



Detex Corporation, 302 Detex Drive, New Braunfels, Texas 78130-3045
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INSTALLATION INSTRUCTIONS FOR H90R/H90R5 MULLION

Drawing: 106080

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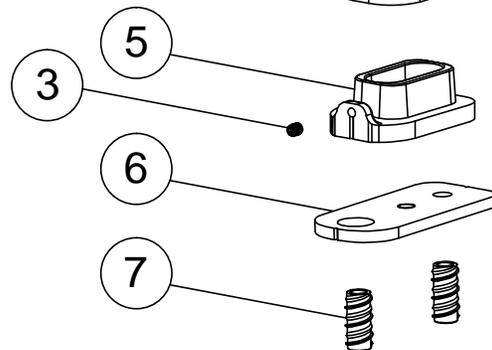
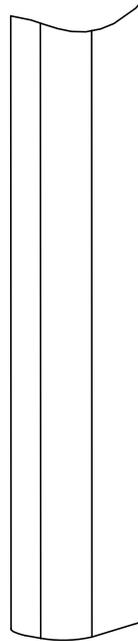
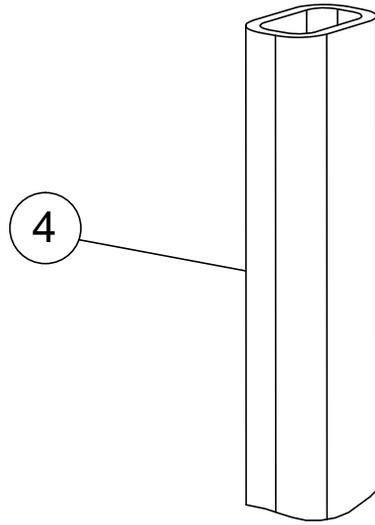
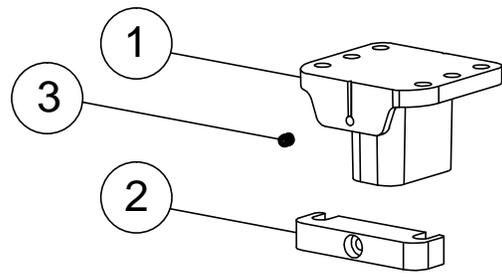
Should you have a Question/Problem with your Detex device please call Detex Technical Support from the job site at 1-800-729-3839 and choose option 2 on our menu. Please do not return the product to the distributor.

**For WARRANTY information,
 scan code below or
 go to www.detex.com/warranty**



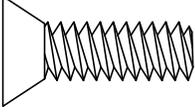
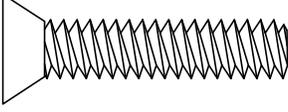
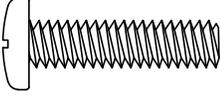
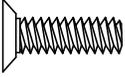
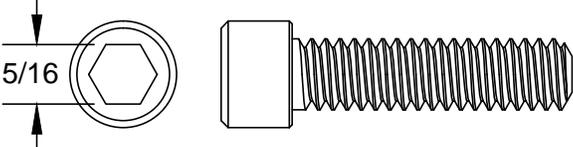
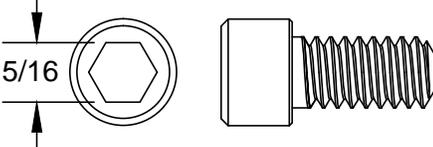
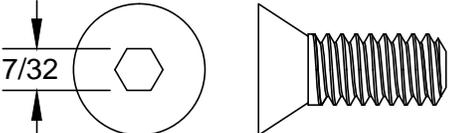
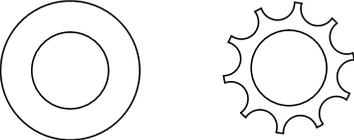
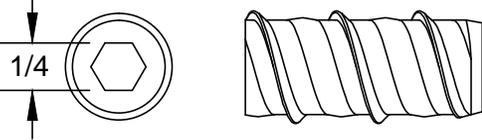
**For device installation videos,
 scan code below or
 go to www.detex.com/videos**





Item	Part No	Description
1	106079	Top fitting, Hurricane Mullion, H90R5
	106092	Top fitting, Hurricane Mullion, H90R
2	106074	Frame spacer block,
3	106087	Set screw, 1/4-20 x 5/16, SS
4	106075-1	Mullion Channel, H90R5 7 foot
	106075-4	Mullion Channel, H90R5 7 foot, 230X prep
	106076-1	Mullion Channel, H90R 7 foot
	106076-2	Mullion Channel, H90R 8 foot
5	106078	Base fitting, Hurricane Mullion, H90R5
	106091	Base fitting, Hurricane Mullion, H90R
6	106093	Mullion base affixment plate
7	106071-2	Concrete floor anchor, 3/8 diameter

Fastener Table

Screw style	Description	Used on
	5/16-18 X 1" PFHMS P/N 106096	Top fitting
	5/16-18 X 1-1/2" PFHMS P/N 101147	Top fitting and frame spacer block
	1/4-20 X 1" PPHMS P/N 100980	Frame spacer block
	10-24 X 5/8" PFHUMS P/N 100112	Strike hook (If ordered)
	3/8-16 X 1-1/2" SOCKET CAP HEAD MS P/N 106072-9	Base fitting
	3/8-16 X 3/4" SOCKET CAP HEAD MS P/N 106072-3	Base fitting
	3/8-16 X 1" SOCKET FLAT HEAD MS P/N 106094-5	Base fitting
	3/8 FLAT WASHER P/N PP-5063-37 3/8 LOCK WASHER P/N PP-5067-37	Base fitting
	3/8 x 1-1/4 ANCHOR Drill Bit Diameter: 1/2 Minimum Hole Depth: 2" P/N 106071-2	Base fitting

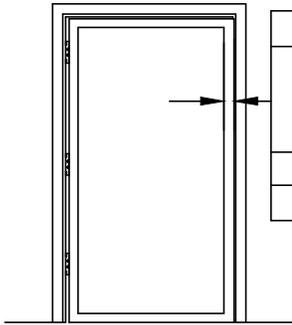
Tools Required:

Power Drill
Level
Hammer
Tape Measure

Safety Glasses
Pencil
Combination Square
Center Punch

Allen Wrenches (1/8", 7/32, 1/4, 5/16)
Phillips Screw Drivers (#2 and #3)
Tap Wrenches (1/4-20 & 5/16-18)

!!!CHECK BEFORE STARTING!!!

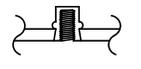
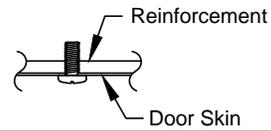


Wide Stile (Surface Strike) 99
Minimum door stile 4-1/2" (114 mm) Template drawings provide door and frame structural and dimensional specifications for door and frame preparation.
Narrow Stile 98
Minimum door stile 2" (51mm)

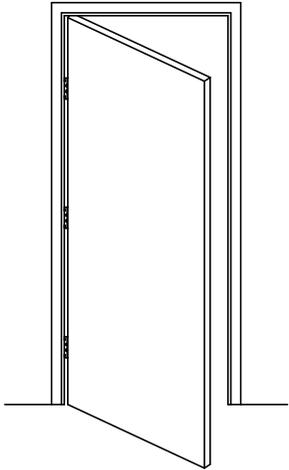
Doors and frames with walls having a structural thickness (metal skin plus reinforcement, or solid wood) to engage less than (3) full screw threads, are considered unreinforced for hardware.

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

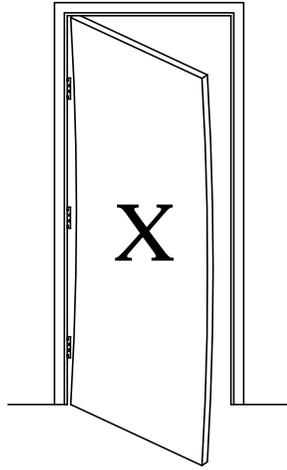
Reinforced door or frame engages at least (3) screw threads.



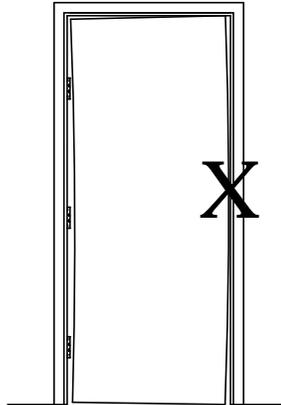
Blind Rivet Nut



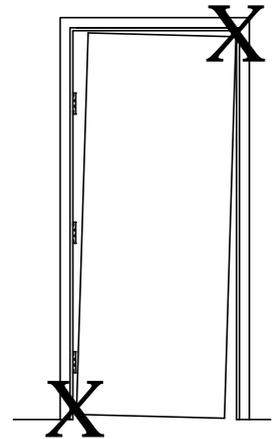
Door Must Swing Freely



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

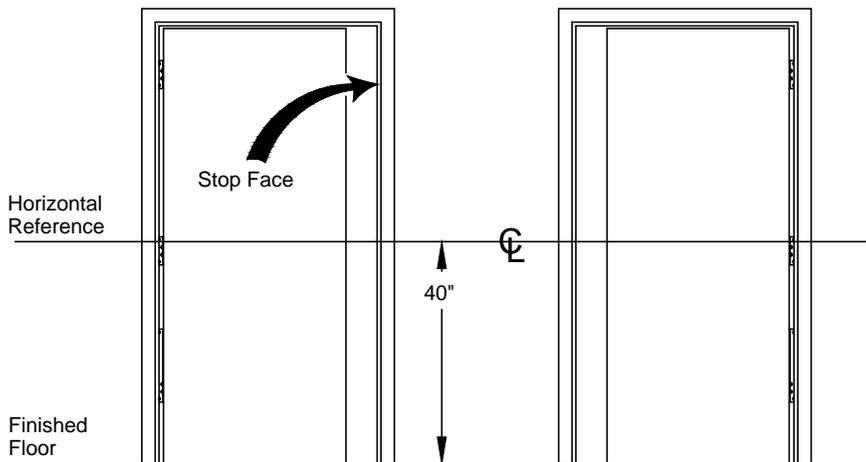
THE SAFETY FEATURES OF THIS PRODUCT ARE ESSENTIAL TO IT'S COMPLIANCE WITH EN 1125.

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



RHR Door

LHR Door

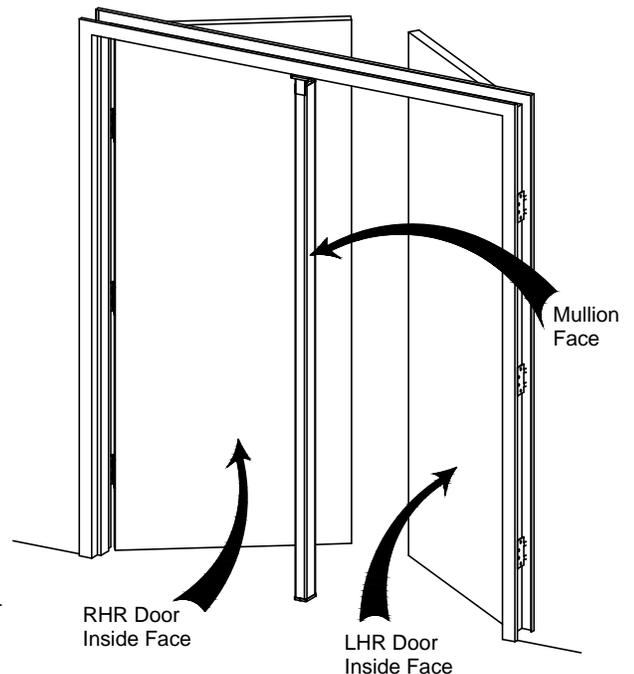


Horizontal Reference

Stop Face

40"

Finished Floor

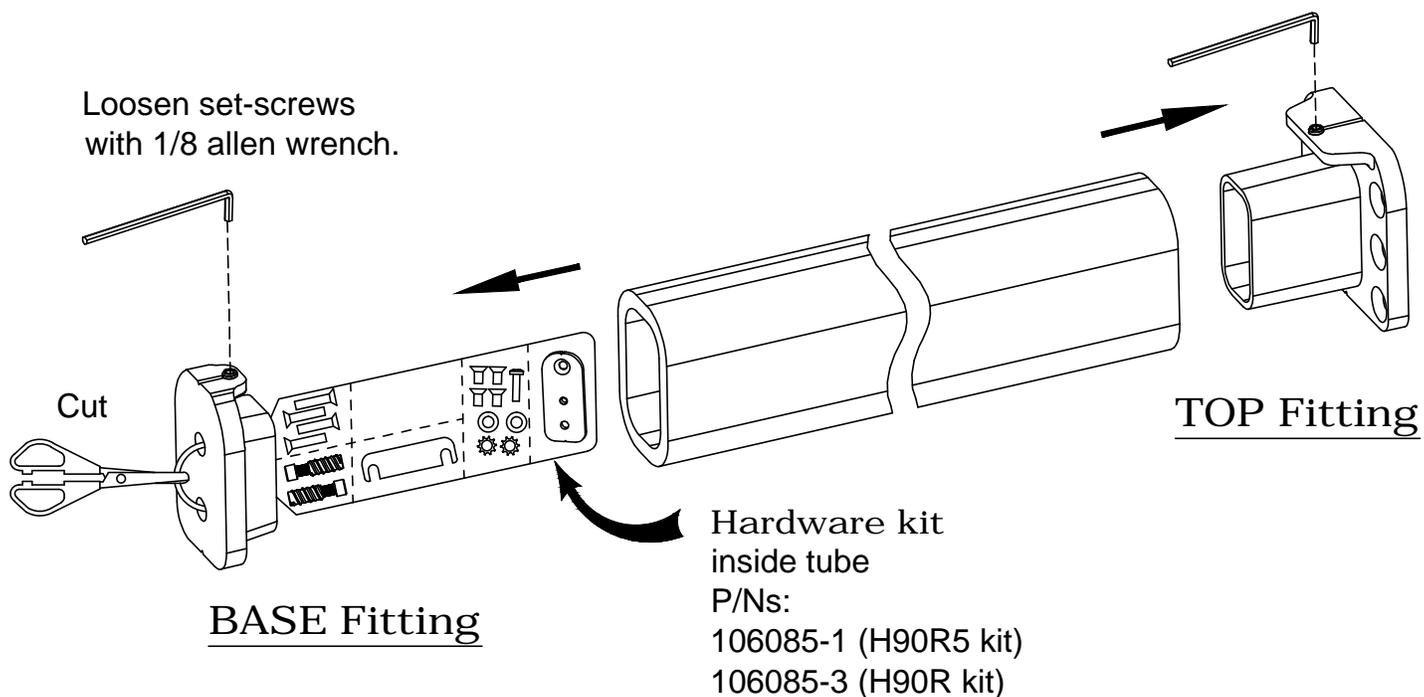


RHR Door Inside Face

LHR Door Inside Face

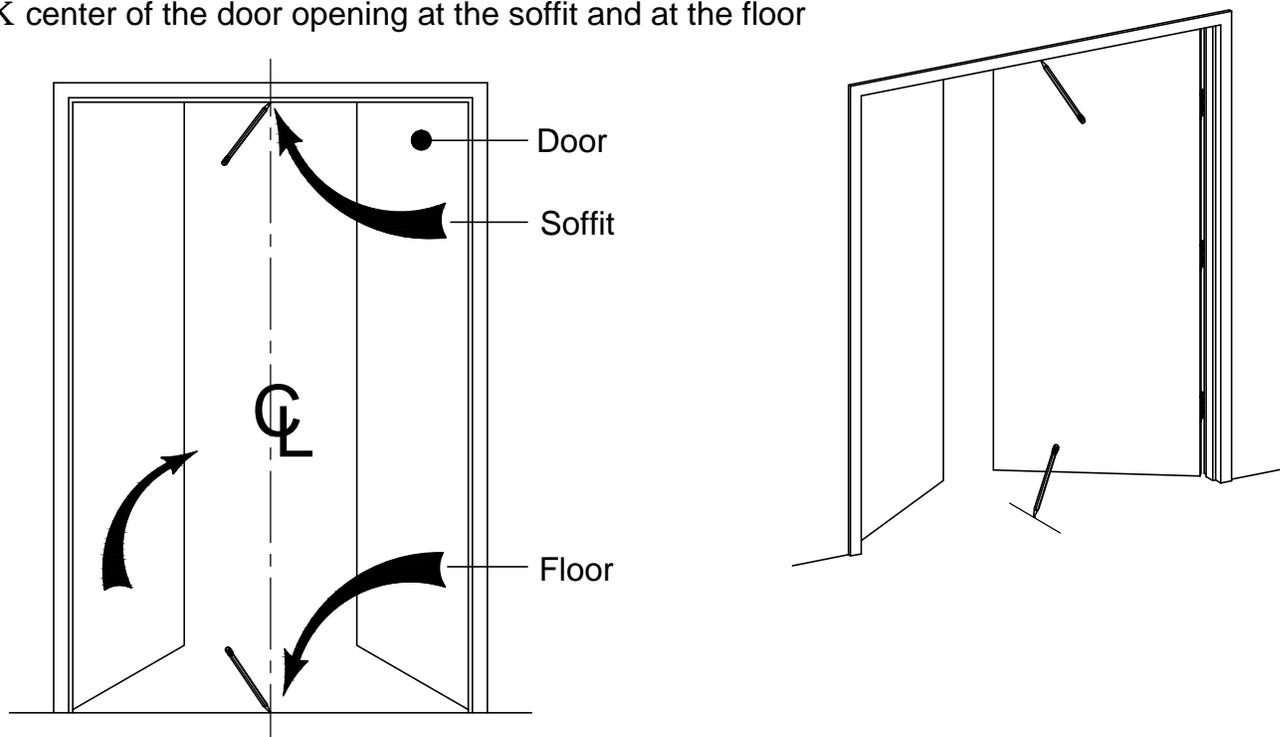
STEP 1: REMOVE FITTINGS - FIND HARDWARE KIT

REMOVE top and base fittings.



STEP 2: MARK CENTER OF DOOR OPENING

MARK center of the door opening at the soffit and at the floor

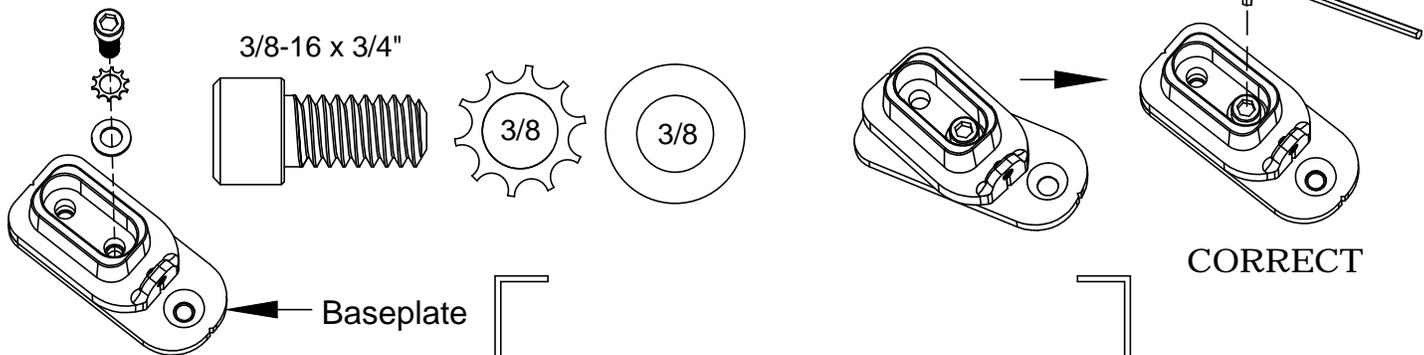


STEP 3: TRIAL FIT MULLION & CUT (IF NECESSARY)

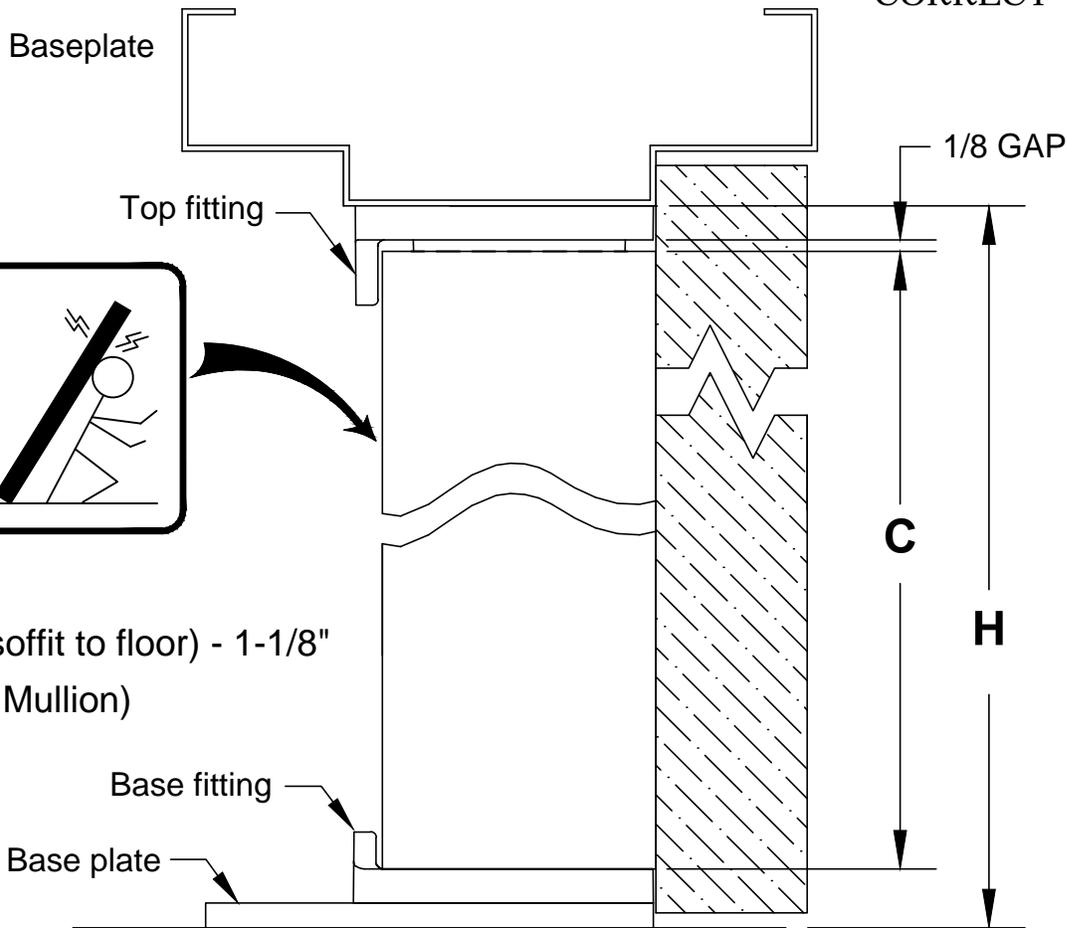
If mullion requires cutting, position cut end to the bottom
(Unless mullion is ordered with strike prep, then cut top end).

3a Assemble base fitting to base plate with screw and washers

3b Align fitting with baseplate, then tighten screw snug 5/16 allen wrench



CAUTION!
Ensure mullion channel is stable



H (Distance from soffit to floor) - $1-1/8"$
= C (Cut length of Mullion)

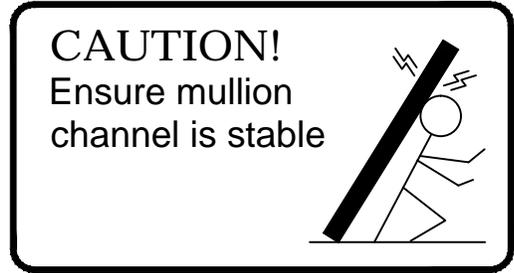
Close doors firmly and trial fit the mullion.

1. Assemble base fitting to base plate with screw and washers.
2. Place the top fitting into mullion channel; place the mullion channel into the base fitting and base plate, then pivot the top upward into place.
3. **If mullion channel is too long**, measure the distance from the soffit to the floor. Subtract $1-1/8"$ from this measurement. Mark and cut the mullion channel to new length.

NOTE: If there is a threshold, be sure to **CUT** the threshold so that the base fitting is resting on the secured non-flammable flooring.

STEP 4: MARK FITTING PERIMETER LOCATIONS

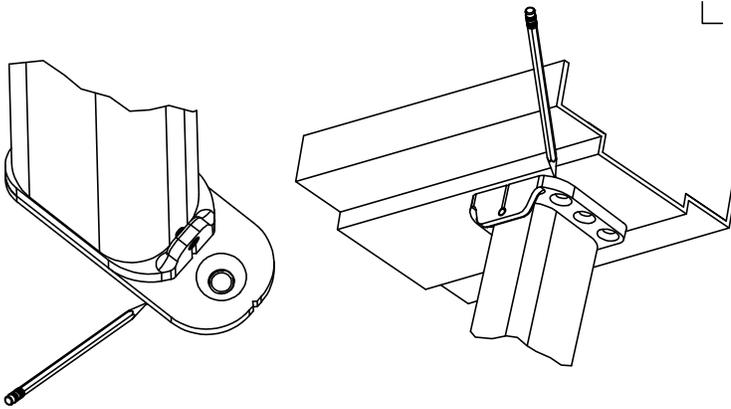
- 4a Position mullion firmly against closed door. Align the top fitting with MARK made on soffit. Align base fitting and base plate with MARK made on floor. TRIAL fit mullion to achieve desired mullion location.



- 4b Tighten set-screws snug.

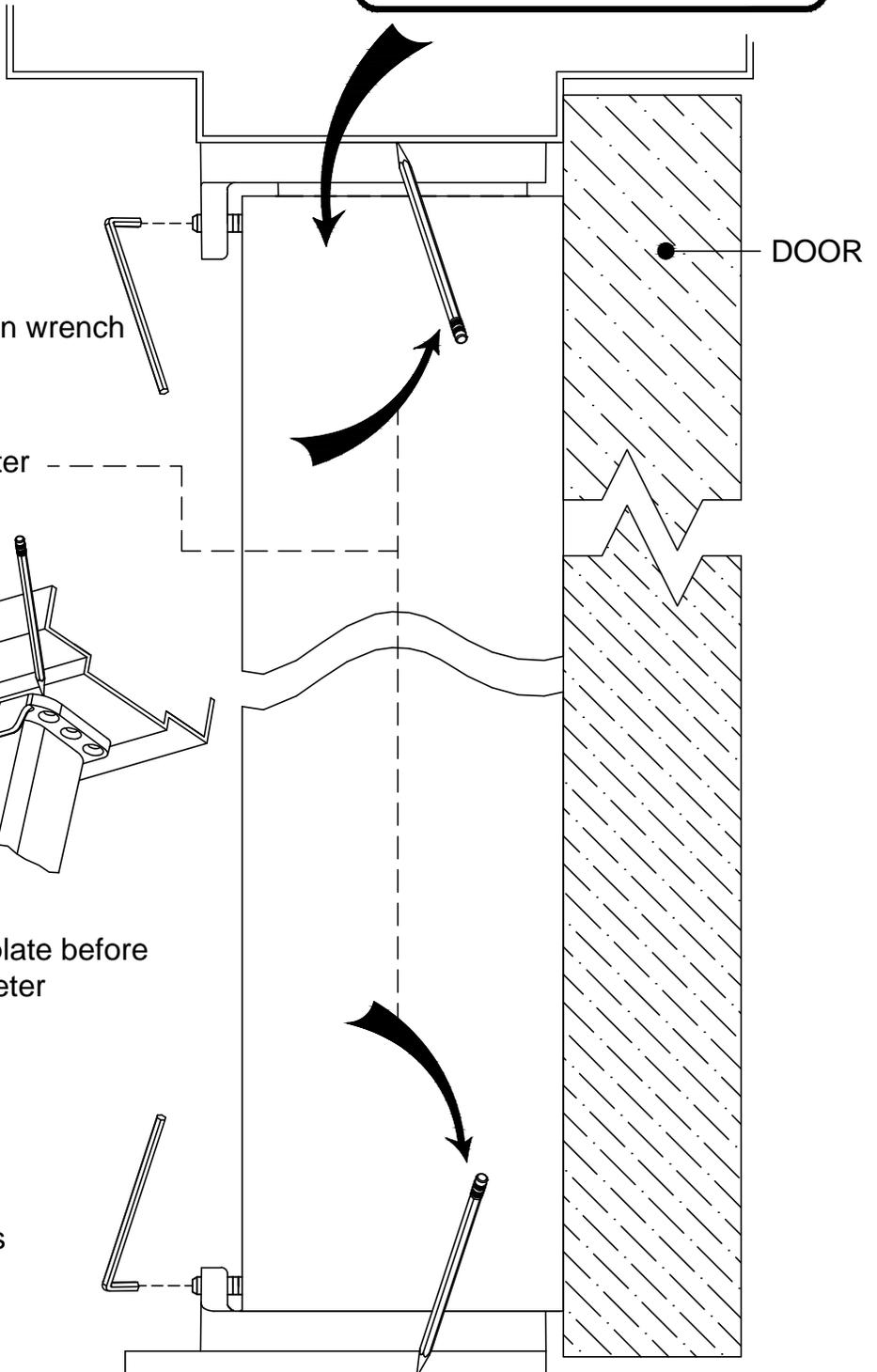
1/8 allen wrench

- 4c DRAW a line around perimeter of base plate and top fitting



Align base fitting with base plate before drawing a line around perimeter

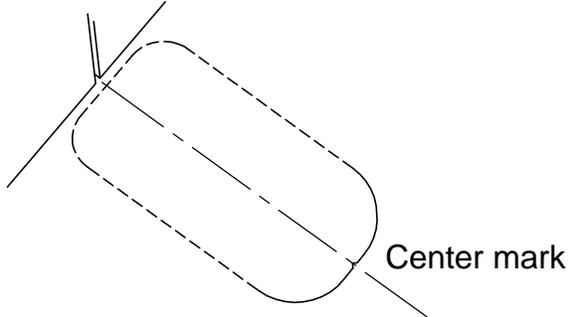
- 4d REMOVE mullion.
Set mullion safely down.
Be sure to loosen set-screws before removing fittings



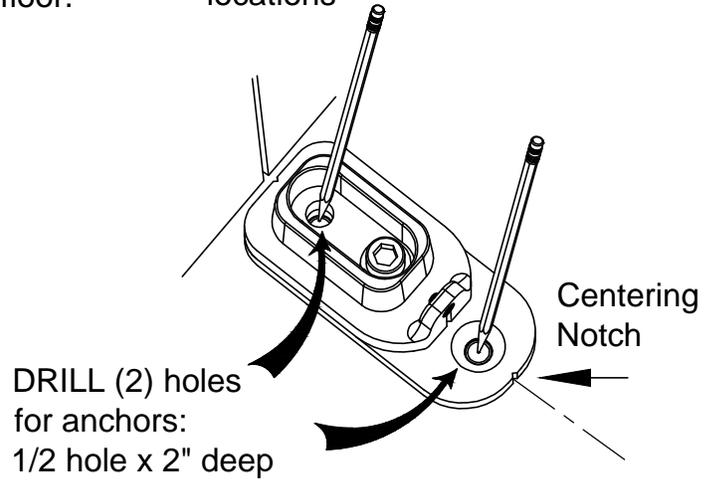
STEP 5: INSTALL BASE FITTING and BASE PLATE

PREP FLOOR FOR BASE FITTING and BASE PLATE

5a POSITION base plate over drawn perimeter.
Align notches on plate with center mark on floor.

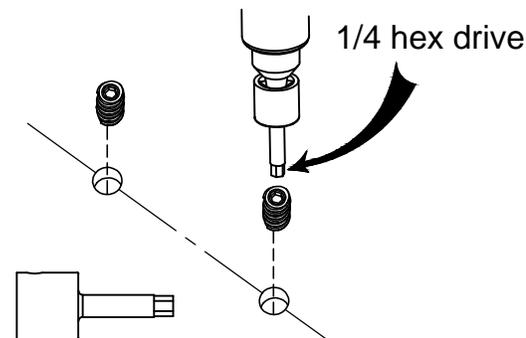


5b MARK and DRILL floor at two locations

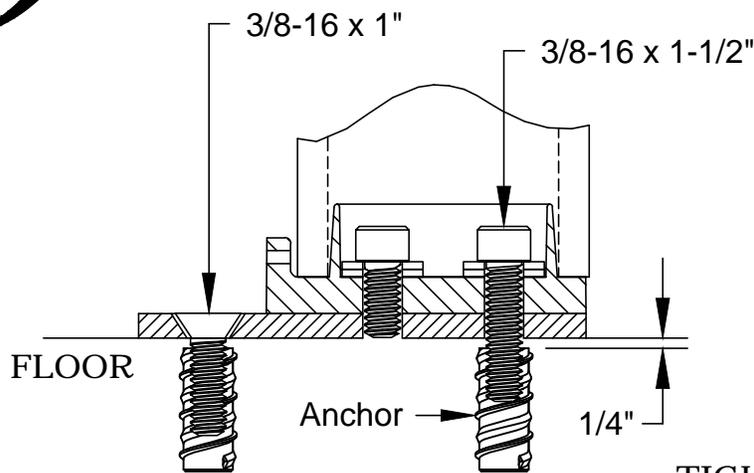
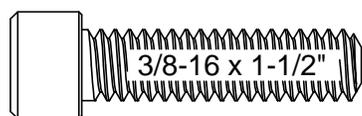
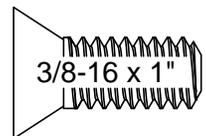


INSTALL BASE FITTING

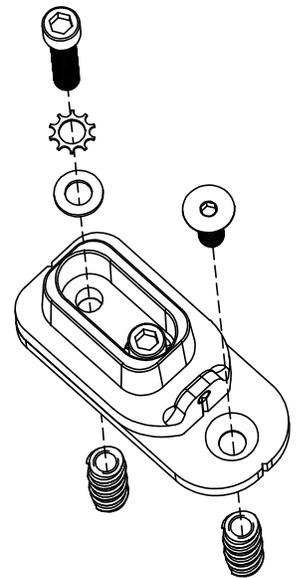
5c INSTALL anchors with 1/4 hex drive tool.
Install top of anchors 1/4" below floor surface.



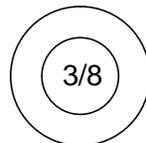
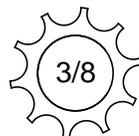
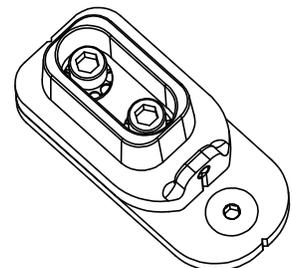
Recommended tool
for installing anchors:
Hex Drive Setting Tool
Powers Fasteners
P/N: 6407SD



5d INSTALL base fitting and plate with washers & screws provided



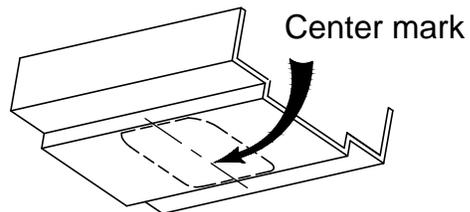
TIGHTEN all screws



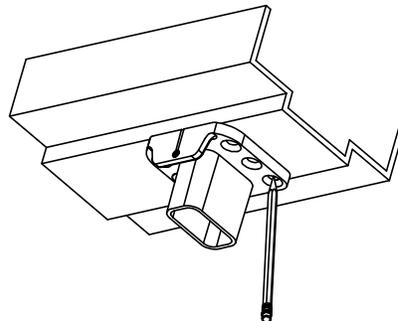
STEP 6: INSTALL TOP FITTING

PREP FRAME FOR TOP FITTING

- 6a** POSITION top fitting over drawn perimeter.
Align notches on fitting with center mark on soffit.

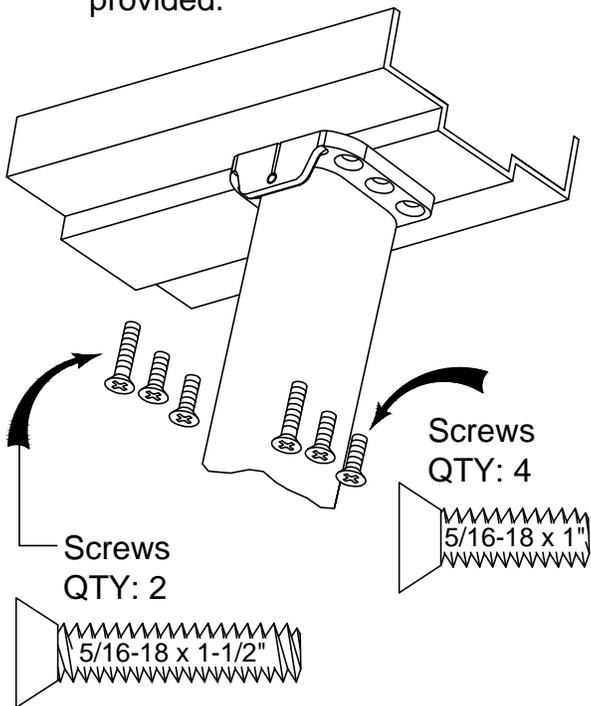


- 6b** MARK, DRILL, and TAP the soffit at six (6) hole locations. Tap holes with 5/16"-18 tap (#F - 0.257 drill).



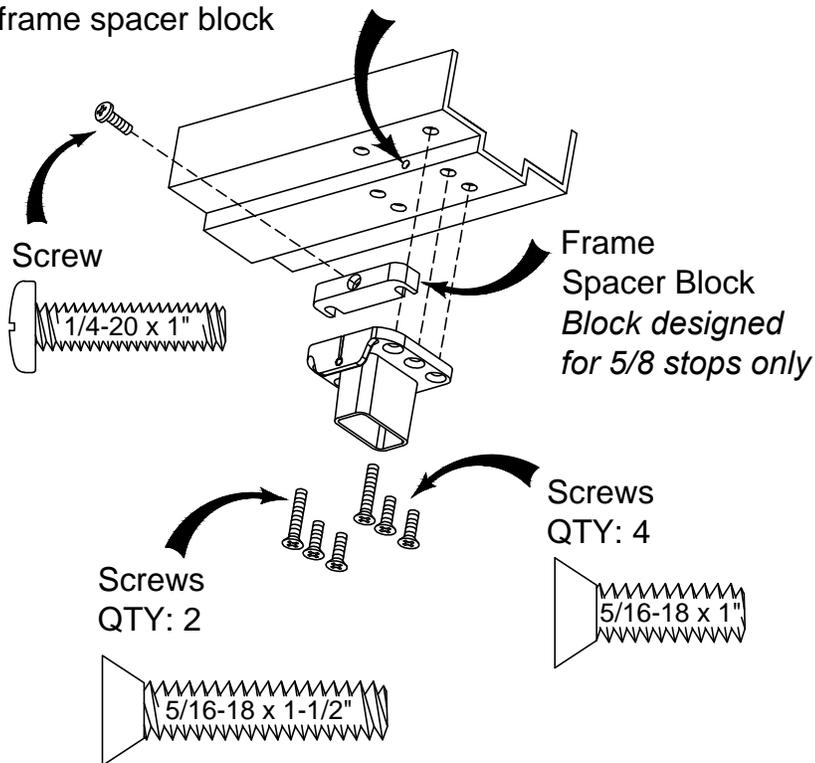
INSTALL TOP FITTING

- 6c** Assemble top fitting and mullion channel to soffit with screws provided.



If top fitting over hangs stop,
USE FRAME SPACER BLOCK

Add a 1/4-20 Tapped hole (#7 - 0.201 drill) for installing frame spacer block

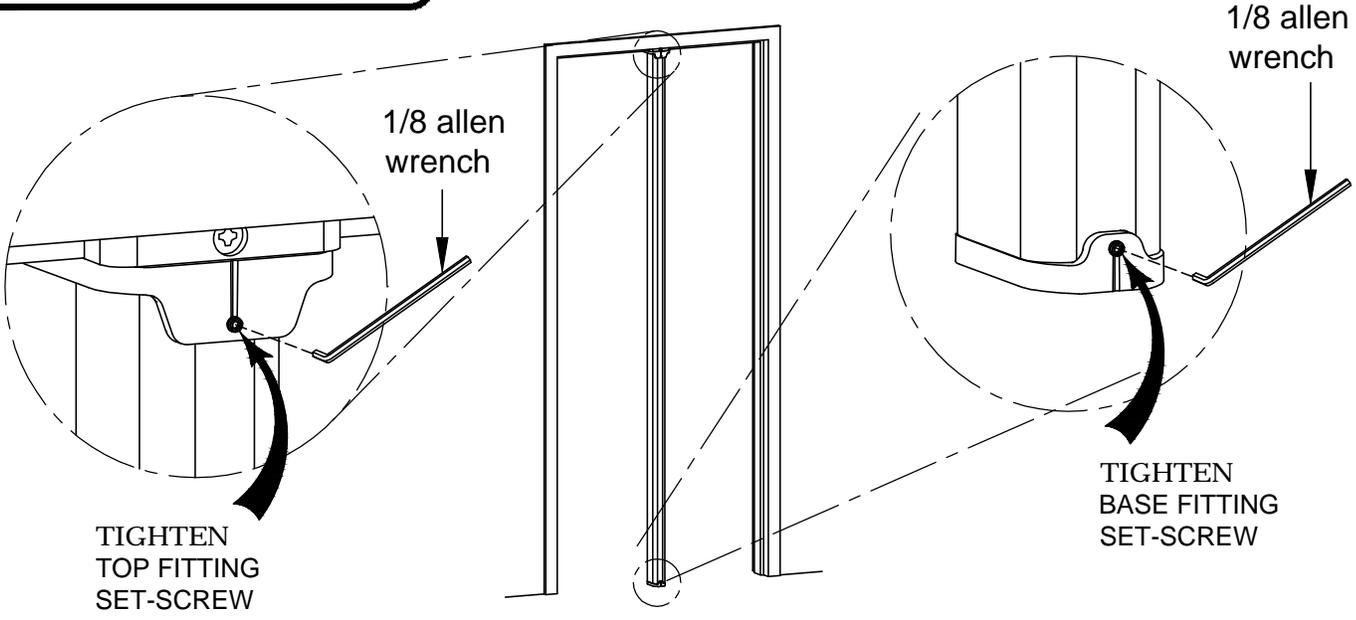


STEP 7: SECURE MULLION

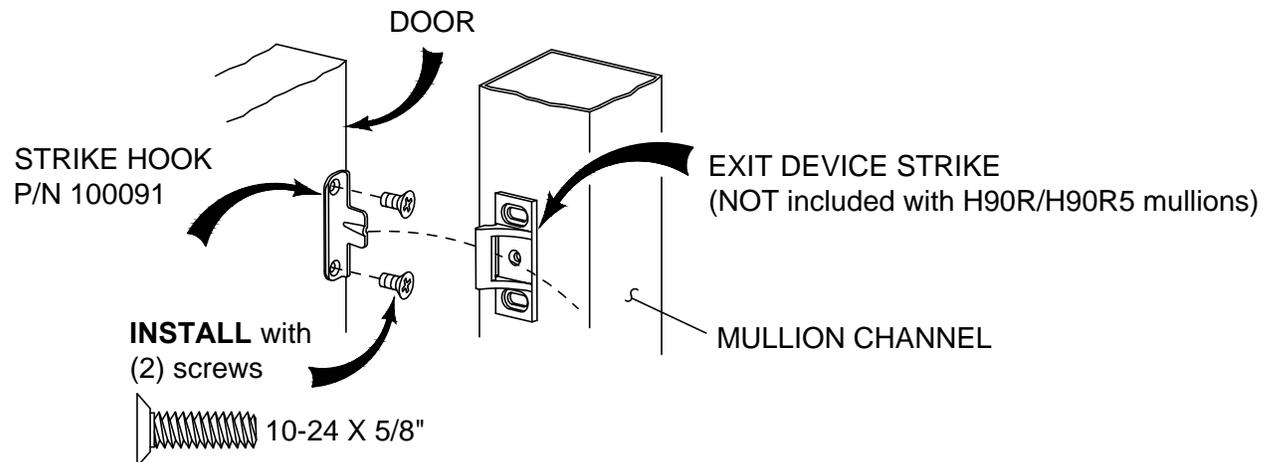
CAUTION!
Ensure mullion channel is appropriately secured



TIGHTEN set-screws to eliminate mullion channel rattle or looseness



STEP 8: INSTALL STRIKE HOOKS (FIRE RATED ONLY)



Attach the strikes to the side of the mullion according to the template provided with the locking device to be used.

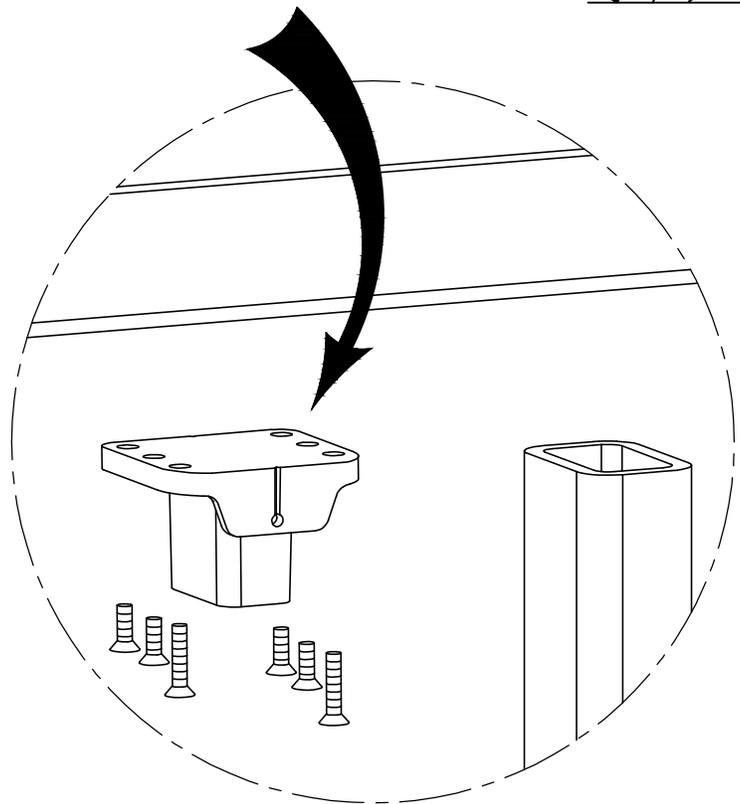
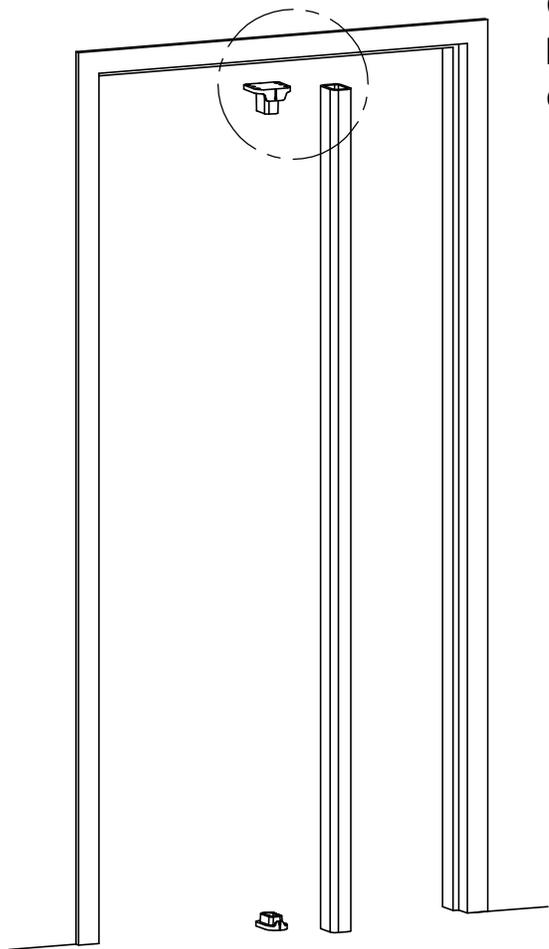
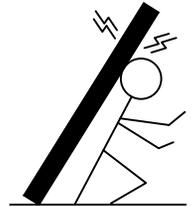
Attach one strike hook per door leaf according to the template provided with the locking device to be used. Ensure that the strike hook engages the strike without interference to the latching mechanism. Open and close the door. The strike hook should not cause friction or bind during the opening and closing cycles of the door.

REMOVING THE MULLION CHANNEL

CAUTION!

Ensure mullion channel is appropriately supported during & after loosening/removing the top fitting screws

The top fitting must be removed before removing mullion channel



TROUBLE SHOOTING

1. If Mullion channel is too long:
 - a) See Step 3 for cutting the mullion channel to correct length.
2. Mullion channel rattles after door is closed:
 - a) Tighten set-screws in top and base fittings (See Step 7).
 - b) Verify base and top fittings are secured. Tighten screws as needed.

Customer Service 1-800-729-3839