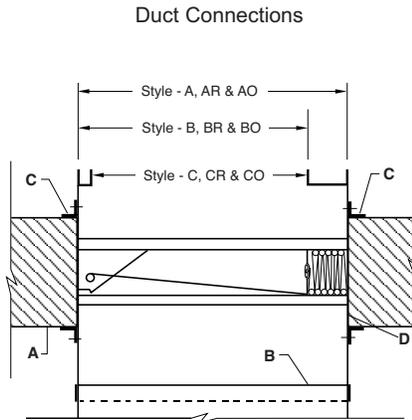The following installation details apply to models **FD4D** and **FD4**
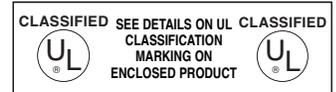
Duct Connections

Style - A, AR & AO

Style - B, BR & BO

Style - C, CR & CO

Damper Installation
(2-sided Mounting Angle)
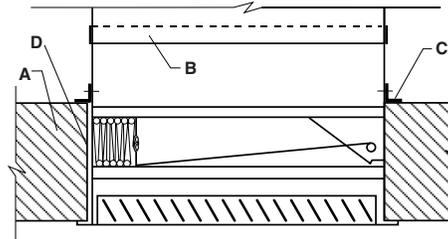
Damper Installation For Typical
Flange Termination with Grille / Register

LISTING SERVICE — STATE OF CALIFORNIA STATE FIRE MARSHAL

CLASSIFIED ®UL SEE DETAILS ON UL CLASSIFICATION MARKING ON ENCLOSED PRODUCT **CLASSIFIED** ®UL
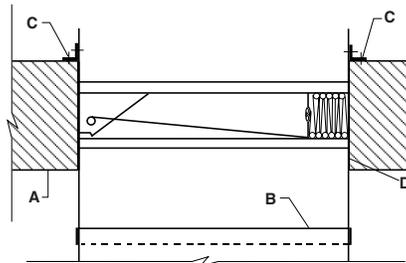
Single Side Mounting Angle Damper Installation

A. Concrete or masonry fire partition shown. The opening shall be a minimum or equal to ¹⁄₄" (6) with a maximum of ³⁄₄" (19) larger than the overall damper and sleeve assembly size. When openings are larger than ³⁄₄" (19), but less than or equal to 6" (152) the mounting angles must be a minimum of 16 gauge (1.5) and must be wide enough to overlap the opening by a minimum of 1" (25). Damper must be installed with leading edge of closed blade within the partition.

B. For rigid type duct connections, the sleeve shall be a minimum of 16 gauge (1.5) for dampers up to 36" wide by 24" high (914 x 610) and a minimum of 14 gauge (1.9) for larger units. When lighter gauge sleeves are used, one or more of commonly used break away style connections are required. Refer to Sleeve Termination Supplemental Installation Instructions for further details. In no case will the sleeve gauge be less than the duct gauge to which it is connected. Damper sleeve shall not extend more than 6" (152) beyond the rated partition unless an access door or Smoke Detector is installed in the sleeve which then permits the extension to be a maximum of 16" (406).

C. Mounting angles shall be a minimum 1-¹⁄₂" x 1-¹⁄₂" x 16 gauge (38 x 38 x 1.5). Mounting angles are only required on the top side of the opening and must be attached to the sleeve at 6" (152) o.c. maximum, to the partition at 24" (610) o.c. maximum, with a minimum of two fasteners per side to both the sleeve and partition on all four sides. Alternately, mounting angles may be installed on both sides of the partition and must be attached only to the sleeve at 12" (305) o.c. maximum, with a minimum of two connections per side on all four sides. Attachment to the sleeve shall be a minimum of #10 (M5) steel fasteners: anchors, bolts, or self-tapping masonry screws. A minimum ³⁄₄" x 20 gauge (19 x 1) flange termination may be used in lieu of mounting angles. Ensure that the attachment device does not interfere with the operation of the damper and the free movement of the damper blades.

Note: If optional sealing between the mounting angle (or flange) leg and the surface of the partition, or floor, and/or between the mounting angle leg and the surface of the damper sleeve is required, the following sealants may be used: Dow-Corning 732 or GE RTV 108 or SCS 1201 RTV. These sealants should be applied such that they do not intrude into the annular space between the outside surface of the damper sleeve and the opening of the partition, or floor, into which the damper sleeve is being installed. Annular space between damper sleeve and opening shall not be filled with firestop materials such as fill, void, or cavity materials.

D. When joining multiple sections or fastening the damper to the sleeve, the damper shall be fastened with ³⁄₁₆" (4.8) diameter steel rivets, Quick-Lock Joints, welds, No. 10 (M5) bolts or sheet metal screws at 8" (203) o.c. maximum. A minimum of two connections per side, top and bottom.

DUCT SIZES	Model FD-4	FD-4D	Model FD-4
	GALVANIZED STEEL		STAINLESS STEEL
Maximum Single Section	40" x 40" (1016 x 1016)	36" x 36" (914 x 914)	40" x 40" (1016 x 1016)
Maximum Multiple Section	80" x 80" (2032 x 2032)	36" x 36" or 72" x 18" (914 x 914) (1829 x 457)	80" x 40" or 40" x 80" (2032 x 1016) (1016 x 2032)

Underwriter's Laboratories file #R14981. The product is also listed by CSFM File # 3225-1404:101.

* Individually sleeved dampers can be installed in partitions wider than the maximum U.L. multiple section size using the Support Mullion for Oversized Floor Openings. See SUpport Mullion for Oversized Floor Openings Installation Instructions for further details.

Information is subject to change without notice or obligation.

NOTE: Dimensions in parentheses ( ) are millimeters.