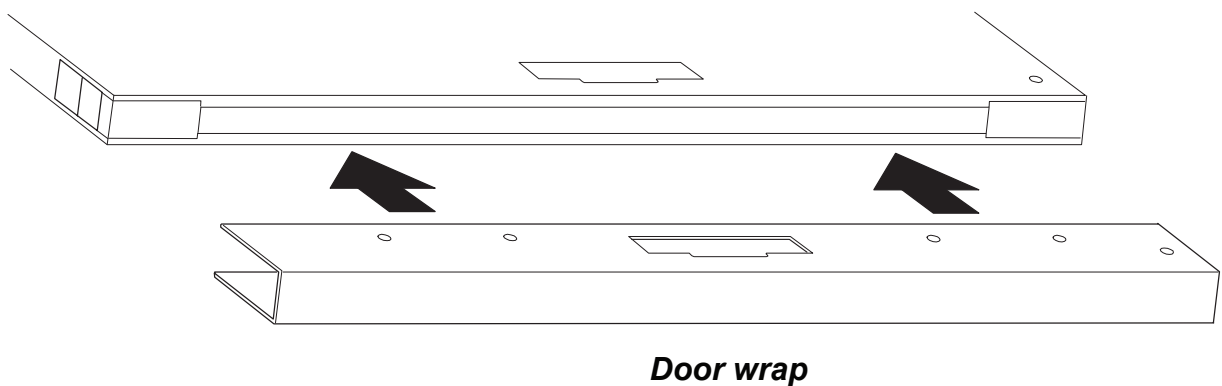
A. Install door blocking. See page 13 for door blocking dimensions.

Note: If not using door wrap, the blocking can be installed after device is installed.



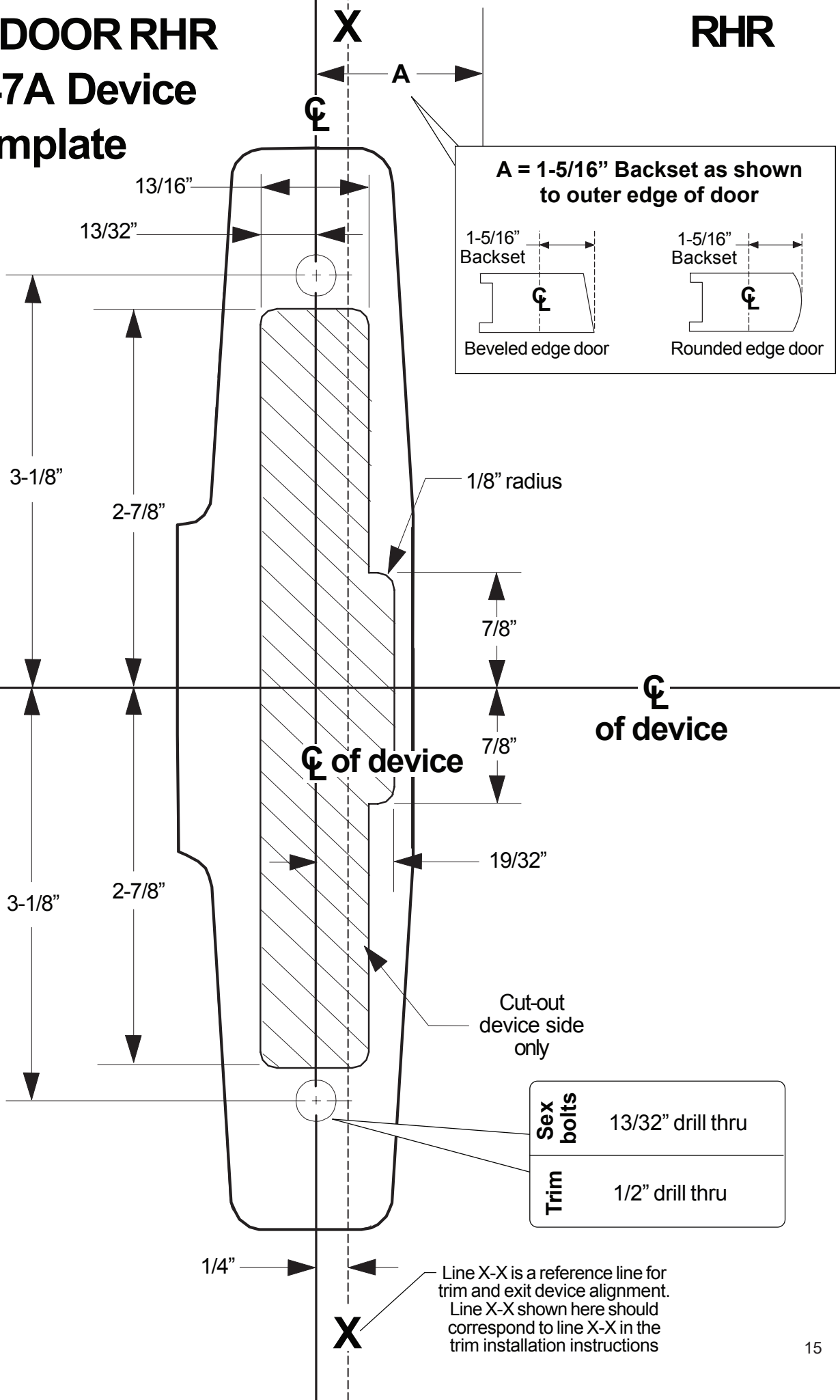
B. Install door wrap if needed. Door wrap is required for Fire rated (F) devices.

Note: Required on fire doors only, not supplied by Von Duprin
(See door manufacturer's requirements)



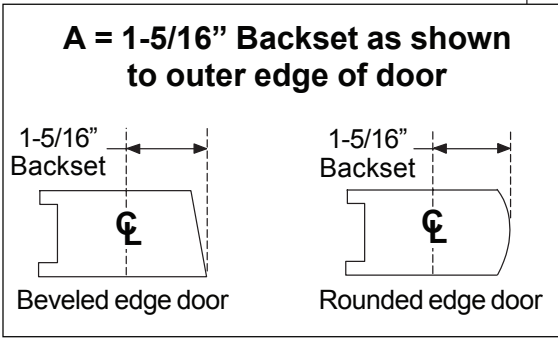
WOOD DOOR RHR 33/3547A Device Template

RHR



LHR

WOOD DOOR LHR 33/3547A Device Template



1/8" radius

7/8"

☉
of device

7/8"

19/32"

Cut-out device side only

☉ of device

13/16"

13/32"

2-7/8"

3-1/8"

2-7/8"

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

| | |
|-----------|-------------------|
| Sex bolts | 13/32" drill thru |
| Trim | 1/2" drill thru |