



Detex Corporation, 302 Detex Drive, New Braunfels, Texas 78130-3045
830-629-2900 / 800-729-3839 / Fax 800-653-3839 / Text photos only: 830-481-6433 / INTERNET: www.detex.com

**INSTALLATION INSTRUCTIONS FOR DETEX VALUE SERIES® RIM V40 SERIES
FV40 SERIES, "H" MODEL (HURRICANE), "W" MODEL (WEATHERIZED), V40NS (NARROW STILE)**

Drawing: 101800
102400

U.S. PATENT NUMBERS:

6009732

6205825B1

6532777B2

INTERNATIONAL PATENT NUMBER:

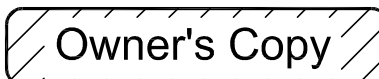
PCT6009732

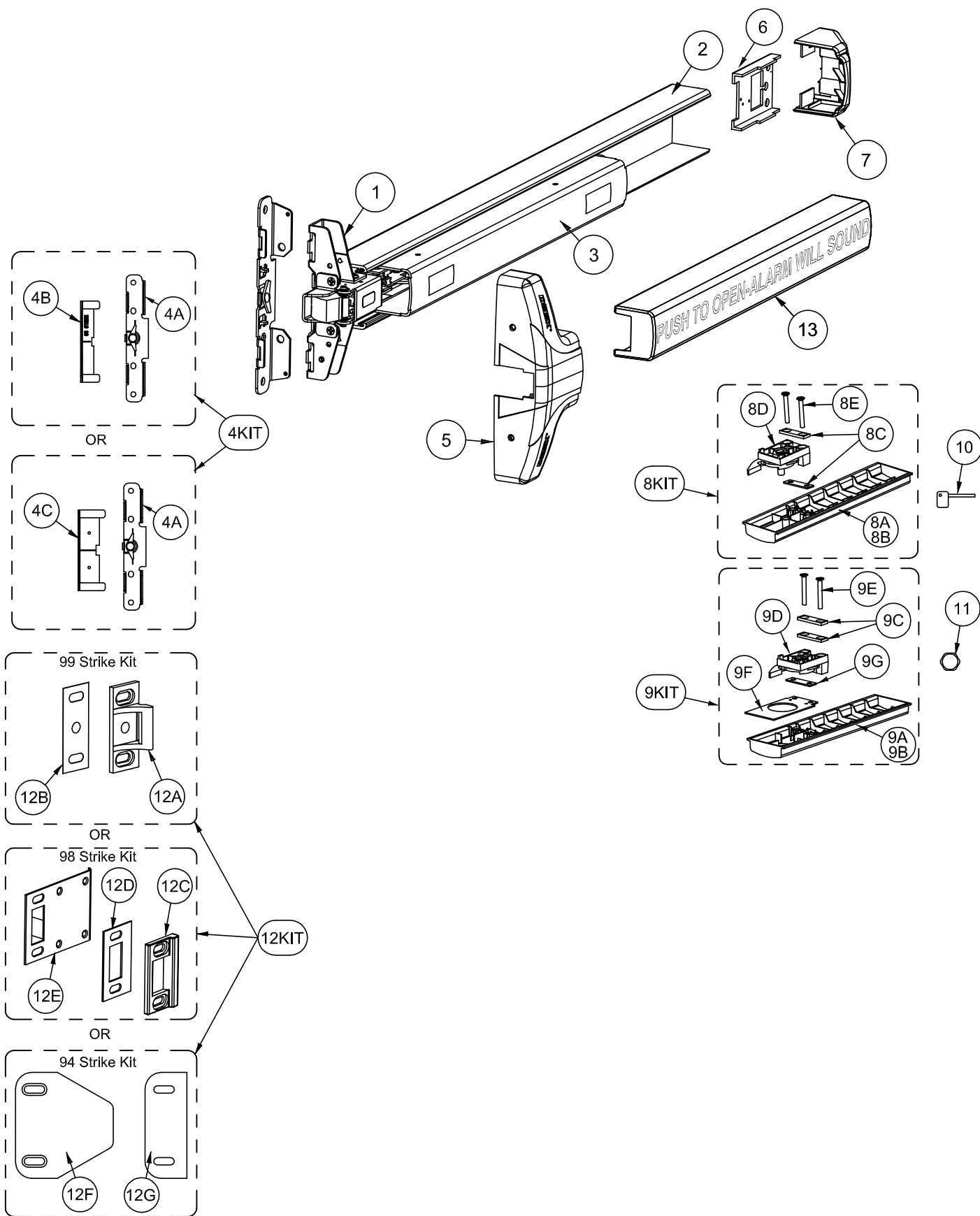
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For device installation videos,
scan code below or
go to detex.com

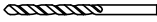



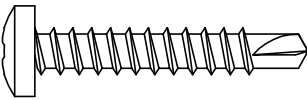
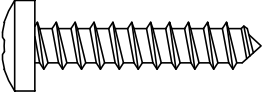



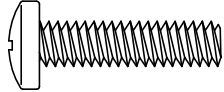


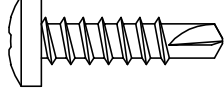

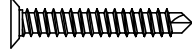


PARTS BREAKDOWN		
Item	Order Part #	Description
1	100698-5	Centercase Assembly, Narrow Stile, V40 series
2	106281	Baseplate Extrusion, 36", Silver
	106285	Baseplate Extrusion, 48", Silver
	106289	Baseplate Extrusion, 36", Black
	106290	Baseplate Extrusion, 48", Black
3	103065-1	Pushpad Subassembly, 36"
	103065-2	Pushpad Subassembly, 48"
4KIT	103806-1	Mounting Plate/Strike Locator Kit, Narrow Stile, 98 Strike BP2 (includes 4A & 4B)
	103806-2	Mounting Plate/Strike Locator Kit, Narrow Stile, 99 Strike, BP1 (includes 4A & 4C)
4A	100696-1	Mounting Plate, BP2, Narrow Stile
4B	101899	Strike Locator 2" Glass Door (98)
4C	100212	Strike Locator, Standard (99)
5	101805-1	Centercase Cover, V40 series
6	101844-1	Endcap bracket w/o battery holder
	101844	Endcap bracket w/ battery holder
7	101822	Endcap
8KIT	101803-1	Fillerplate, Subassembly, S&R, Hex Dogging, HD, V40 series, 36" (includes 8A or 8B through 8E)
8A	101812-1	Fillerplate, HD, 36"
8B	101812-2	Fillerplate, HD, 48"
8C	100164	Spacer, dogging bracket, .120" thick
8D	102216-4	Die cast dogging assembly, HD
8E	PP-5802-124	Screw, mach, 10-32 x 1-1/2" PFH
9KIT	102195-1	Fillerplate, Subassembly, S&R, Cylinder Dogging, CD, V40 series, 36" (includes 9A or 9B through 9G)
9A	102194-1	Fillerplate, CD, 36"
9B	102194-2	Fillerplate, CD, 48"
9C	100164	Spacer, dogging bracket
9D	102216-3	Die cast dogging assembly, CD
9E	PP-5802-124	Screw, mach, 10-32 x 1-1/2" PFH
9F	102196	Bracket, fillerplate, V40, CD
9G	100938	Spacer, dogging bracket, .060" thick
10	100450	Hex Key (for Hex Dogging)
11	100783	Cylinder Nut (for Cylinder Dogging)
12KIT	100855-2	99 Strike Kit (includes 12A & 12B)
	100855-1	98 Strike Kit (includes 12C, 12D & 12E)
	102212-1	94 Double Door Strike Kit (includes 12F & 12G)
12A	100234-1	Strike, Non-roller
12B	100088	Strike Shim
12C	100480	Strike, Mortise
12D	100482	Shim, Mortise Strike
12E	100481	Shield, Strike
12F	102211	Double Door Strike Plate
12G	102214	Shim, 94 strike
13	105417-1	Pushpad Wrap, 36", Red (English text)
	105417-2	Pushpad Wrap, 48", Red (English text)
	105417-3	Pushpad Wrap, 36", Black
	105417-4	Pushpad Wrap, 48", Black

Your particular part or configuration
may not be shown:
Contact Detex technical support
at 800-729-3839 (option 2)

Hardware Table for BASIC device mounting.
Additional hardware is provided per the device configuration in kit form and is addressed on the appropriate pages as required
 Device hardware kit: p/n 101809-2 for Hex Dogging (HD)
 Device hardware kit: p/n 101809-5 for Cylinder Dogging (CD)

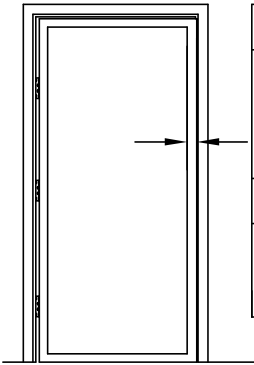
	Fastener Part No	Drill Bit 
	P/N: 100980 1/4-20 x 1" PPH	#7 or 13/64"
	P/N: 101621-5 1/4-20 x 1/4" PPHMS	#7 or 13/64"
	P/N: 100162-106 6-32 x 3/8" PFHUMS	-----
	P/N: 103276-65 #14 x 1-1/2" PPH self-drilling	1/8 pilot hole recommended for self-drilling screws
	P/N: PP-5183-110 #14 x 1-1/4" PPH wood screw	1/8 pilot hole recommended for wood screws
	P/N: PP-5067-25 #14 Lockwasher	

99 Strike Kit: p/n 100855-2 or 98 Strike Kit: p/n 100855-1			
	P/N: 100980 1/4-20 x 1" PPH	#7 or 13/64"	in both kits
	P/N: 100112 10-24 x 5/8" PFHUMS		in 99 kit only
	P/N: 100162-1 6-32 x 5/8" PFHUMS		in 98 kit only
	P/N: 103276-63 #14 x 1" PPH	1/8 pilot hole recommended for self-drilling screws	in both kits
	P/N: 103277-216 #10 x 1" self-cutting PFHU		in 99 kit only
	P/N: 101451-1 #6 x 1" self-cutting PFHU		in 98 kit only

Tools Required:

- | | | |
|-----------------------|-------------------|---|
| Safety Glasses | Pencil | Phillips & small flat Screw Drivers |
| Power Drill | Hammer | Combination Square |
| Tape Measure | Pliers | Center Punch |
| Level | 1/4-20 Tap | Saw for cutting device if necessary (chop saw preferred) |

!!!CHECK BEFORE STARTING!!!

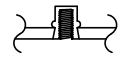
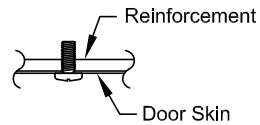


Wide Stile (Surface Strike)
Minimum door stile 4-1/2" (114 mm) Template drawings provide door and frame structural and dimensional specifications for door and frame preparation.
Narrow Stile
Minimum door stile 2" (51mm) Surface strike possible Mortise strike recommended

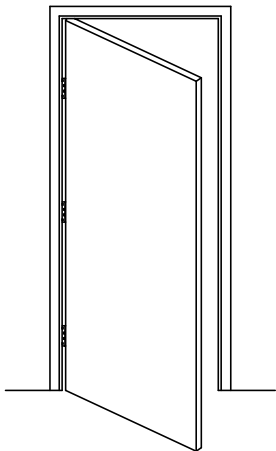
Doors and frames with walls having a structural thickness (metal skin plus reinforcement, or solid wood) to engage less than (3) full screw threads, are considered unreinforced for hardware.

Unreinforced Doors: Use Sex Nuts and Bolts
Unreinforced Frames: Use Blind Rivet Nuts (see sketch)
Fasteners for unreinforced openings are not supplied by Detex.

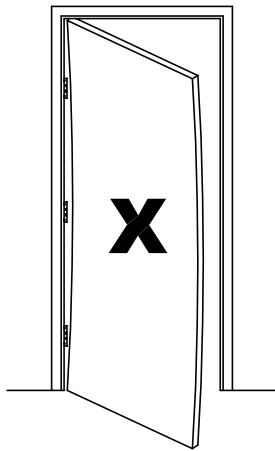
Reinforced door or frame engages at least (3) screw threads.



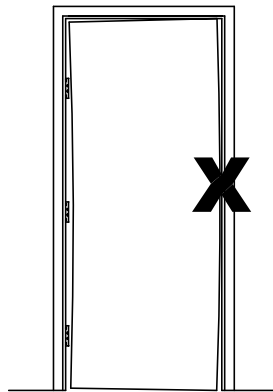
Blind Rivet Nut



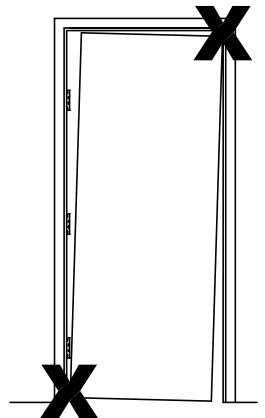
Door Must Swing Freely



Door Must Not be Warped



Door Must Not Bind

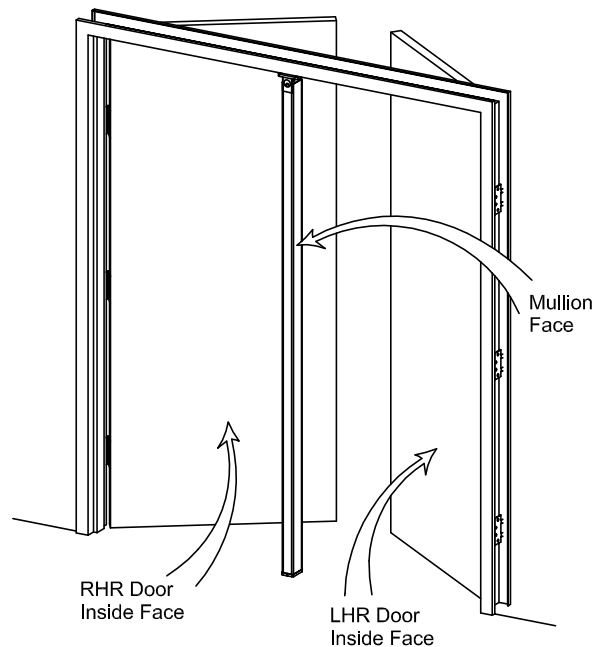
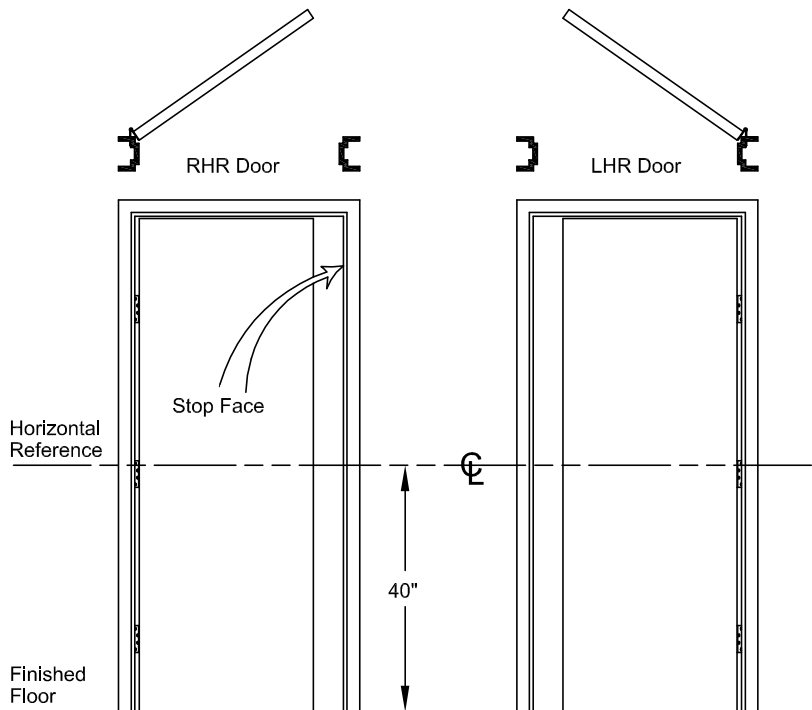


Door Must Not Sag

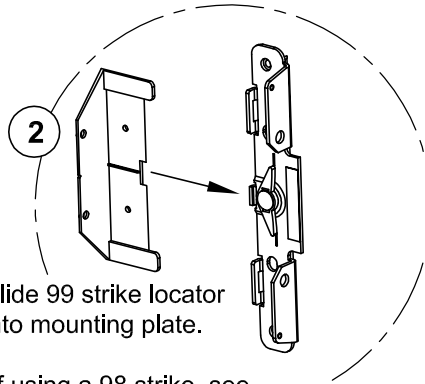
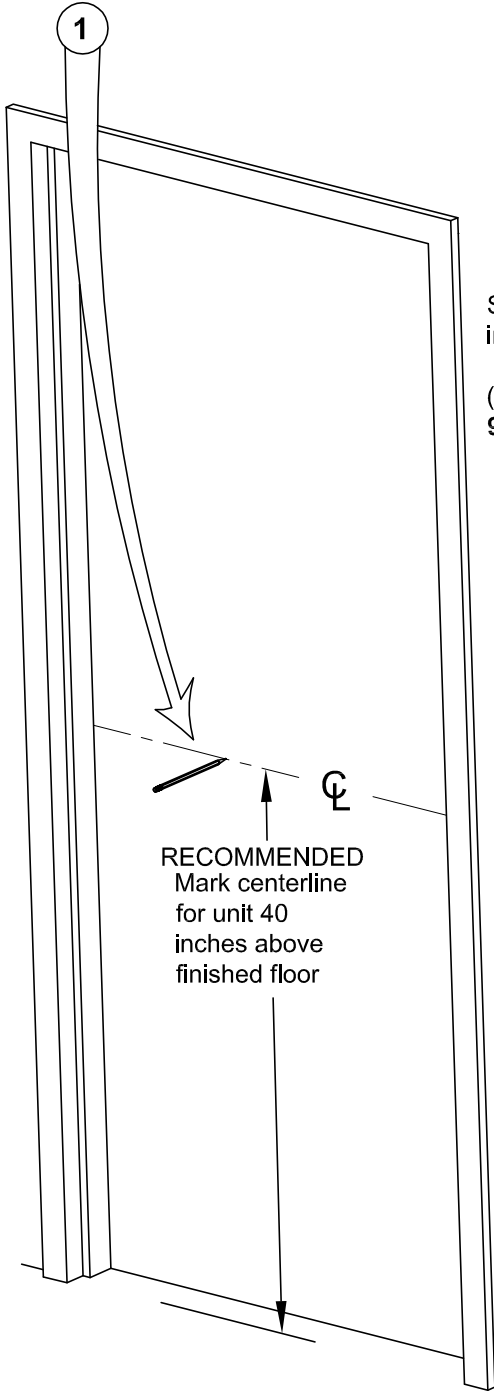
NOTE: 750mm MAXIMUM DOOR WIDTH OPENING FOR EUROPE FOR 36" DEVICE
(1000mm MAXIMUM DOOR WIDTH OPENING FOR EUROPE FOR 48" DEVICE)

THE SAFETY FEATURES OF THIS PRODUCT ARE ESSENTIAL TO ITS COMPLIANCE WITH EN 1125.

NO MODIFICATION OF ANY KIND, OTHER THAN THOSE DESCRIBED IN THESE INSTRUCTIONS ARE PERMITTED.

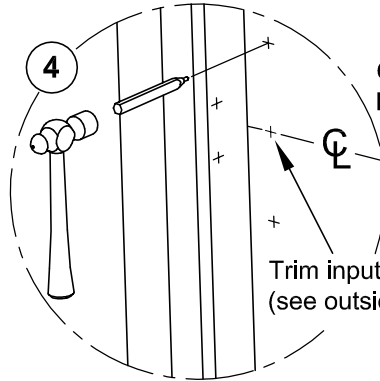
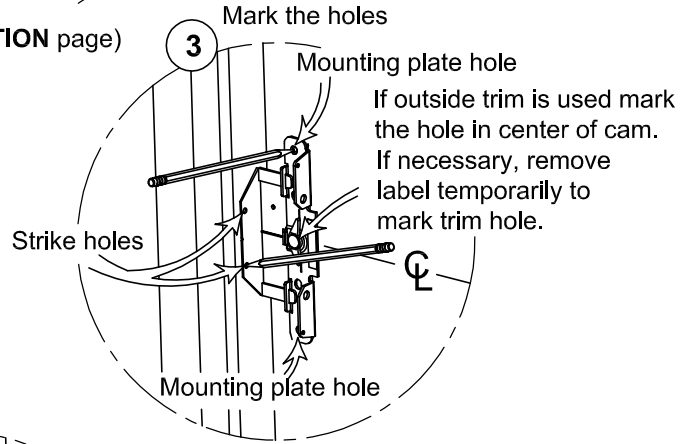


MOUNTING PLATE & STRIKE INSTALLATION:

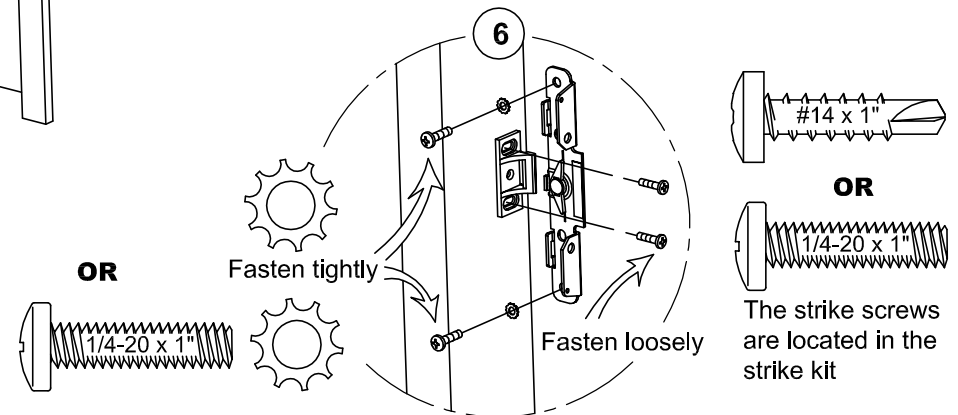


Slide 99 strike locator into mounting plate.

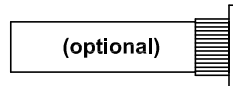
(if using a 98 strike, see 98 STRIKE INSTALLATION page)



Centerpunch the mount plate & strike holes. No predrilling required for self-drilling screws.



NOTE: HURRICANE rated devices MUST BE thru-bolted using either sexnuts or outside mating trim

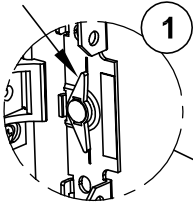


Optional Sex Nuts can be used for thru-bolting the device to the door. Catalog No: SN1 (quantity 2 per order)

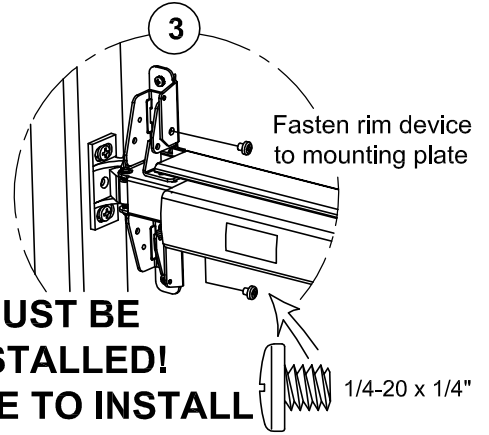
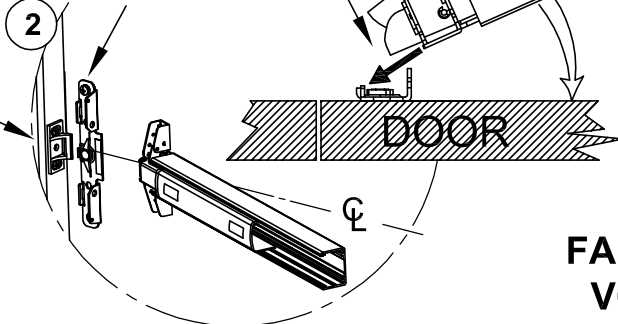
DEVICE INSTALLATION:

NOTE: If device is too long, refer to next page for cut-down procedure.

Position cam as shown



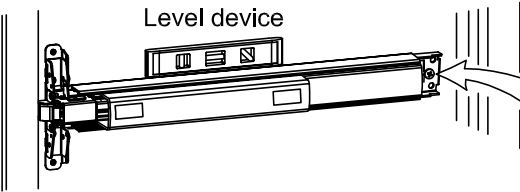
Insert centercase into slots of centercase mounting plate, **DEPRESS PUSHPAD**, rotate toward door.



**MUST BE INSTALLED!
FAILURE TO INSTALL
VOIDS WARRANTY**

1/4-20 x 1/4"

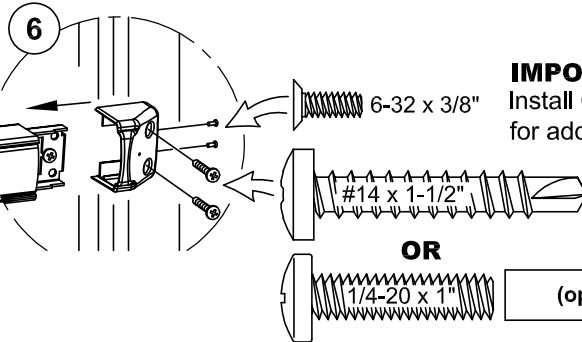
Level device



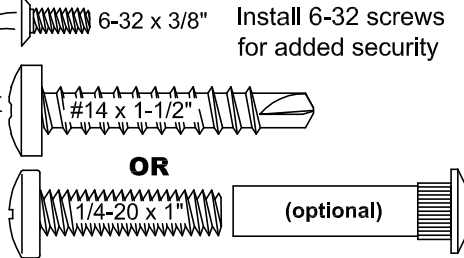
4 Slide fillerplate & endcap bracket into extrusion & level pushpad assembly.
Note: Endcap Bracket must bottom-out on extrusion.
DO NOT REMOVE NYLON SPACER ON BACK OF BRACKET!

5 With pushpad assembly level, secure the endcap bracket to door by tightening the factory installed self-drilling screw.

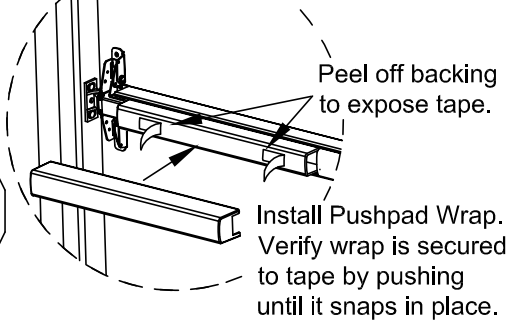
6 Slide and mount endcap to endcap bracket. **DO NOT OVERTIGHTEN SCREWS**



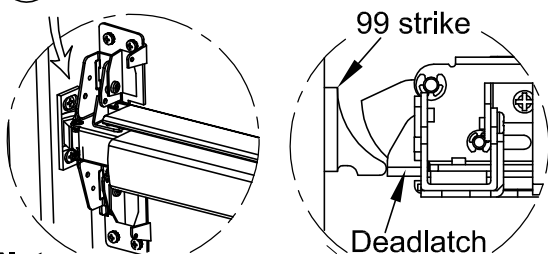
IMPORTANT: Install 6-32 screws for added security



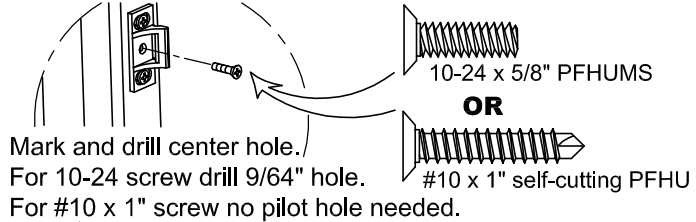
7 If Pushpad Wrap is not already installed, follow step 7.



8 Align the 99 strike with the latchbolt. Firmly tighten screws (shim if needed)



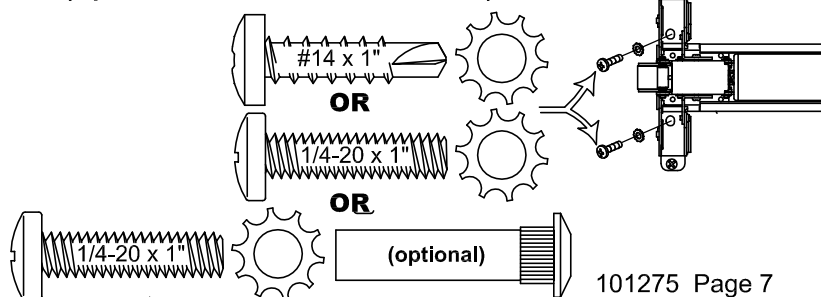
9 Secure the 99 strike (Required on hurricane models)



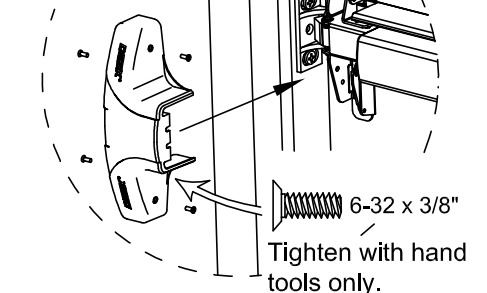
Note:

Check device function and strike engagement BEFORE going to step 9

10 **REQUIRED SUPPORT SCREWS FOR HURRICANE MODELS** (Optional on non-hurricane models)

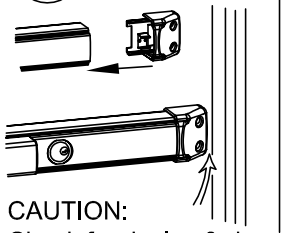


11 Install cover



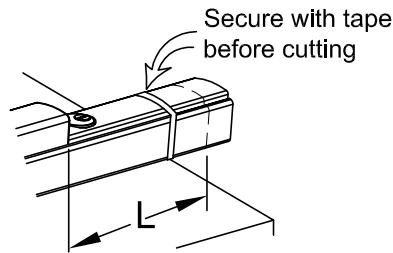
CHECKING FOR DEVICE CLEARANCE (Cut-Off procedure if required)

1 Slide endcap assembly onto extrusion



CAUTION:
Check for device & door frame clearance. If no cut-off needed, proceed to MORTISE CYLINDER INSTALLATION

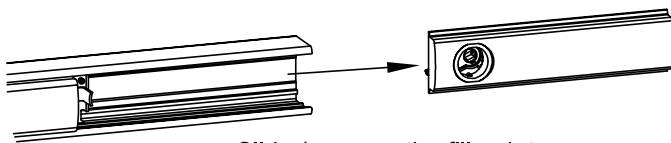
2 Cut fillerplate and extrusion STRAIGHT & SQUARE to desired length and deburr



Non-Electrified Minimum Fillerplate Length	
Type	Length (L)
LD	2-1/2"
HD/CD	3"

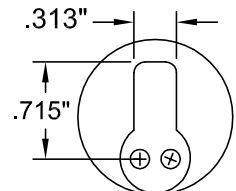
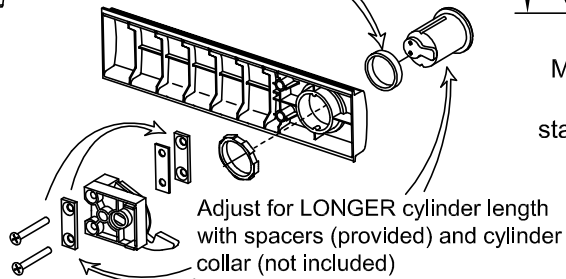
For further Cut-Down information, see:
www.detex.com/cutdown

MORTISE CYLINDER INSTALLATION (if required)



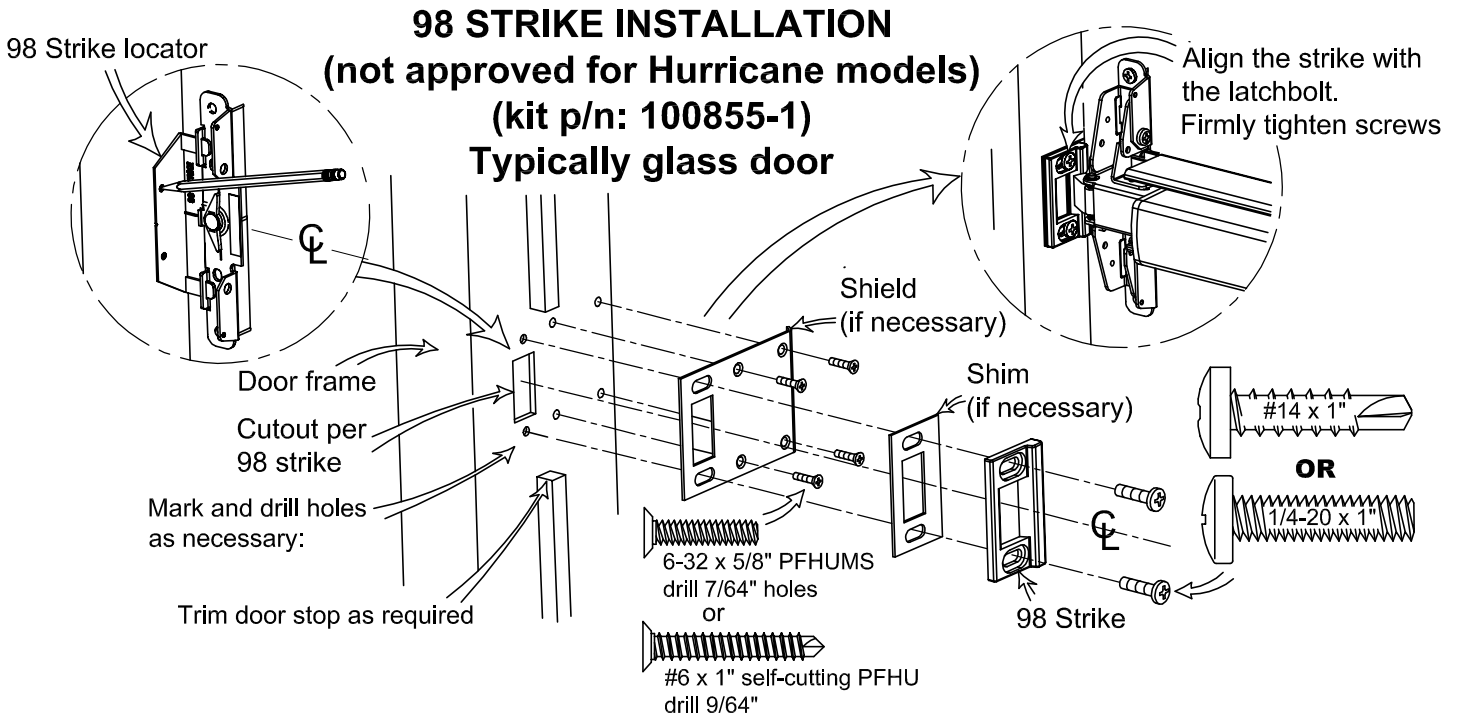
Slide / remove the fillerplate subassembly

1/4" collar (not supplied) required for 7 pin cylinder. (Detex p/n: ECL-1595)



Mortise Cylinder with standard Yale cam required

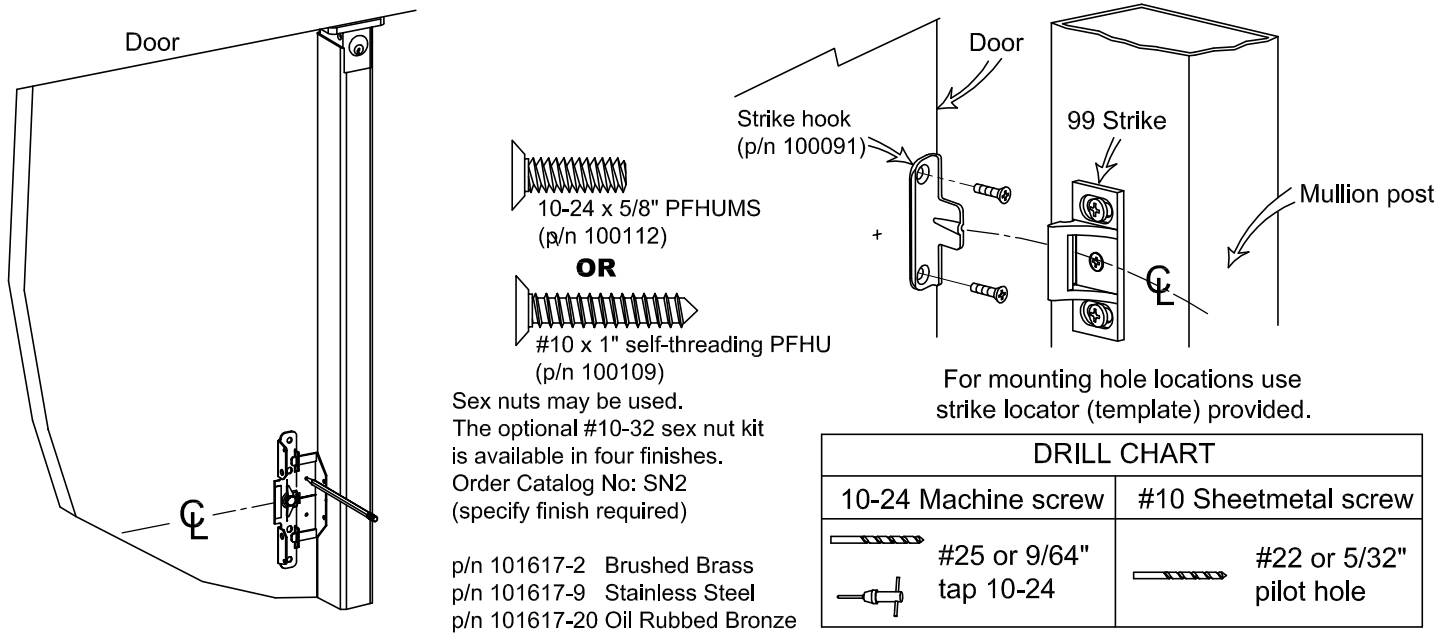
- (1) All cylinder spacers must be used.
- (2) Turn key max CCW before installing slide in fillerplate.
- (3) Reinstall fillerplate subassembly



STRIKE HOOK INSTALLATION

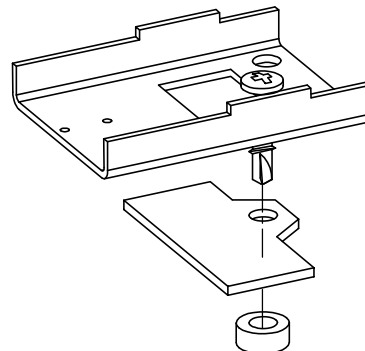
Strike Hook Kit p/n 101795

(Caution: This installation is required on fire rated door openings with removable mullion.)

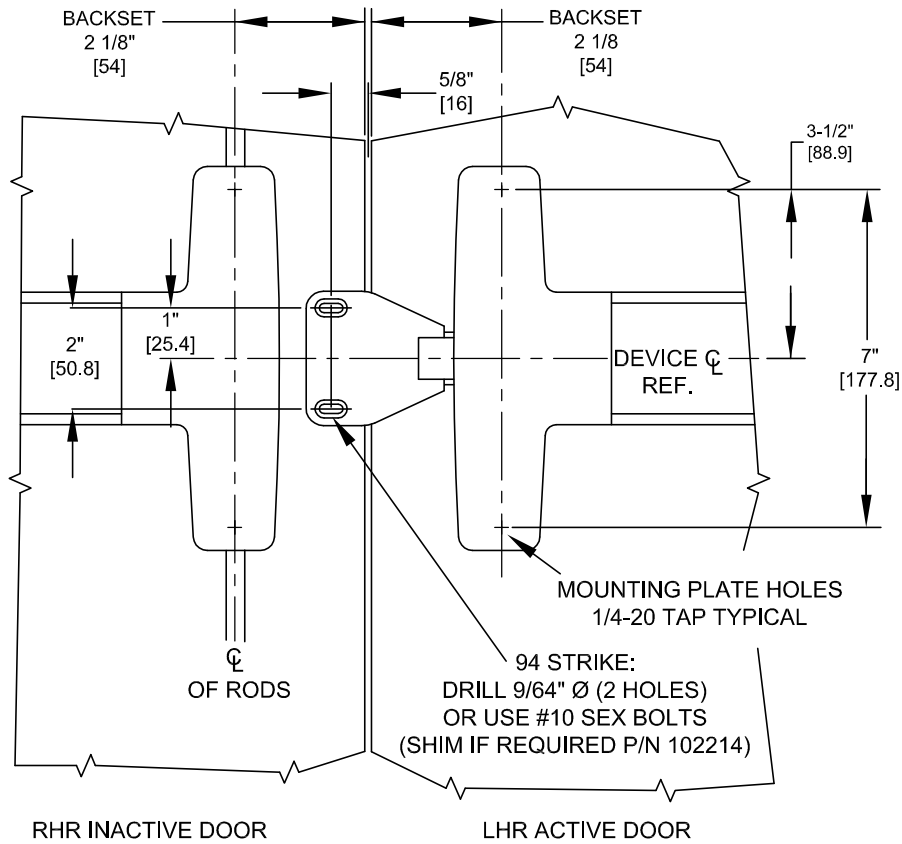


Narrow Stile Endcap Mounting Plate Fascia (p/n 101864) (For use on Glass Doors)

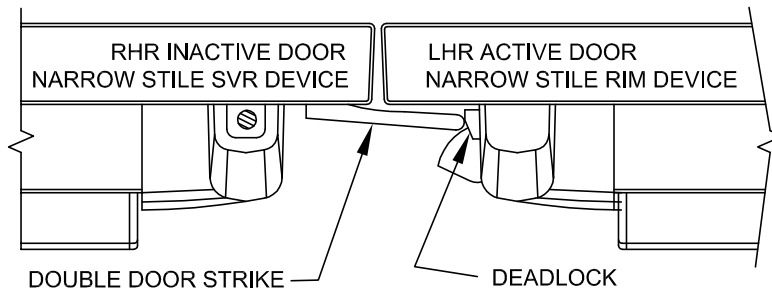
- a. Remove the endcap mounting bracket.
- b. Remove nylon spacer.
- c. Slide fascia onto screw.
- d. Reinstall nylon spacer.
- e. Reinstall endcap mounting bracket.



94 DOUBLE DOOR STRIKE INSTALLATION
(not approved for Hurricane models)
(if required)



NOTE: FOR DEVICE FUNCTION AND OTHER DIMENSIONS, SEE APPROPRIATE DEVICE AND/OR TRIM INSTRUCTIONS

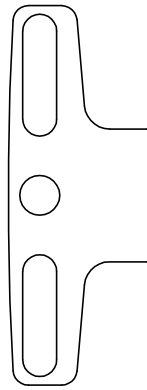


THE DEVICE USED ON THE ACTIVE DOOR SHOULD BE INSTALLED SO THAT THE STRIKE WILL DEPRESS THE DEADLOCK SUFFICIENTLY TO ALLOW FOR ANY AND ALL ALARM / ELECTRONIC FUNCTIONS. ADD SHIM (P/N 102214) AS REQUIRED. TWO PROVIDED IN KIT. THE INACTIVE DOOR SHOULD CLOSE FIRST.

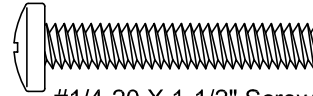
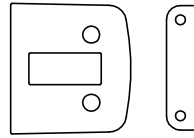
Optional Accessories

Glass Bead Kit

Catalog No: GB2 - Glass Bead Kit, 40 series
p/n: 101644

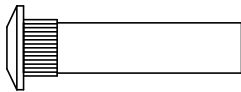


40 Series (Narrow)



#1/4-20 X 1-1/2" Screw
(4) Included

Sex Nut



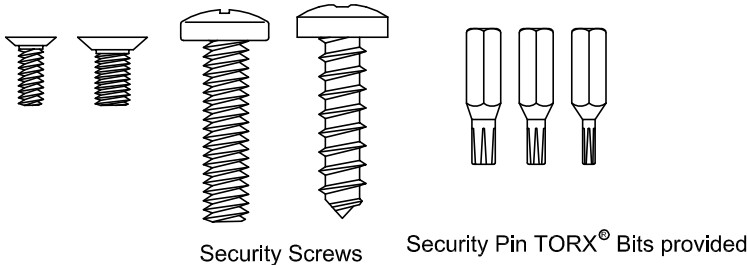
The #1/4-20 kit is available in (4) finishes:

- Catalog No: SN1 Brushed Brass BHMA 606 Finish
- Catalog No: SN1 Oil Rubbed Bronze BHMA 613 Finish
- Catalog No: SN1 Brushed Chrome BHMA 626 Finish
- Catalog No: SN1 Stainless Steel BHMA 630 Finish

p/n: 101616-X

Tamper Kit

(Security Kit)
Catalog No: SSK3
p/n: 101233



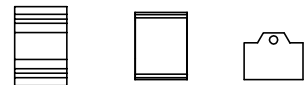
Security Screws

Security Pin TORX® Bits provided

Narrow Stile Door Kit

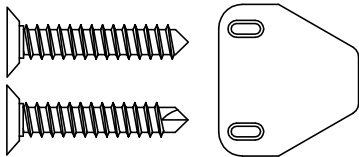
(Splice Kit may be used with either 3-0 or 4-0 units)

Catalog No: NSK1
p/n: 101879-1 (628 Finish, Clear)
p/n: 101189-2 (711 Finish, Black)
(includes 98 Strike)



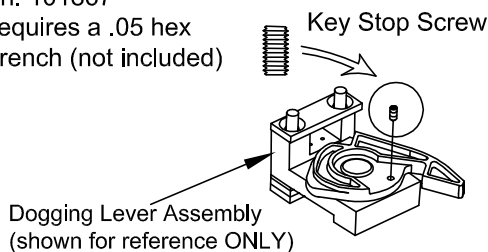
Double Door Strike Kit

Catalog No: 94 (with Security screws)
p/n: 102212-1



Key Stop Kit

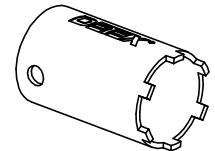
Catalog No: KS
p/n: 101867
Requires a .05 hex wrench (not included)



Dogging Lever Assembly
(shown for reference ONLY)

Cylinder nut socket kit

p/n: 103779



The following Models in the series were evaluated by UL: Controlled Exit Panic Devices; Model 10 and 40. These devices may be suffixed with 01, 02, 03, 08, 09, or 14 followed by C, CN, D, DN, DT, DNT, DU, DNU, P, PN, W or WS, followed by BP1, BP2, BP3, BP5, BP6, BP7 or BP8 followed by 605, 606, 611, 612, 613, 625, 626, 628, 629, 630, 693, 695 or 711 followed by the RHR or LHR, followed by EA, which may be followed by LD or CD, followed by 605, 606, 611, 612, 613, 625, 626, 628, 629, 630, 693, 695 or 711 followed by 98 or 99, followed by 36 or 48.



Detex Corporation, 302 Detex Drive, New Braunfels, Texas 78130-3045
830-629-2900 / 800-729-3839 / Fax 800-653-3839 / Text photos only: 830-481-6433 / INTERNET: www.detex.com

ELECTRICAL INSTRUCTIONS FOR VALUE SERIES EB, EA, EX & EBxW MODELS

Dwg #: 101800 RIM
102400 RIM "W"
103550 SVR

- EB - Exit Alarm (Battery only)**
- EA - Exit Alarm**
- EX - Request to exit**
- EXV - Request to exit (3 amp)**
- EXxW - Request to exit, weatherized**
- EXVxW - Request to exit (5 amp), weatherized**
- EBxW - Electrified with battery, weatherized**

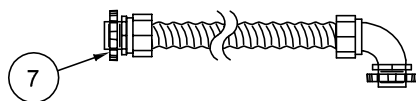
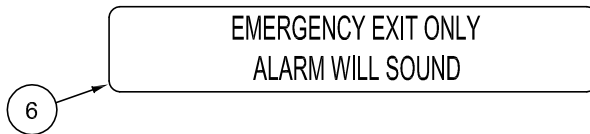
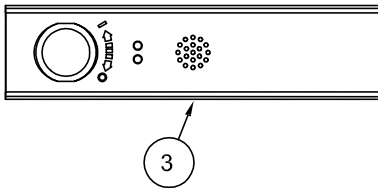
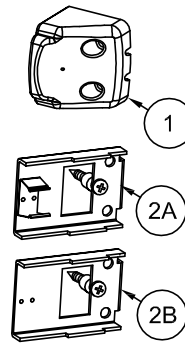
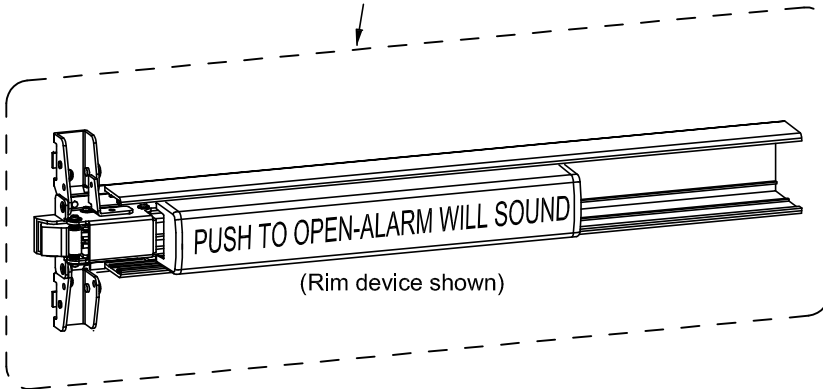
U.S. PATENT NUMBERS:
6009732
6205825B1
6532777B2
INTERNATIONAL PATENT NUMBER:
PCT6009732

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EB/EA Switch Options, EB/EA & EBxW wiring details.....	5
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EA Troubleshooting / Optional Accessories.....	7

For device installation videos,
scan code below or
go to detex.com



See instruction 101275



PARTS BREAKDOWN		
Item	Order Part #	Description
1	101822	Endcap
2A	101844	Endcap bracket with battery holder
2B	101844-1	Endcap bracket without battery holder
3	104358-4	Fillerplate Subassembly, EB, 3 ft
	104358-8	Fillerplate Subassembly, EB, 4 ft
	104358-1	Fillerplate Subassembly, EA, 3 ft
	104358-5	Fillerplate Subassembly, EA, 4 ft
	104358-3	Fillerplate Subassembly, EBxW, 3 ft
	104358-7	Fillerplate Subassembly, EBxW, 4 ft
	104287-2	Fillerplate Subassembly, EXxW, 3 ft LD
	104287-4	Fillerplate Subassembly, EXxW, 4 ft LD
4	100783	Cylinder Hex Nut
5	PP-5567	9V Battery
6	EA-561	Door Sign
7	FC3	Armored Cable, 3ft
	FC10	Armored Cable, 10ft
	FC3W	Weatherized Armored Cable, 3ft
	FC10W	Weatherized Armored Cable, 10ft

Your particular part or configuration may not be shown:
Contact Detex technical support at 800-729-3839 (option 2)

EB / EA / EBxW ALARM OPERATIONS

Note: Unit is shipped with Auto Rearm turned OFF and Status Indicator turned OFF

Refer to tables 1, 2 & 3 on page 5

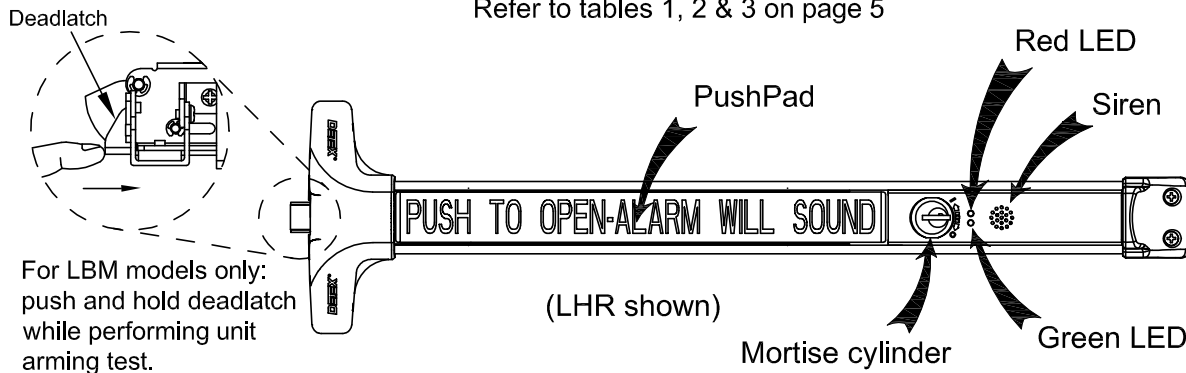


Figure 1 Device features.

SPECIAL NOTES and DEFINITIONS

1. When operating the ON/OFF switch, there is a slight delay.
2. The key is inserted and removed only in the horizontal position (home position).
3. Key function: counter clockwise (CCW) = Armed; clockwise (CW) = Disarmed

UNIT ARMING TEST:

1. Turn key counterclockwise (CCW) (key is removable after rotating back to horizontal position).
2. Red LED will flash twice, then green LED will flash continuously for the 15 second delay time, then turn off.
The siren will sound three short beeps indicating the unit is armed.
3. Depress Pushpad (Siren will sound and red LED will illuminate).
4. Turn key clockwise (CW). Turns alarm off.

LOW BATTERY ALERT:

1. Siren will beep and red LED will blink at approximately 45 second intervals when battery is low.

DOGGING FEATURE: (non-fire rated units only)

1. Depress Pushpad.
2. While holding Pushpad depressed, turn key clockwise (CW). Pushpad should remain depressed & latch retracted.
(Key is removable after rotating back to horizontal position)
3. Unit is now disarmed.

SILENT ARMING: (wires not included on EB model)

Disarm the device by turning the key CW. Remove all power from device. Short the two violet remote bypass wires together (see Fig 3 & Table 4). Depress pushpad switch. Add power (battery or AC). Red and green leds blink and siren chirps twice. After approximately 5 seconds remove the short from the violet wires and release pushpad switch. Finish making any required connections per the instructions. Repeating these steps will enable audible arming again.

Care and Maintenance: The Value Series® devices are designed to provide many years of maintenance free service under normal usage. Periodically inspect and lubricate the unit to extend its life.

EB / EA / EBxW SWITCH OPTIONS

Switch selections can be made at any time (See Figure 2)

Table 1	
Status Indicator	Status Description
Off (default)	The Device gives no indication of armed or disarmed status. (Gives the longest battery life)
On	The Device flashes red or green LED every 3 seconds. Red indicates armed status and green indicates disarmed.

Table 2	
Auto rearm	Auto Rearming Feature Setting
Off (default)	Alarm sounds until turned off with key. Extended bypass is enabled.
On	Unit sounds alarm for 2 minutes after bar is released. Alarm will automatically rearm after 2 minutes.

Table 3 (Switch available on EA)	
Note: AC power must be applied for switch to operate	
Disable Low Battery	Status Description
Off (default)	The device flashes one red LED and one beep about every 45 seconds when the battery needs to be changed.
On	The device gives no indication of battery being low.

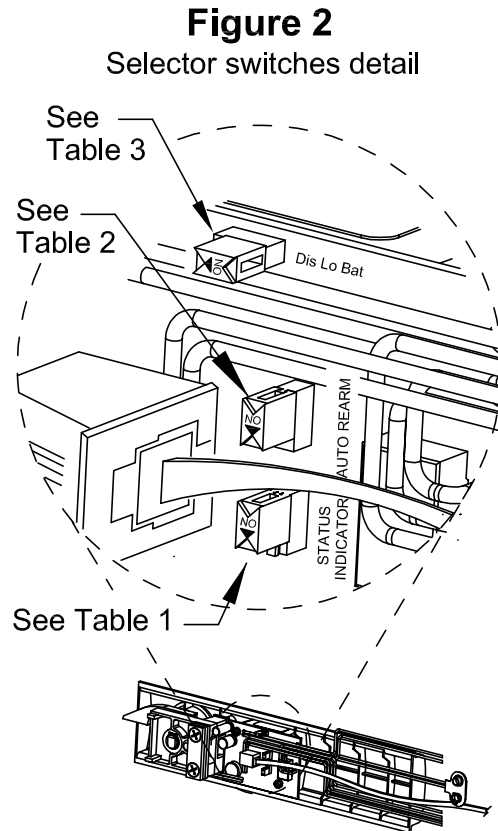
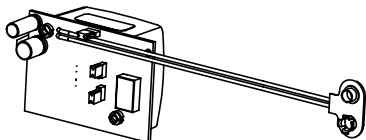


Figure 3
WIRING DETAIL

EB shown below



EA shown below

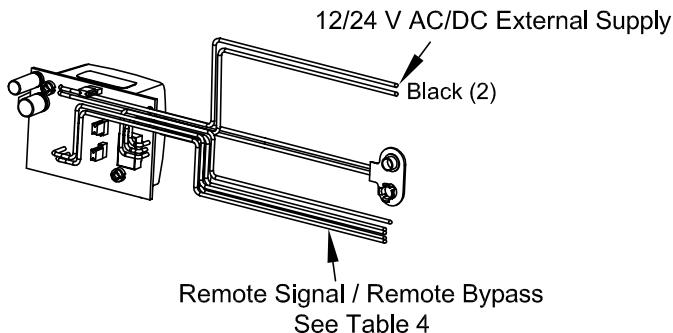
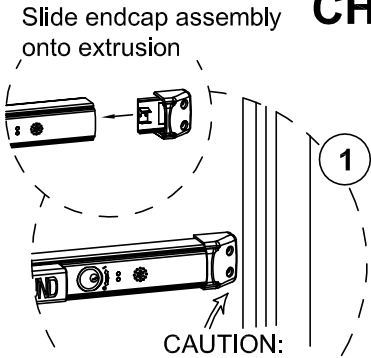


Table 4 (EA & EBxW wire usage)			
Remote Signal		Remote Bypass	
Brown	Common	Violet	N.O. contact
Yellow	Normally Open	Violet	N.O. contact
Green	Normally Closed	---	---
Contacts rated at 1.0A @ 30VDC or 0.5A @ 125VAC			

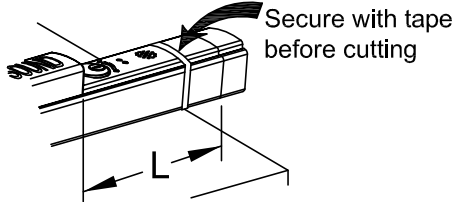
Note: **EBxW** same as above, but **DOES NOT** have black wires for 12/24 V AC/DC connection

CHECKING FOR DEVICE CLEARANCE

(Cut-Off procedure if required)



2 Cut fillerplate and extrusion STRAIGHT & SQUARE to desired length and deburr

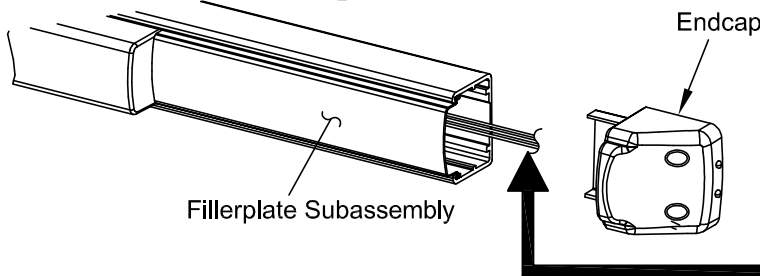


CAUTION:
Check for device and door frame clearance.
If no cut-off needed, proceed to the next section.

Minimum Fillerplate Length	
Type	Length (L)
EX x LD	3"
EX x (HD/CD)	3"
EA / EB / EBxW	7"

For further Cut-Down information, see:
www.detex.com/cutdown

"EX" Wiring Instruction



EX EXxW (0.1A)	
Wire Color	Connection
Brown	Common
Gray	Closed
Yellow	Open

EXV (3A) EXVxW (5A)	
Wire Color	Connection
Brown/Red	Common
Gray/Red	Closed
Yellow/Red	Open

POWER TRANSFER METHODS

Note: For high traffic areas an electric through-wire hinge or power transfer is recommended.

Electric Hinge Endcap Prep (By Others)

Electric Hinge p/n: EWH8-X (not weatherized)

Wire chase through door

1/2" hole through the inside door face

Power Transfer Endcap Prep (By Others)

Power Transfer p/n: PT-5 (not weatherized)

1/2" hole through the inside door face

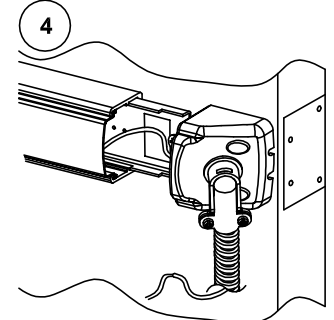
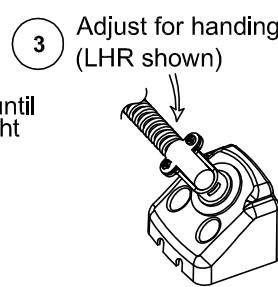
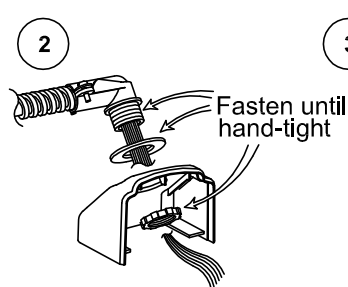
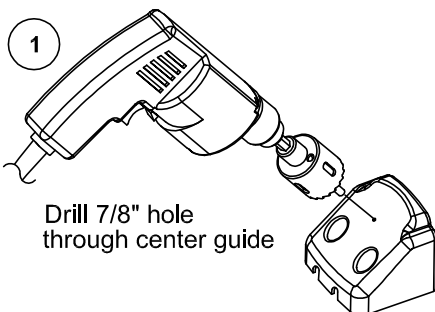
Wire chase through door

Value Series Flex Conduit

p/n: FC3 (3 ft)
FC10 (10 ft)
FC3W (3 ft weatherized)
FC10W (10 ft weatherized)

(non-weatherized shown)

(see below for prep)



Troubleshooting Tips for Default Setting

Problem	Probable Cause	Action
When unit is armed, red LED flashes twice, green LED is on for 15 seconds, but the unit does not give three beeps after the green LED goes off.	The actuator is sticking to the micro switch.	Lubricate the plastic parts
No LED activity when key is turned ccw to armed position.	Dead or weak battery. Battery not secured to connector correctly. Battery connector or wires damaged. No AC power.	Install new battery, LED's should flash and the siren beep once. Secure battery correctly. Replace battery connector Verify power from transformer and check for correct voltage at black wires.
AC powered unit gives a low battery indication.	Battery not installed. OR Low battery	Install battery. If battery is not desired, disconnect power and slide the 'Dis Lo Bat IND' switch to 'ON' position.
LED's do not flash to indicate armed or disarmed status.	Status indicator switch in off position.	Slide 'Status indicator' switch to 'ON' position.

Technical Support 800-729-3839

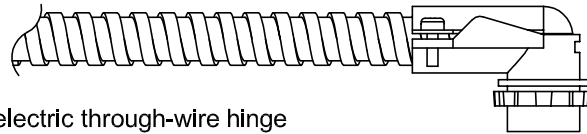
Optional Accessories

Armored Cable (Flex Conduit) Kit

P/N: FC3 (3 ft)

P/N: FC10 (10 ft)

Electrical Wires Not Supplied



Note: For high traffic areas an electric through-wire hinge or power transfer is recommended.

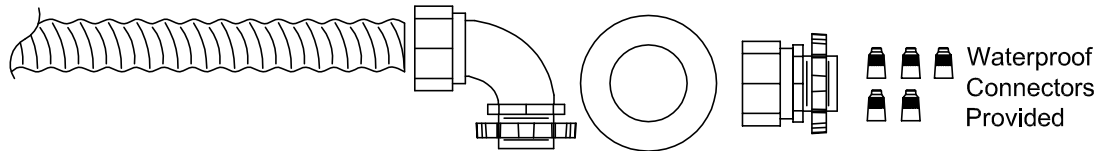
Weatherized

Armored Cable (Flex Conduit) Kit

P/N: FC3W (3 ft)

P/N: FC10W (10 ft)

Electrical Wires Not Supplied



Key Stop Kit

(Momentary Shunt)

Catalog No: KS

P/N: 101867

