



911398-00

Surface Vertical Rod Exit Device

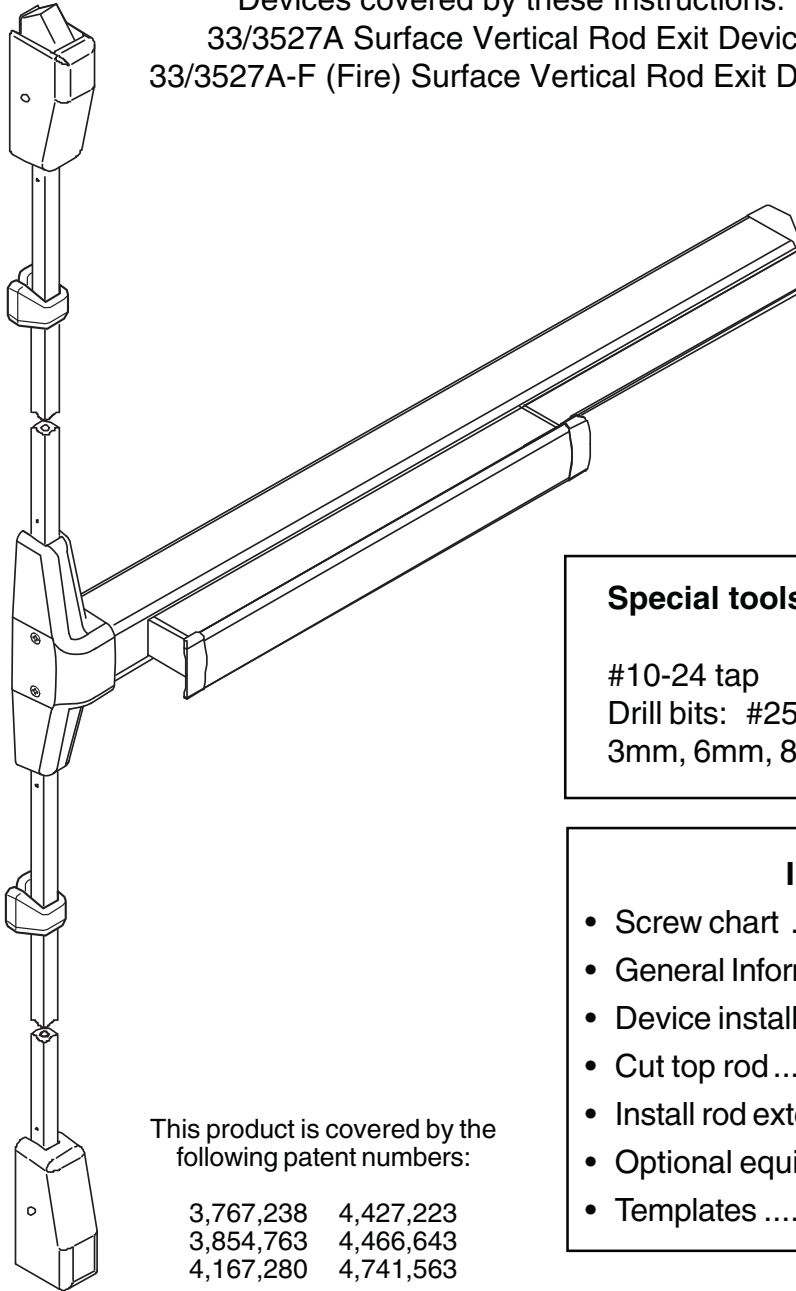
33/3527A & 33/3527A-F VON DUPRIN®

Installation Instructions



BS EN 1125 : 2008

Devices covered by these Instructions:
33/3527A Surface Vertical Rod Exit Device
33/3527A-F (Fire) Surface Vertical Rod Exit Device



Special tools needed:

- #10-24 tap
- Drill bits: #25 (approx 4mm)
- 3mm, 6mm, 8mm, 10mm, 13mm

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- Device installation 4-7
- Cut top rod 8
- Install rod extension 8
- Optional equipment (CD) 9
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This product is covered by the following patent numbers:

3,767,238	4,427,223
3,854,763	4,466,643
4,167,280	4,741,563

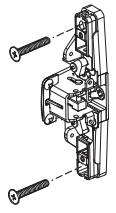
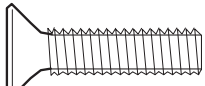
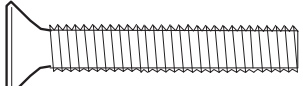
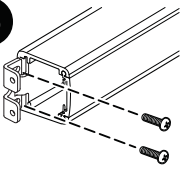
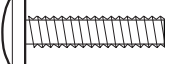



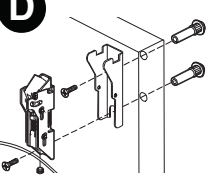
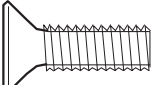
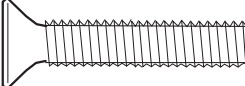

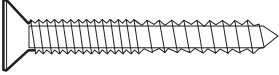
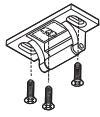
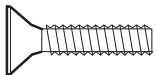
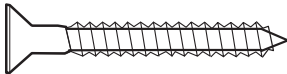
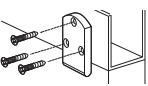
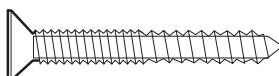
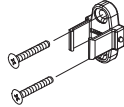
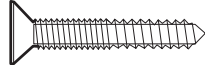
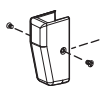

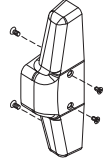

Please give these instructions to building owner after device is installed



Customer Service

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

SCREW CHART

A 	 1/4-20 x 25mm  1/4-20 x 38mm	Trim mount or sex bolts: (44mm door) (57mm door)
B 	 #10-24 x 19mm  #10-24 x 29mm	Surface mount or Sex bolts (44mm door) Sex bolts 57mm door
C 	 #10-16 x 10mm Thread cutting	End cap
D 	 1/4-20 x 19mm  1/4-20 x 29mm	44mm door 57mm door
E 	 #10-12 x 10-24 x 32mm combination	Metal or wood frame
F 	 #10-24 x 19mm  #10-24 x 38mm wood screw	Metal frame Wood frame
G 	 #10-12 x 10-24 x 32mm combination	Metal or wood frame
H 	 #8-16 x 8-32 x 25mm combination	Metal or wood door
I 	 #8-32 x 6mm	Latch covers
J 	 #8-18 x 10mm thread cutting	Center case cover

GENERAL INFORMATION

These exit devices can be installed on the door widths listed below:

<u>Device & Strike</u>	<u>Device Size</u>	<u>Code/Standard Requirement</u>	<u>Effective Door Width</u>
3327A/3527A Rim	813 mm	BS EN 1125 : 2008	641 mm - 762 mm
3327A/3527A Rim	1118 mm	BS EN 1125 : 2008	794 mm - 1016 mm



WARNING

The safety features of this product are essential to its compliance with BS EN 1125 : 2008. No modifications of any kind, other than those described in these instructions, are permitted.

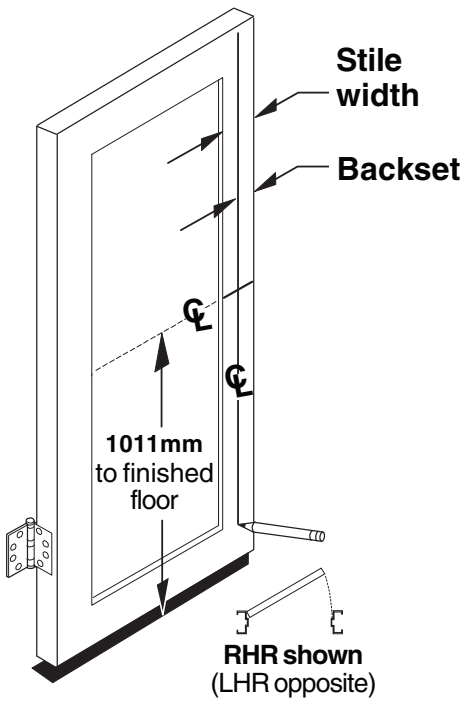


NOTE

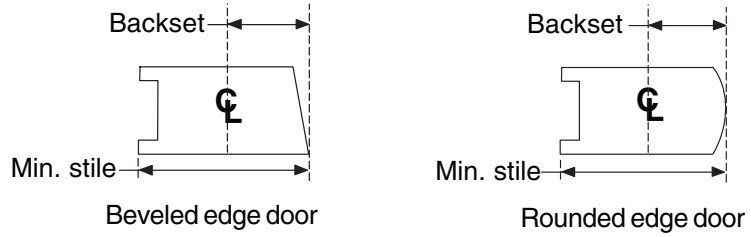
Dogging panic device during high traffic periods will increase life of device. To dog, depress pushbar and turn hex key or cylinder key one-quarter turn clockwise.

1

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



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 54mm)



Backset	Min. stile	Application
30mm	51 - 70mm	Two vertical rod devices
38mm	70 - 95mm	
48mm	95 - 127mm	
64mm	127mm to flush	
34mm	51 - 70mm	Single door
38mm	70 - 95mm	
48mm	95 - 127mm	
64mm	127mm to flush	
56mm	76mm	Vertical rod and rim device

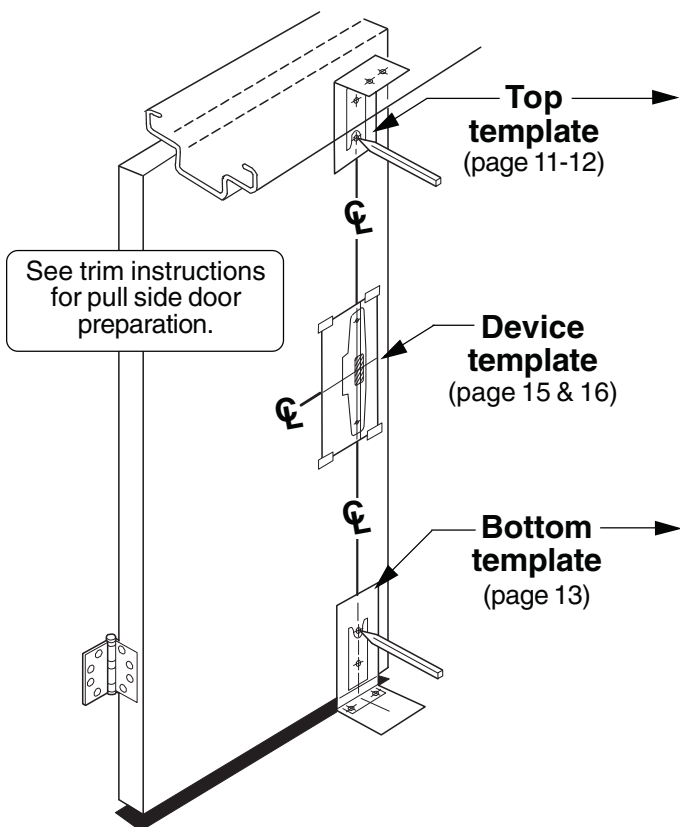
Note: For 299/299F top strike use minimum backsets shown below.

Double doors: 35mm min. backset
56mm min. stile

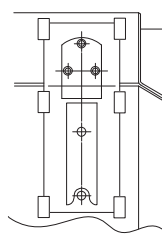
Single door: 48mm min. backset
68mm min. stile

2

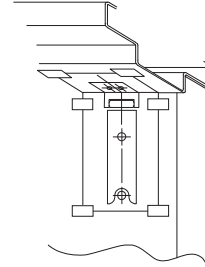
Tape templates to door and prepare door and frame per templates.



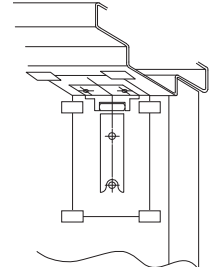
260U strike



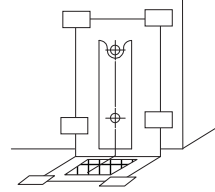
265 strike



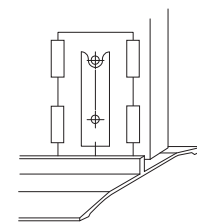
*299/299F strike



304L strike



Latch track



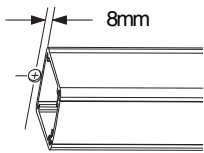
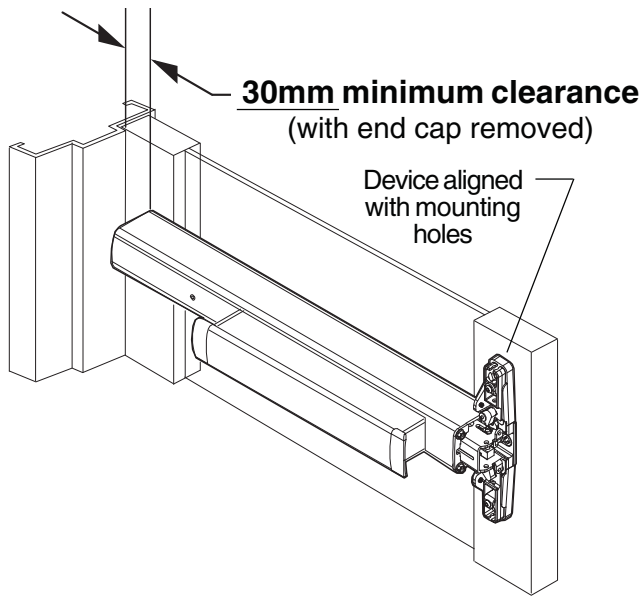
*For 299/299F top strike use minimum backsets shown below.

Double doors: 35mm min. backset, 56mm min. stile

Single door: 48mm min. backset, 68mm min. stile

3

Measure to determine length to cut device.



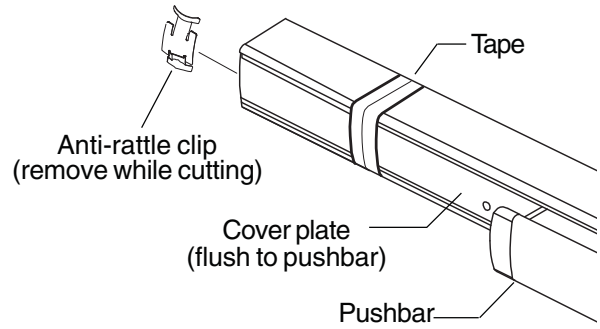
Note

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

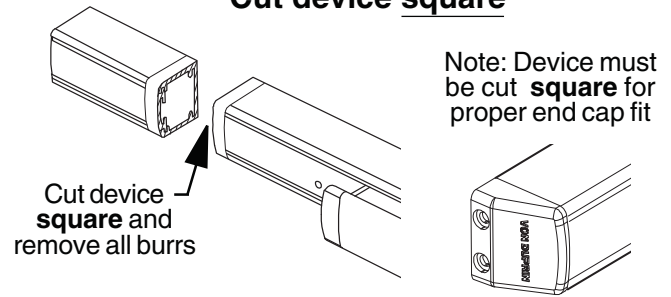
4

Cut device to length.

Prepare device for cutting

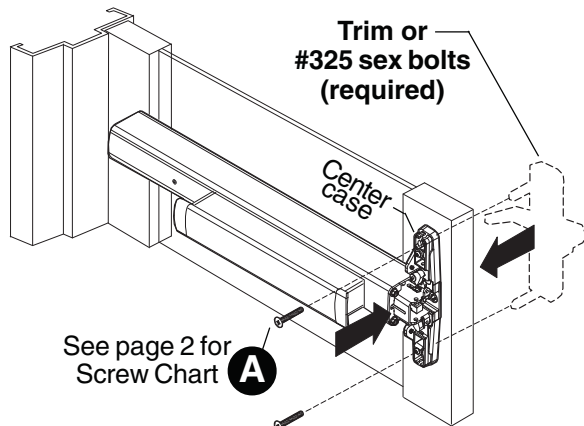
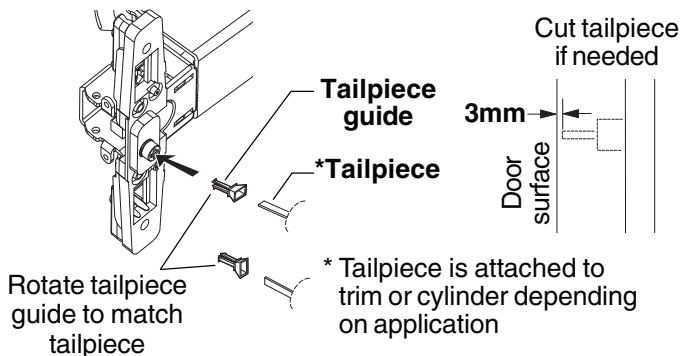


Cut device square



5

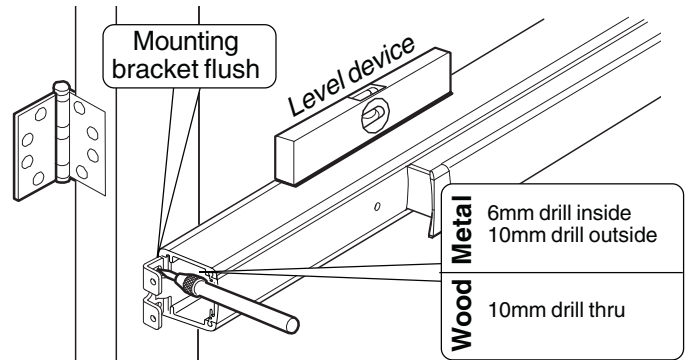
Install tailpiece guide and trim (or sex bolts) and secure device center case to door.



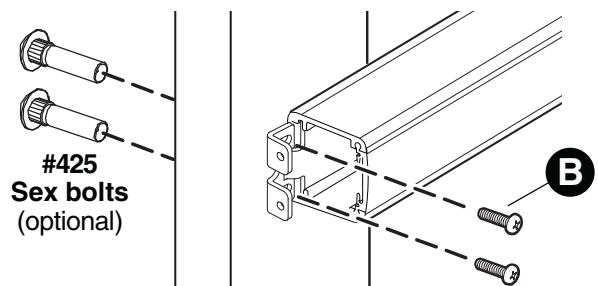
6

Install hinge stile mounting bracket.

Mark and prepare 2 mounting holes

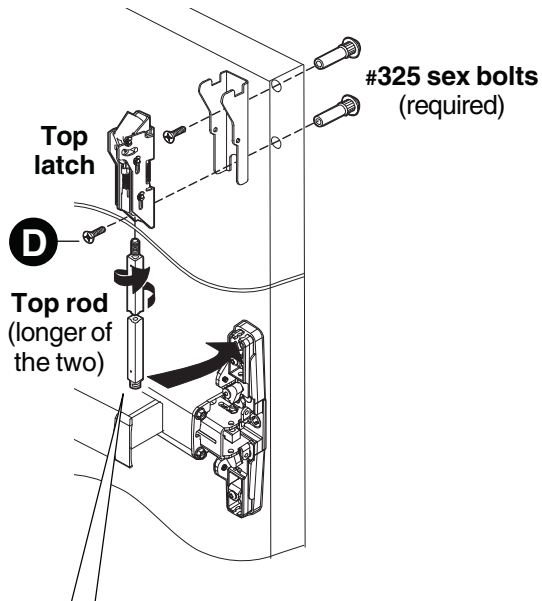


Secure mounting bracket



7

Install top latch and rod.



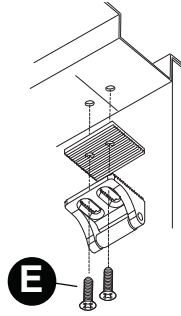
If top rod is too long, see “**Cut top rod**” on page 8

If top rod is too short, see “**Install rod extension**” on page 8

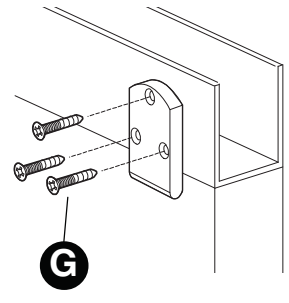
8

Install top strike.

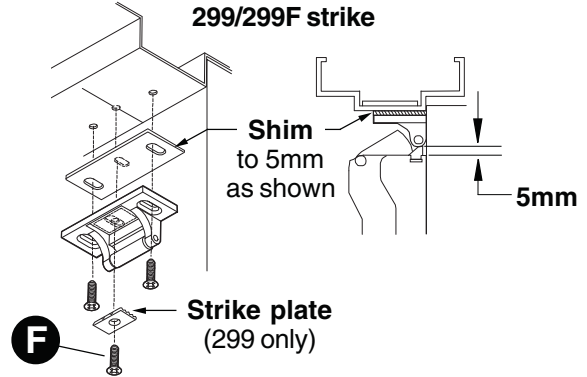
265 strike
For panic device application only



260U strike
For panic device application only



299/299F strike



9

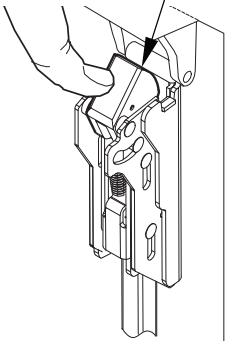
Adjust top rod until latch bolt acts as shown.

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

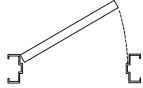
With door closed:



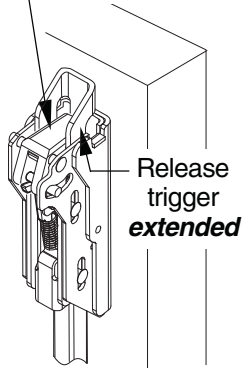
Latch bolt **deadlocked**
(will not push in)



With door open:



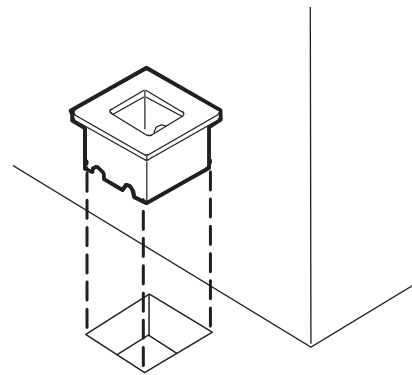
Latch bolt stays **retracted**



10

Install bottom strike.

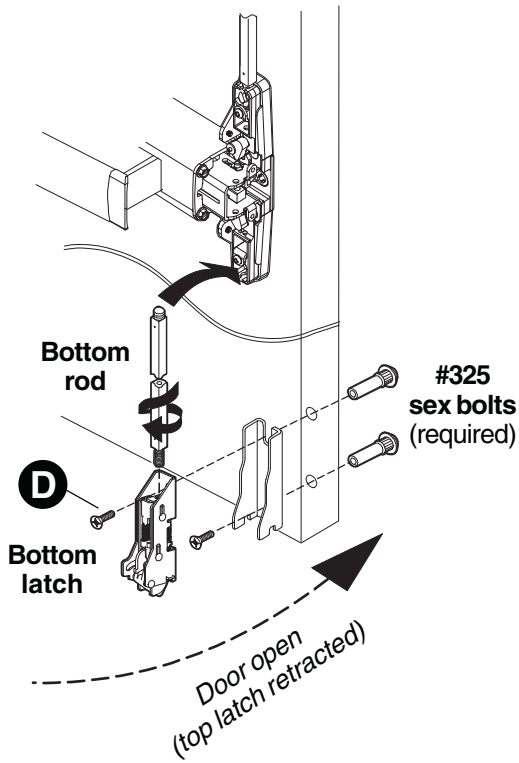
304L strike



Grout strike into floor

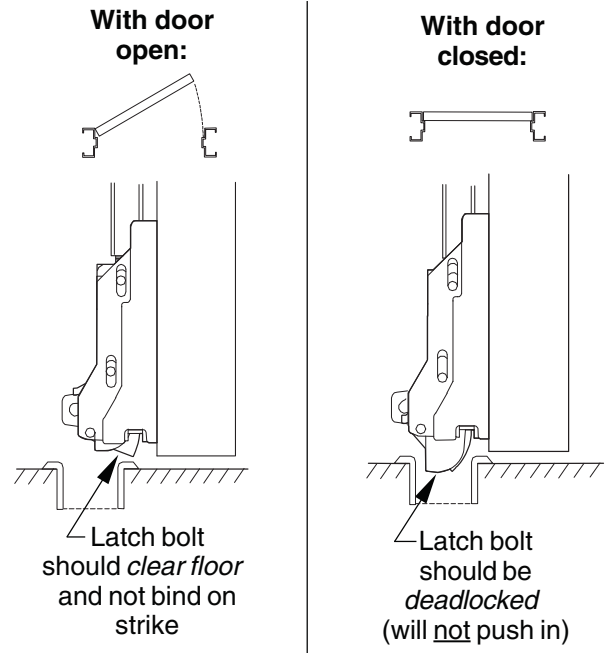
11

Install bottom latch and rod.



12

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

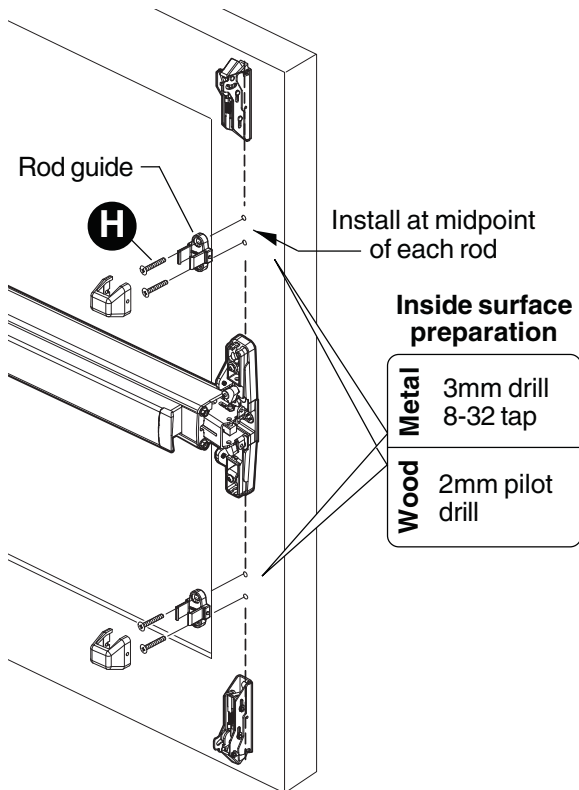


Open and close door a few times and check for deadlocking when door is closed

Readjust rods if needed

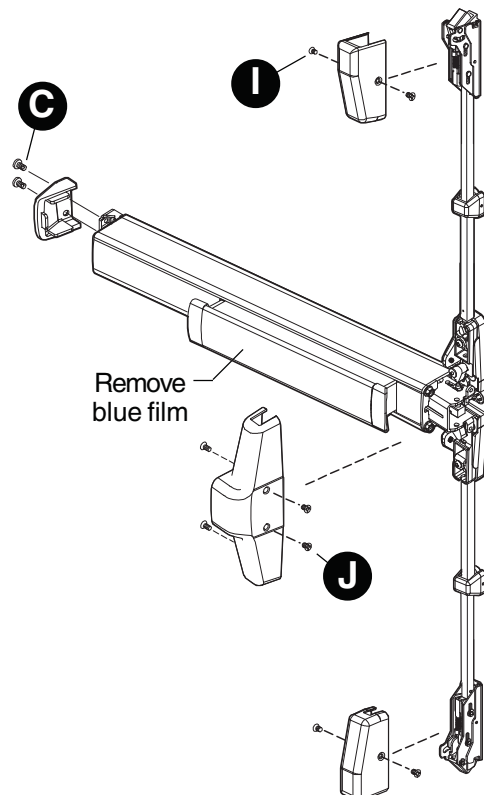
13

Install rod guides.



14

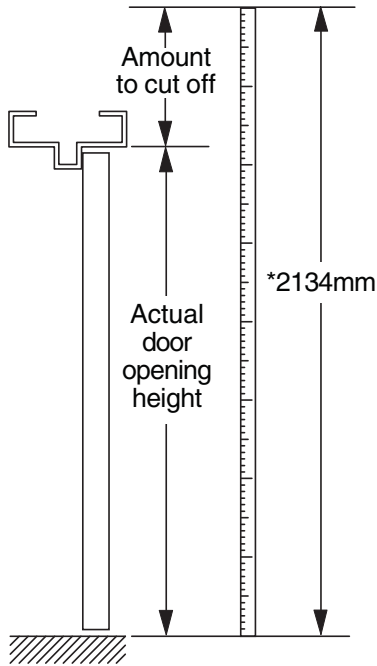
Install covers and end cap.



CUT TOP ROD

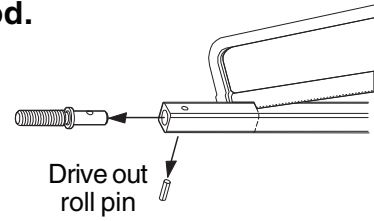
1. Measure amount to cut off rod as shown below.

Note: Rod cutting is required for doors shorter than 2134mm.

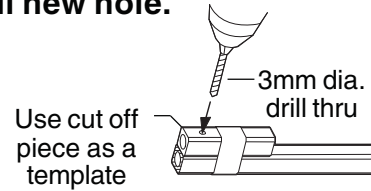


*Rods are factory sized for 2134mm door. Measure actual door height and subtract that number from 2134mm to get amount to cut off top rod.

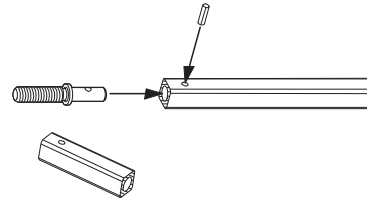
2. Cut rod.



3. Drill new hole.

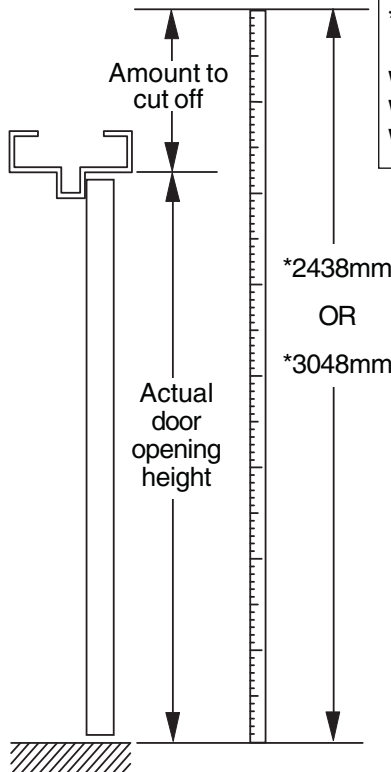


4. Reinstall rod end and roll pin.



INSTALL ROD EXTENSION

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

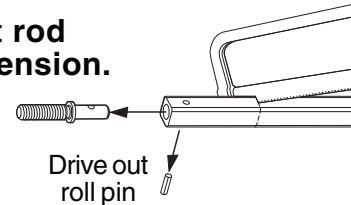


*Standard door heights:

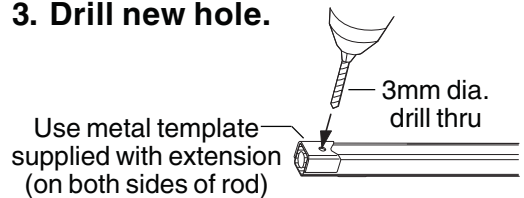
With no extension 2134mm
With 305mm extension 2438mm
With 914mm extension 3048mm

*Rods are factory sized for door heights shown above. Measure actual door height and subtract that number from 2438mm (for 305mm extension) or 3048mm (for 914mm extension) to get amount to cut off extension.

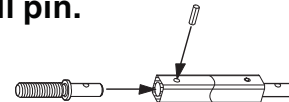
2. Cut rod extension.



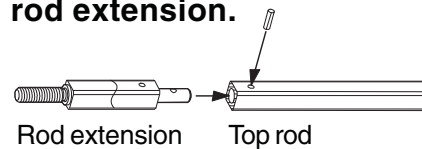
3. Drill new hole.



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.

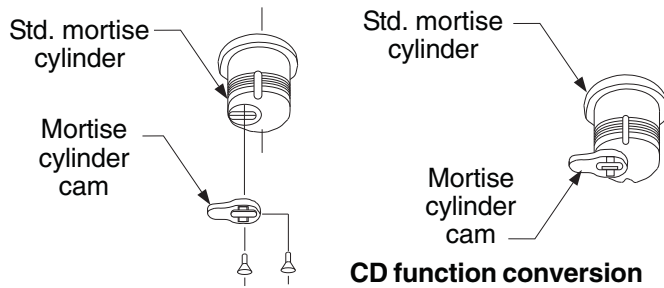


Figure 1

Dogging procedure

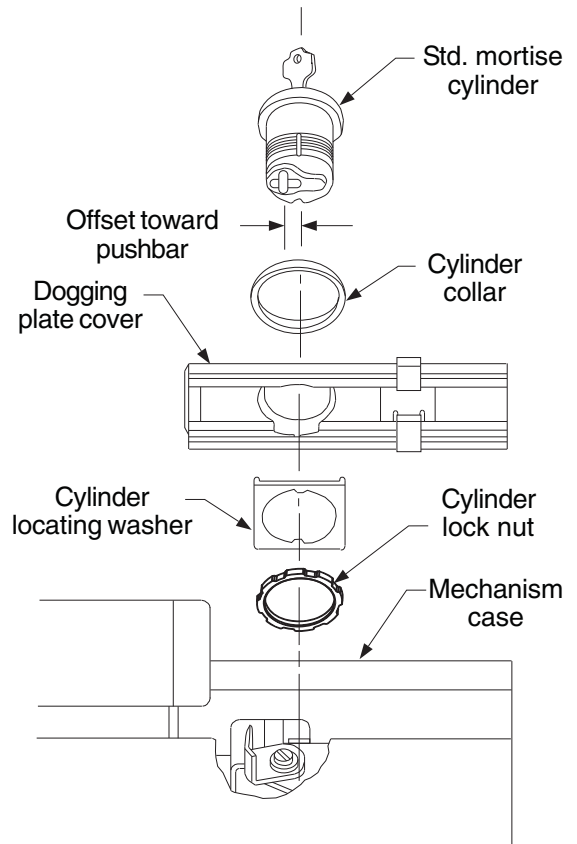
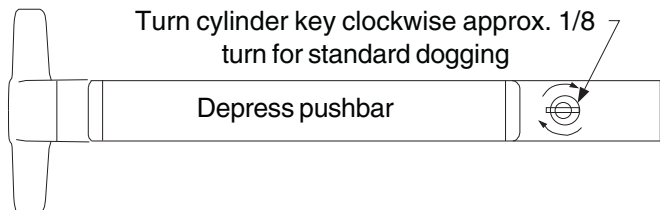


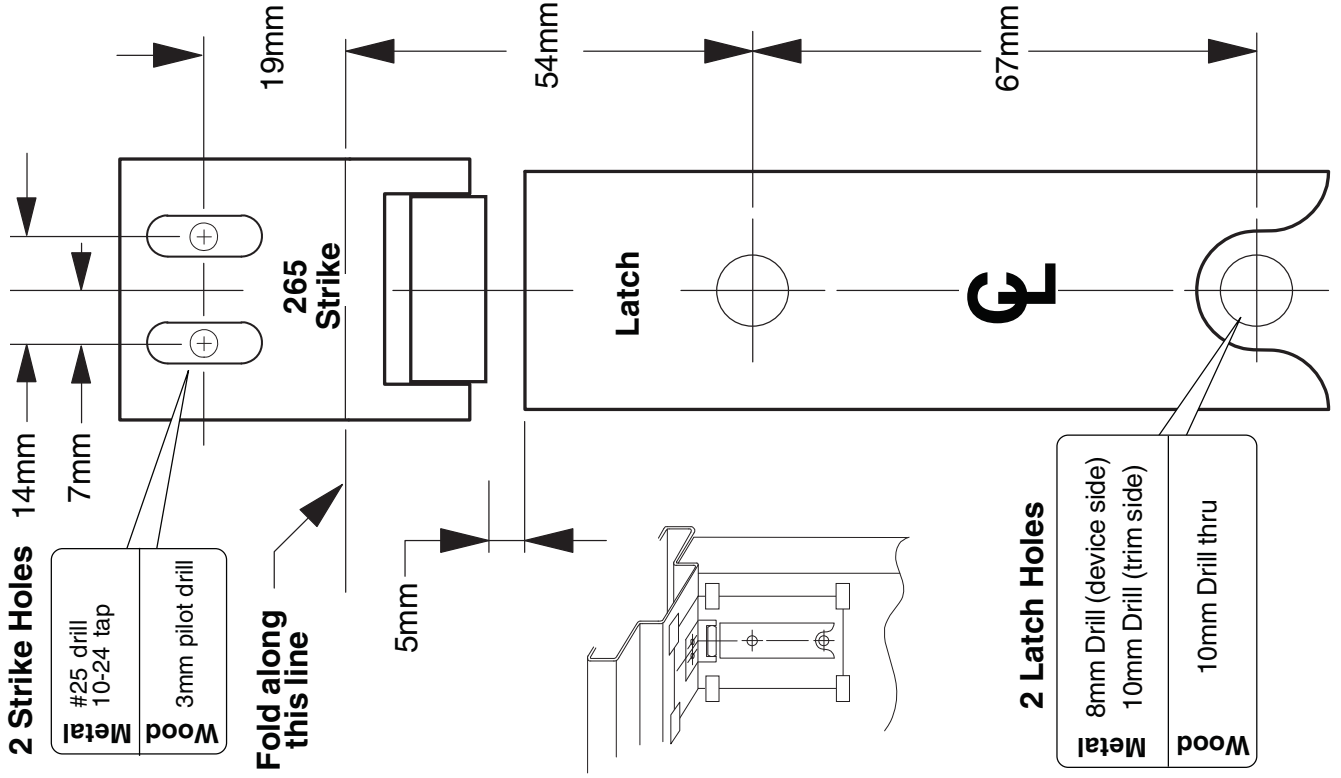
Figure 2

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TOP TEMPLATE

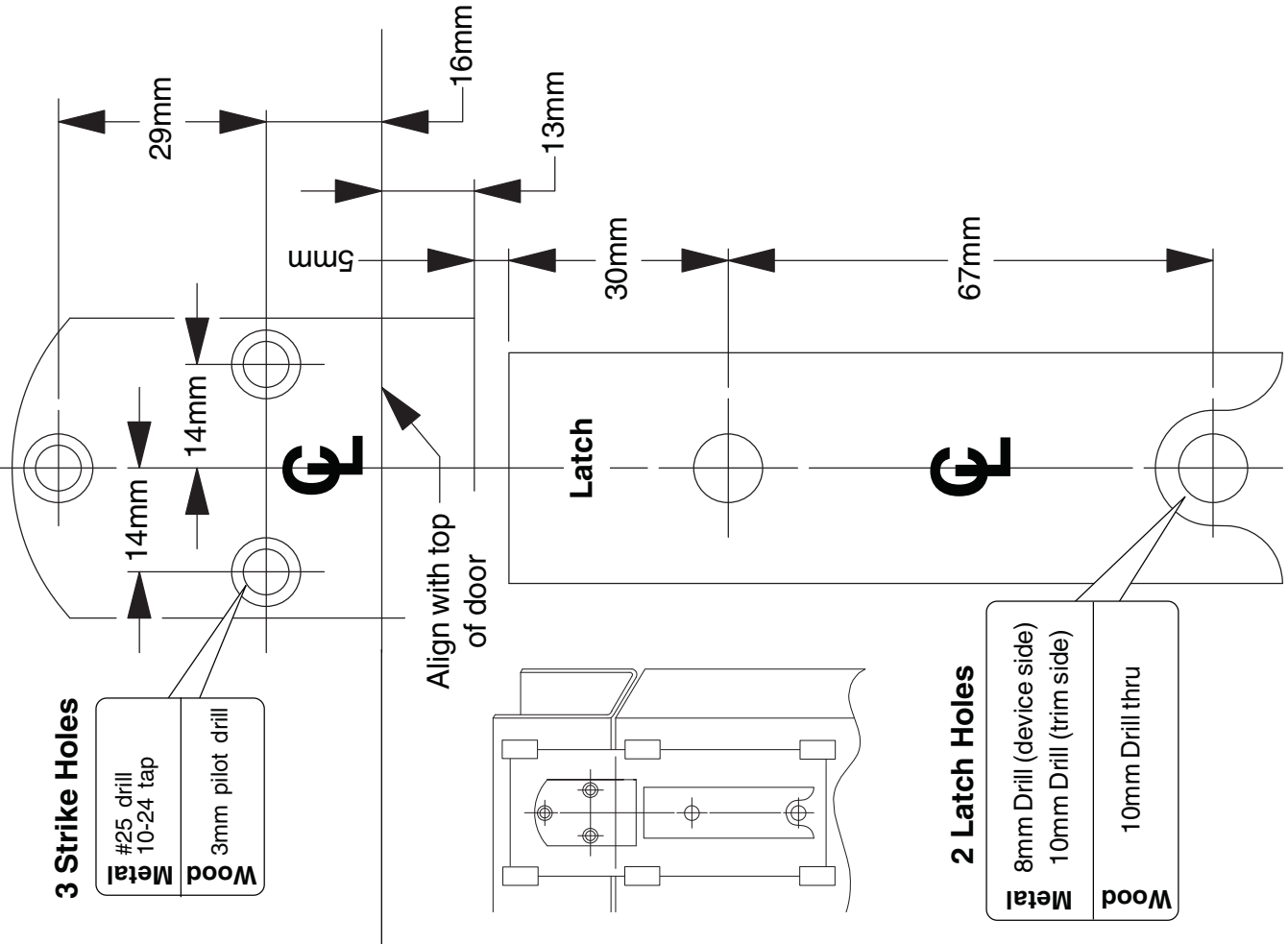
TOP LATCH & 265 STRIKE

For panic device application only



TOP LATCH AND 260U STRIKE

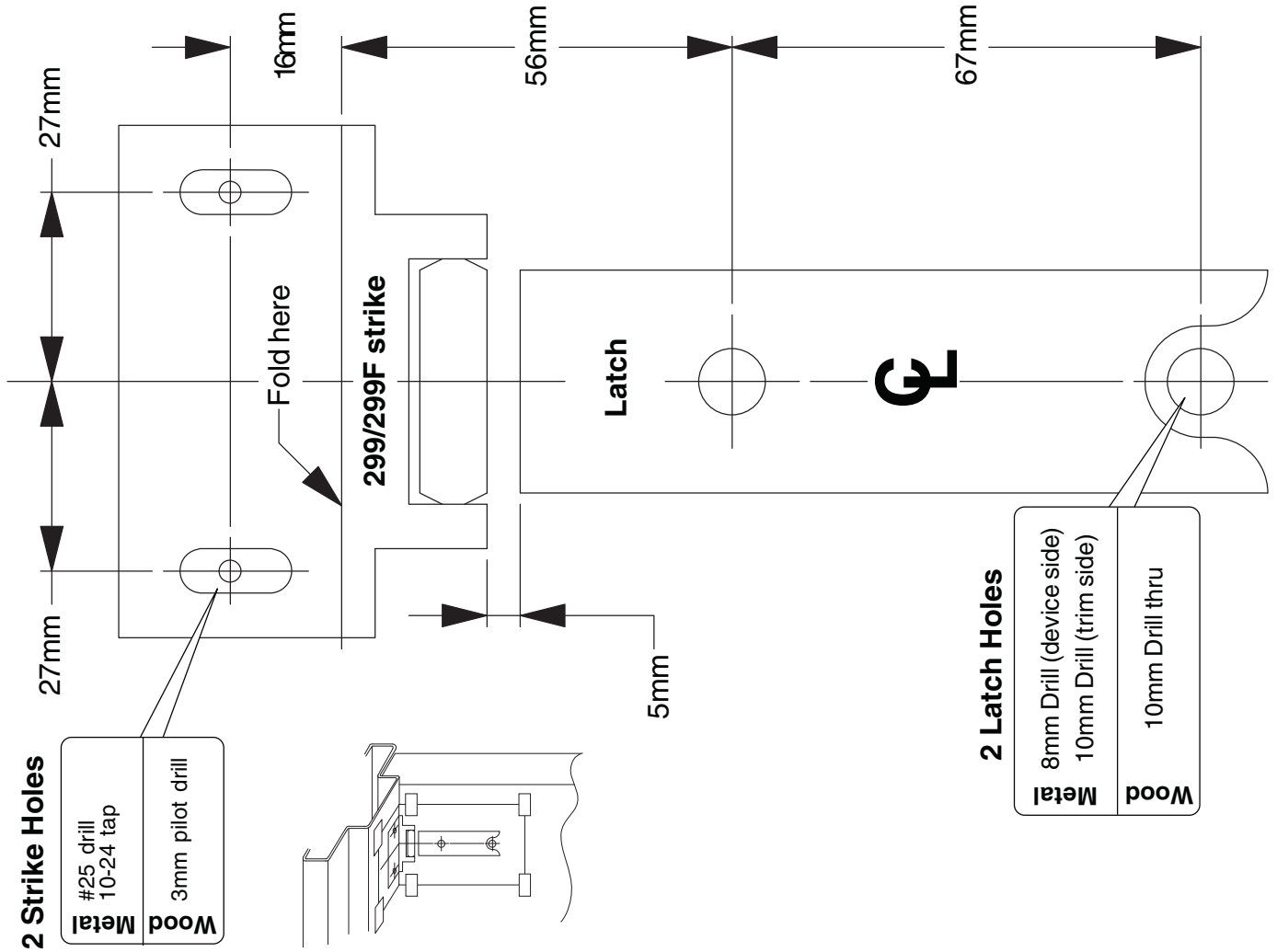
For panic device application only



TOP TEMPLATE - CONTINUED

Note: For 299/299F top strike use minimum backsets shown below.
 Double doors: 35mm min. backset, 56mm min. stile
 Single door: 48mm min. backset, 68mm min. stile

TOP LATCH & 299/299F STRIKE



2 Strike Holes

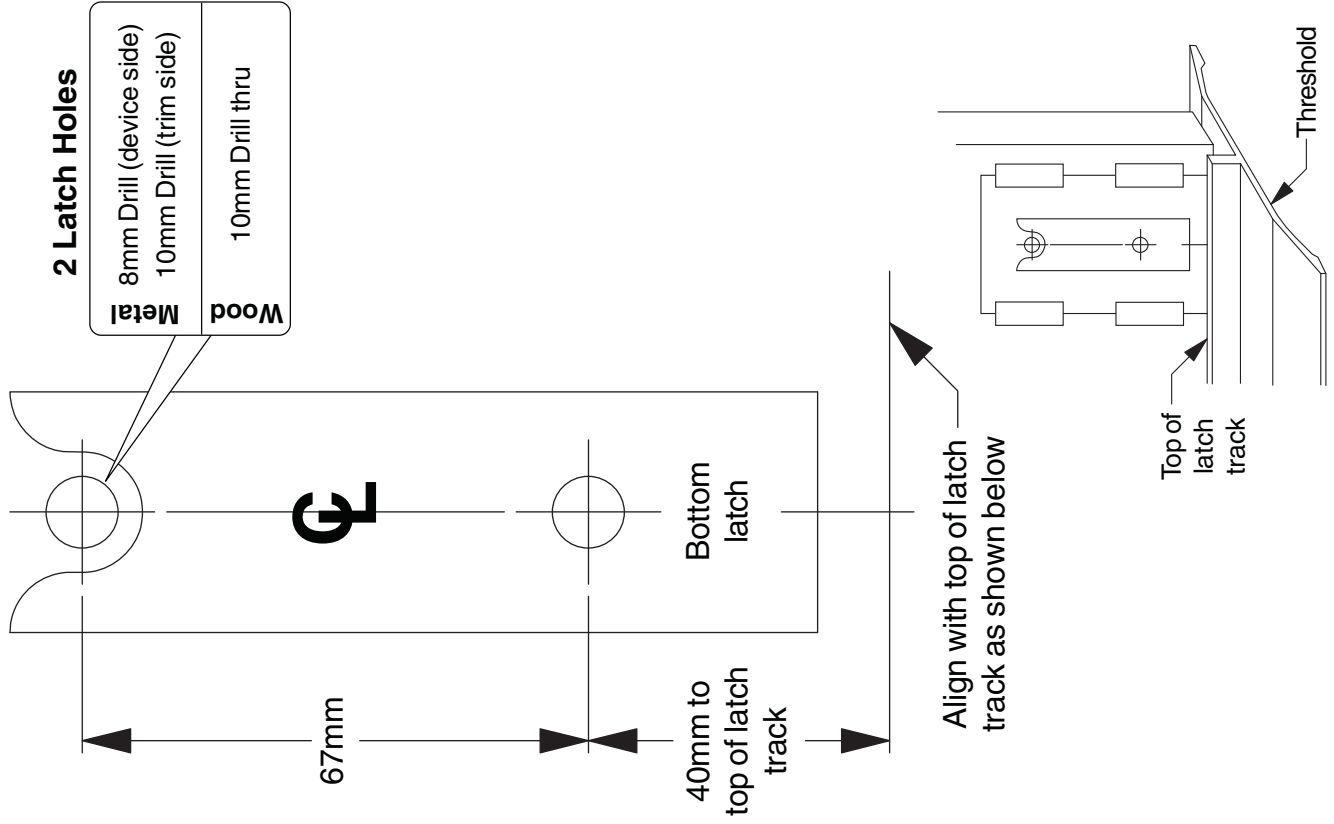
Wood	3mm pilot drill
Metal	#25 drill 10-24 tap

2 Latch Holes

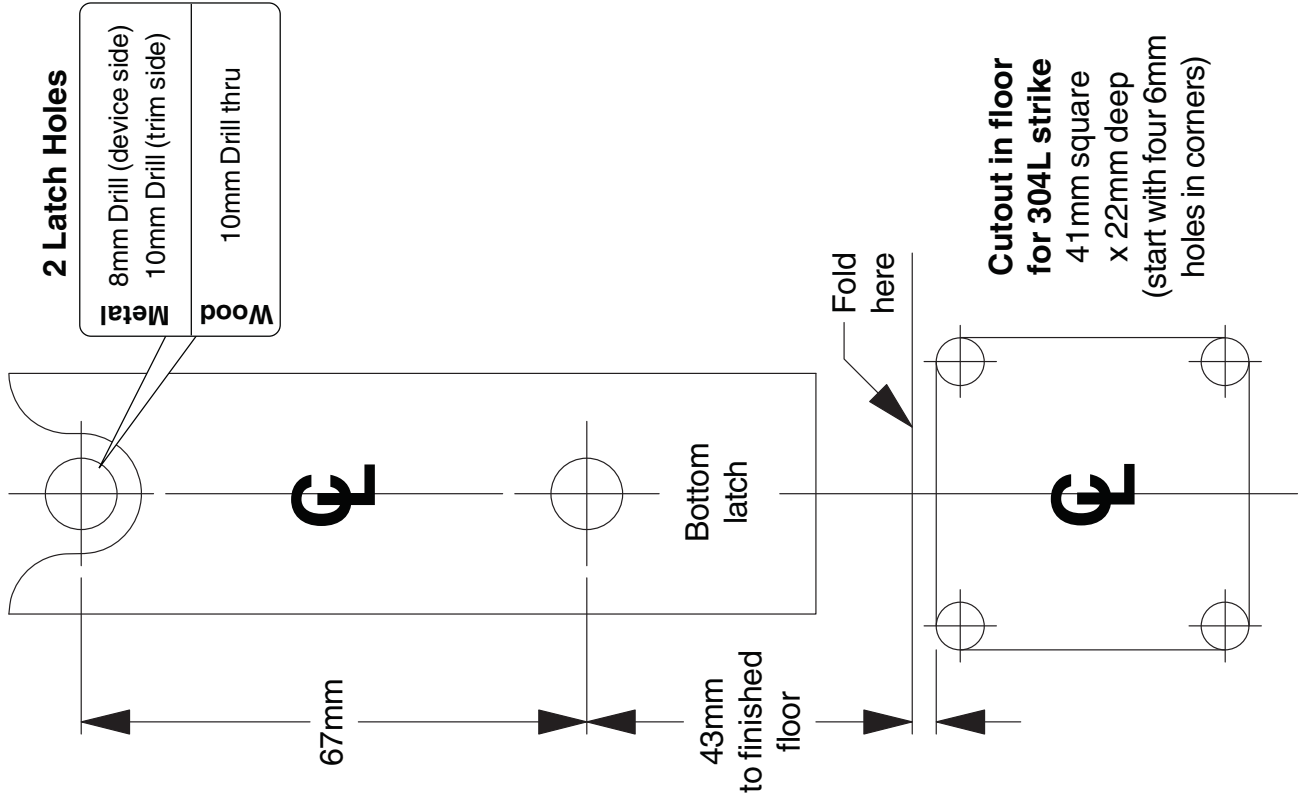
Wood	10mm Drill thru
Metal	8mm Drill (device side) 10mm Drill (trim side)

BOTTOM TEMPLATE - CONTINUED

BOTTOM LATCH AND LATCH TRACK



BOTTOM LATCH AND 304L STRIKE

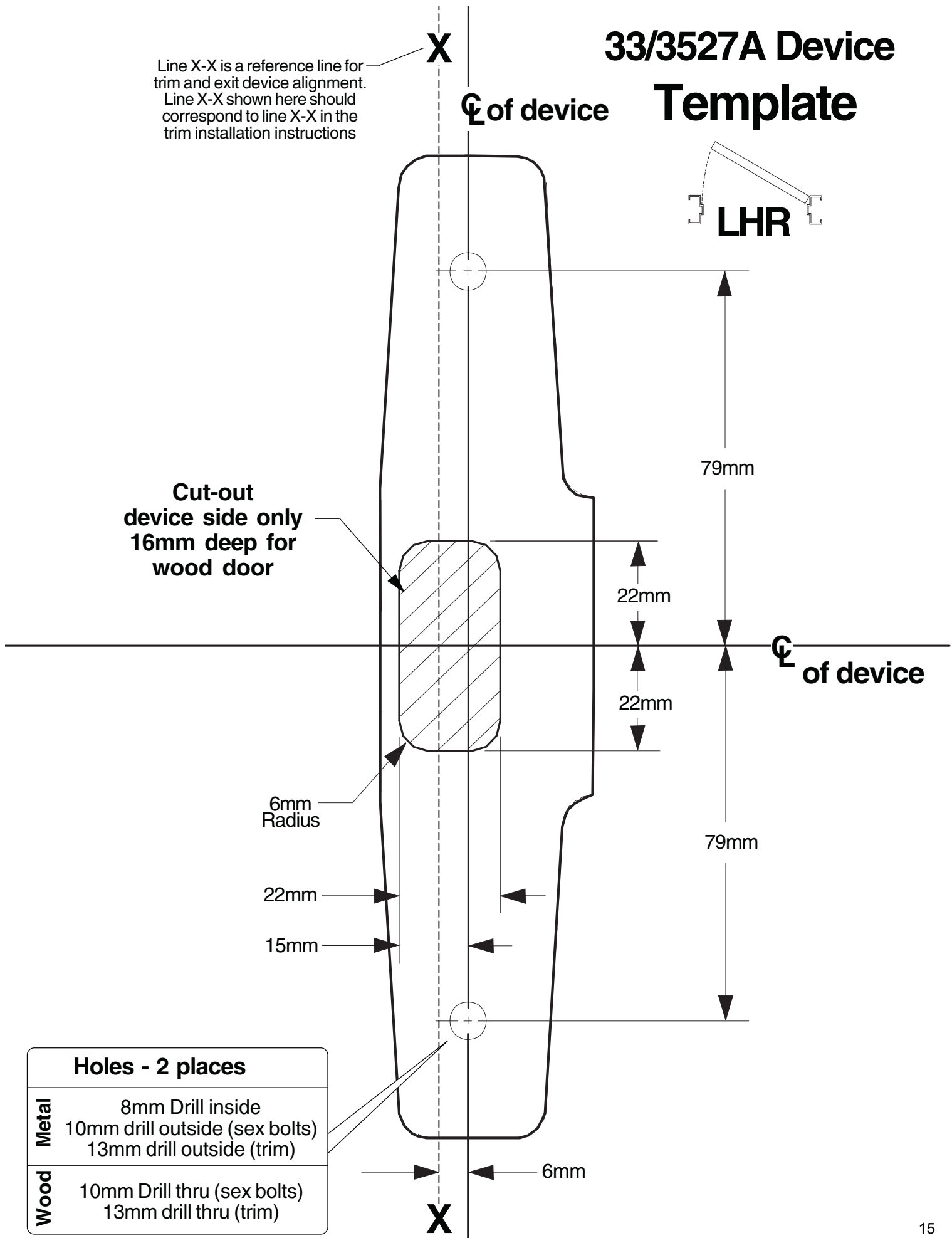
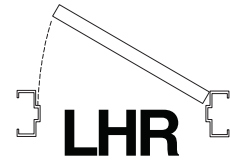


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33/3527A Device Template

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

☉ of device



Cut-out device side only 16mm deep for wood door

6mm Radius

22mm

15mm

22mm

22mm

79mm

☉ of device

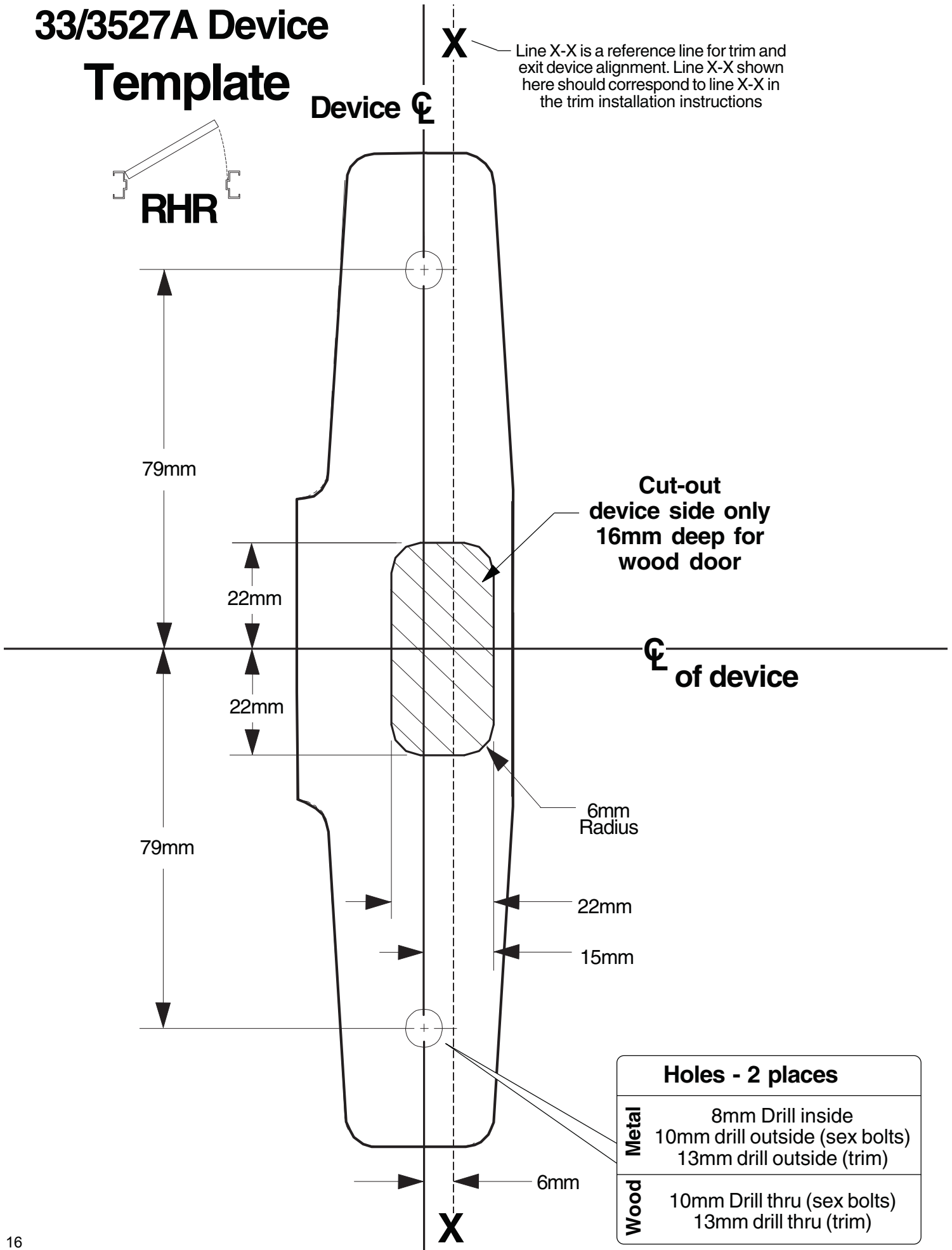
79mm

6mm

Holes - 2 places	
Metal	8mm Drill inside 10mm drill outside (sex bolts) 13mm drill outside (trim)
Wood	10mm Drill thru (sex bolts) 13mm drill thru (trim)

33/3527A Device Template

X — 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	8mm Drill inside 10mm drill outside (sex bolts) 13mm drill outside (trim)
Wood	10mm Drill thru (sex bolts) 13mm drill thru (trim)

ADDITIONAL INSTALLATION REQUIREMENTS

- Before installation ensure door and frame are in good condition, correctly hung and not distorted
Note - Maximum door distortion of 5mm to ensure safe exit.
- It is not recommended that exit devices be fitted to hollow core doors unless specially designed for this type of door.
- It is recommended to verify that the door construction allows the use of the device, i.e. to verify that offset hinges and engaging leaves allow both leaves to be opened simultaneously, or to verify that the gap between door leaves does not differ from that defined by the exit device producer, or to verify that the opening elements do not interfere, etc.
- Before fitting an emergency exit device to a fire/smoke resisting door, the fire certification of the fire door assembly on which the exit device has been tested to prove suitability for use on a fire door should be examined. It is of utmost importance that an exit device is not used on a fire door assembly of a greater fire resistance time than approved for.
- Care should be taken to ensure that any seals or weather-stripping fitted to the complete door assembly does not inhibit the correct operation of the emergency exit device.
- On double door sets with rebated meeting stiles and where both leaves are fitted with emergency exit devices, it is essential to check that either leaf will open when its emergency exit device is activated and also that both leaves will open freely when both emergency exit devices are operated simultaneously.
- Category 2 (Standard projection) emergency exit devices should be used in situations where there is restricted width for escape, or where the doors to be fitted with the emergency exit devices are not able to open beyond 90°
- Different fixing can be necessary for fitting emergency exit devices to wood, metal or frameless glass doors. For more secure fixing, male and female through-door bolts, reinforcement and rivets can be used.
- These exit devices are not intended for use on double action (double swing) doors.
- These fixing instructions should be carefully followed during installation. These instructions and any maintenance instructions should be passed on by the installer to the user.
- When installing lever operating emergency exit devices, particularly on doors with raised or recessed surfaces, consideration should be given to minimizing any potential safety risks, such as the trapping of fingers or clothing.
- The bolt heads and keepers should be fitted to provide secure engagement. Care should be taken to ensure that no projection of the bolt heads, when in the withdrawn position, can prevent the door swinging freely.
- Where emergency exit devices are to be fitted to double doorsets with rebated meeting stiles and self closing devices, a door coordinator device in accordance with EN 1158 should be fitted to ensure the correct closing sequence of the doors. This recommendation is particularly important with regard to smoke/fire-resisting door assemblies.
- No devices for securing the door in the closed position should be fitted other than specified in EN 1125 / EN 179. This does not preclude the installation of self-closing devices.
- If a door closing device is to be used to return the door to the closed position, care should be taken not to impair the use of the doorway by the young, elderly and infirm.
- Where applicable, the "Push to open" sign should be applied on the inside face of the door immediately above the operating element.

MAINTENANCE INSTRUCTIONS

To ensure performance in accordance with the relevant standard, the following routine maintenance checks should be undertaken at intervals of not more than one month.



- a) Inspect and operate the emergency exit device to ensure that all components are in a satisfactory working condition.
Using a force gauge, measure and record the operating forces to release the exit device.
- b) Ensure that the keepers are clean and free from obstruction
- c) Check that the emergency exit device is lubricated if required.
- d) Check that no additional locking devices have been added to the door since its original installation.
- e) Check periodically that all components of the system are still correct in accordance with the list of approved components originally supplied with the system.
- f) Check periodically that the operating element is correctly tightened and, using a force gauge, measure the operating forces to release the exit device.
Check that the operating forces have not changed significantly from the operating forces recorded when originally installed.
- g) Check that all fixing screws are tight.

These instructions should be passed on by the installer to the user on completion of installation.

PRODUCT INFORMATION

- To comply with EN1125 : 2008 door leaf must not exceed 2500mm high x 1300mm wide x 200Kg maximum weight.
- This product is intended for use on single and / or double leaf outward opening fire escape route doors.
- Category of projection : Category 2
- Field of door application : Category A
- Resistance of door leaf against pulling force of the recommended fixing screws: 1000N maximum achieved.

CERTIFICATION DETAILS

		 Bescot Crescent Walsall, WS1, 4DL England									
1121-CPD-AAA027		2009									
EN 1125:2008		3	7	6	B	1	3	2	2	B	A

FIRE / SMOKE DOOR SUITABILITY

120 minutes except when fitted with approved trim devices shown in the table below

Door type: Insulated timber or mineral composite tested in accordance with BS EN1634-1 : 2000 (single or double leaf configuration)

Note - when fitted with the following accessories, fire door suitability is reduced to 60 minutes

22 Series	210DT#	210NL*	230L#	230DT#	230NL*
33A Series	OL*	360T*	386NL#	386DT#	388*
35A Series	OL*	360T*	386NL#	386DT#	388*
98 Series	990DT#	990NL*	990TP*	991K*	992L*
99 Series	990DT#	990NL*	990TP*	991K*	992L*

All items marked ‘#’ may be fitted to timber or mineral composite based doorsets for up to 60 minutes integrity.

All items marked ‘*’ may be fitted to timber or mineral composite based doorsets for up to 60 minutes integrity, having a minimum thickness of 52mm and including sub facings comprising a minimum of 3mm thick non-combustible board, with their lock cylinders wrapped with a 1mm thick Interdens intumescent.

For additional information and full details of certification and fire door suitability:

Telephone : 01922 707400

www.allegion.com

