



911395-00

Rim Exit Device

98/99, 98/99-F, & CD98/CD99

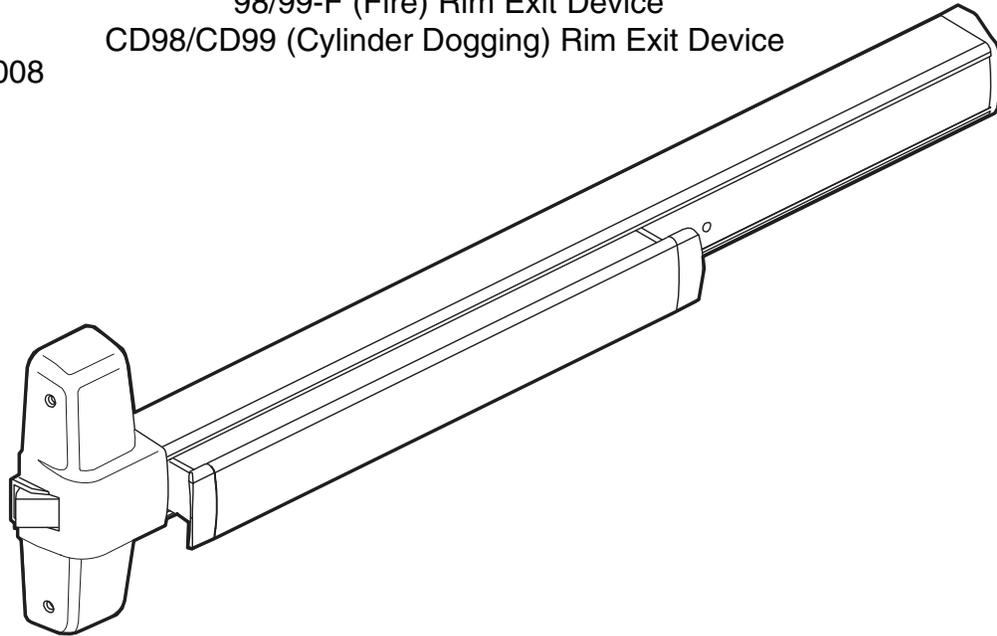
VON DUPRIN®

Installation Instructions



BS EN 1125 : 2008

Devices covered by these Instructions:
98/99 Rim Exit Device
98/99-F (Fire) Rim Exit Device
CD98/CD99 (Cylinder Dogging) Rim Exit Device



Please give these instructions to building owner after device is installed

Special Tools Required:

- #10-24 tap
- #25 drill bit (approximately .4 mm dia.)
- 10 mm dia. drill bit (for sex bolts)
- 13 mm dia. drill bit
- 16 mm dia. spade drill (for #825 sex bolts)
- Hacksaw
- Sabre saw

Index:

- Screw chart 2
- General Information 3
- Device installation 4-5
- Preparation chart 6
- 1609 strike installation 7
- Cut device 8
- 499F strike installation 8

This product is covered by the following patent numbers:

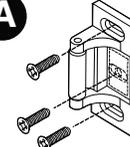
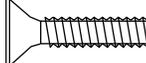
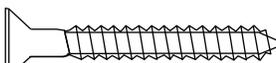
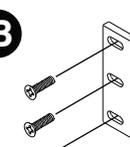
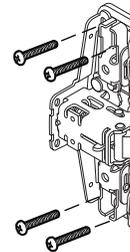
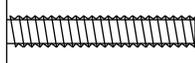
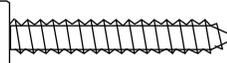
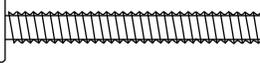
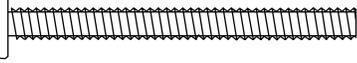
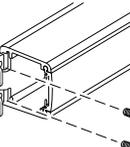
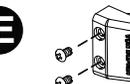
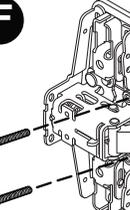
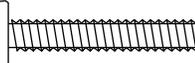
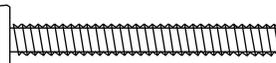
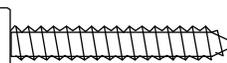
3,767,238	4,427,223
3,854,763	4,466,643
4,167,280	4,741,563



Customer Service

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

SCREW CHART

A 	 #10-24 X 19mm  #10 X 38mm Wood screw	Metal frame Wood frame
B 	 #10-24 X 19mm  #10 X 38mm Wood screw	Metal frame Wood frame
C 	 #10-24 X 25mm  #10-24 X 38mm  #10 X 32mm Wood screw - Packaged with trim -  #10-24 X 35mm  #10-24 X 38mm	Surface mount or Sex bolts (45mm door) Sex bolts (57mm door) Surface mount (wood) 990 Trims (45mm door) 990 Trims (57mm door)
D 	 #10-24 X 19mm  #10-24 X 29mm  #10 X 32mm Wood screw	Surface mount or Sex bolts (45mm door) Sex bolts (57mm door) Surface mount (wood)
E 	 #10-16 X 10mm Thread cutting	End cap screw
F 	 #10-24 X 25mm  #10-24 X 38mm  #10 X 32mm Wood screw	Surface mount or Sex bolts (45mm door) Sex bolts (57mm door) Surface mount (wood)
G 	 #8-18 X 10mm Thread cutting	Cover screw

GENERAL INFORMATION

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

Device & Strike	Device Size	Code/Standard Requirement	Effective Door Width
98/99Rim(299)	813 mm	BS EN 1125 : 2008	662 mm - 762 mm
98/99Rim(299)	1118 mm	BS EN 1125 : 2008	814 mm - 1016 mm
EL98/99Rim(299)	813 mm	BS EN 1125 : 2008	729 mm - 762 mm
EL98/99Rim(299)	1118 mm	BS EN 1125 : 2008	881 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.



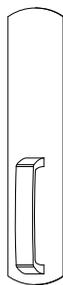
NOTE

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.

OUTSIDE TRIM FUNCTIONS



EO¹
(exit only)



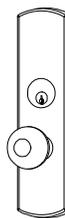
DT
(pull when dogged)



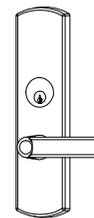
NL
(key retracts latch bolt)



TP²
(key locks thumbpiece)



K³
(key locks knob)



L³
(key locks lever)

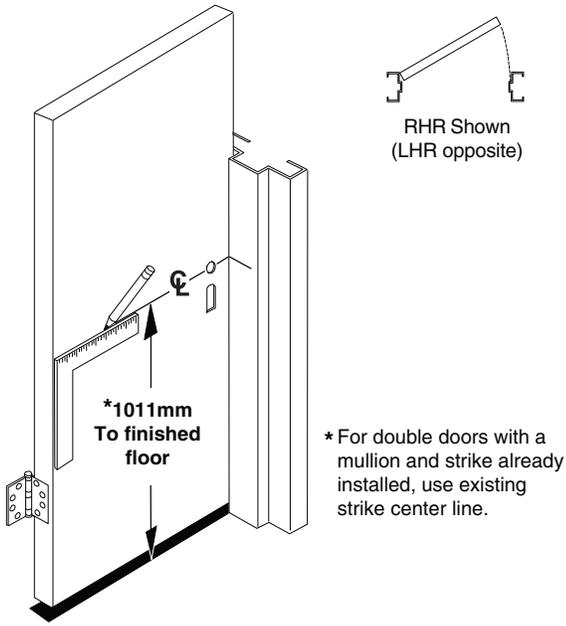


NLOP
(cylinder, tailpiece, retaining cup)

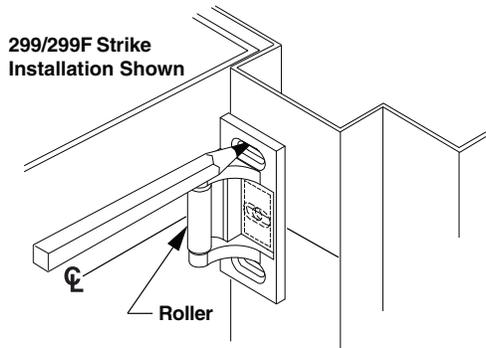
- Notes:**
1. No trim provided with EO; 990EO plate shown is optional.
 2. Also available as BE (no cylinder used; trim is always unlocked).
 3. Also available as: BE; Rigid (rigid knob or lever; key retracts latch bolt); DT (pull only).

Von Duprin
2720 Tobey Drive
Indianapolis, IN 46219

1 Draw Horizontal Device and Strike Center Line (☉)



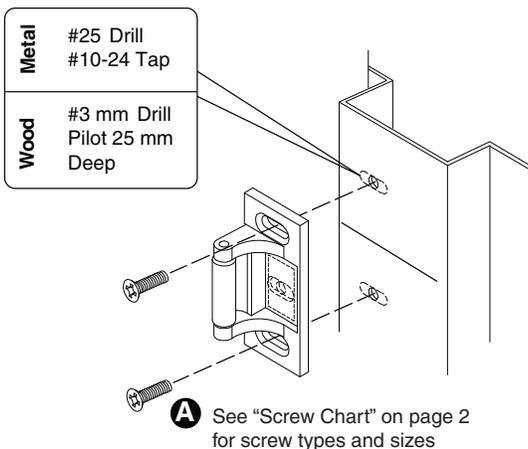
2 Align Strike on ☉ and Mark the Two Slotted Holes



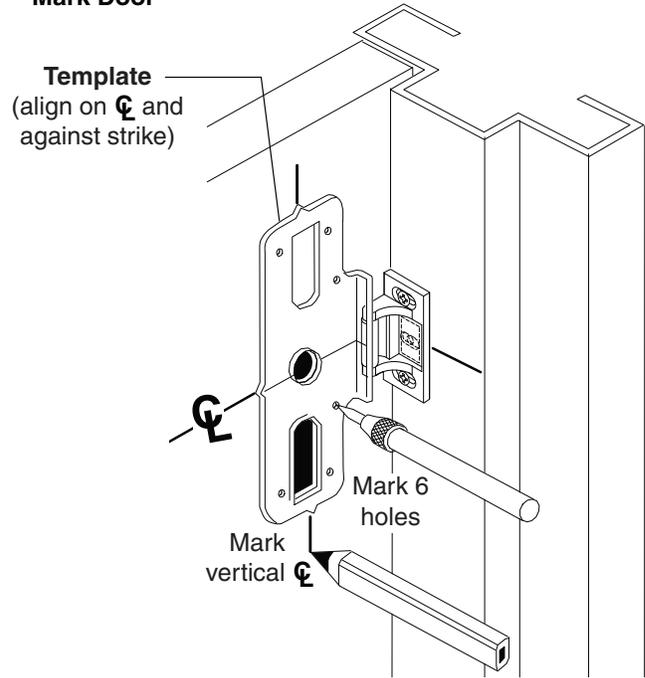
Notes:
For 499F strike installation, see page 8.

For double door application in combination with a 98/9927 device, see "Preparation for 1609 Strike" on page 7.

3 Prepare 2 Holes and Install 2 Screws

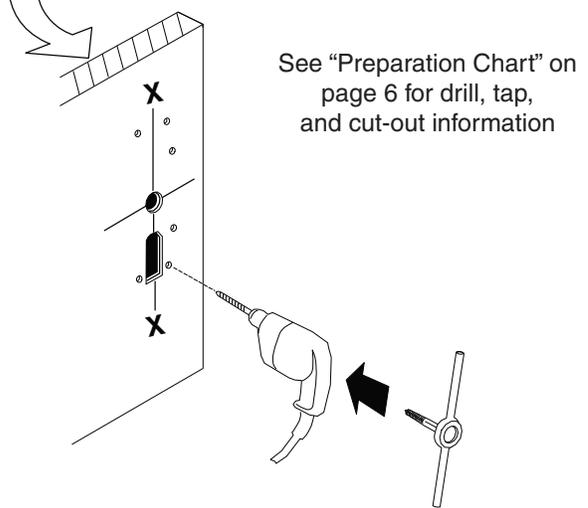


4 Position Template Against Strike and on ☉ then Mark Door



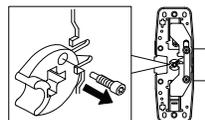
5 Prepare Door for Device and Trim

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



6 If Using an Outside Cylinder, Check NL Drive Screw

NL drive screw



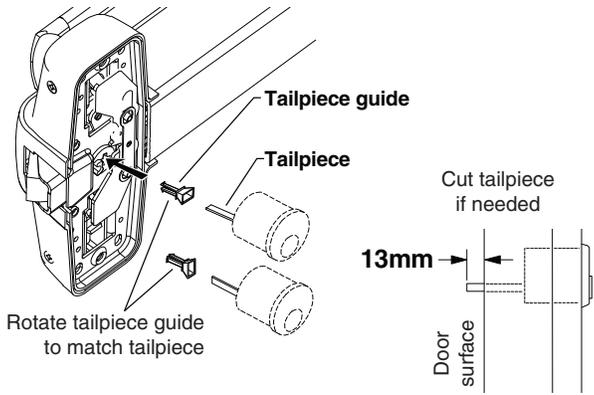
Note: When the NL drive screw is left in back of device, the outside cylinder will function only as a Night Latch.

When installing trim that has a functional lever, knob, or thumb piece AND an outside cylinder to lock and unlock the trim, remove NL drive screw from back of device.

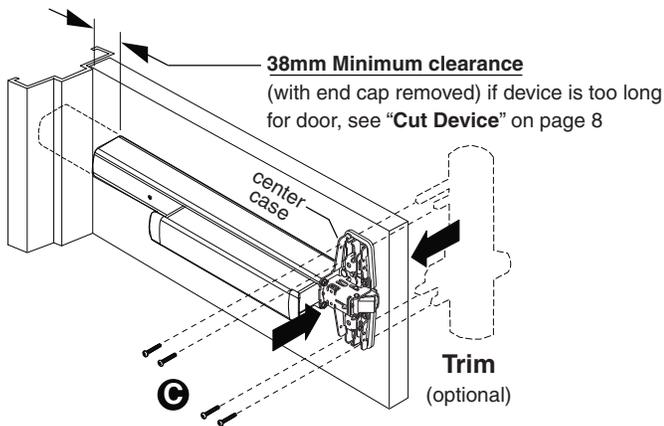
DO NOT remove NL drive screw for the following application: **NL, EO, DT, TP-2, L-2, and K-2 trims or with 98/99-2 (double cylinder).**

With "BE" trim, device may need to be rehanded. See instructions on back of trim.

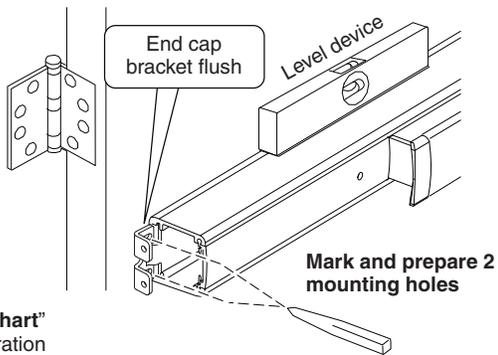
7 Install Tailpiece Guide



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

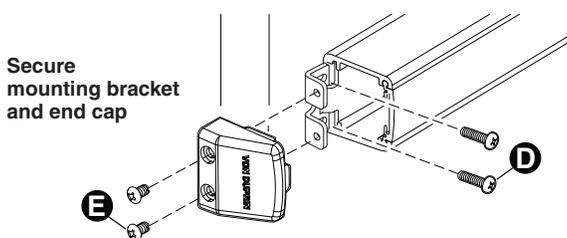


9 Mark and Prepare 2 Holes for End Cap Bracket

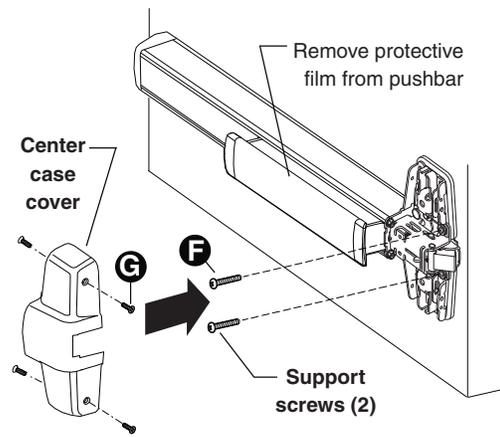


See "Preparation Chart" on page 3 for preparation

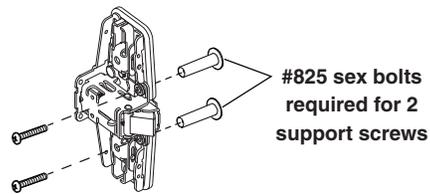
10 Install End Cap Bracket and End Cap



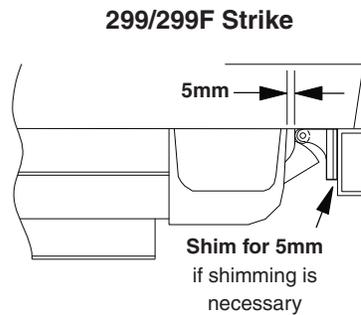
11 Install 2 Support Screws and Center Case Cover



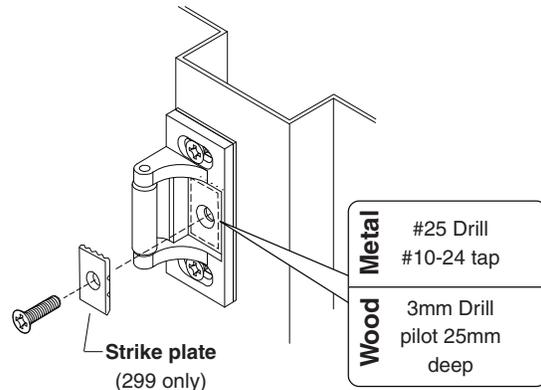
For 98F/99F (fire rated) devices on wood or composite door:



12 Adjust Strike as Needed



13 Secure Strike with Additional Screw



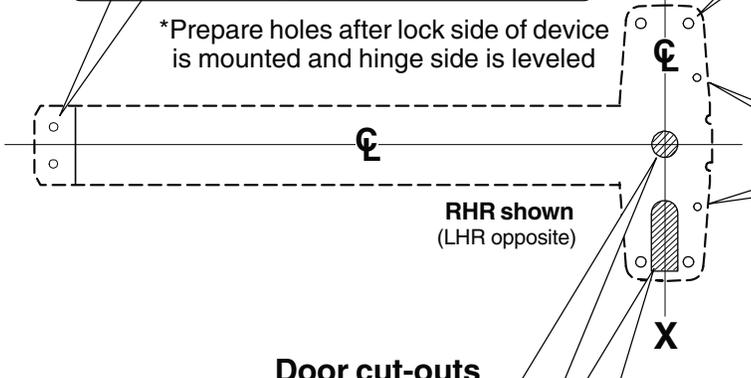
PREPARATION CHART

Go to instructions on next page before using preparation chart

*End cap bracket - 2 holes

Surface mount		Sex bolts	
Metal	#25 Drill	Metal	6mm Drill (device side)
	#10-24 tap	Metal	10mm Drill (trim side)
Wood	3mm Drill pilot 25mm deep	Wood	10mm Drill thru

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



Door cut-outs

	Outside cylinder applications: Mark with template and cut-out: Metal door (cut device side) Wood door (cut thru)
	For trim applications with working lever, thumbpiece, or knob: Mark with template and cut out: (cut device side only)

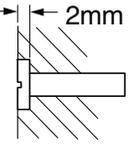
Center case - 4 holes

Surface mount		Sex bolts or 990 trims	
Metal	#25 Drill #10-24 tap	Metal	6mm Drill (device side) 10mm Drill (trim side)
	Wood	Wood	3mm Drill pilot 25mm deep 10mm Drill thru

Center case - 2 support holes

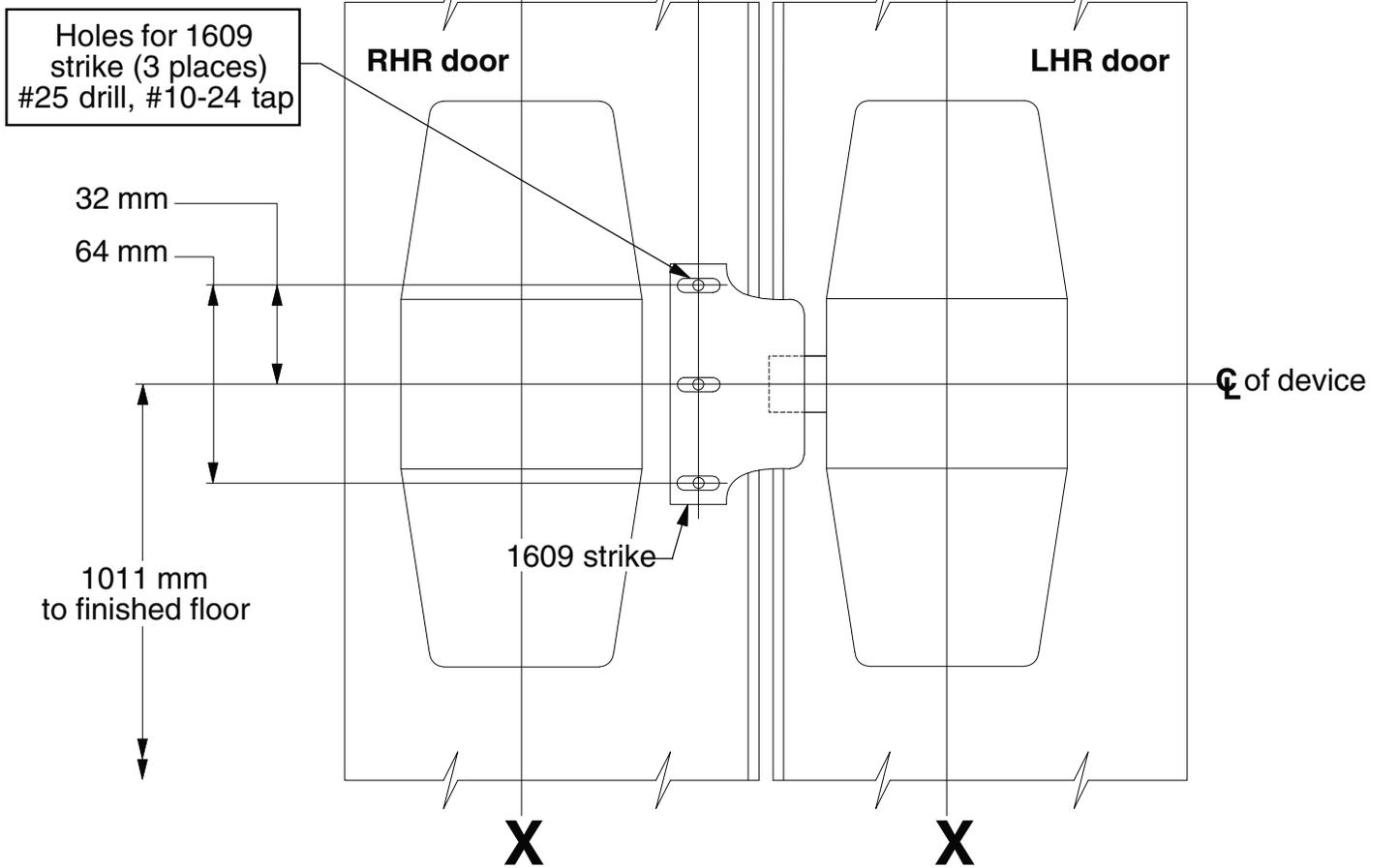
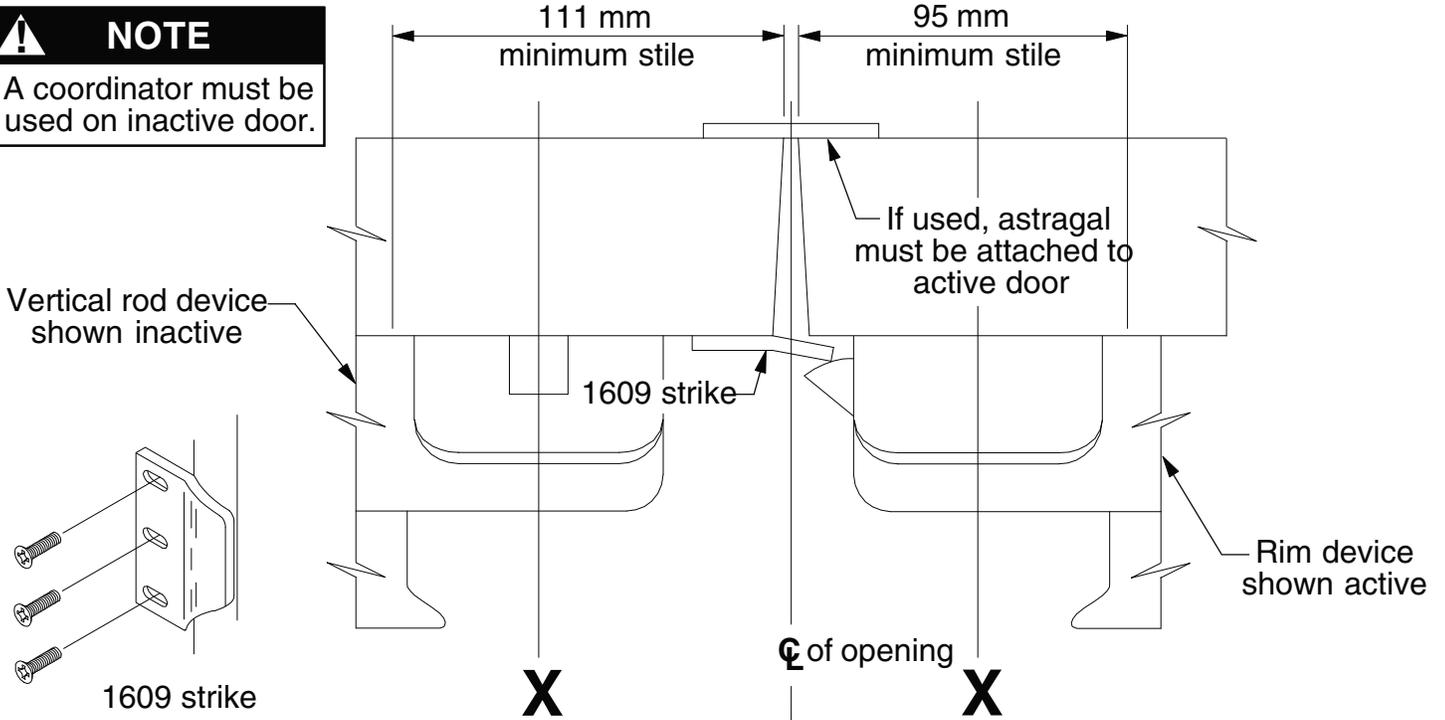
Surface mount		#425 sex bolts	
Metal	#25 Drill #10-24 tap	Metal	6mm Drill (device side) 10mm Drill (trim side)
	Wood	Wood	3mm Drill pilot 25mm deep 10mm Drill thru

For 98-F/99-F (fire) wood door

Wood or composite	#825 Sex bolts (2) required	
	10mm Drill thru	
	16mm Spade drill 2mm Deep outside	

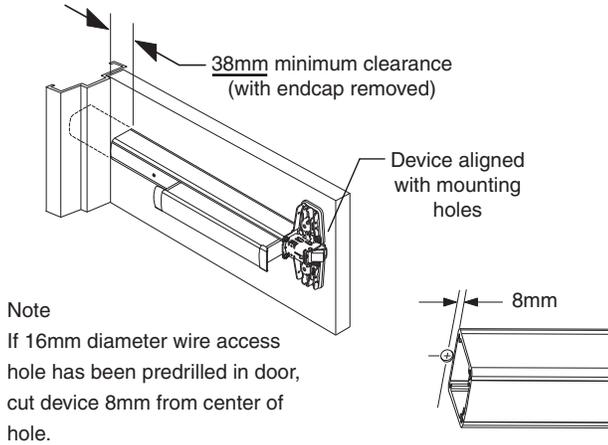
PREPARATION FOR 1609 STRIKE

NOTE
 A coordinator must be used on inactive door.

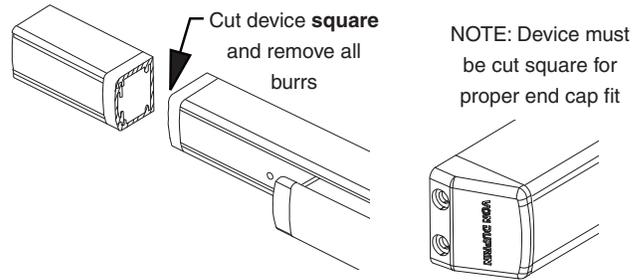


CUT DEVICE

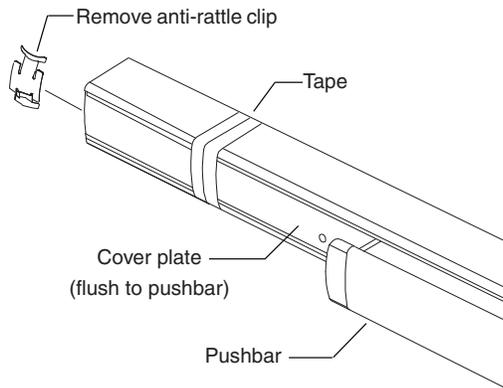
1 Measure amount to cut off device.



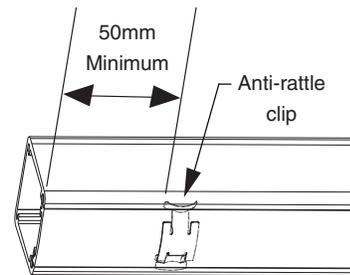
3 Cut device square.



2 Tape and mark area being cut.

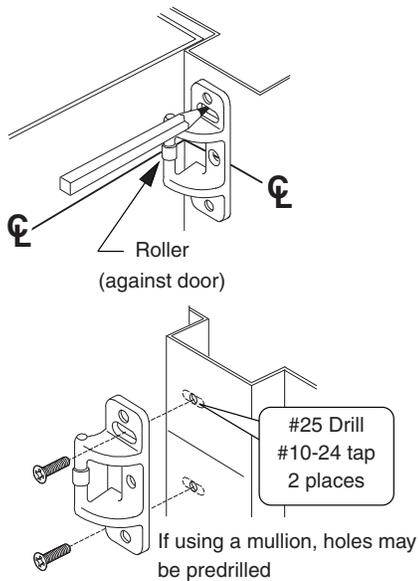


4 Slide anti-rattle clip into device.

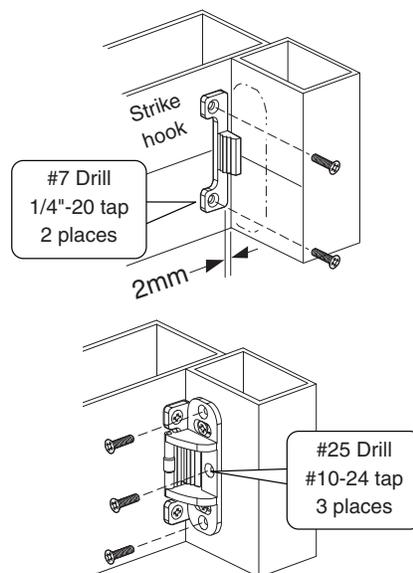


499F STRIKE INSTALLATION

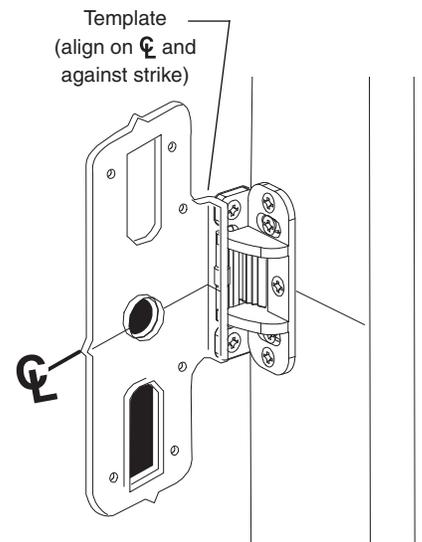
1 Prepare and install screws through 2 strike slots.



2 Install strike hook and additional strike screws.



3 Template aligns as shown.



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

	ALLEGION  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

