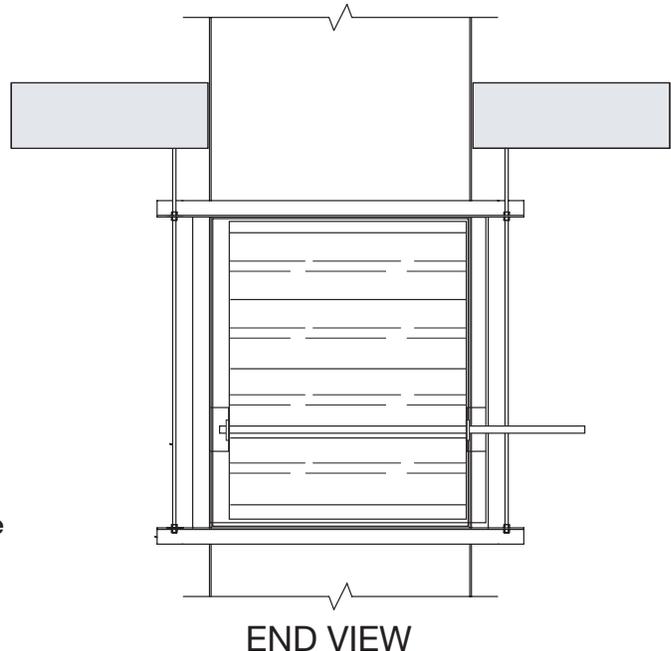


Fire Resistant Ventilated Duct Assembly for Fire Dampers (FD and DFD series) and Combination Fire Smoke Dampers (CFSD, OFSD, FSD series)

These instructions are for installing vertical mount fire and combination fire smoke dampers in a fire resistant ventilation duct (UL Ventilation duct Assembly HNLJ. V-5)

- 1) The damper sleeve must slip inside the fire resistant duct spool. Damper sleeve assembly will be 1/4 in. (6mm), 1/2 in. (13mm) maximum, smaller than duct spool size.
- 2) Damper is to be supplied with factory mounted sleeve. Sleeve gauge will be minimum of 16 ga. (1.5mm) for dampers up to 36 in. wide x 24 in. (914mm x 610mm) high and 14 ga. (2mm) for dampers exceeding 36 in. W x 24 in. high (914mm x 610mm).
- 3) Mounting angles need to be the following sizes:
 - 1 1/2 in. x 1 1/2 in. x 1/4 in. up to 24 in. (38mm x 38mm x 6mm up to 610mm)
 - 2 in. x 2 in. x 1/4 in. over 24 in. up to 32 in. (51mm x 51mm x 6mm over 610mm up to 813mm)
 - 2 1/2 in. x 2 1/2 in. x 1/4 in. over 32 in. up to 40 in. (64mm x 64mm x 6mm over 813mm up to 1016mm)
 - 3 in. x 3 in. x 1/4 in. above 40 in. (76mm x 76mm x 6mm above 1016mm)
- 4) Mounting angle fasteners:
 - #10 bolts or screws
 - 3/16 in. (4.7mm) steel rivets
 - 1/2 in. (13mm) long welds
- 5) Mounting Angle Fasteners Spacing:
 - Mounting angles to dampers, space fasteners on 6 in. (152mm) on center.
 - Mounting angle to spool flange, space fasteners on 12 in. (305mm) on center.
 - Minimum 2 fasteners per side
- 6) Hanger rods:
 - 3/8" threaded rod anchored to the floor above and attached to the mounting angles through hole in the angles and secured with hex nut and washer (items 5 & 6). Anchor to masonry per assembly No. V-5.
- 7) Duct to Damper Sleeve Connection:
 - See the fire damper or the combination fire smoke installation instructions for breakaway, flanged, or non-breakaway connections.

Refer to:
 'Installation Instructions for FD, DFD, SSFD, & KFD Series'
 (Part number 452763)
 or
 "Installation Instructions for FSD-XXX, DFD-XXX, SSFSD-XXX & CFSD-XXX Series Fire & Combination Fire Smoke Dampers'
 (Part number 461336)
 or
 "Installation Instructions for FD & DFD 150X Series Curtain Fire Dampers' (Part number 453946)
 or
 "Installation Instructions for OFSD, ODFD, OFD, AND OSSFD Series Dampers' (Part number 461337)
 or
 'Installation Instructions for FSD-3XXXV Series Dampers'
 (Part number 461666) for additional details



Item	Description
1	Fire resistant ventilation duct (UL HNIJ Assembly No. V-5)
2	Fire damper or combination fire smoke damper
3	Hanger rods in accordance with assembly no. V-5
4	Mounting angles (see instruction #3)
5	3.8" in. (10mm) hex nuts
6	3/8 in. (10mm) flat washer
7	Mounting angle fasteners (see instructions #4)

