Detex Corporation, 302 Detex Drive, New Braunfels, Texas 78130-3045
(830)629-2900 / 1-800-729-3839 / Fax (830)620-6711
E-MAIL: detex@detex.com INTERNET: www.detex.com

INSTALLATION INSTRUCTIONS FOR ARCHITECTURAL VALUE SERIES®
ELECTRIC DOGGING / ELECTRIC LATCH RETRACTION AND "H" MODELS (HURRICANE)

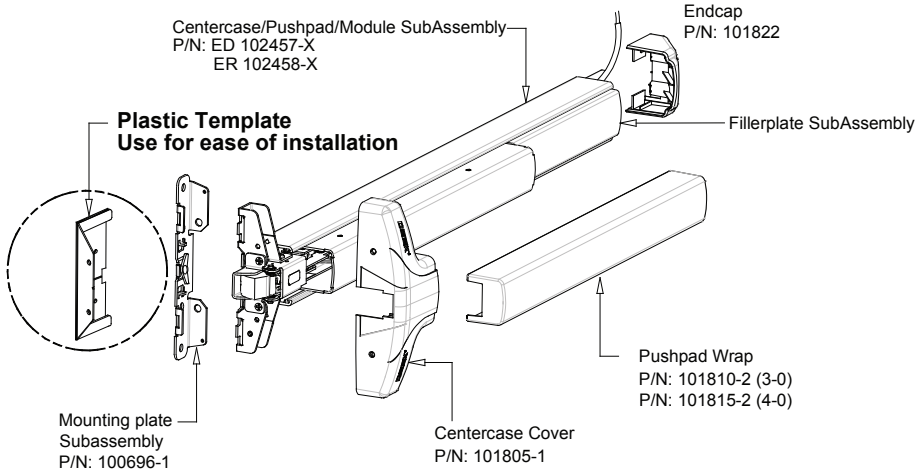
V40

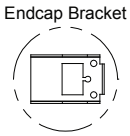
VALUE SERIES® RIM

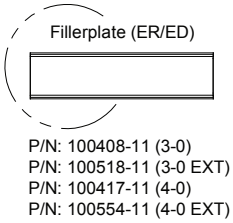
ED Electric Dogging
ER ELECTRIC LATCH RETRACTION

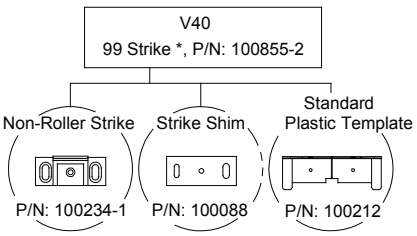
U.S. PATENT NUMBERS:
6009732
6205825B1
6532777B2
INTERNATIONAL PATENT NUMBER:
PCT6009732

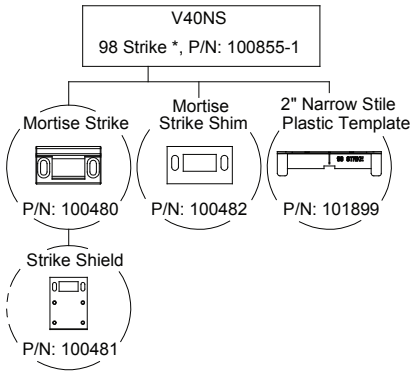
Parts Check List









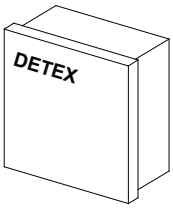


*** Note:**
Parts listed above will vary according to product configuration.

***Narrow Stile "NS" option**

Mortise cylinder not included with device.
Standard Yale type cam required.

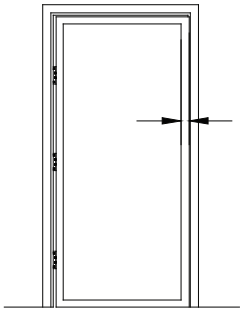
Power Supply
See Accessories on Page 13



See Optional Accessories For:
- **Glass Bead Kit**
- **Sex Nuts**
- **Tamper Kit**
- **Double Door Strike Kit**
- **Key Stop Kit**
- **Narrow Stile Kit**

Owner's Copy

!!!CHECK BEFORE STARTING!!!

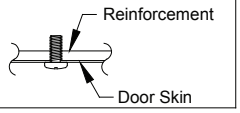


Wide Stile (Surface Strike)
Minimum door stile 4-1/2" (114 mm) Template drawings provide door and frame structural and dimensional specifications for door and frame preparation.
Narrow Stile
Minimum door stile 2" (51mm) Surface strike possible Mortise strike recommended

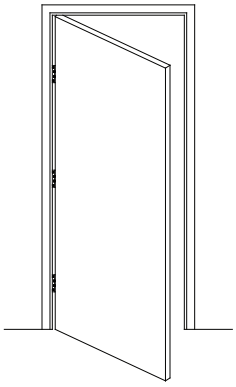
Doors and frames with walls having a structural thickness (metal skin plus reinforcement, or solid wood) to engage less than (3) full screw threads, are considered unreinforced for hardware.

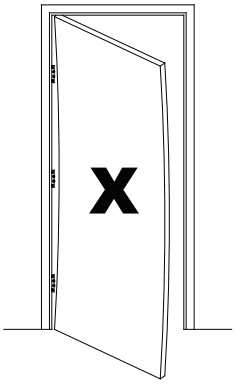
Unreinforced Doors: Use Sex Nuts and Bolts
Unreinforced Frames: Use Blind Rivet Nuts (see sketch)
Fasteners for unreinforced openings are not supplied by Detex.

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

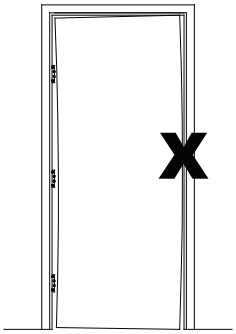



Blind Rivet Nut

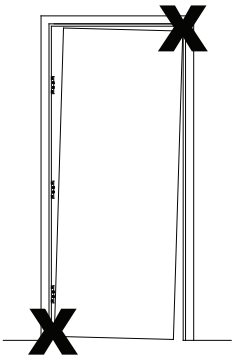

Door Must Swing Freely



Door Must Not be Warped

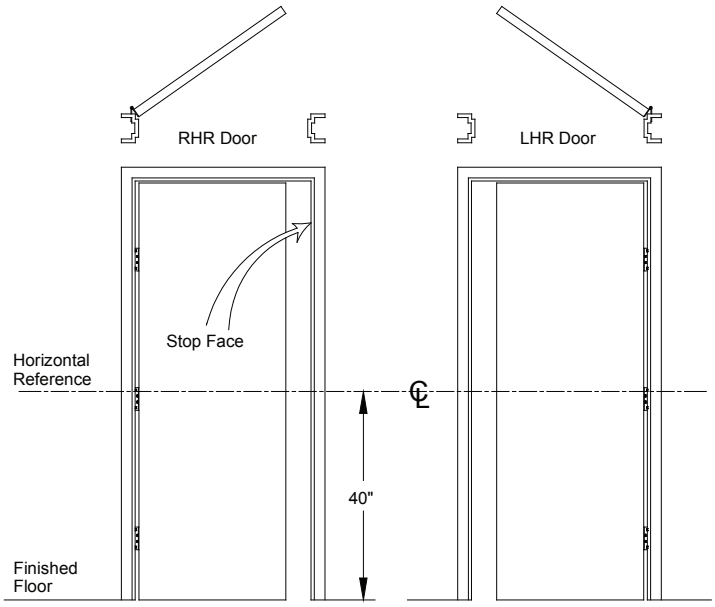


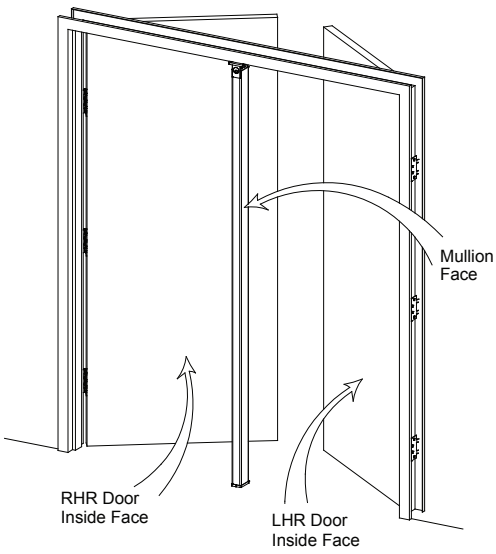
Door Must Not Bind



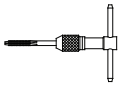
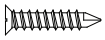
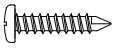
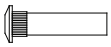
Door Must Not Sag

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.



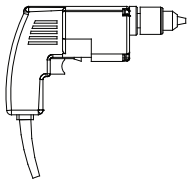
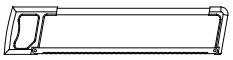
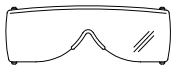
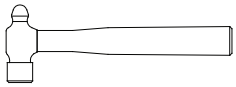
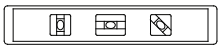
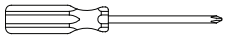


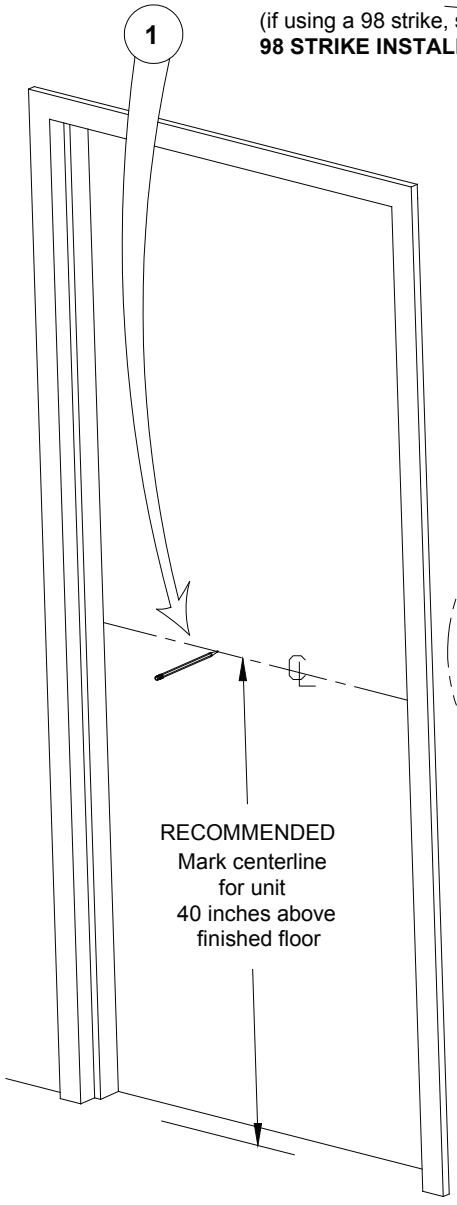
Fastener Table

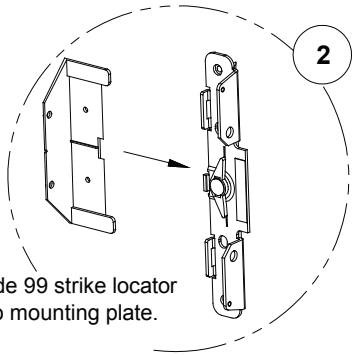
DETEX®			Drill Bit	Tap Wrench	Comments
					Use Either Machine Screws, Sheetmetal Screws, or Sex Nuts
Machine Screws 	#6-32 x 5/8"	PPH	#36 or 7/64	#6-32 Tap	Used on 98 Strike Shield Mounting Holes
	#6-32 x 3/8"	PPH	-----	-----	Used to Mount Centercase Cover and Endcap
	#10-24 x 5/8"	PPH	#25 or 9/64"	#10-24 Tap	Used on 99 Strike Center Mounting Hole
	#1/4-20 x 1/4"	PPH	-----	-----	Used to Fasten Centercase Unit onto Mounting plate
	#1/4-20 x 1"	PPH	#7 or 13/64"	#1/4-20 Tap	Used on Strike, Mounting plate, and Endcap Mounting Holes
Sheetmetal Screws 	#6 x 1"	PFH	9/64"	-----	Used on 98 Strike Shield Mounting Holes
Self-drilling Screws 	#10 x 1"	PFH	No pilot hole necessary for self-drilling screws	-----	Used on 99 Strike Center Mounting Hole
	#14 x 1"	PPH		-----	Used on Strike
	#14 x 1-1/2"				Metal Applications Used on Mounting plate and Endcap Mounting Holes
Sex Nut 	#1/4-20	----	9/32" Interior Door Face	-----	Recommended on Fire Rated Wood and Unreinforced Hollow Metal Doors Used on Mounting plate and Endcap Mounting Holes
		----	3/8" Exterior Door Face	-----	
	#10-32	----	13/64" Interior Door Face	-----	Recommended on Fire Rated Wood and Unreinforced Hollow Metal Doors Used on Strike Hook Mounting Holes
		----	5/16" Exterior Door Face	-----	

Note: (1) Fastener selection will vary per catalog configuration and kits ordered.
(2) Mortise cylinder NOT provided.
(3) For wood applications use Wood Door Kit, p/n 103991(supplied separately).

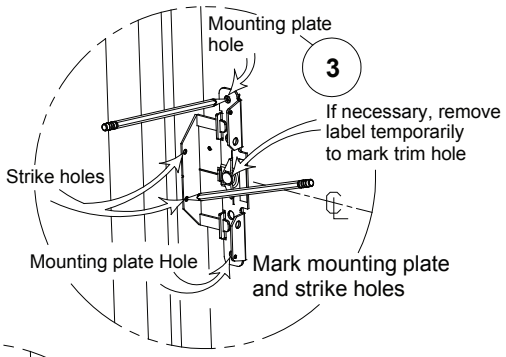
Tools Required

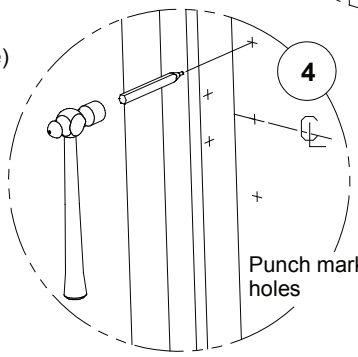
Power Drill 	Pencil
	Hack Saw 
Safety Glasses 	Hammer 
Level 	Tape Measure 
Screw Driver 	Center Punch

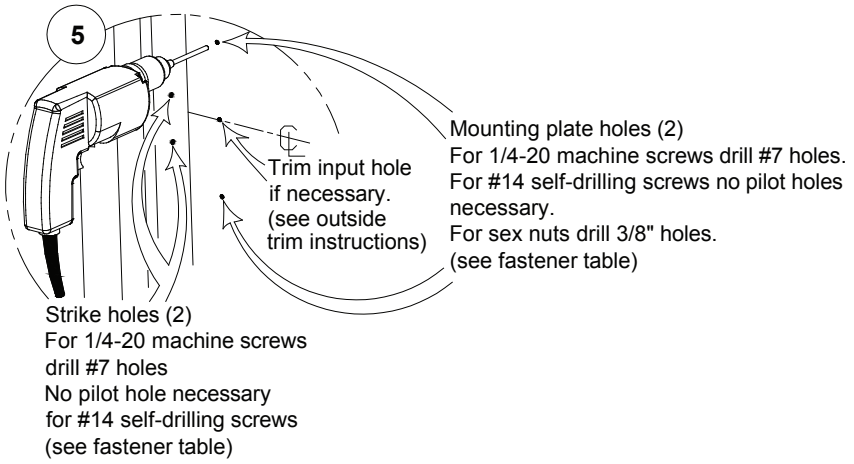


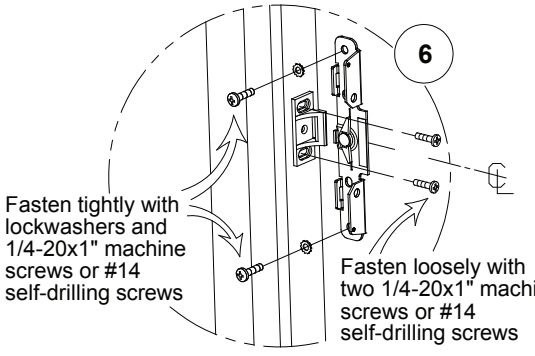


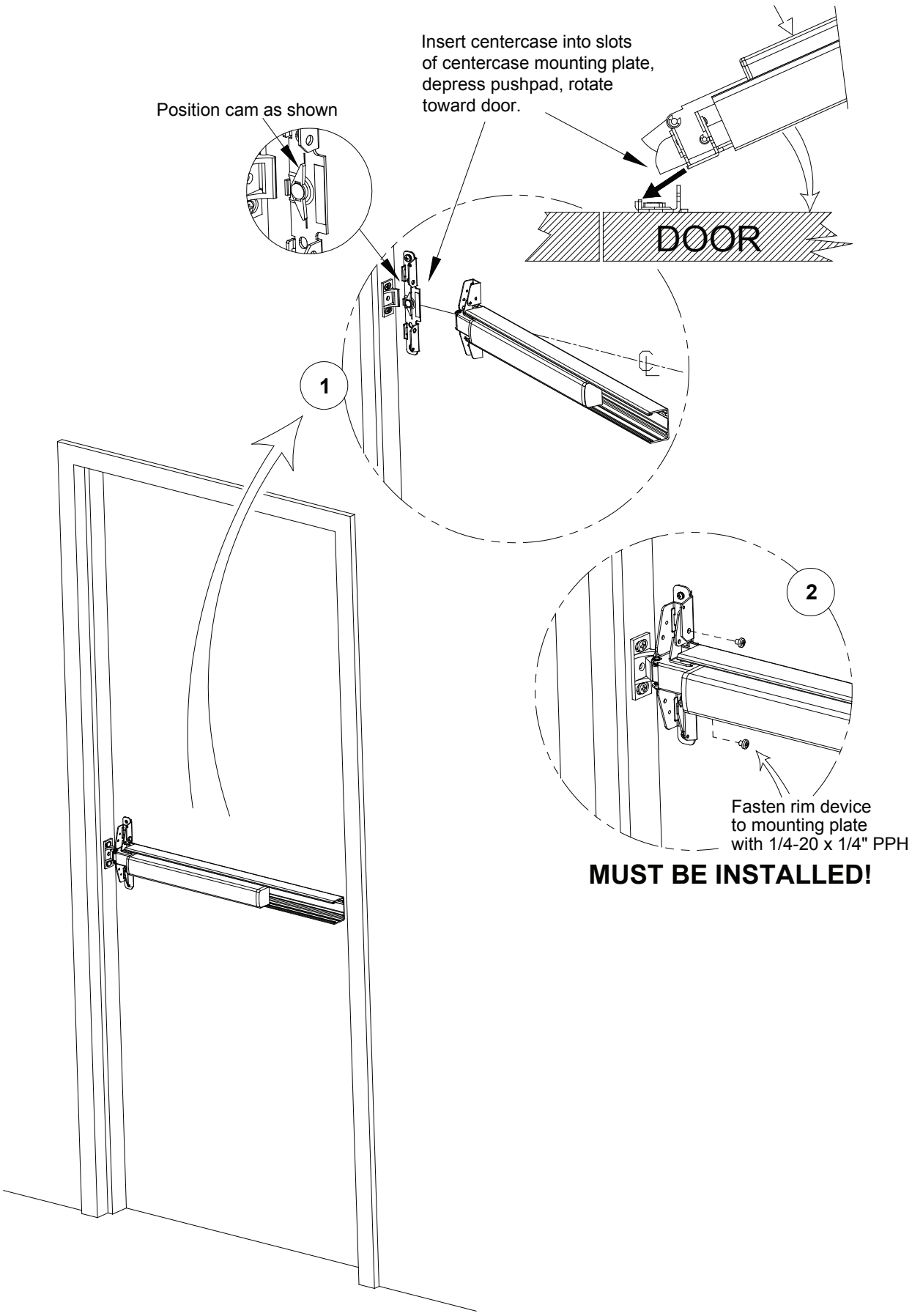
(if using a 98 strike, see **98 STRIKE INSTALLATION** page)

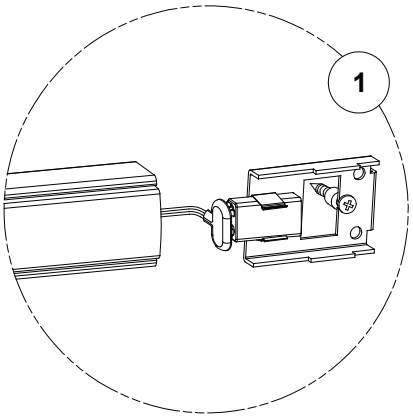


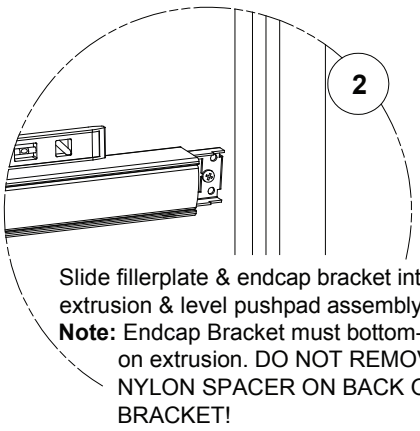




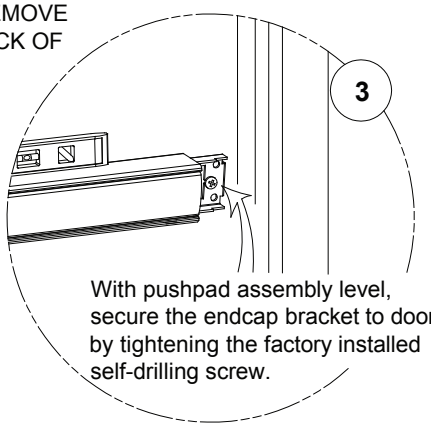



Position cam as shown
Insert centercase into slots
of centercase mounting plate,
depress pushpad, rotate
toward door.
DOOR
1
2
Fasten rim device
to mounting plate
with 1/4-20 x 1/4" PPH
MUST BE INSTALLED!

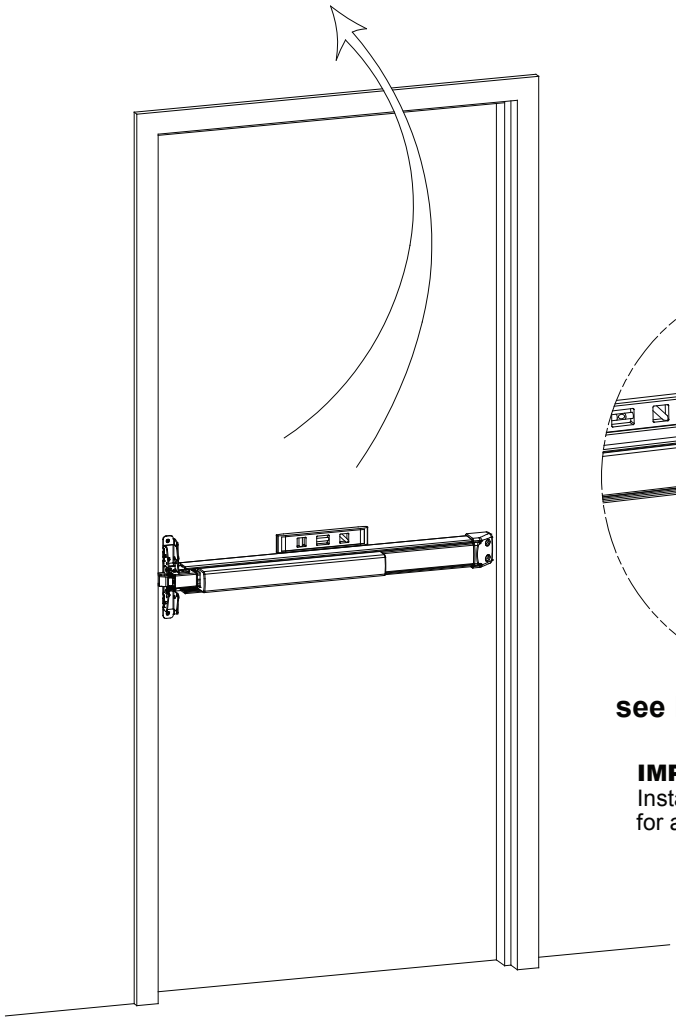


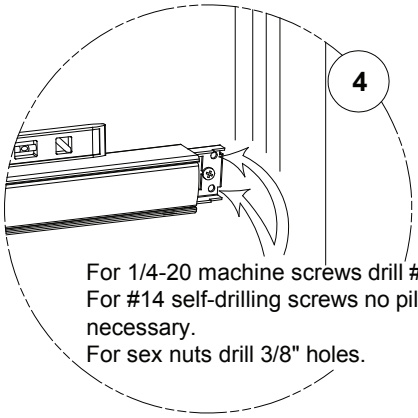


Slide fillerplate & endcap bracket into extrusion & level pushpad assembly.
Note: Endcap Bracket must bottom-out on extrusion. DO NOT REMOVE NYLON SPACER ON BACK OF BRACKET!



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

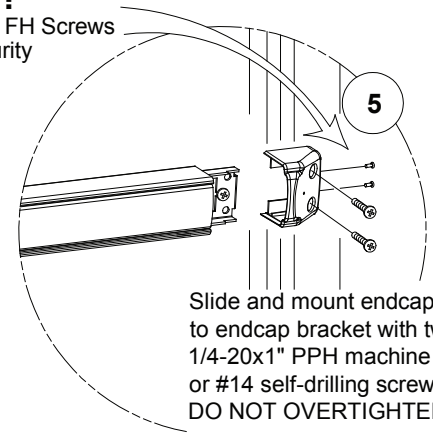




For 1/4-20 machine screws drill #7 holes.
For #14 self-drilling screws no pilot holes necessary.
For sex nuts drill 3/8" holes.

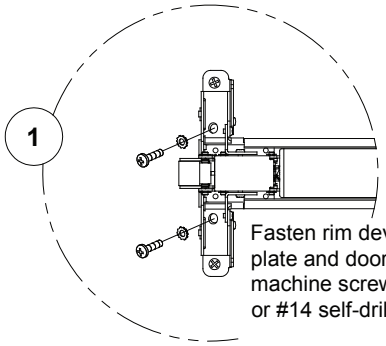
see HARDWIRE TRANSFER OPTIONS page

IMPORTANT:
Install (2) 6-32 FH Screws for added security

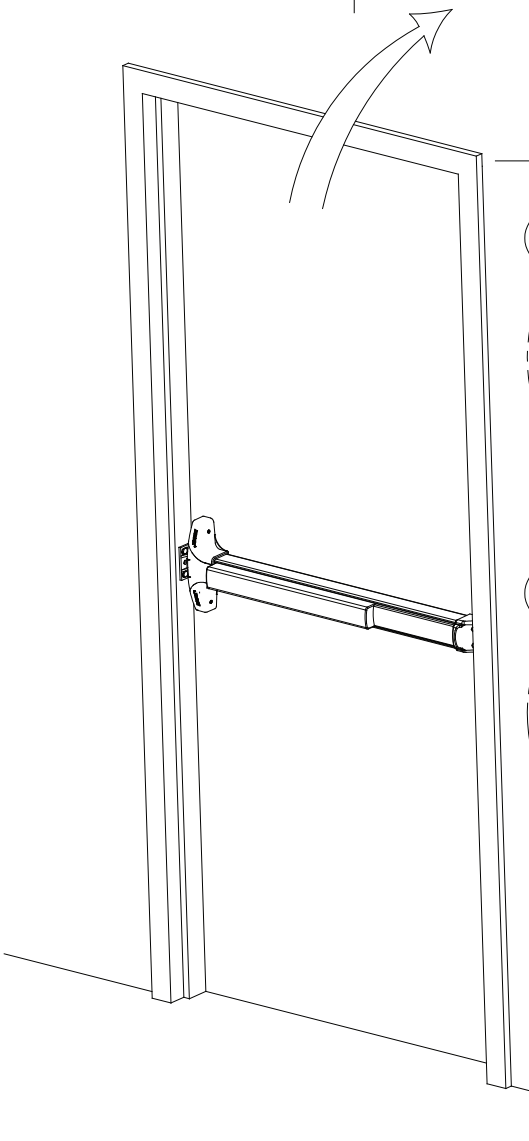


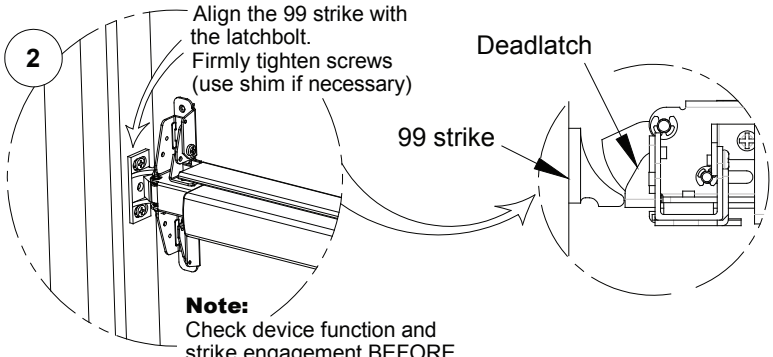
Slide and mount endcap to endcap bracket with two 1/4-20x1" PPH machine screws or #14 self-drilling screws.
DO NOT OVERTIGHTEN

For Hurricane Models
(see Hurricane kit)



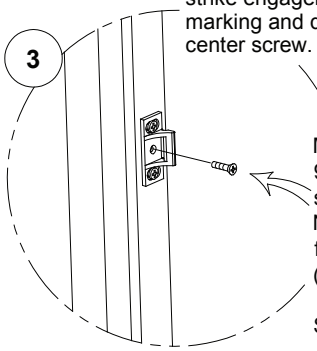
Fasten rim device to mounting plate and door with 1/4-20x1" machine screws(drill #7 holes) or #14 self-drilling screws





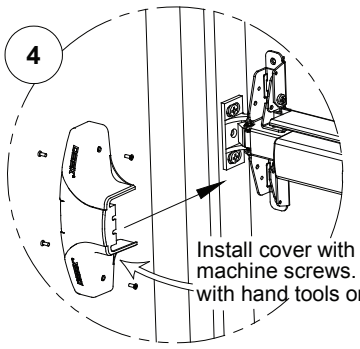
Align the 99 strike with the latchbolt.
Firmly tighten screws (use shim if necessary)

Note:
Check device function and strike engagement BEFORE marking and drilling for center screw.



Mark and drill center hole.
9/64" for 10-24 machine screws.
No pilot hole necessary for #10 self-drilling screws.
(see fastener table)

Secure the 99 strike.

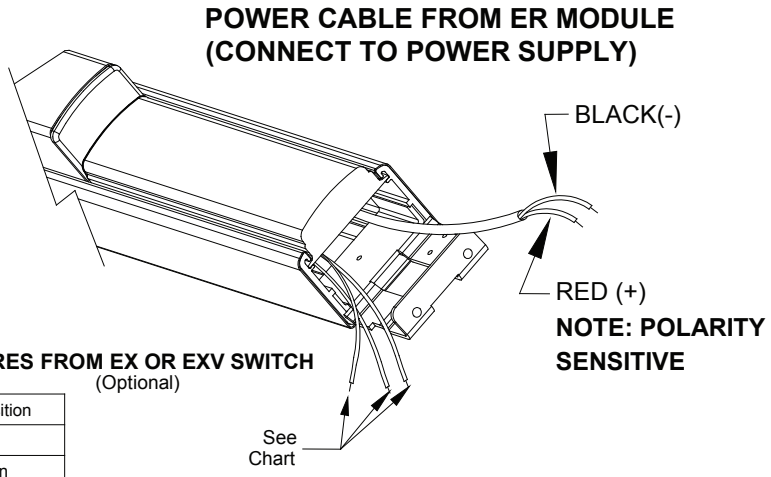


Install cover with 6-32 machine screws. Tighten with hand tools only.

Care and Maintenance:
The Detex 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.

ER CONFIGURATION

DETEX ER UNITS REQUIRE A DETEX POWER SUPPLY/CONTROLLER; DETEX P/N 81-800-X, 82-800-X, OR 83-800-X SEE POWER SUPPLY INSTALLATION INSTRUCTIONS(PACKAGED WITH POWER SUPPLY) FOR COMPLETE INSTALLATION PROCEDURE.



Amperage	Wire Color	Switch Position
50mA max.	Grey	Closed
	Brown	Common
	Yellow	Open
3A max.	Grey/Red	Closed
	Brown/Red	Common
	Yellow/Red	Open

CONNECTIONS FOR THE ER MODEL

The red and black wires should be connected to the power supply control board (81-800, 82-800, or 83-800, depending on the door configuration). See power supply instructions 101339 or 101340 as appropriate for typical connections.

RETRACTING THE LATCH

The ER device must be connected to a Detex power supply/controller, 81-800, 82-800 or 83-800. With all the connections made according to the power supply instructions, closing the contact will retract the latch. The pushpad will be pulled down as the latch and deadbolt are retracted. The latch is held by an internal dogging assembly until the contact is released/opened.

HOLDING THE LATCH RETRACTED

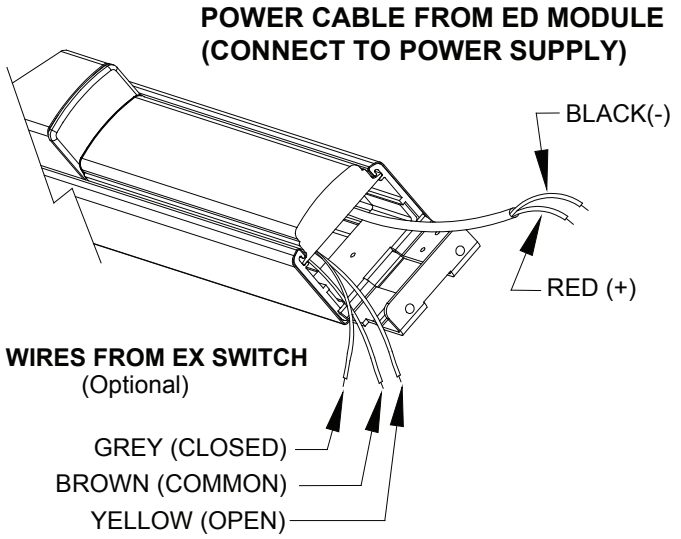
ER model holds the latch retracted as long as the control switch is maintained(closed).

RELEASING THE LATCH

ER is an electronically dogged latch. Opening the control switch (or contacts) causes the latching mechanism to release. If an 8X-800 series Detex power supply is used, there is a slight delay from the opening of the switch contacts to the release of the latch. This delay is intended for external signaling and is described in the power supply instructions.

ED CONFIGURATION

DETEX ED UNITS MAY BE OPERATED FROM A 24 V AC OR DC SOURCE OR WITH A DETEX POWER SUPPLY
(NOTE: FIRE RATED DEVICES MUST USE 80-800-X POWER SUPPLY)



CONNECTIONS FOR THE ED MODEL
For transformer operation, the ED device can use a transformer or power supply. Use Detex part number PP-5152-2 transformer or approved 24 volt Class 2 equivalent rated at 40 VA or higher. An appropriate switch must be used to control the power to the device. See Figure 1 on page 10 for a typical installation. Detex power supply 80-800 may also be used. See Figure 2 on page 10 for a typical installation. Fire rated doors must use the 80-800 power supply. This is because transformers cannot be controlled by the building's fire system. Connections to the building's fire system are described in the power supply instructions.

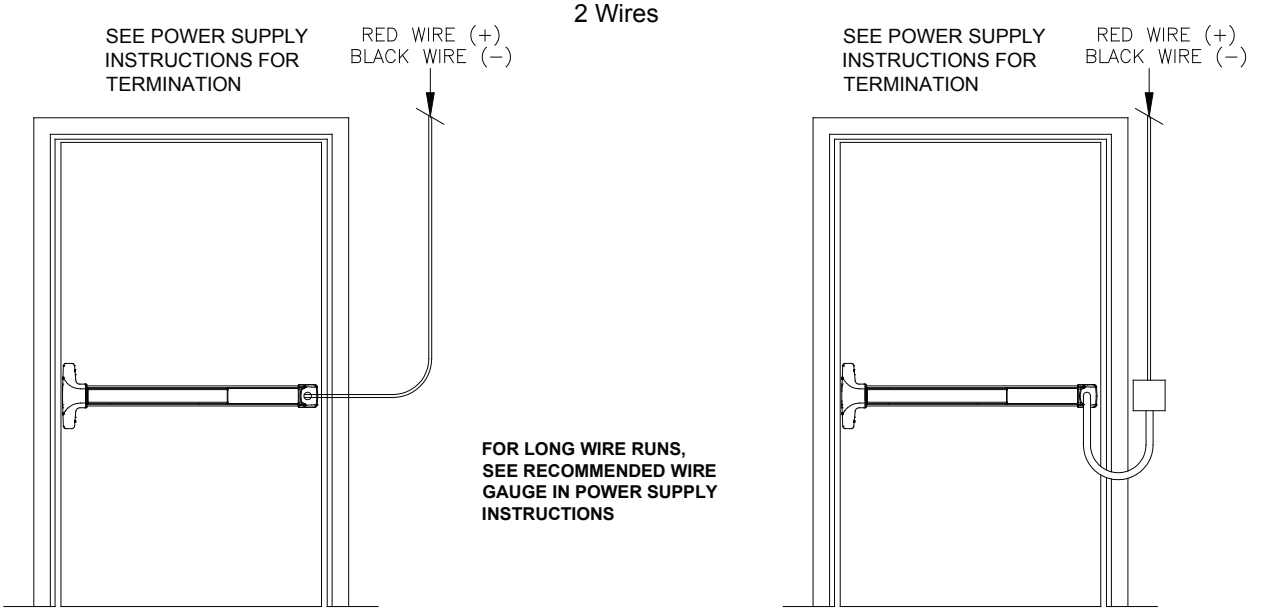
RETRACTING THE LATCH
The ED model is electrically dogged, but has no mechanism to retract the latch. Once the switch is activated/closed and power is supplied to the device, press the pushpad to open the door. As the pushpad reaches the proper amount of travel, it will automatically latch into place. The pushpad will be held in this position as long as the control switch is maintained(closed).

HOLDING THE LATCH RETRACTED
ED model holds the latch retracted as long as the control switch is maintained(closed).

RELEASING THE LATCH
ED is an electronically dogged latch. Opening the control switch (or contacts) causes the latching mechanism to release the lock.

RISER DIAGRAM

2 Wires



ELECTRIFIED HINGE INSTALLATION
(MIN 22 GA WIRE)

OPTIONAL JB-1 JUNCTION BOX INSTALLATION
WITH 10' FLEX CONDUIT TO DETEX POWER SUPPLY

Typical ED Connection Diagrams

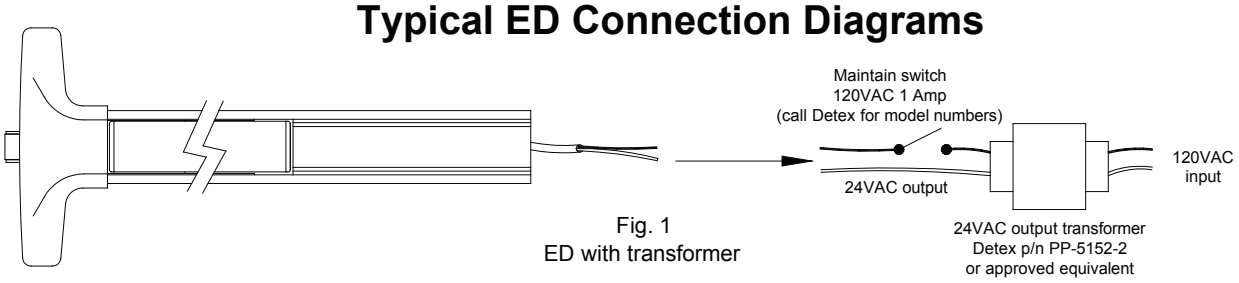


Fig. 1
ED with transformer

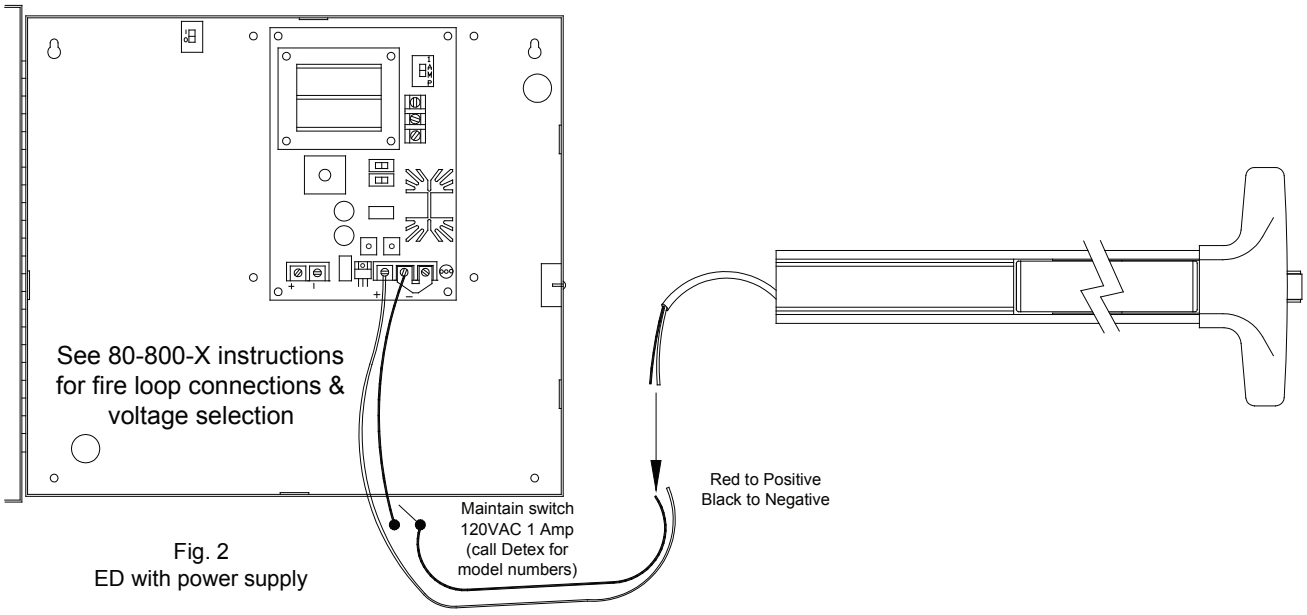


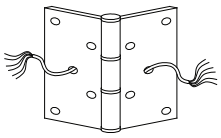
Fig. 2
ED with power supply

HARDWIRE TRANSFER OPTIONS

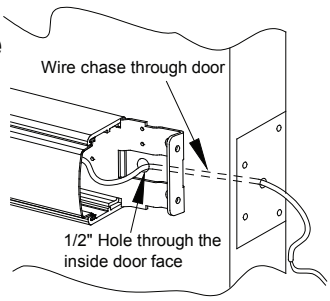
(Requirements: Minimum 6 Conductor Wires, Maximum 12 Conductor Wires)

Electric Hinge

p/n: EWH8-X

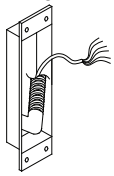


Electric Hinge Endcap Prep

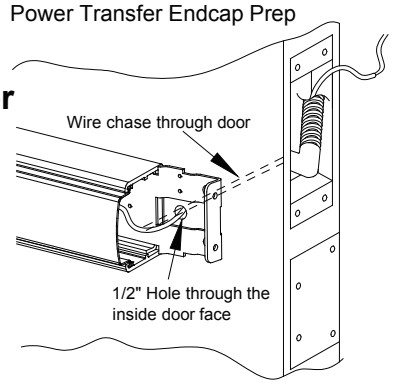


Power Transfer

p/n: PT-5



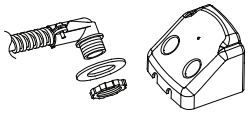
Power Transfer Endcap Prep



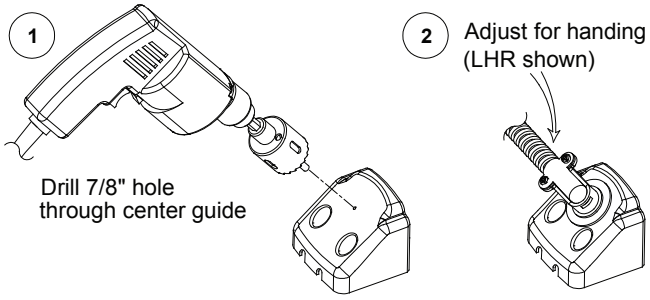
Note: For high traffic areas an electric through-wire hinge or power transfer is recommended.

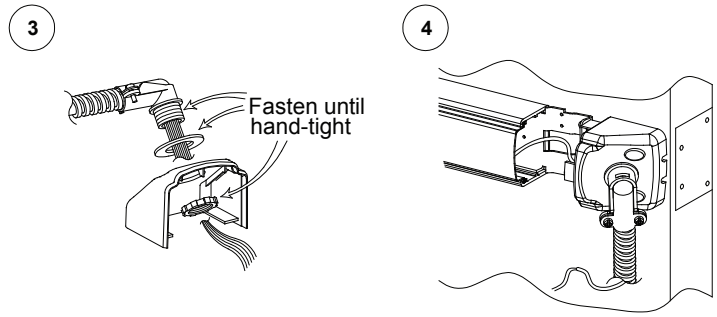
Value Series Flex Conduit/End Cap Kit

p/n: FCV

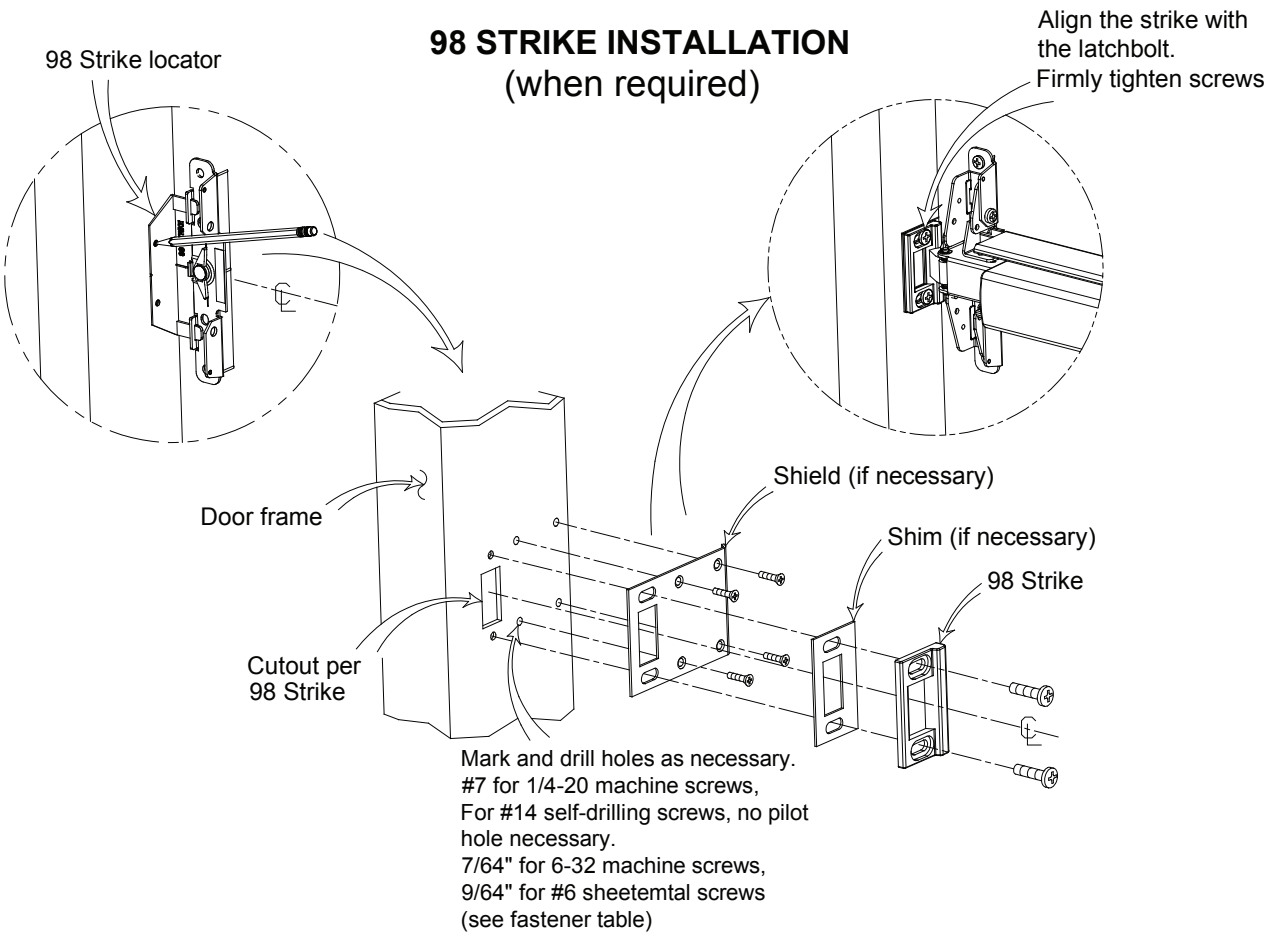


VALUE SERIES FLEX CONDUIT INSTALLATION

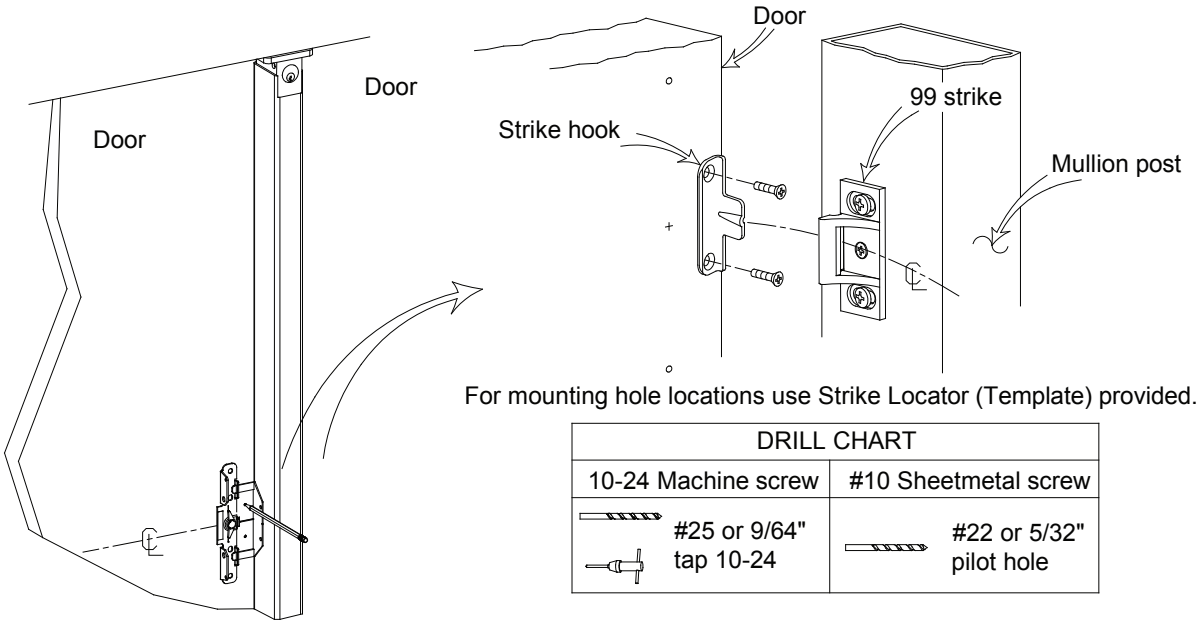




98 STRIKE INSTALLATION
(when required)



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



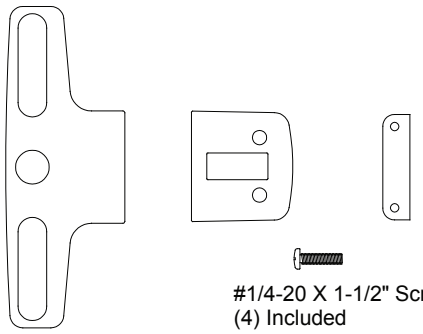
For mounting hole locations use Strike Locator (Template) provided.

DRILL CHART	
10-24 Machine screw	#10 Sheetmetal screw
#25 or 9/64" tap 10-24	#22 or 5/32" pilot hole

Optional Accessories

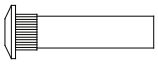
Glass Bead Kit

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



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

Sex Nut



The #10-32 kit is available in (4) finishes:

Catalog No: SN2 Brushed Brass BHMA 606 Finish
Catalog No: SN2 Oil Rubbed Bronze BHMA 613 Finish
Catalog No: SN2 Brushed Chrome BHMA 626 Finish
Catalog No: SN2 Stainless Steel BHMA 630 Finish

p/n: 101617-X

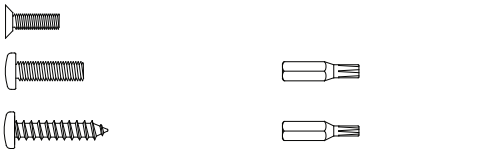
The #1/4-20 kit is available in (4) finishes:

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

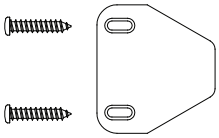
(Security Kit)
Catalog No: SSK3
p/n: 101233



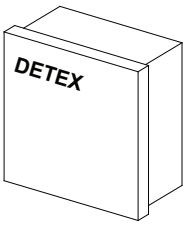
Security Screws Security Pin TORX® Bits provided

Double Door Strike Kit

Catalog No: 94
p/n: 102212-1



Power Supply



Power Supply	Product
80-800-X	ED Single Door
81-800-X	ER SIngle Door
82-800-X	ER Dual Door
83-800-X	ER Dual Door w/ Independent Operator

The following Models in the series were evaluated by UL: Controlled Exit Panic Devices; Model V40. These devices may be suffixed with 01, 02, 03, 08, 09, or 14 followed by A, AN, BN, CN, DN, DNT, DNU, MN, P, PN, or WS followed by BP2 or BP8 followed by 605, 606, 611, 612, 613, 625, 626, 628, 629, 630, or 711 followed by the RHR or LHR, followed by ED or ER, which may be followed by LD or CD, followed by 628 or 711, followed by 98 or 99, followed by 36 or 48.