

INSTALLATION INSTRUCTION SUPPLEMENT 1½ HOUR UL CLASSIFIED CURTAIN TYPE (D)IBD SERIES, MULTI-BLADED DFD AND FSD SERIES VERTICAL MOUNT DAMPERS WITH 3-SIDE RETAINING ANGLE

Refer to Ruskin Installation Instructions for (D)IBD-xxx, DFD-xxx and FSD-xxx series Fire & Combination Fire/Smoke dampers for additional information.

APPLICATION

This instruction applies to 1½ hour rated combination fire/smoke dampers and fire dampers mounted in masonry, block, metal stud or wood stud walls. Specific requirements in these instructions are mandatory. These instructions meet UL555 requirements. Installation shall meet requirements of NFPA 90A (standard for the Installation of Air Conditioning and Ventilating Systems) and UL Classification R5531.

1. Mounting Angles

Mounting angles shall be a minimum of 1½" x 1½" x 20 gauge steel (38 x 38 x 1.0). For openings in metal stud, wood stud walls or concrete/masonry walls of sizes 90" x 49" or 49" x 90" (2286 x 1245 or 1245 x 2286) and less mounting angles are only required on one side of the wall and must be attached to both the sleeve and the wall. Mounting angles may be installed directly to the metal stud under the wall board on metal stud wall installations only. Mounting angles must over-lap the partition a minimum of 1" (25). Do not weld or fasten angles together at corners of dampers.

a. Mounting Angle Fasteners

Sleeve: #10 bolts or screws, 3/16" (5) steel rivets or 1/2" (13) long welds. Masonry/Wall : #10 self-tapping concrete screws. Wood/Steel Stud Wall: #10 screws.

b. Mounting Angle Fastener Spacing

Fasteners attaching to sleeve are to be spaced at 6" (152) o.c. and fasteners fastening to wall shall be spaced at 12" (305) o.c. with a minimum of 2 fasteners on each side. Screw fasteners used in metal stud must engage the metal stud a minimum of 1/2" (13). Screw fasteners used in wood stud must engage the wood stud a minimum of 3/4" (19). Screw fasteners used in masonry walls must engage the wall a minimum of 1½" (38).

2. Firestop Material Option (See Installation Supplement for addition information)

- Packing (Optional) - Polyethylene backer rod, recessed from both surfaces of wall to accommodate the required thickness of fill material.
- Fill Material- Fire stop caulk applied to a minimum 5/8" (16) thickness for 1½ hour dampers or 1" (25) for 3 hour dampers within the annular space and flush with both surfaces of the wall. If the damper/sleeve assembly comes into contact with the wall, a minimum 3/8" (10) diameter bead shall be applied to the interface between the sleeve and contact surface.

Hilti Corporation • FS-One, CP606

3M • #M-CP 25WB+

Specified Technologies, Inc. • SpecSeal® Series SSS or LCI

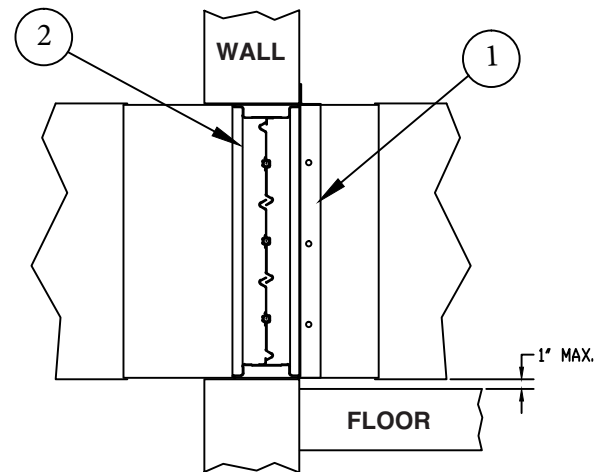
John Manville International, Inc. - Firetemp™ CI

Rectorseal • Metacaulk 1000, Metacaulk 350i, Biostop 500+ or Biostop 350i

3. Opening Clearance

For 3-side angle installations, the opening shall be a minimum of ¼" (6) to a maximum of 1" (25) larger than the overall size of the damper/sleeve assembly. The opening may be as much as 2" (51) larger than the damper/sleeve assembly as long as the annular space is not greater than 1".

- For installations requiring angles on (top and both sides), the damper shall rest directly on the base of the wall opening. The sleeve on the retaining angle side of the installation shall not be more than 1" above the floor.
- For applications requiring angles on (top, bottom & one side) or (both sides and bottom) Firestop material shall be used on remaining side between sleeve and opening in wall. See Ruskin's Optional Firestop Material installation supplement for complete installation requirements.



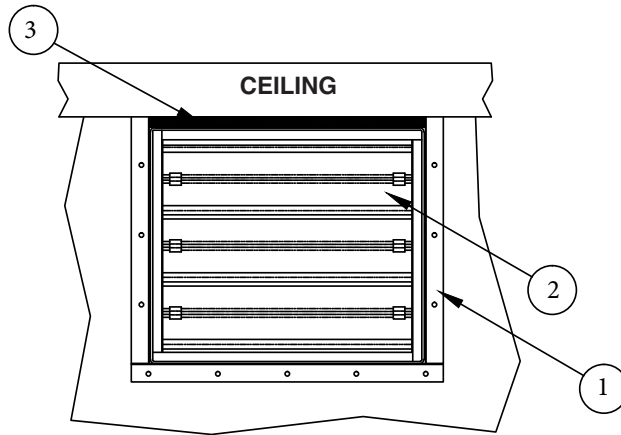
TYPICAL SECTION

1. MOUNTING ANGLES

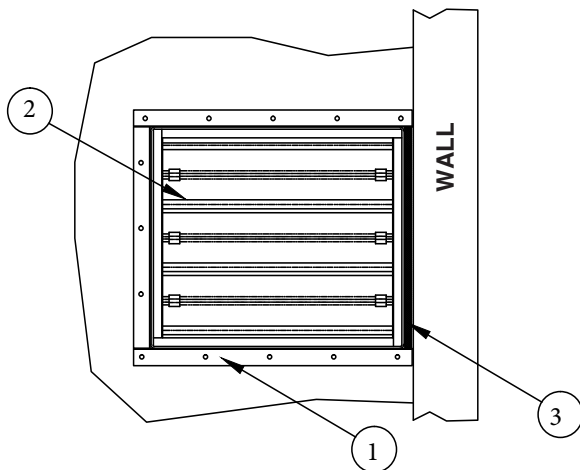
2. DAMPER ASSEMBLY



SEE COMPLETE MARKING
ON PRODUCT

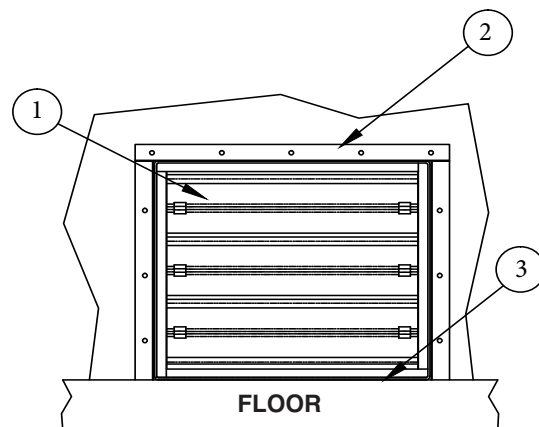


ANGLES BOTTOM AND BOTH SIDES



ANGLES TOP, BOTTOM AND ONE SIDE

- 1. MOUNTING ANGLES
- 2. DAMPER ASSEMBLY
- 3. FIRESTOP MATERIAL



ANGLES TOP AND BOTH SIDES