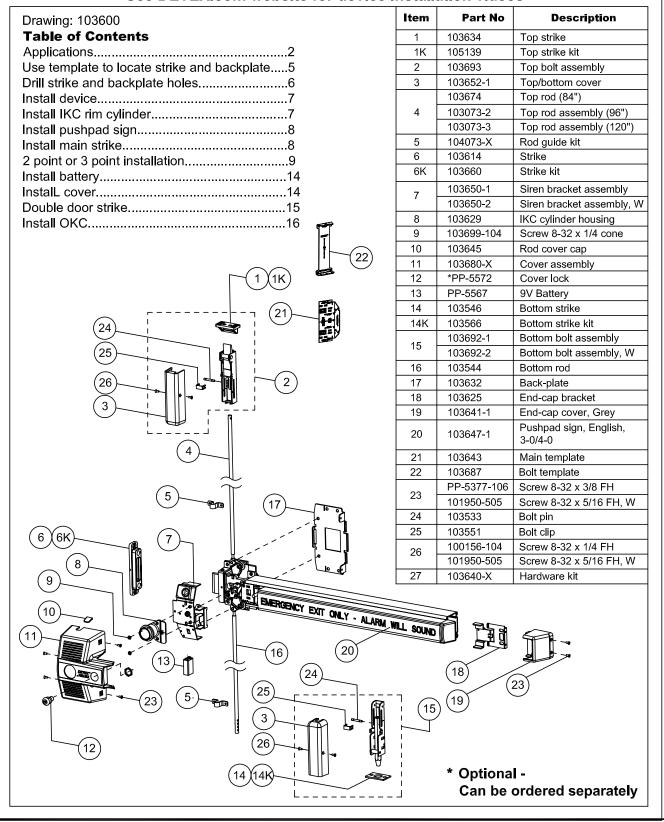
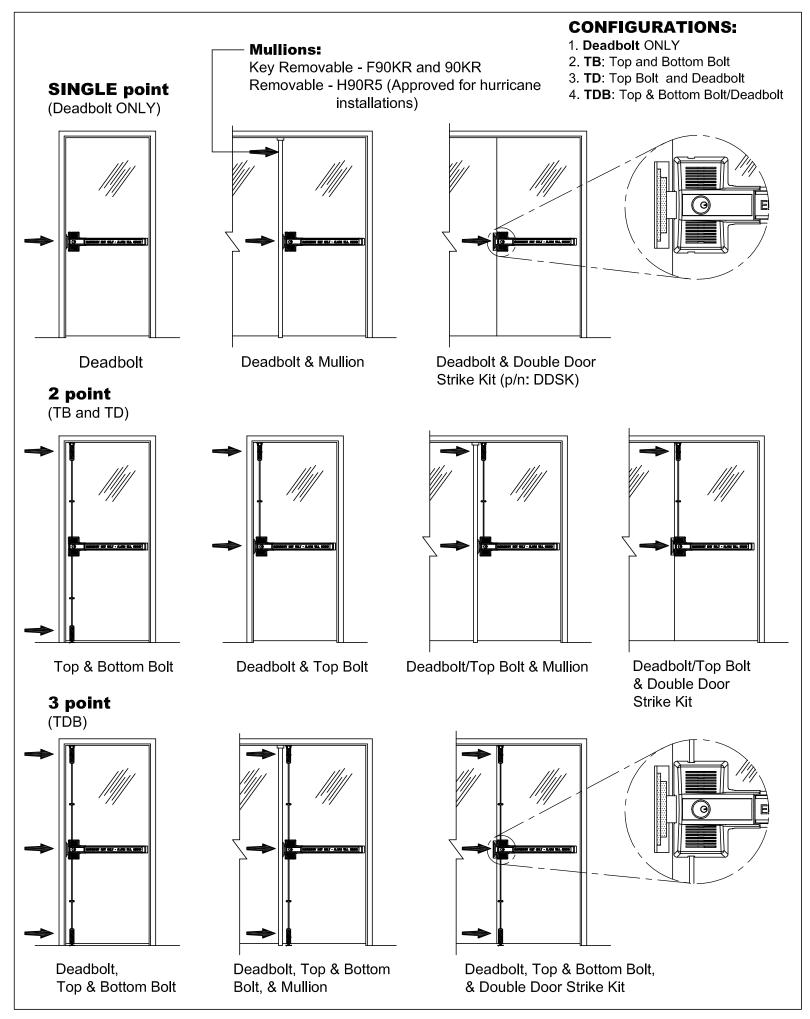
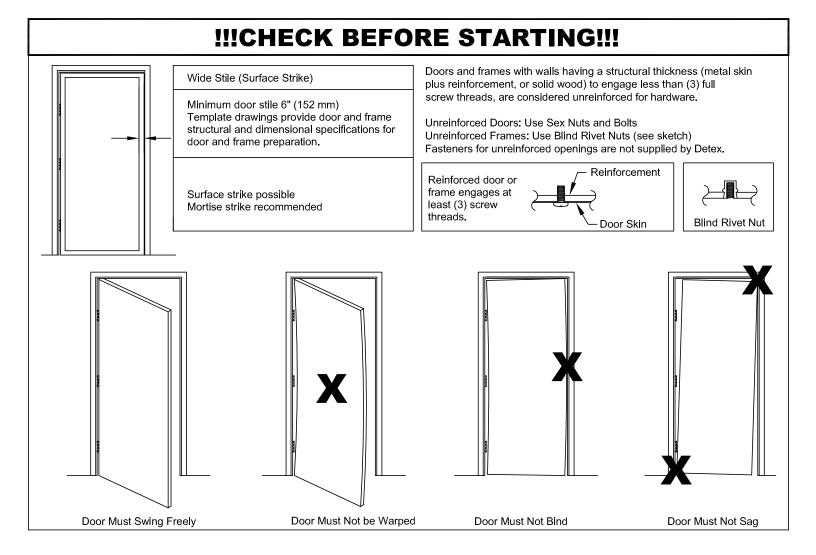


Detex Corporation, 302 Detex Drive, New Braunfels, Texas 78130-3045

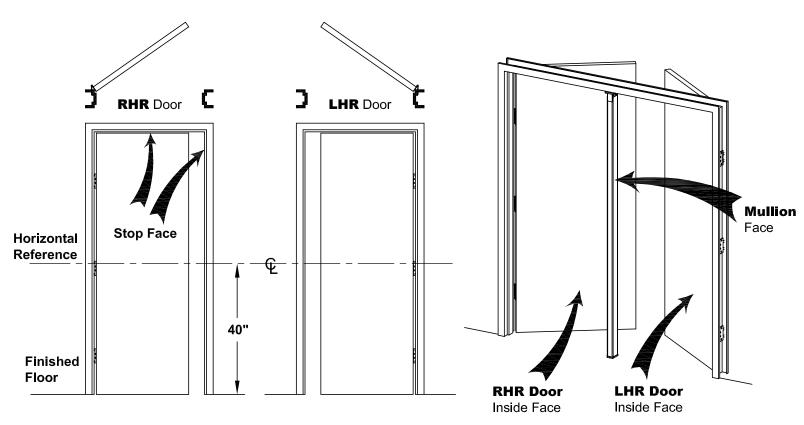
INSTALLATION INSTRUCTIONS FOR ECL-230X & H-ECL-230X HURRICANE DEVICES See DETEX.com website for device installation videos







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



Hardware Table						
Machine Screws		Fastener Part No	Drill Bit consume			
А		P/N: 100980 1/4-20 x 1" PPH	#7 or 13/64"			
В		P/N: 100954 1/4-20 x 1-1/2" PPH	#7 or 13/64"			
С		P/N: 102271-116 1/4-20 x 1" PFH	#7 or 13/64"			
D	P/N: PP-5377-106 8-32 x 3/8" PFH	P/N: 101950-505 8-32 x 5/16" PFH				

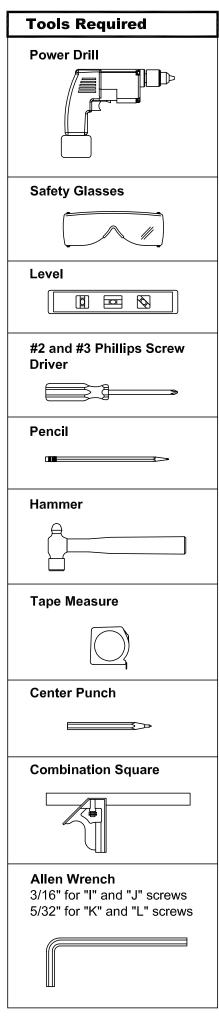
Self-drilli	ng Screws
OCII-GIIIII	ig ociews

E	P/N: 103276-63 #14 x 1" PPH	1/8 pilot hole recommended for self-drilling screws
F	P/N: 103276-65 #14 x 1-1/2" PPH	1/8 pilot hole recommended for self-drilling screws
G	P/N: 103276-41 #10 x 1" PFH	1/16 pilot hole recommended for self-drilling screws
Н	P/N: 103277-324 #14 x 1-1/2" PFH	1/8 pilot hole recommended for self-drilling screws

Socket Head Cap Screws (High strength bolts for TDB configurations) Recommend using socket head cap screws with sex nuts.

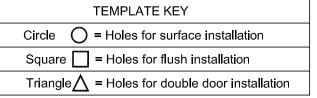
HURRICANE: Sex nuts and socket head cap screws MUST be used with HURRICANE devices.

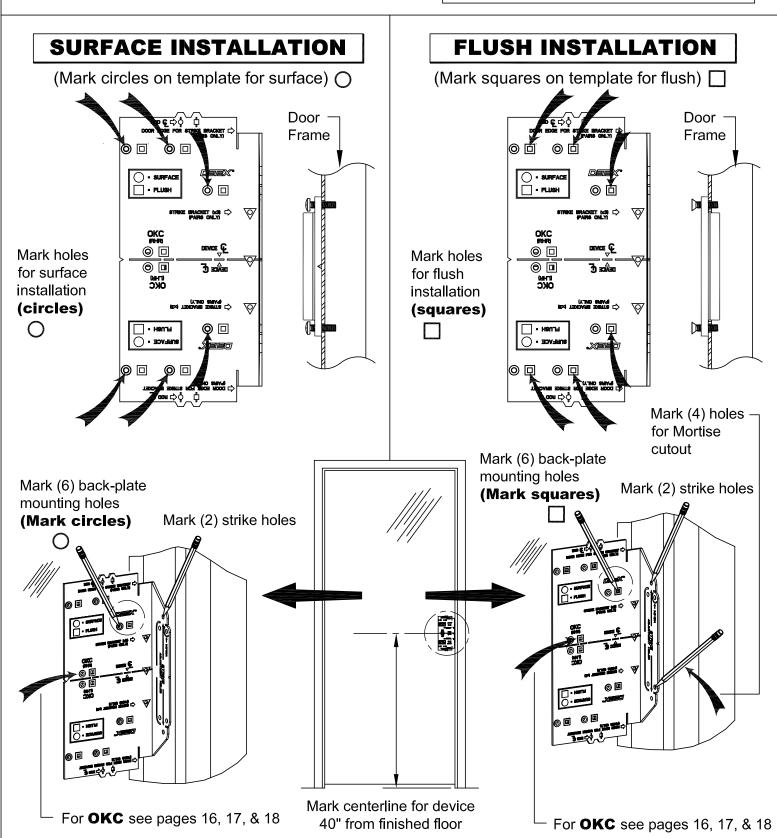
	•	
	P/N: 105773-7 1/4-20 x 1" 3/16 Socket HD	#7 or 13/64"
	P/N: 105773-9 1/4-20 x 1-1/2" 3/16 Socket HD	#7 or 13/64"
K	P/N: 105774-5 1/4-20 x 1" 5/32 Socket HD	#7 or 13/64"
	P/N: 105846-7 1/4-20 x 1" 5/32 Socket HD	#7 or 13/64"
	P/N: 101129-1 Anchor	1/4 pilot hole Supplied with bottom strike kit, P/N 103566
	P/N: 102642-6 Alligator Anchor	1/4 pilot hole Supplied with bottom strike kit, P/N 103566
\$\tilde{\	P/N: PP-5067-25 #14 Lockwasher	
	Part No: 105209 (6 ea per kit)	9/32 Interior door face 1/2 Exterior door face (With Trim)
	Sex Nut 1/4-20 SS Catalog No: SN1-630 (2 ea per kit)	9/32 Interior door face 3/8 Exterior door face (Without Trim)



STEP 1: Use template to locate backplate and strike

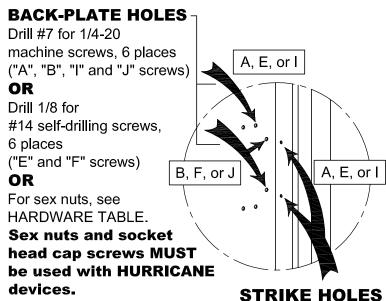
- 1. Use plastic template to mark/drill backplate and strike holes.
- 2. See text and symbols on plastic template for installation options.
- 3. RHR installation shown, reverse all steps for LHR
- 4. See page 6 for OKC (03) function.





STEP 2: Drill backplate and strike holes

SURFACE INSTALLATION



2 places

OR

Drill #7 for 1/4-20

("A" and "I" screws)

machine screws

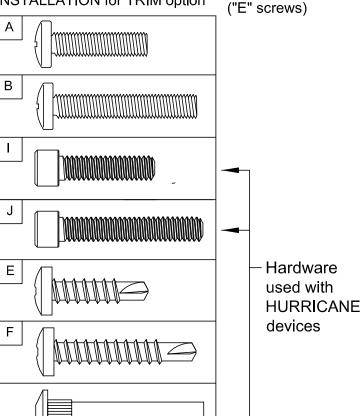
Drill 1/8 for #14

self-drilling screws

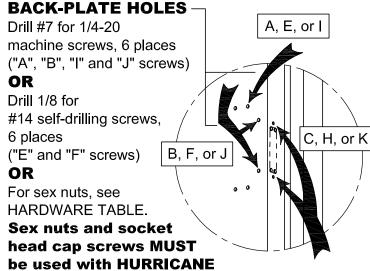
See OUTSIDE KEY CONTROL INSTALLATION section for transferring hole locations from DEVICE side to TRIM side.

OR

See OUTSIDE KEY CONTROL INSTALLATION for TRIM option



FLUSH INSTALLATION



See OUTSIDE KEY CONTROL INSTALLATION section for transferring hole locations from DEVICE side to TRIM side.

OR

devices.

See OUTSIDE KEY CONTROL self-drilling s INSTALLATION for TRIM option ("H" screws)

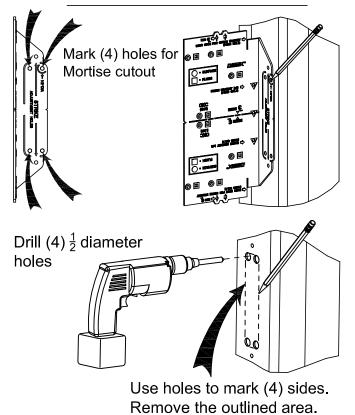
STRIKE HOLES

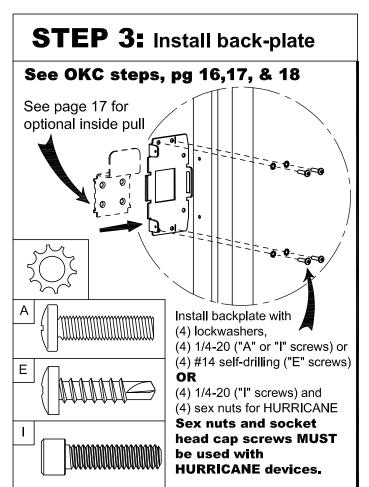
2 places Drill #7 for 1/4-20 machine screws ("C" and "K" screws)

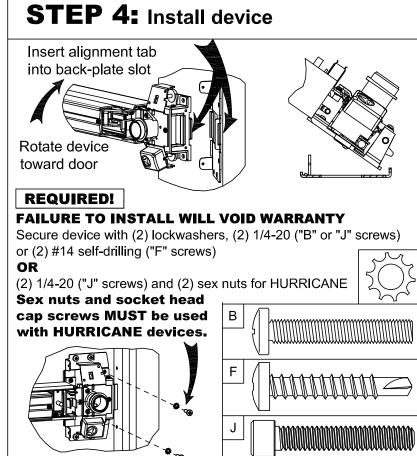
OR

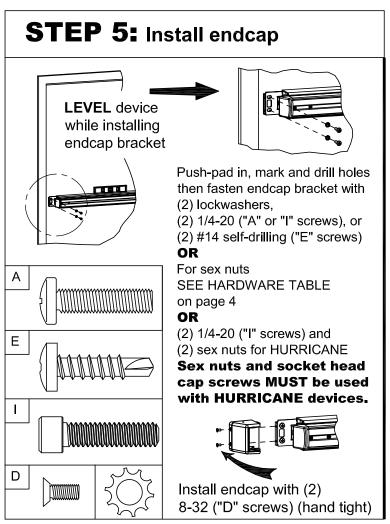
Drill 1/8 for #14 self-drilling screws ("H" screws)

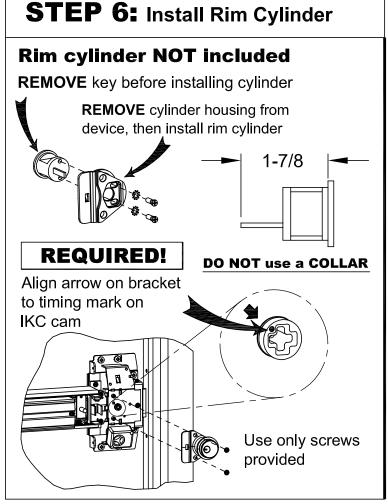
Remove outlined area





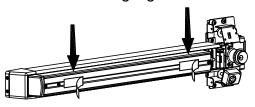






STEP 7: Install Sign

Peel and remove tape backing BEFORE installing sign



Insert sign edge into bottom of push-pad and snap into top of push-pad. Slide hand along top edge of push-pad to fully seat sign

-pad to fully seat sign

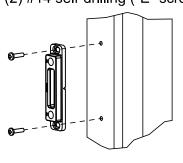
Edge of sign should be flush with edge of push-pad endcap

NOTE: A screwdriver handle, pen, or other small blunt tool can be used to snap/press the sign in.

STEP 8: Install Strike

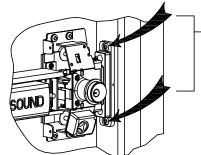
SURFACE INSTALLATION

Fasten strike loosely with (2) 1/4-20 ("A" or "I" screws) or (2) #14 self-drilling ("E" screws)



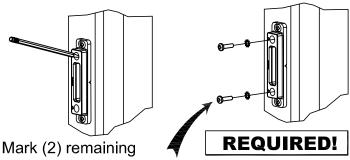
NOTE:
Arrows on strike indicate strike orientation





Adjust strike to desired fit. Tighten screws.

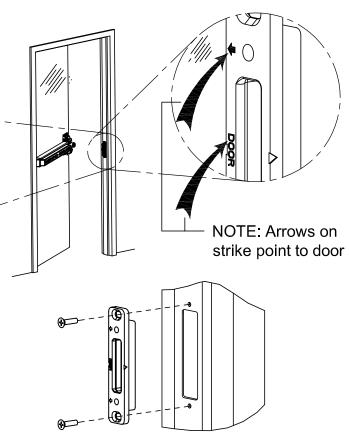
Install remaining screws



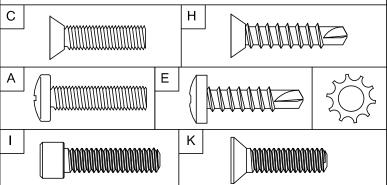
Mark (2) remaining holes

Install with (2) lockwashers, (2) 1/4-20 ("A" or "I" screws), or (2) #14 self-drilling ("E" screws)

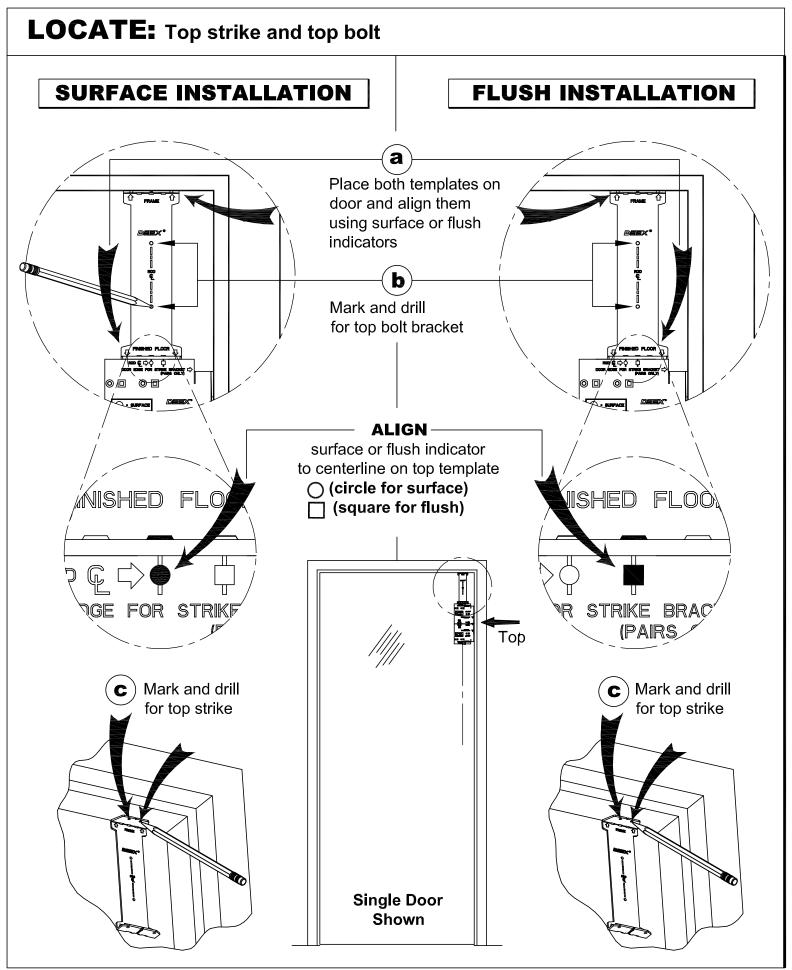
FLUSH INSTALLATION



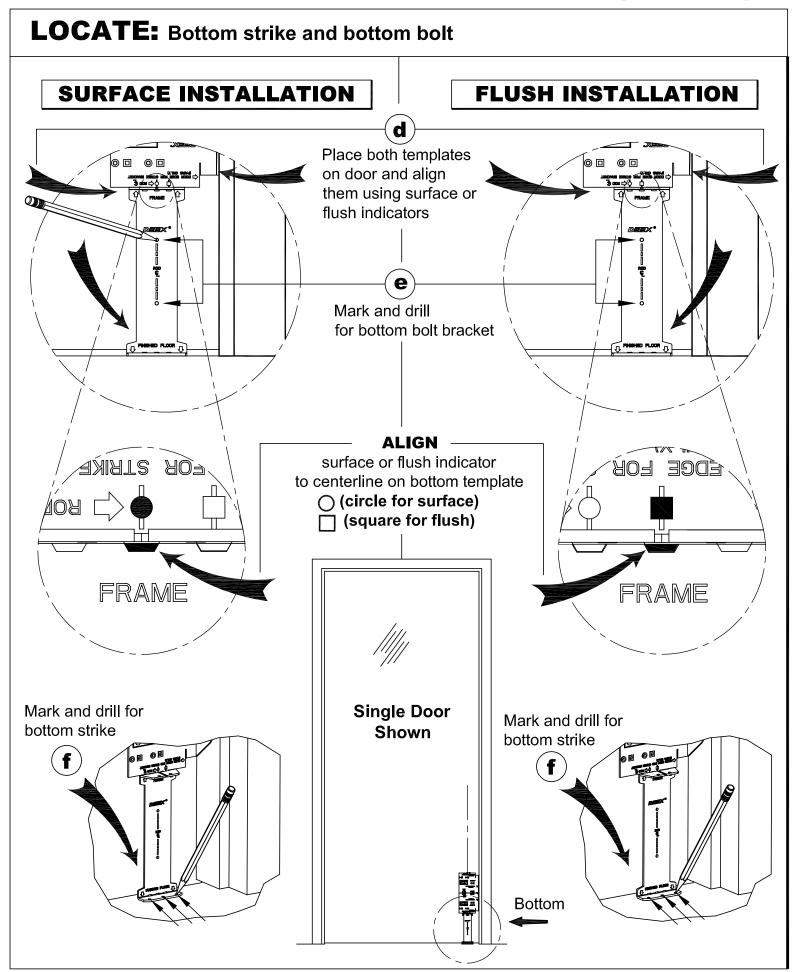
Install strike with (2) 1/4-20 ("C" or "K" screws) or (2) #14 self-drilling ("H" screws)



2-POINT and 3-POINT INSTALLATION (Top)



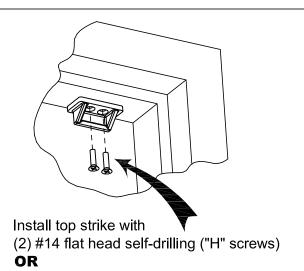
2-POINT and 3-POINT INSTALLATION (Bottom)



TOP STRIKE and TOP BOLT INSTALLATION

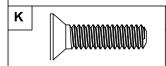
NOTE: The top bracket, top bolt and cover are shipped as a unit. Remove cover to access parts.

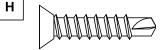
STEP A: Install top strike



(2) 1/4-20 flat head ("K" screws)

Socket flat head cap screws **MUST be used with HURRICANE** devices.

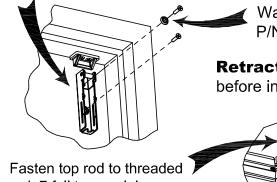


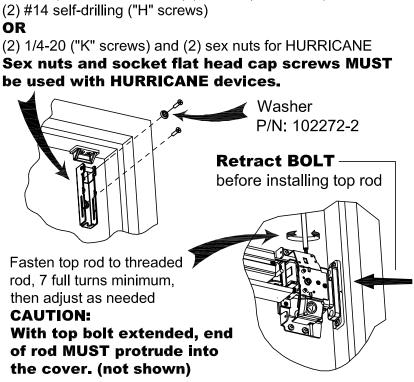


STEP B: Install top bolt

Install top bolt bracket with (2) 1/4-20 ("K" screws) or

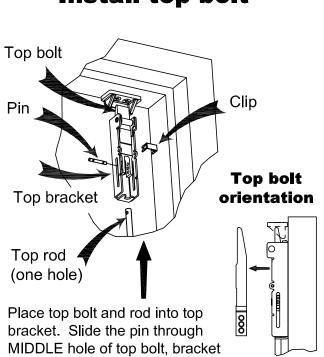
(2) 1/4-20 ("K" screws) and (2) sex nuts for HURRICANE





STEP C: Install top bolt

Install top bolt

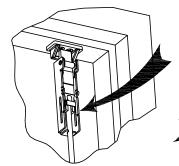


slots and rod. Insert pin clip.

STEP D: Top bolt adjustment

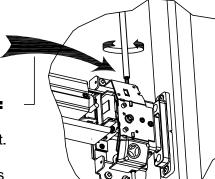
Top bolt ADJUSTMENT

(See page 20 for cutting top rod)



COURSE ADJUSTMENT:

Adjust strike engagement by using different holes in bolt.



FINE ADJUSTMENT:

Use thread on top rod to obtain fine adjustment. 1 thread turn =

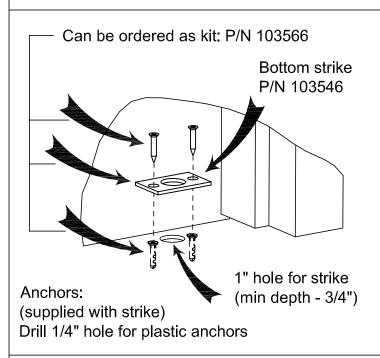
Approximate .050 inches

SEE PAGE 19 for TESTING and ADJUSTMENT

BOTTOM STRIKE and BOTTOM BOLT INSTALLATION

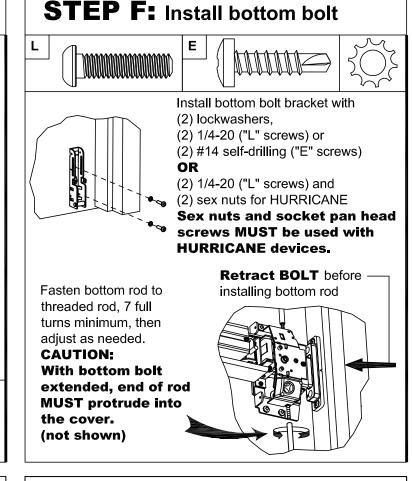
NOTE: The bottom bracket, bottom bolt and cover are shipped as a unit. Remove cover to access parts.

STEP E: Install bottom strike

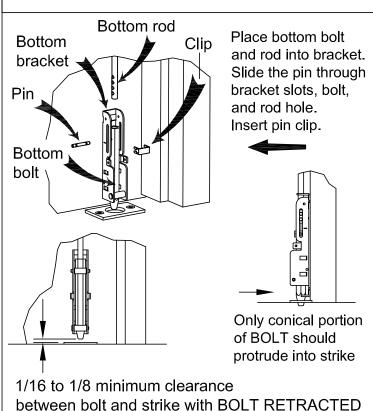


Dustproof Strike Kit Part No: 101562-X

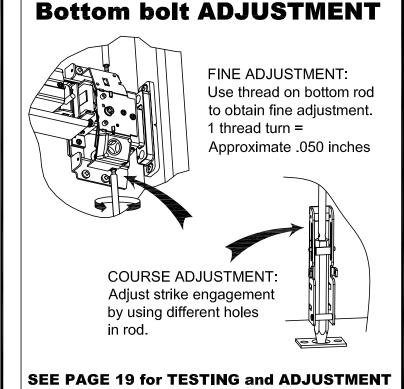
(Optional - Can be ordered separately)



STEP G: Install bottom bolt

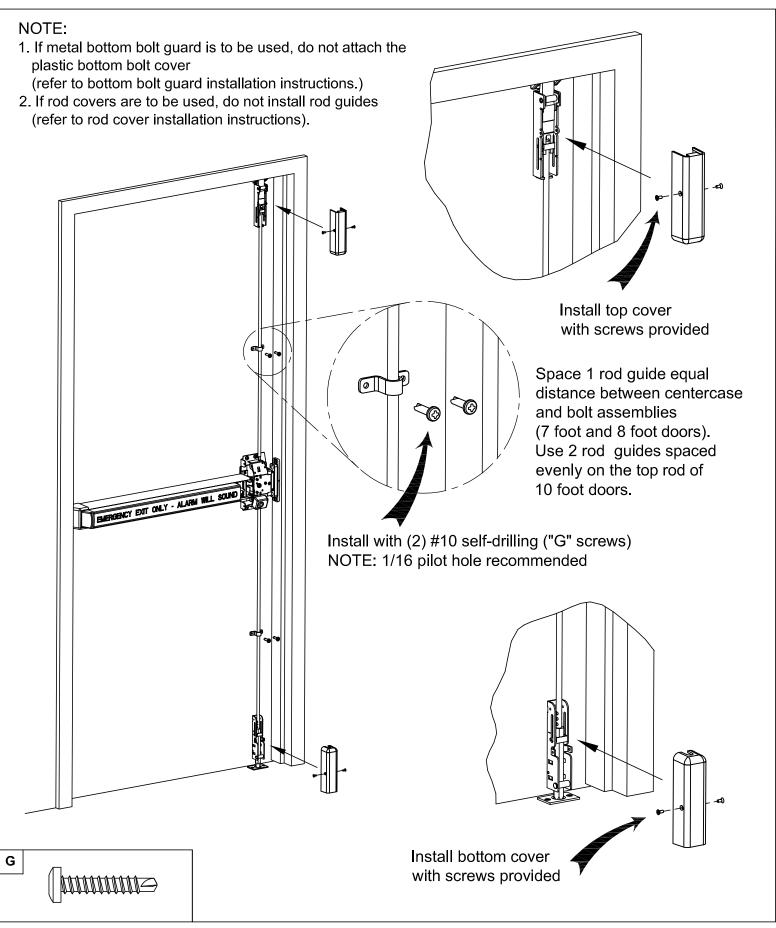






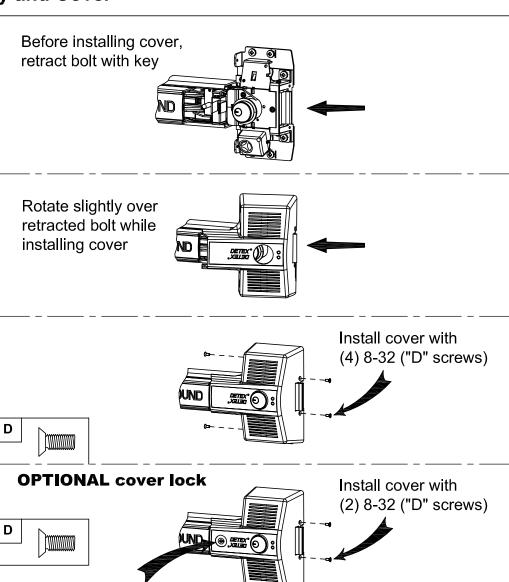
TOP and BOTTOM COVER INSTALLATION

STEP I: Install top or bottom covers; Install rod guides



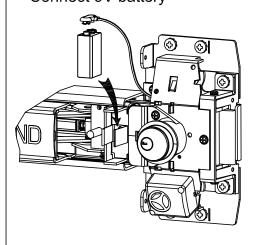
DEADBOLT AND TOP BOLT INSTALLATION (TD) Remove bottom rod, connector, pin, and e-clip Remove bottom rod, connector, pin, and e-clip





Before installing battery, RETRACT bolt with key

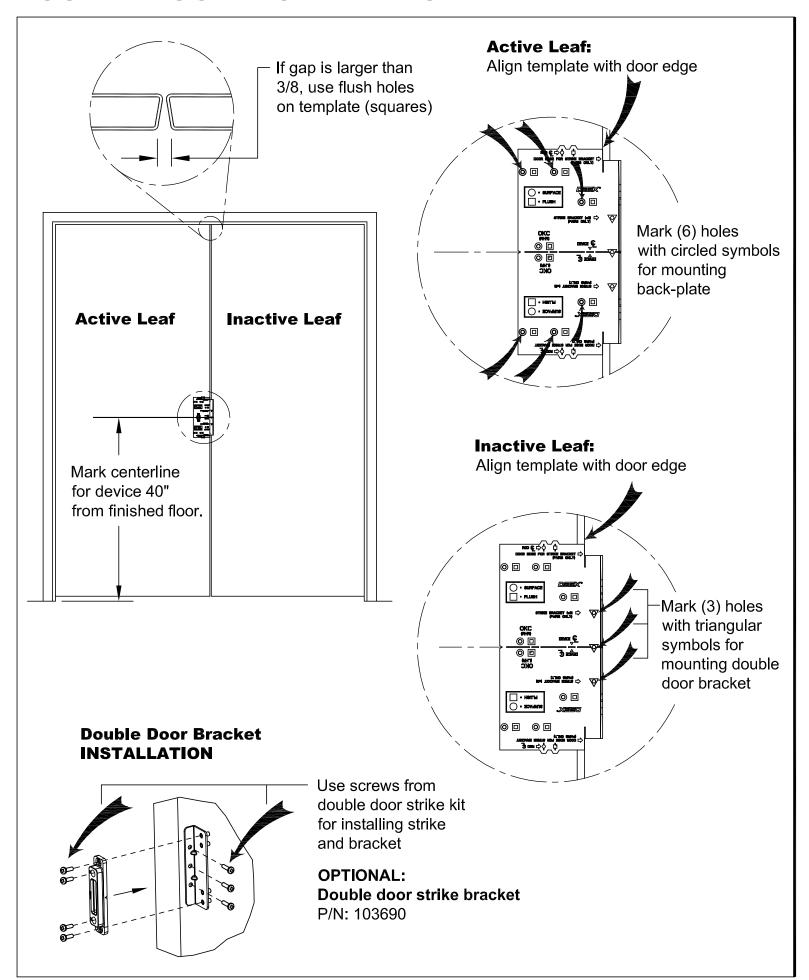
Connect 9V battery



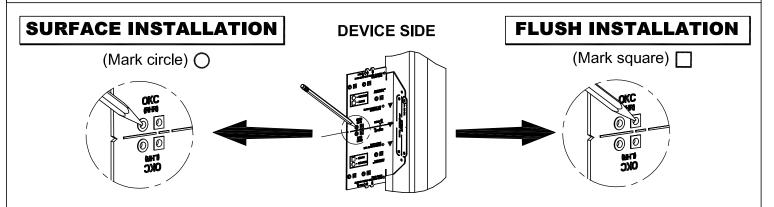
Optional cover lock: (If ordered)

Turn cover lock key 4 to 5 turns (CW) to fasten cover

DOUBLE DOOR INSTALLATION

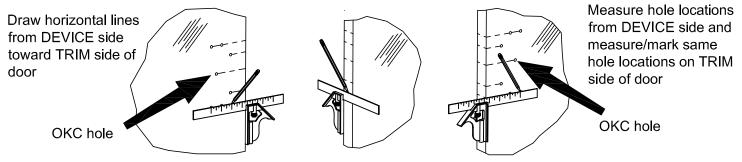


Outside Key Control Installation, if required



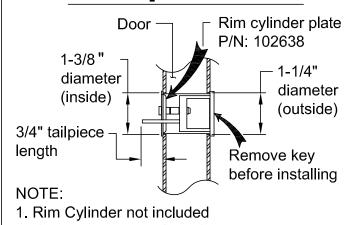
Align template with device centerline and mark/drill appropriate OKC hole through door (RHR Shown)

Transfer hole locations from DEVICE side to TRIM side



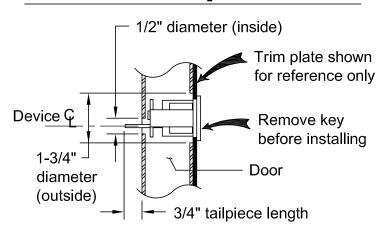
See pg 18 for outside Trim TEMPLATE

OKC option shown



2. Collar available: P/N: ECL-1595

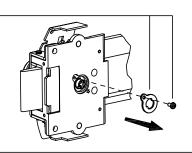
TRIM PLATE option shown

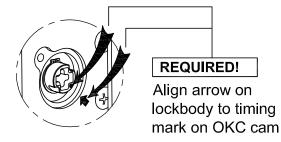


Remove OKC lockplate on device

REQUIRED!

Remove screw and lockplate on back of center-case for OKC

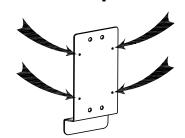




PULL PLATE and TRIM PLATE

OUTSIDE Pull installation

(Recommended for optimum security, not required)



Drill (2) holes for LHR or RHR

Sex Nut

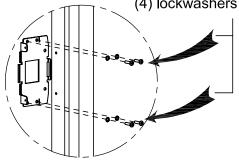
- Optional: Can be ordered separately
- Recommended on Fire Rated Wood and Unreinforced Hollow Metal Doors

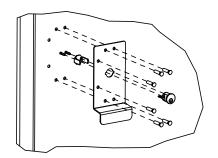
Part No: 105209 (6 ea per kit)

Install PULL PLATE to backplate with

9/32 Interior door face 1/2 Exterior door face (With Trim)

Install backplate to PULL PLATE with (4) 1/4-20 ("A" screws) and (4) lockwashers





PULL PLATE shown with cylinder option NOTE: Use collar where needed.

(4) 1/4-20 ("A" screws) and (4) sex nuts

OR

(4) 1/4-20 ("I" screws) and (4) sex nuts
for HURRICANE

Sex nuts and socket head cap screws

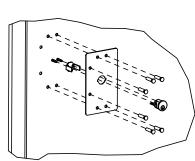
MUST be used with HURRICANE devices.

Secure PULL PLATE to device with (2) 1/4-20 ("B" screws) and (2) sex nuts **OR**

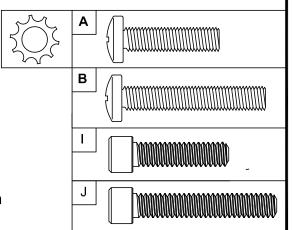
(2) 1/4-20 ("J" screws) and (2) sex nuts for HURRICANE

Sex nuts and socket head cap screws MUST be used with HURRICANE devices.



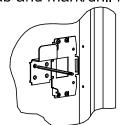


TRIM PLATE shown with cylinder option

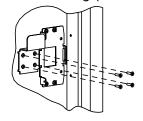


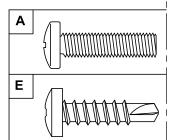
Inside Pull (Inside Pull must be installed before installing device)

Align pull with back-plate tab and mark/drill holes



Install pull with (4) 1/4-20 ("A" screws) or (4) #14 self-drilling ("E" screws)







TEMPLATE for outside Trim TOP - RHR Measure BACKSET on device side and transfer to TRIM side - 1-7/8 -1/4 RHR 4-3/8 TRANSFER DEVICE CENTERLINE TO TRIM SIDE 2-3/16 1/4 LHR 3-1/2 FOR HOLE DIAMETER SEE INSTRUCTIONS PG. 6 1-3/8 11/16 11/16 3/8 diameter 6 places AHJ - GOT Measure BACKSET on device side and transfer to TRIM side 103132 - Page 18

Operations: Turn the cylinder key 360 degrees clockwise (CW) to arm the device and lock the door. With the door locked, pushing the bar will unlock the door and sound the alarm. Turn the cylinder key 360 degrees clockwise (CW) to turn off the alarm. lock the door and arm the device.

Unlocking door with key: Turn the key 360 degrees counterclockwise (CCW) to unlock the door without setting off the siren.

Note: 360 degrees is the cylinder requirement, do not exceed. DO NOT turn past the HOME POSITION.

Troubleshooting:

1. How to remove cover

a) Remove cover by unfastening four screws. If a cover lock is provided with cover, insert the cover lock key and turn it counter-clockwise approximately 4-5 complete turns in addition to removing 2 screws in front of cover.

2. Trouble installing cover:

- a) No cylinder collar is needed and will cause problems installing cover, remove collar.
- b) The cover needs to rotate slightly over the dead bolt.

3. Siren does not sound:

- a) Confirm the 9V battery voltage is good.
- b) Confirm the battery connector and wires are ok.
- c) Remove siren bracket assembly Check micro-switches With both switches open, the siren should sound.
- d) For a quick test to check siren, a 9V battery can be connected straight to the red (+) and black (-) wires on the siren.

4. Key control cylinder (IKC) - Hard to turn (Binding), does not turn:

- a) Verify the tailpiece is the right length and not bottoming out.
- b) Verify the cylinder cam is timed correctly, see page 7, step 6
- c) Verify the dead bolt or rod bolts are not bottoming out or rubbing on the strike.
- d) Push bar in and release, the bar should spring back out.
- e) Make sure the device back-plate and end mounting bracket are on the same level surface.
- f) Confirm two screws are installed to secure locking mechanism to door, see page 7, step 4.

Two point locking

g) Confirm bottom rod connector was removed, see page 14

5. The unit sounds when the dead bolt is extended:

- a) Verify the cylinder cam is timed correctly, see page 7, step 6
- b) Verify the dead bolt or rod bolts are not bottoming out or rubbing on the strike.

6. The alarm does not reset:

a) Turn the key 360 degrees clockwise.

7. The rod adjustments can cause malfunction of the product.

a) If the multi-point device is malfunctioning, remove one rod at a time and recheck operations. See rod adjustment operations on page 11 and 12

Call DETEX Technical Support at 1-800-729-3839

Testing and Adjustment:

Testing: (TOP BOLT)

- 1. Close the door; turn key (CW) to lock door; bolt should project into the strike cavity and lock securely.
- 2. Push on the push-pad to open the door. The top bolt should retract from the strike and clear by 1/16" to 1/8". Bolt should remain retracted.
- 3. Close the door; turn key (CW) to lock door. Bolt should project into strike cavity.

Adjustment: (TOP BOLT) - Adjust bolt engagement by using holes in top bolt:

1. If top bolt hits edge of strike when door is opened:

Remove clip and pin, move bolt down and insert pin in next lower bolt hole. Insert clip and pin. Test door for bolt clearance.

2. If top bolt does not engage strike:

Remove clip and pin, move bolt up and insert pin in next upper bolt hole. Insert clip and pin. Test door for bolt engagement.

NOTE: Fine adjustment can be obtained by using thread on bottom rod (1 thread turn = Approx .050 inches)

Testing: (BOTTOM BOLT)

- 1. Close the door; turn key (CW) to lock door; bottom bolt should drop into the strike with door closed.
- 2. Push on the push-pad to open the door. The bottom bolt should retract from the strike and clear by 1/16" to 1/8". Bolt should remain retracted.
- 3. Close the door; turn key (CW) to lock door. Bolt should drop into strike.

Adjustment: (BOTTOM BOLT) - Adjust bolt engagement by using holes in rod:

1. If bottom bolt drags on the floor or hits edge of strike:

Remove clip and pin, move bolt up and insert pin in next upper rod hole. Insert clip and pin. Test door for bolt clearance.

2. If bottom bolt does not engage strike:

Remove clip and pin, move bolt down and insert pin in next lower rod hole. Insert clip and pin. Test door for bolt engagement.

NOTE: Fine adjustment can be obtained by using thread on bottom rod (1 thread turn = Approx .050 inches)

Cutting Top Rod (For non-standard doors)

