

The following installation details apply to model **FSD-125R**

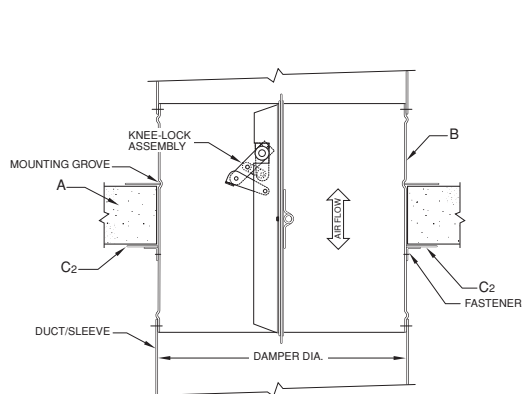


Figure 1a
Horizontal Concrete Partition

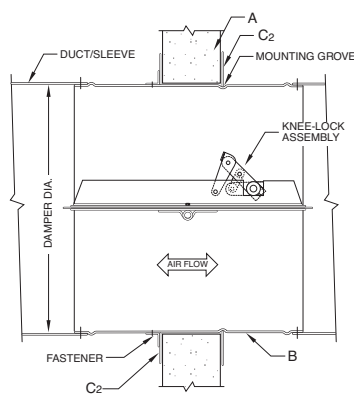


Figure 1b
Vertical Concrete Partition

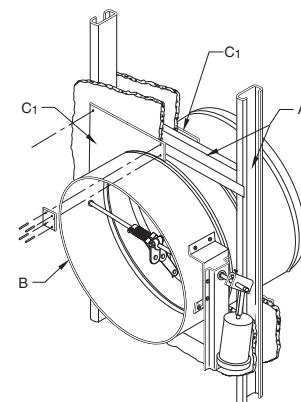


Figure 2
Stud Partition

- A.** Concrete or masonry fire partition shown in figure 1a and 1b. Wood or steel stud fire partition shown in figure 2. See Wood Stud and/or Steel Stud Framing for Fire Dampers In Drywall and/or Cavity Shaftwall Partitions Supplemental Installation Instructions for further vertical installation details. The square or round opening shall be a minimum ¼" (6) larger than the damper sleeve/frame. Damper must be installed with the leading edge of the closed blade within the partition. Damper may be installed with the blade a maximum of 15 degrees from horizontal. For mounting angles that are up to and including 1-½" high, the opening shall be a maximum of ¾" (19) larger than the overall damper and sleeve assembly. When openings are larger than ¾" (19), but less than 6" (152) the mounting angles must be a minimum of 16 gauge (1.5) and must be tall enough to overlap the opening by a minimum of 1" (25).
- B.** The connecting duct shall not be continuous, and shall terminate at the sleeve/frame using one or more of commonly used break away style connections. Refer to Sleeve Termination Supplemental Installation Instructions for further details. Damper sleeve shall not extend more than 16" (406) beyond the rated partition on the actuator side. The opposite side extension shall be a maximum of 6" (152) unless an access door is installed in the sleeve which then permits the extension to be a maximum of 16" (406).

C1. Dual Side Mounting Plate

The holding plate (on operator side) must be flush with the partition. Seat the holding plate (see figures 4, 4A and 5) into the mounting groove on operator side of damper and place damper in the partition. Place the guide plate (see figure 4A) around opposite side of damper sleeve and slide forward until it touches the partition. Secure both plates with joiner clips (see figure 3) using four #10 (M5) sheet metal screws, bolts or ⅛" (3) welds or rivets per joiner clip minimum. A minimum of three 1" x 1" x 2" x 20 GA. (25 x 25 x 51 x 1) clip angles shall be arranged symmetrically around the damper and fastened to the damper sleeve flush with the guide plate. Fasteners shall be a minimum of #10 (M5) screws, bolts, ⅛" (3) rivets or welds. The guide plate shall be attached to the partition with a minimum of four fasteners, at the corners of square plates (for square openings) or equally spaced around the circumference of round plates (for round openings).

For horizontal installation of the damper in a concrete floor, the holding plate must be installed on the top side of the floor opening.

- C2.** As an alternative to C1, for dampers ≤ 8" (203) in diameter the guide and holding plates must be attached only to the sleeve, with clip angles spaced a maximum of 8" (203) O.C. For dampers > 8" (203) and ≤ 12" (305) in diameter, the clip angles must be spaced a maximum of 4" (102) O.C. The clip angles must be staggered on either side of the partition.
- C3.** As a further option for round openings either or both plates may be replaced by 1-½" x 1-½" x 20 GA. (38 x 38 x 1) minimum angle rings. The ring shall be fastened to the damper sleeve and not the partition at 8" (203) on center maximum with a minimum of 3 fasteners using #10 (M5) sheet metal screws, bolts, masonry anchors, ⅛" (3) diameter rivets or welds.
- C4. Single Side Mounting Plate**
Single side mounting plates can be used for vertical masonry or steel stud partitions. The mounting plate must be 20 GA. (1) minimum, the clamping brackets must be 2" x 1" x ½" x 14 GA. (51 x 25 x 13 x 2) minimum, and the clamping bolt shall be a ¼" - 20 x 3" (M6 x 76) bolt minimum. Each clamping bracket must be secured to the mounting plate with a minimum of two ⅜" (5) diameter rivets or welds. The mounting plate hinges on a ⅜" (5) minimum diameter rivet. The mounting plate can be installed on either side of the partition. The mounting plate must be positioned with the retaining bolt and nut facing **AWAY** from the wall. **The mounting plate may be placed into the mounting groove or placed around the damper sleeve/frame. See Sheet 2 for mounting plate hole diameters.** Tighten clamping bolt to ensure the mounting plate is secured to the damper. The mounting plate must be fastened to the partition at all four corners and for dampers D ≥ 12" (25) the mounting plate must be fastened 1" (25) from the center of each side using a minimum of #10 (M5) screws, concrete anchors, ⅛" (3) rivets or welds. Fasteners must be a minimum of ¼" (6) from the edge of the plate and **must engage the steel stud by ½" (13) minimum.**
- D.** Fire/leakage rated damper and qualified operators are tested together by Underwriters Laboratories and are factory installed to qualify for standard damper/operator warranties. Damper operator/actuator must be tested prior to system start-up to ensure proper operation. Before applying power to the actuator, the power must be verified.

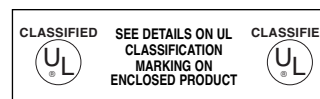
Model - FSD-125R

For Use in Dynamic or Static Systems.

1-1/2 Hour Rated.

Vertical or horizontal mounting.

Galvanized and Stainless Steel construction.



Dual Side Mounting Plates

The following installation details apply to model **FSD-125R**

DESCRIPTION

- A - FSD-125R Combination Fire Smoke Damper.
- B - Holding Plate, 20 ga.(1) steel.
(Dual Side Plate Shown, Single Side Plate Similar)
- C - Guide Plate, 20 ga. (1) steel. (For Dual Sided Plates Only)
- D - Joiner Clip, 20 ga. (1), steel, typical both sides.
(For Dual Sided Plates Only)
- E - Rated Partition. (steel stud, wood stud or masonry)
- F - 1/8" (3) Dia. Steel Pop Rivet, or #10 (M5) x 1/2" (13) Sheet Metal Screw. (For Dual Sided Plates Only)

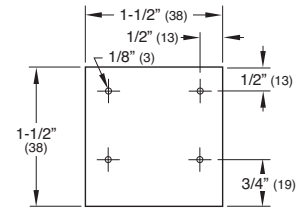
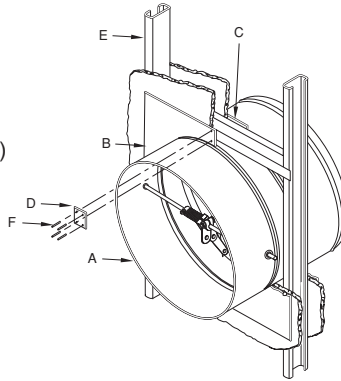
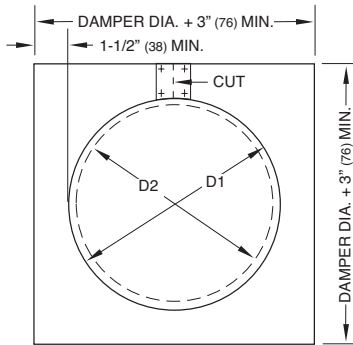


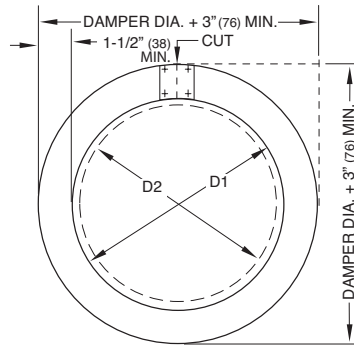
Figure 3

Joiner Clip - 20 GA. (1) Galv. Steel



D1 = DAMPER DIA. FOR GUIDE PLATE
D2 = DAMPER DIA. - 3/8" (10) FOR HOLDING PLATE

Figure 4 (Square Openings)
Guide Plate & Holding Plate Detail



D1 = DAMPER DIA. FOR GUIDE PLATE
D2 = DAMPER DIA. - 3/8" (10) FOR HOLDING PLATE

Figure 4A (Round Openings)
Guide Plate & Holding Plate Detail

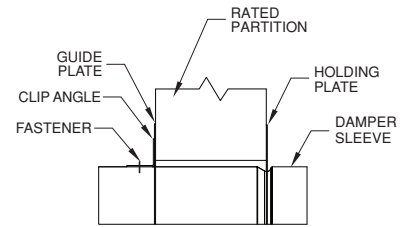
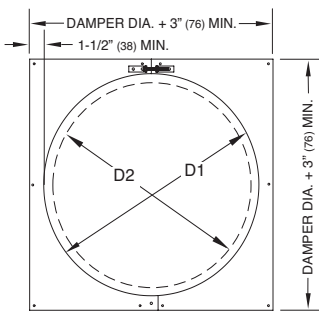


Figure 5

Dual Side Mounting Plate Partition Detail

* Note: If wood, opening must be lined with drywall

Single Side Mounting Plate



D1 = DAMPER DIA. IF MOUNTING PLATE IS NOT PLACED IN GROOVE
D2 = DAMPER DIA. - 3/8" (10) IF MOUNTING PLATE IS PLACED IN GROOVE.

Figure 6 - Mounting Plate

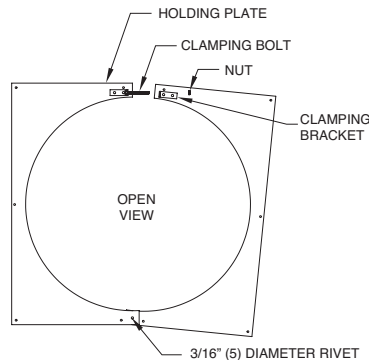


Figure 6A - Mounting Plate

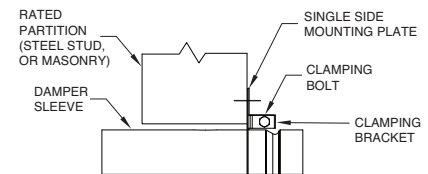
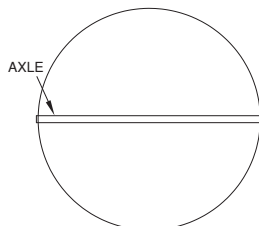


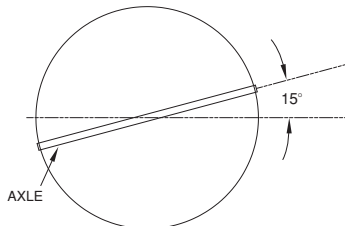
Figure 6B

Single Side Mounting Plate Partition Detail

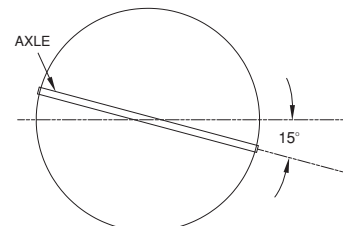
Blade Orientation



Normal



15° Off Horizontal (Maximum)



15° Off Horizontal (Maximum)