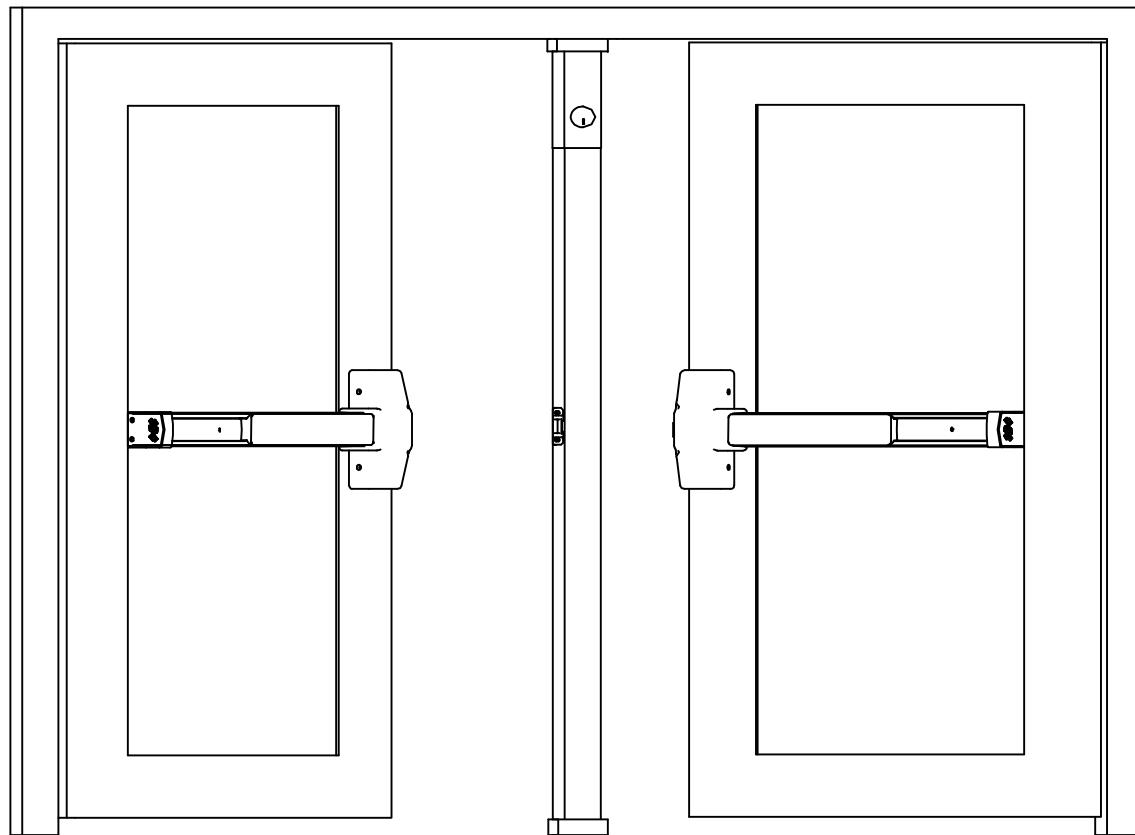
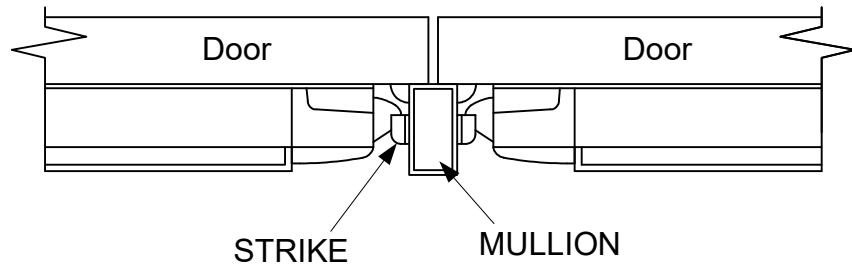


## INSTALLATION INSTRUCTIONS

### INST-KR90F FOR NON-FIRE & FIRE RATED REMOVABLE MULLION

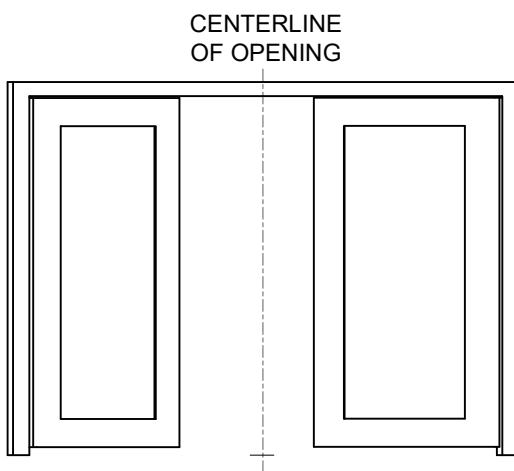


The removable Mullion is used with  
Two Rim Devices on double doors.



**STEP 1: MARK CENTERS & HOLE LOCATIONS**

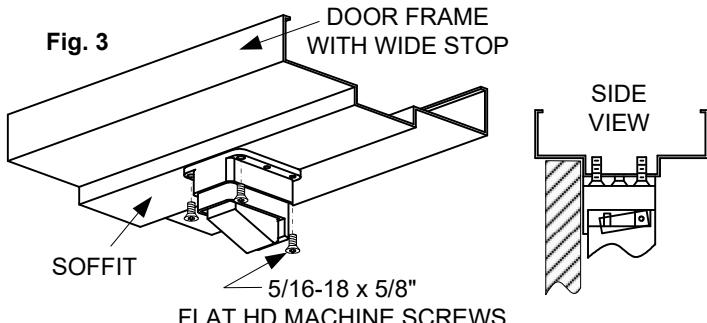
1. Mark the center of the width of the door opening at the soffit and at the floor (see Fig. 1).
2. As shown in Fig. 2, mark a centerline of the width of the Top Bracket edge. Then place the top bracket at the soffit of the top frame and align the centerline with the mark that you made in Step 1-1. Close the doors and butt the centerline side to the doors. Make sure the centerline on the top bracket is in alignment with the gap of the two single doors.
3. Mark and drill four (4) hole locations on the soffit as per attached template. Tap the four (4) holes with 5/16-18 thread.

**FIG. 1****FIG. 2**

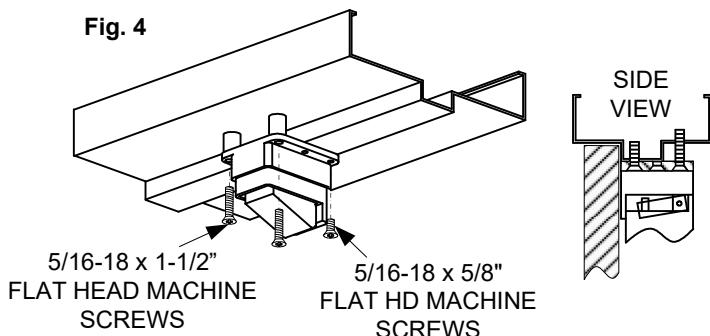
Mark a centerline  
on Top Bracket

**STEP 2: INSTALL TOP BRACKET**

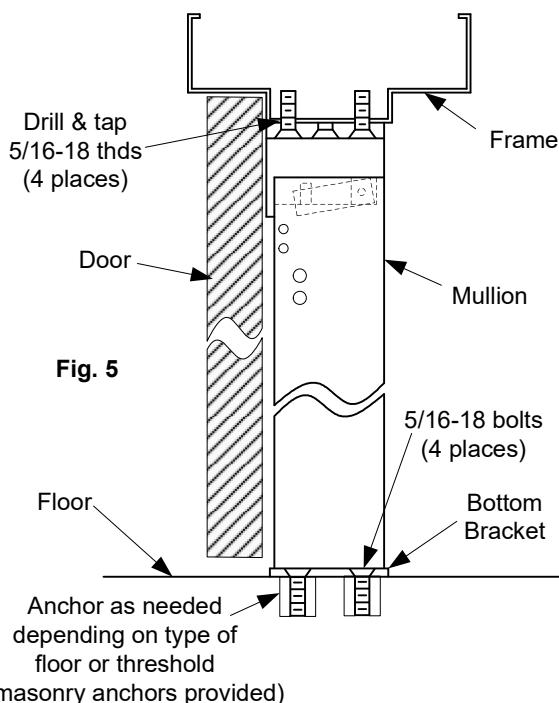
1. Tighten the top bracket to the soffit with the screws (#5/16-8 X 5/8") provided (see Fig. 3).

**Fig. 3****STEP 2: (cont.)**

2. If the top bracket is installed on a typical door frame (with a narrow stop), the top bracket overhangs the stop, the furnished shims should be used (see Fig. 4).
  - a. Check stop height and match to shims (1/2" or 5/8").
  - b. Install shims using the long screws (5-16-18 x 1-1/2" flat countersunk head) supplied in hardware kit.

**Fig. 4****STEP 3: INSTALL BOTTOM BRACKET**

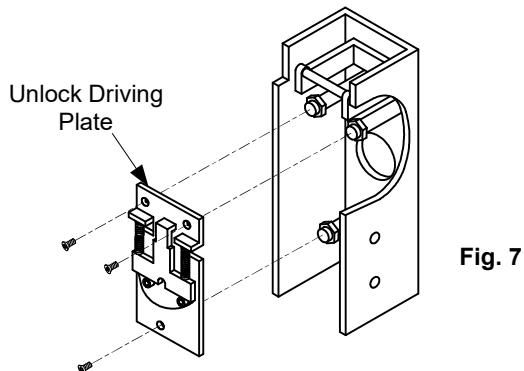
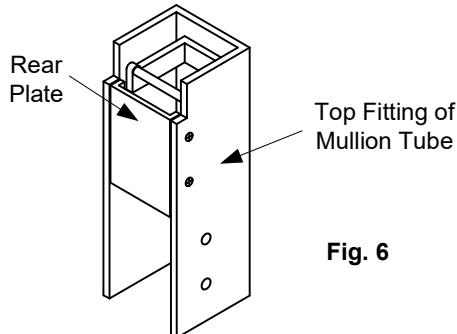
1. If there is a threshold, be sure to cut the threshold so that the bottom bracket can be installed on the flooring directly.
2. Place the mullion tube into the bottom bracket and put its top into the top bracket. Close the door again. Move the bottom bracket at floor slightly and butt the mullion to the doors. Align centering notches on the bracket with the mark you made in Step 1-1. Mark and drill four (4) holes on the floor for anchors. Tighten the bottom bracket to the floor with provided anchors and bolts (see Fig. 5).

**Fig. 5**

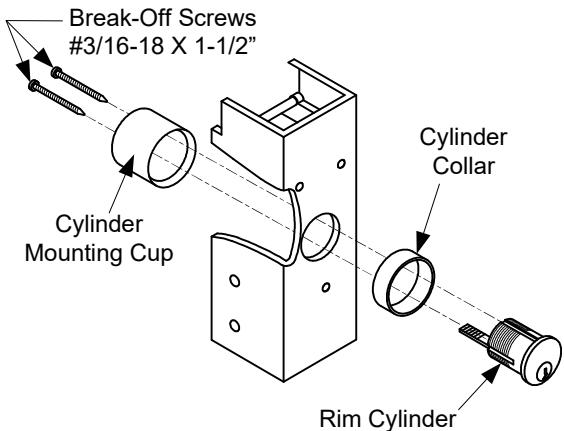
**STEP 4: INSTALL CYLINDER**

If the mullion has a cylinder installed, skip this step to the next. If the mullion does not have a cylinder installed, follow the procedure below:

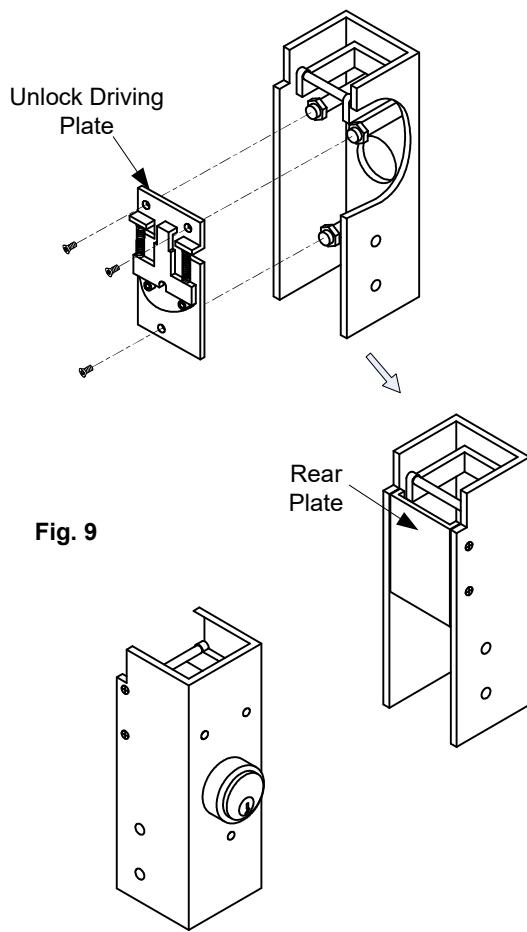
1. Releasing the fixing screws on both sides of the top fitting for removing the rear plate, see Fig. 6. After the rear plate is removed, release three (3) fixing screws on the unlock driving plate, see Fig. 7.



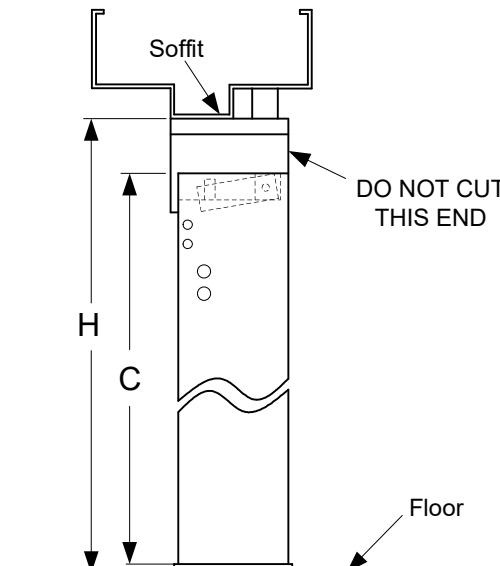
2. Slide cylinder collar onto rim cylinder body, then install a cylinder mounting cup on the back side of the top fitting.
3. Install the rim cylinder into the top fitting, and align tailpiece with tailpiece hole on the cylinder cup then let the end of tailpiece go through the hole. Adjust and cut break-off screws to eliminate excess length, secure rim cylinder (see Fig. 8).



4. Place and fasten the unlock driving plate and the rear plate back in place (see Fig. 9)

**STEP 5: INSTALL MULLION TUBE**

1. Measure the distance from the soffit to the floor shown as "H" in Fig. 10. then subtract 1-7/8" (47.5mm) from the measurement that is the actual length you need to use, shown as "C" in Fig. 10.
2. Mark a cutting line on the bottom end of the mullion tube then cut the excess portion.
3. Place the mullion tube into the bottom bracket and the top bracket. Make sure the mullion tube should snap firmly into the place. If the mullion tube is cut too much and causes too much of a gap, the shim plates should be used to raise the bottom bracket. the shim plate is the same size as the base of the bottom bracket. Shim plates are not included in the mullion hardware kit. Sold separately.
4. Ensure that the mullion is easily removable when the key is turned in its cylinder or operate the cylinder turn.

**Fig. 10****STEP 6: INSTALL STRIKES AND RIM EXIT DEVICE****1. For the Non-Fire Rated Keyed Removable Mullion**

Install rim strikes on both sides of the mullion as per the template and installation instructions of the rim exit device.

**2. For the Fire Rated Keyed Removable Mullion**

Use the provided instructions of mullion strike and strike hook to install them on the mullion and each door leaf. Ensure that the strike hook engages the strike without interference to the latching mechanism. Open and close the door for several times to make sure of correct installation. The strike hook should not cause friction or bind during the opening and closing cycles of the door.