

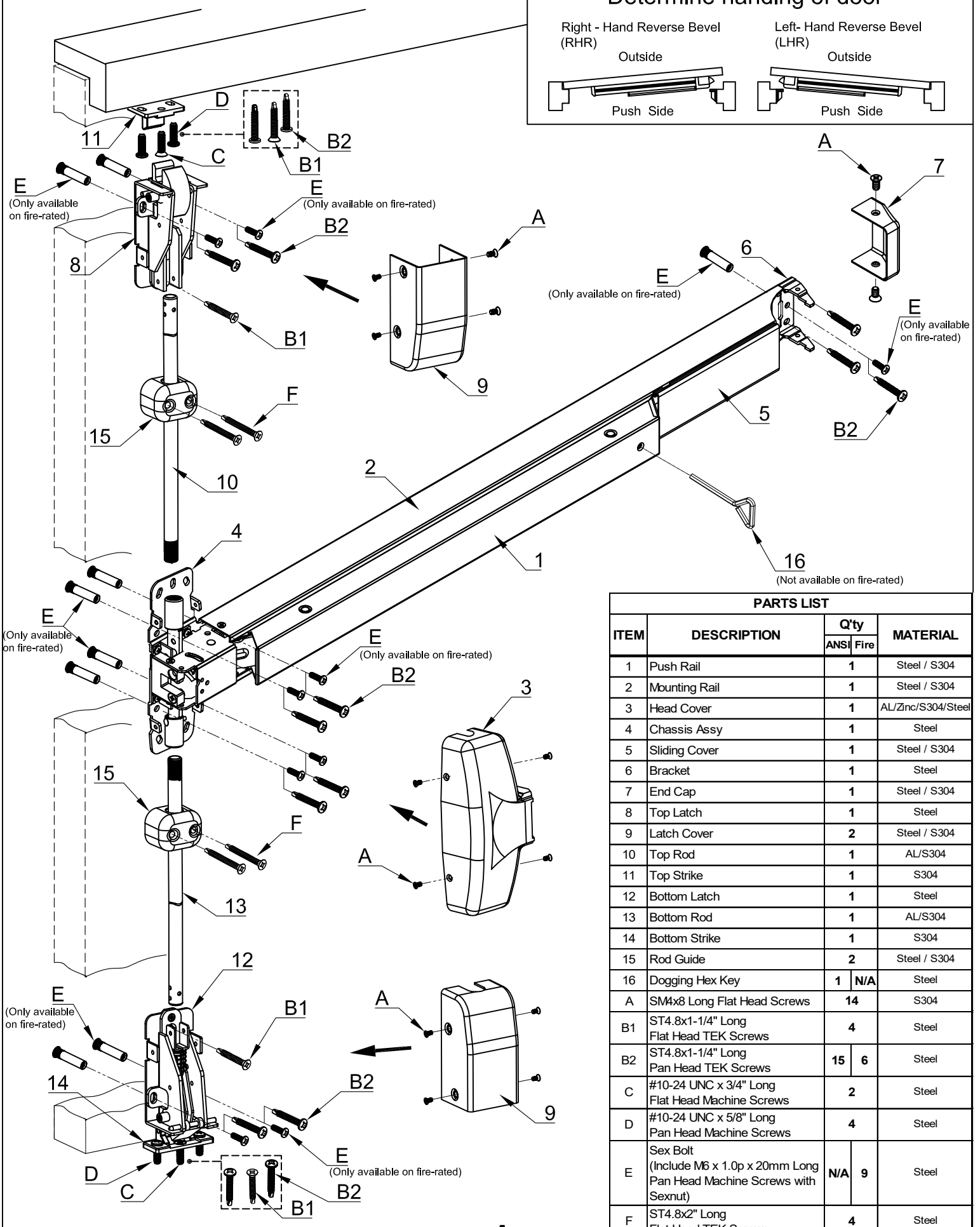
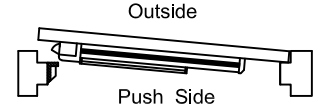
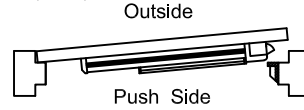
Installation Instructions

8900 & F-8900 SVR Device

Determine handing of door

Right - Hand Reverse Bevel
(RHR)

Left- Hand Reverse Bevel
(LHR)



(Not available on fire-rated)

PARTS LIST

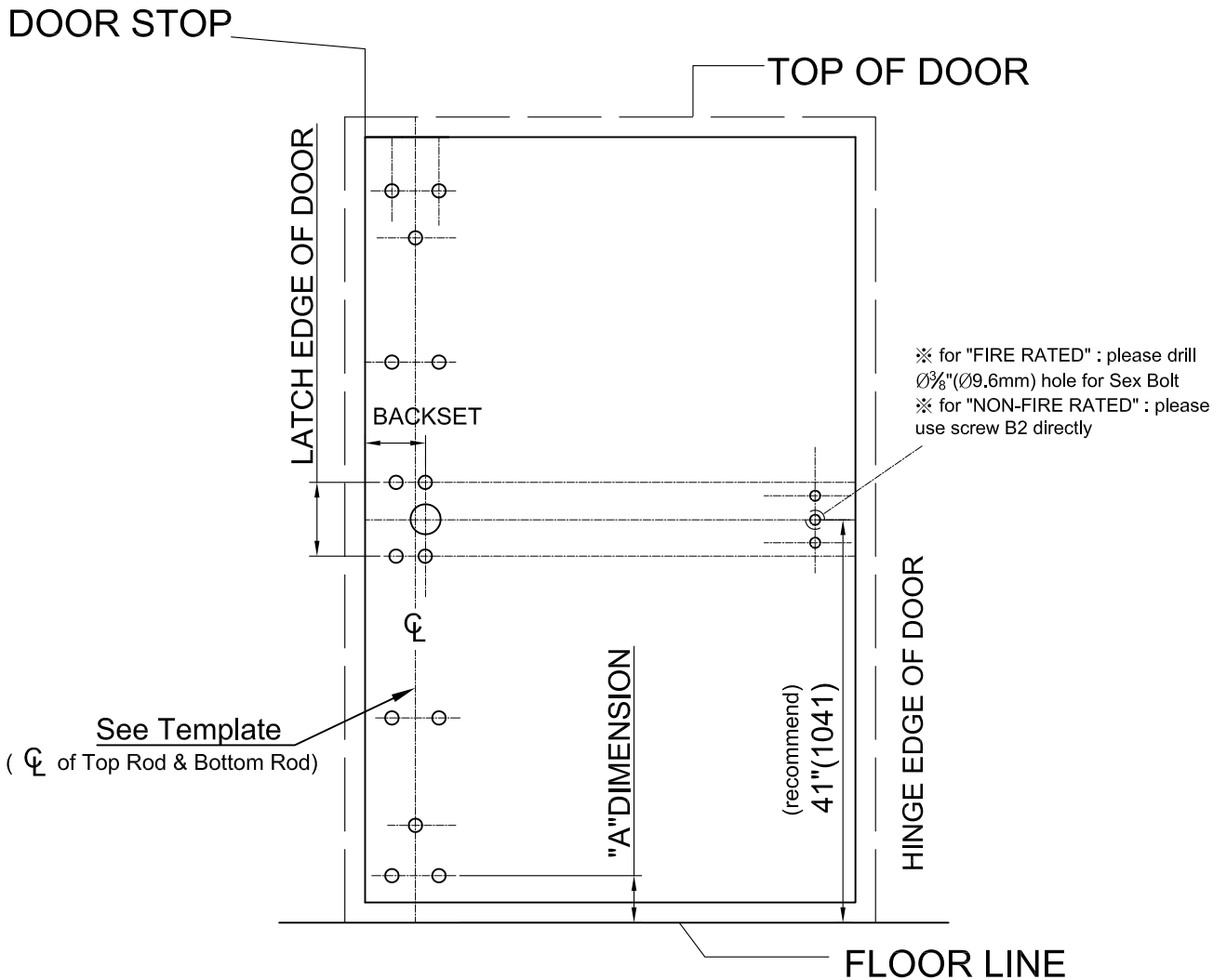
ITEM	DESCRIPTION	Q'ty		MATERIAL
		ANSI	Fire	
1	Push Rail	1		Steel / S304
2	Mounting Rail	1		Steel / S304
3	Head Cover	1		AL/Znc/S304/Steel
4	Chassis Assy	1		Steel
5	Sliding Cover	1		Steel / S304
6	Bracket	1		Steel
7	End Cap	1		Steel / S304
8	Top Latch	1		Steel
9	Latch Cover	2		Steel / S304
10	Top Rod	1		AL/S304
11	Top Strike	1		S304
12	Bottom Latch	1		Steel
13	Bottom Rod	1		AL/S304
14	Bottom Strike	1		S304
15	Rod Guide	2		Steel / S304
16	Dogging Hex Key	1	N/A	Steel
A	SM4x8 Long Flat Head Screws	14		S304
B1	ST4.8x1-1/4" Long Flat Head TEK Screws	4		Steel
B2	ST4.8x1-1/4" Long Pan Head TEK Screws	15	6	Steel
C	#10-24 UNC x 3/4" Long Flat Head Machine Screws	2		Steel
D	#10-24 UNC x 5/8" Long Pan Head Machine Screws	4		Steel
E	Sex Bolt (Include M6 x 1.0p x 20mm Long Pan Head Machine Screws with Sexnut)	N/A	9	Steel
F	ST4.8x2" Long Flat Head TEK Screws	4		Steel

STEP 1: MARK CENTER LINES

Mark Center Lines on INSIDE of door .Establish the horizontal center line of the device by drawing a line across the door 41" (1041mm) above floor line . Establish the top and bottom rod backset center line by drawing a vertical line from the top to bottom of the door measuring from the DOOR STOP. After marking & drilling, please install pushbar according to its marked location. With establishment of pushbar, then go for next step of other installations.

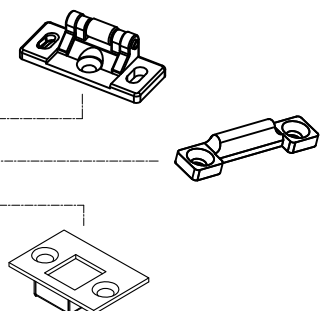
Regularly furnished unless ordered separately.

INSIDE OF LHR DOOR IS ILLUSTRATED



Regularly furnished unless ordered separated.

"A" DIMENSION	INSTALLATION
$1 \frac{47}{64}"$ (44mm)	For Surface Strike
$1 \frac{9}{16}"$ (39.5mm)	For Handicap Strike
$1 \frac{5}{32}"$ (29.5mm)	For Mortise in Strike



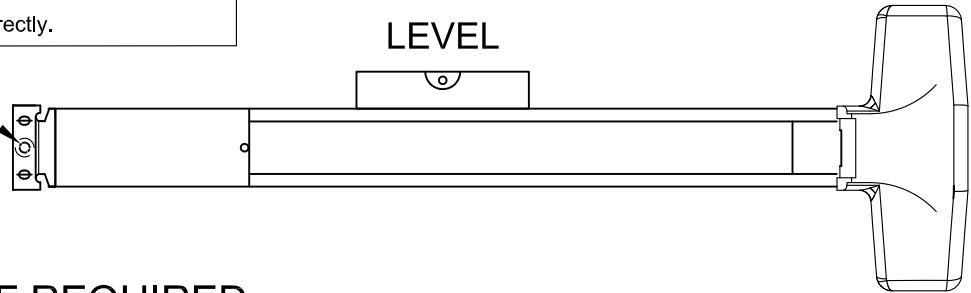
STEP 2: INSTALL DEVICE & CUT DEVICE IF REQUIRED

2A. INSTALL DEVICE

- (1) Take off head cover and put device horizontally at the door. Fix screws (B2) on chassis but **DO NOT** tighten them at this step.
- (2) Install bracket with screw (B2). Be sure to remain device being horizontal and then tighten all screws.
- (3) Install end cap & Install head cover after STEP 9.

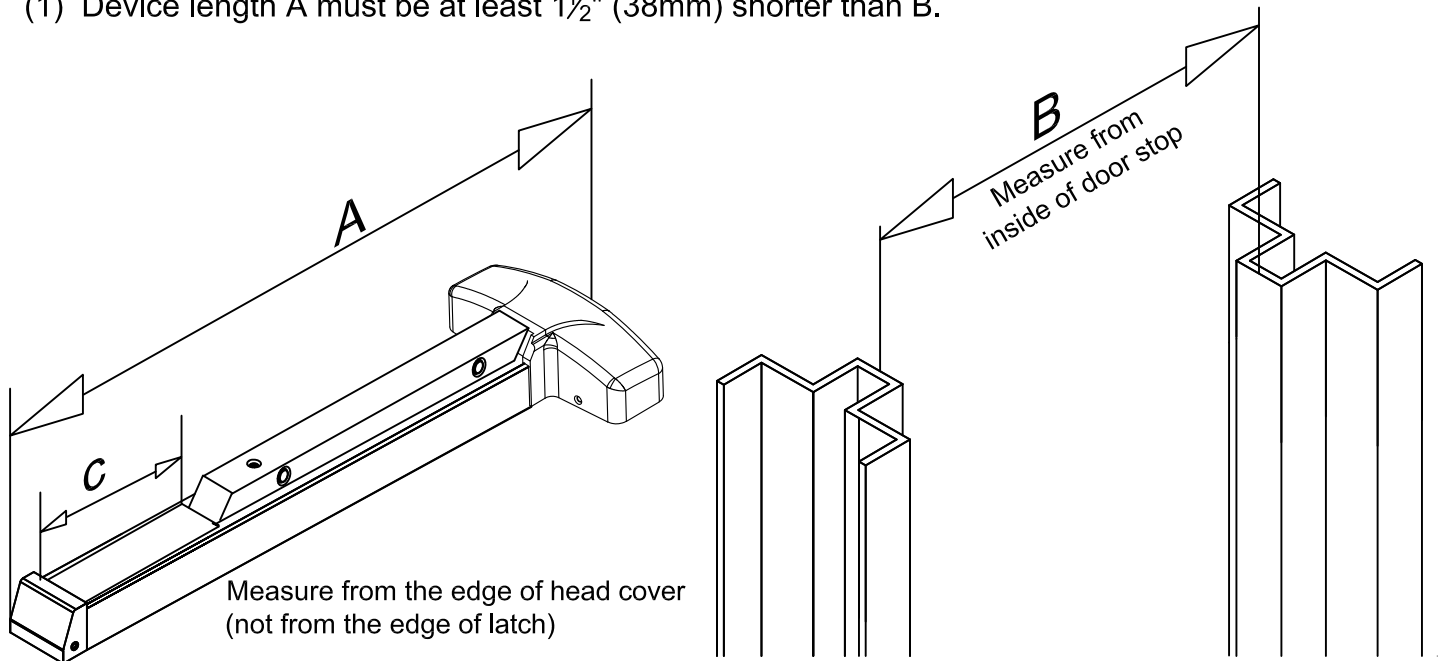
※ for "FIRE RATED":
please drill $\varnothing \frac{3}{8}$ " ($\varnothing 9.6\text{mm}$) hole for Sex Bolt (E).

※ for "NON-"FIRE-RATED":
please use screw (B2) directly.



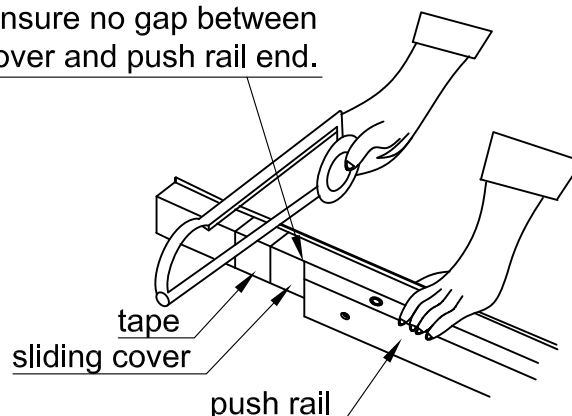
2B. CUT DEVICE IF REQUIRED

- (1) Device length A must be at least $1\frac{1}{2}$ " (38mm) shorter than B.



- (2) If required, cut length C, so A is at least $1\frac{1}{2}$ " (38mm) shorter than B.

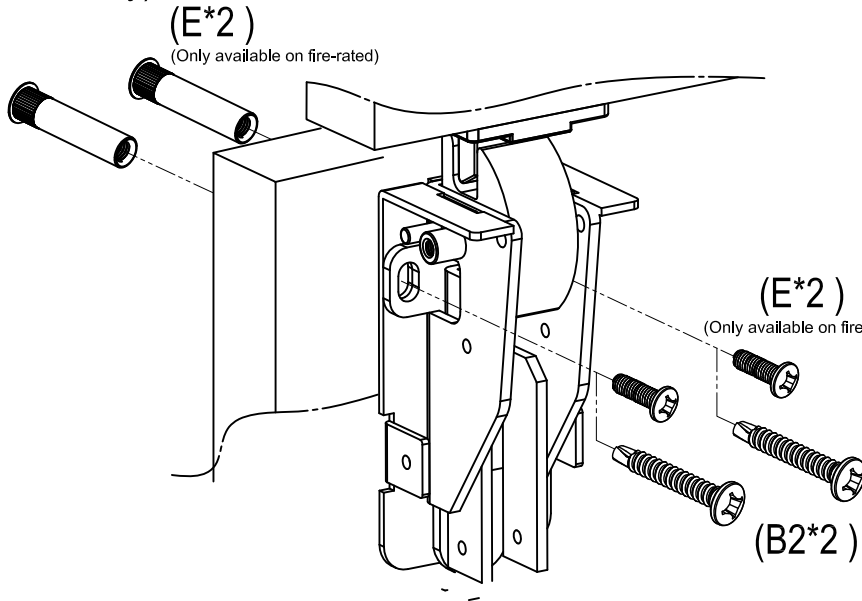
Ensure no gap between
sliding cover and push rail end.



NOTE : the minimum length of the sliding cover must be 1"(25.4mm) or longer than length "C".

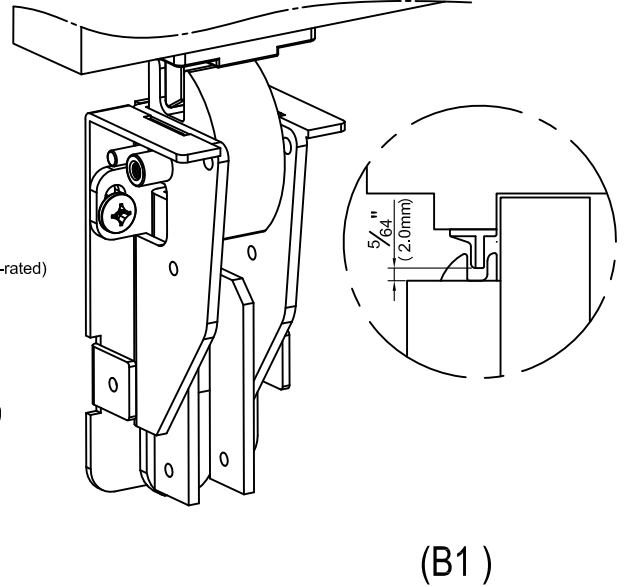
STEP 3: PREPARE TOP LATCH & INSTALL TOP LATCH

Prepare Top Latch and Mark by TEMPLATE for later installation .
Follow TEMPLATE to install Top Latch with two screws (B2). (DO NOT TIGHTEN screws (B2) firmly)



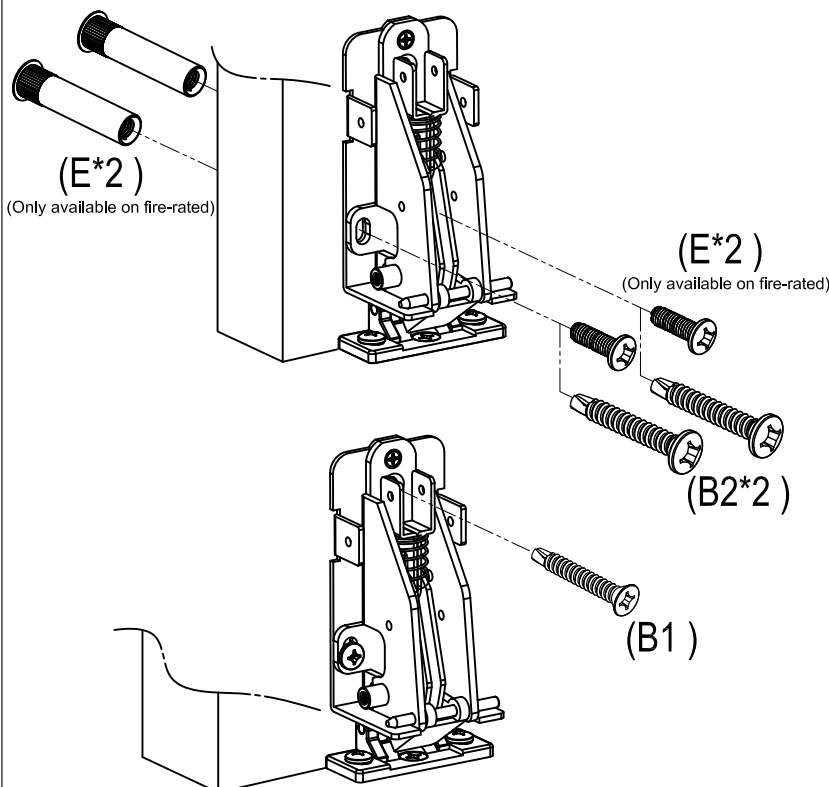
STEP 4: INSTALL TOP STRIKE

Follow TEMPLATE to install Top Strike. Adjust the Proper gap between Top Latch and Strike which is about $\frac{5}{64}$ "(2.0mm), tighten screws (B2) firmly and then screw (B1).



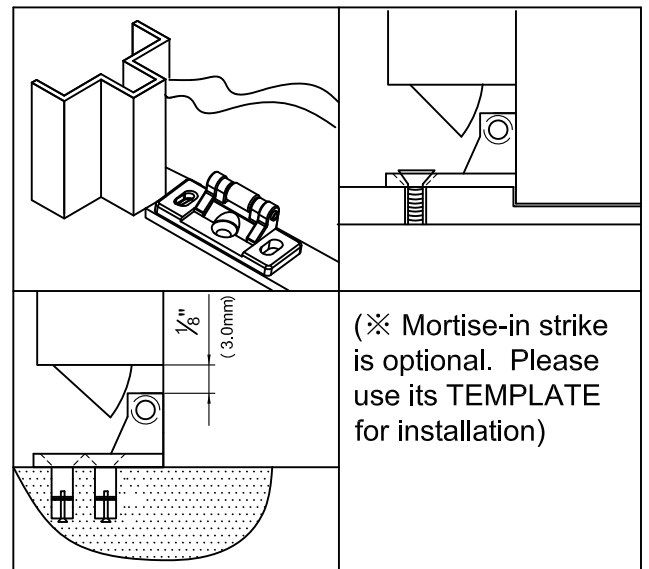
STEP 5: PREPARE BOTTOM LATCH & INSTALL BOTTOM LATCH

Prepare Bottom Latch and Mark by TEMPLATE for later installation .
Follow TEMPLATE to install Bottom Latch with two screws(B2).
(DO NOT TIGHTEN screws (B2) firmly)



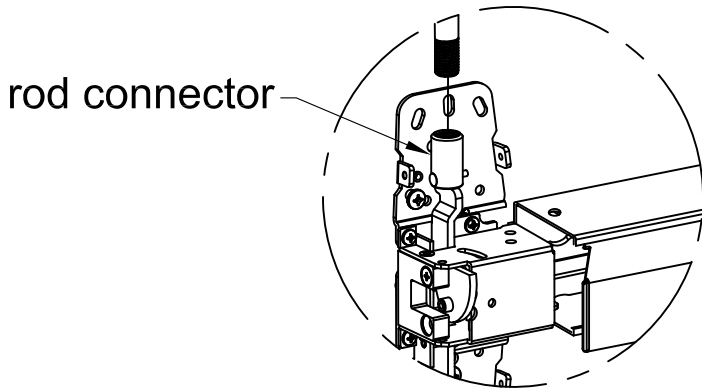
STEP 6: INSTALL BOTTOM STRIKE

Follow TEMPLATE to install Bottom Strike. Adjust the proper gap between Bottom Latch and Strike which is about $\frac{1}{8}$ " (3.0mm), tighten screw (B2) firmly and then screw (B1).

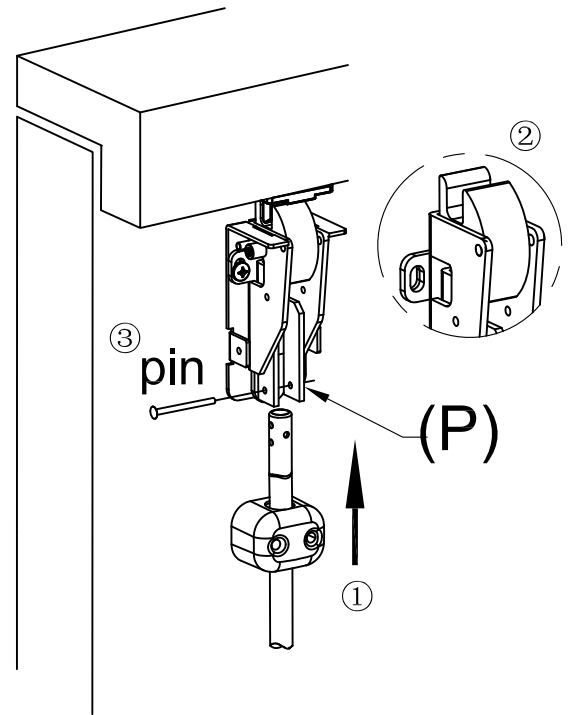


STEP 7: INSTALL & ADJUST TOP ROD

The rod length can be adjusted by the thread of the rod, adjust the correct length when door is in the closed position, by aiming the rod to the hole of the part (P).

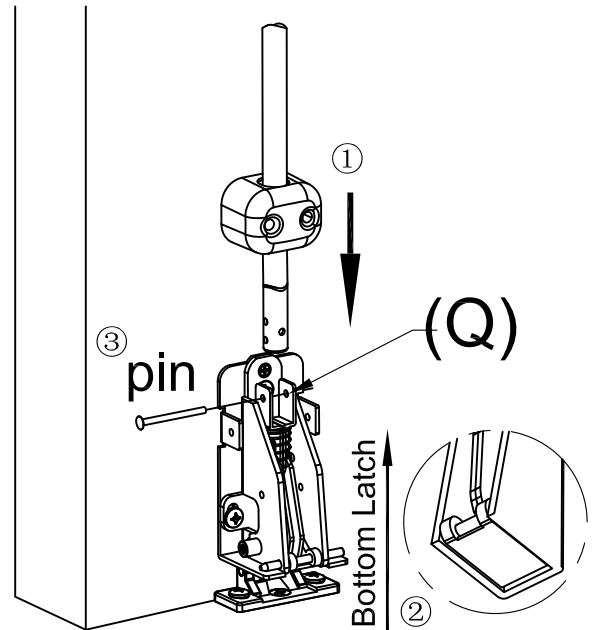
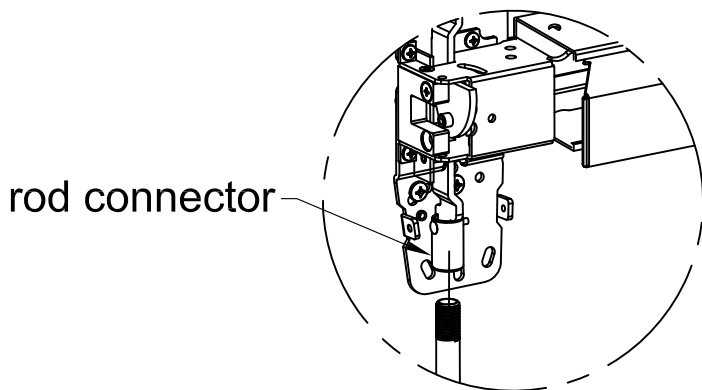


※ If Top Rod had been cut to fit door height, please drill hole for pin loading.



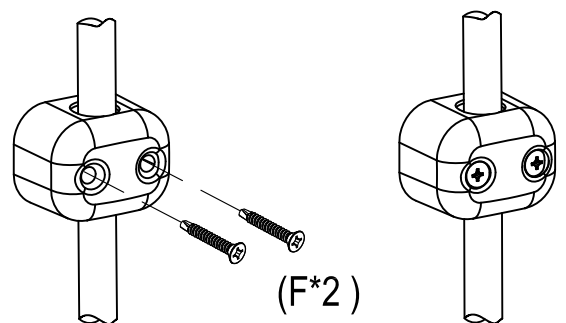
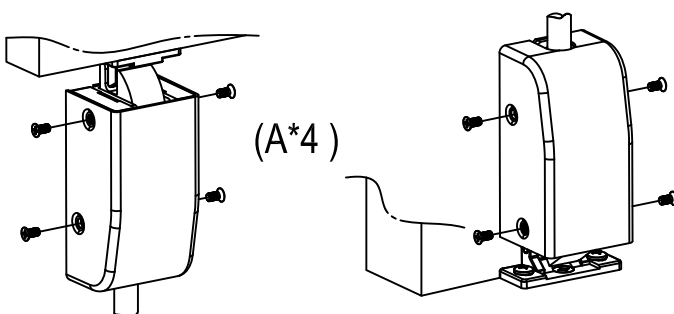
STEP 8: INSTALL & ADJUST BOTTOM ROD

The rod length can be adjusted by the thread of the rod, adjust the correct length when door is in the opened position, by aiming the rod to the hole of the part (Q).



STEP 9: INSTALL LATCH COVERS & ROD GUIDE

- (1) Install Latch Covers and fix/tighten them with screws (A).
- (2) Put rod guide midway between Head Cover and Latch. Then, fix & tighten Rod Guide with screws (F).



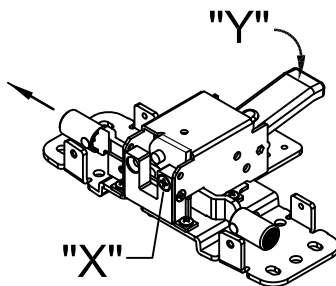
STEP 10: TEST PUSH RAIL & THE DOGGING FUNCTION

1. The latches should engage the strikes when the door is closed. If the door can be pushed to open without depressing the push rail, please check the rod length and installation(see step 3)
2. The latches should disengage from the strikes freely when the push rail is depressed or dogged down. If not, please check the rod length/installation again (see step 3)
3. When applying outside trims:
 - (1). No trims : Exit only, latch bolts are retracted just by the push rail inside.
 - (2). Entrance : latch bolts are retracted by trim outside after the trim unlocked.
 - (3). Storeroom : latch bolts are retracted by trim outside with key only.
 - (4). Passage : latch bolts are retracted by trim outside always open.
4. Dogging:Use dogging hex key and turn clockwise 90° when depressing push rail. Latch bolts will remain retracted.

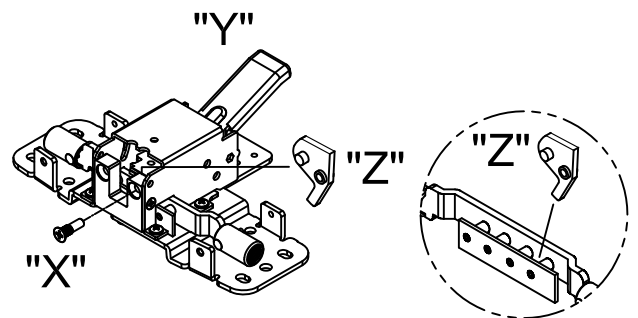
STEP 11: CHANGE HANDING OF DEVICE

TO CHANGE HANDING OF DEVICE (FOR EXAMPLE: FROM LHR to RHR)

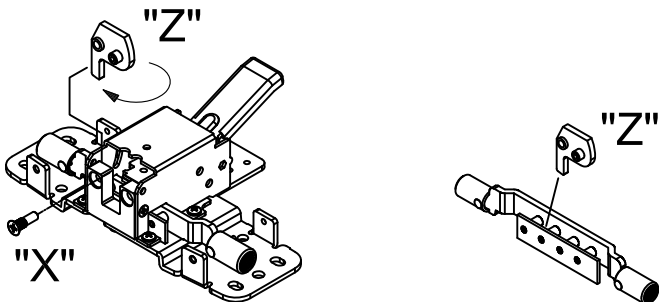
(LHR)



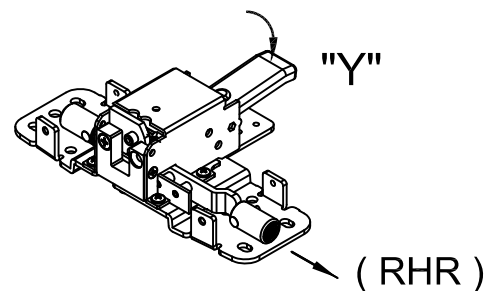
Press Lift Arm "Y" and ensure the direction before changing. The screw "X" is at the below hole position as figure shown



Unscrew "X" and take off "Z".



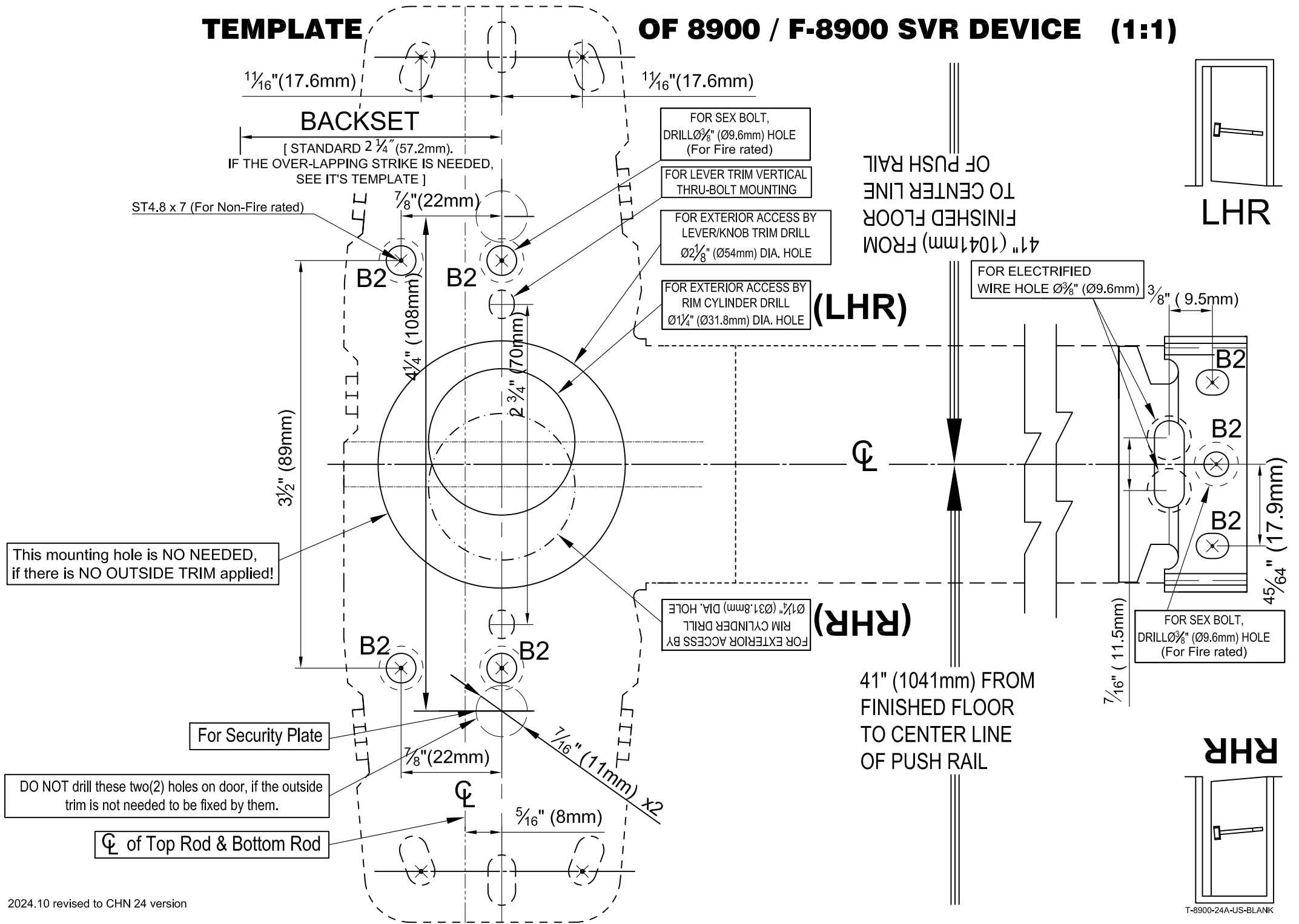
Turn "Z" 180° and put it back as figure shown. Then, fasten "X" at above screw hole position.



Press Lift Arm "Y" to ensure the processing direction is reversed.

TEMPLATE

OF 8900 / F-8900 SVR DEVICE (1:1)



1 1/16" (17.6mm) 1 1/16" (17.6mm)

BACKSET

[STANDARD 2 3/4" (57.2mm).
IF THE OVER-LAPPING STRIKE IS NEEDED,
SEE IT'S TEMPLATE]

ST4.8 x 7 (For Non-Fire rated)

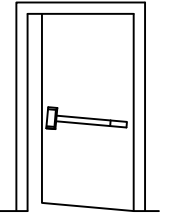
FOR SEX BOLT,
DRILL Ø 3/8" (Ø9.6mm) HOLE
(For Fire rated)

FOR LEVER TRIM VERTICAL
THRU-BOLT MOUNTING

FOR EXTERIOR ACCESS BY
LEVER/KNOB TRIM DRILL
Ø 2 1/8" (Ø54mm) DIA. HOLE

FOR EXTERIOR ACCESS BY
RIM CYLINDER DRILL
Ø 1 1/4" (Ø31.8mm) DIA. HOLE

41" (1041mm) FROM
FINISHED FLOOR
TO CENTER LINE
OF PUSH RAIL



LHR

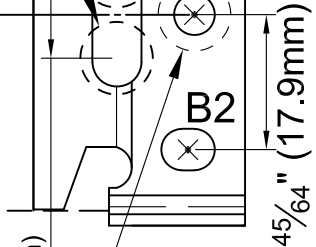
FOR ELECTRIFIED
WIRE HOLE Ø 3/8" (Ø9.6mm)

(LHR)

3/8" (9.5mm)

3 1/2" (89mm)

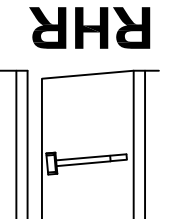
This mounting hole is NO NEEDED,
if there is NO OUTSIDE TRIM applied!



FOR SEX BOLT,
DRILL Ø 3/8" (Ø9.6mm) HOLE
(For Fire rated)

(RHR)

41" (1041mm) FROM
FINISHED FLOOR
TO CENTER LINE
OF PUSH RAIL



RHR

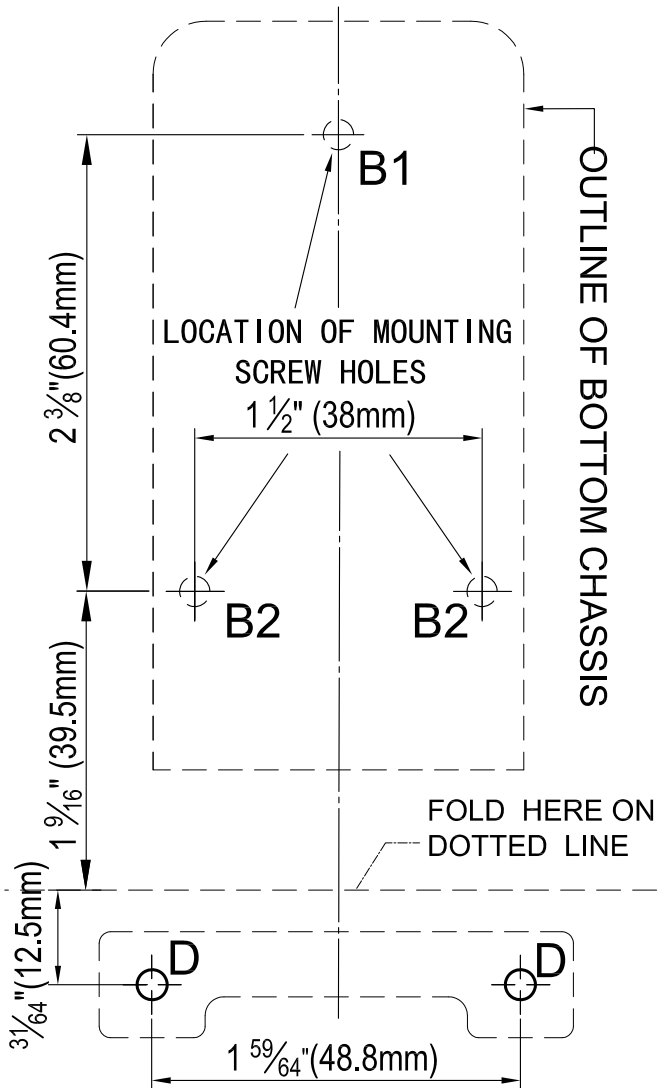
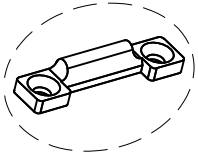
For Security Plate

DO NOT drill these two(2) holes on door, if the outside
trim is not needed to be fixed by them.

CL of Top Rod & Bottom Rod

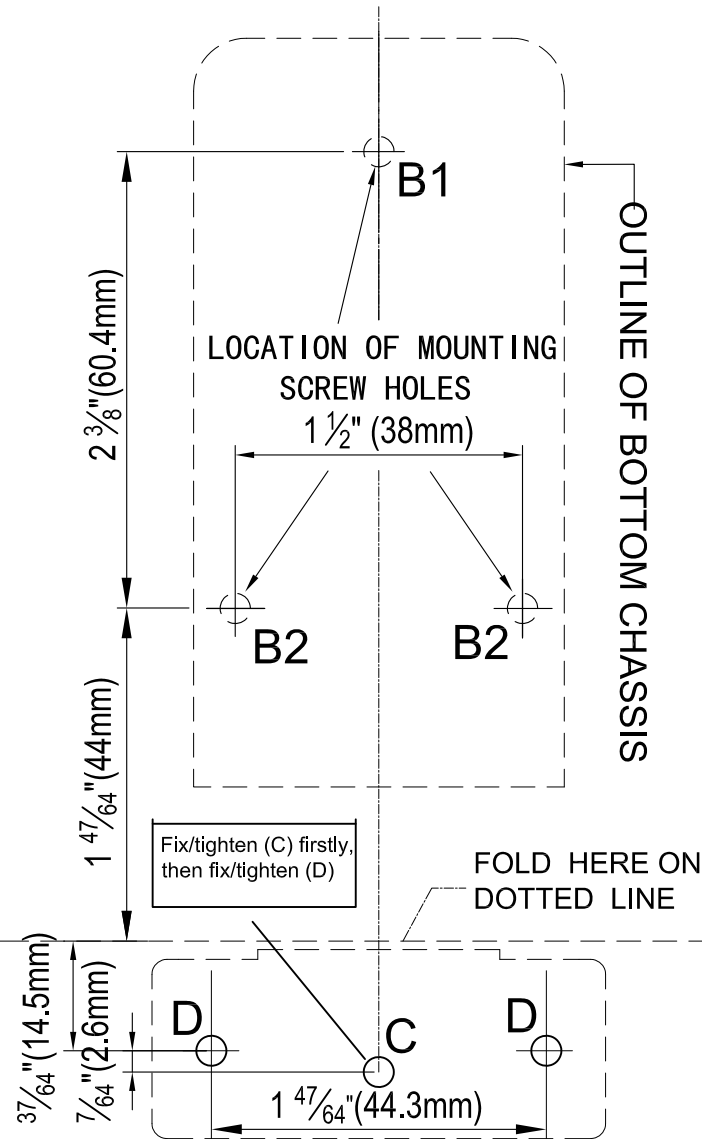
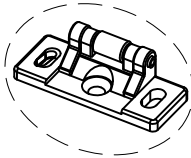
TEMPLATE of Bottom LATCH (1:1)

【Handicap Strike (Optional use)】



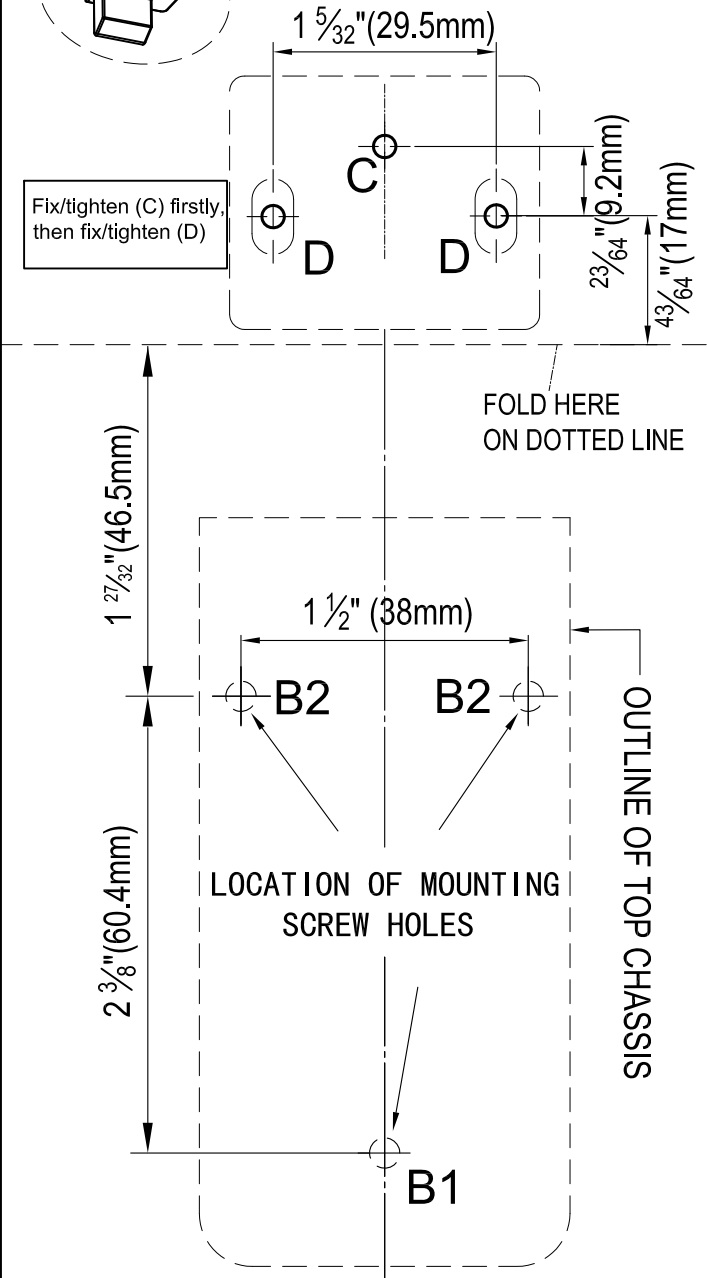
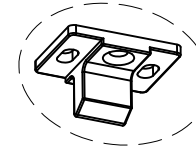
TEMPLATE of Bottom LATCH (1:1)

【Surface Strike (regular use)】



TEMPLATE of Top LATCH (1:1)

【Top Strike (regular use)】



TEMPLATE of Bottom LATCH (1:1)

【Mortise in Strike (Optional use)】

