

3900 Dr. Greaves Rd.

Kansas City, MO 64030

(816) 761-7476

FAX (816) 765-8955

INSTALLATION INSTRUCTIONS 11/2 HOUR UL CLASSIFIED CURTAIN TYPE FIRE DAMPERS MODEL (D)IBD10

APPLICATION

The Ruskin (D)IBD10 dampers are unique "install from one side" 11/2 hour fire rated curtain type dampers designed for metal stud or masonry wall applications.

The 11/2" (38) flange attaches directly to the masonry wall or to the metal stud fire rated partitions either before or after the gypboard is attached.

MAXIMUM UL CLASSIFIED SIZES

DYNAMIC FIRE DAMPERS - DIBD model

See label on damper for maximum air flow and pressure.

MODEL DIBD10 MAXIMUM SIZE

Vertical Installation - 33"w x 36"h (838 x 914).

STATIC FIRE DAMPERS - IBD models

Not for use in dynamic (fans on) systems.

MODEL IBD10 MAXIMUM SIZE

Vertical Installation – 36"w x 36"h (914 x 914).



Note:

Dimensions shown in parentheses () indicate millimeters.

California State Fire Marshal Listing No. 3225-245:005

1. Opening Clearance

The opening in the wall shall be a minimum of 1/4" (6) to a maximum of 1" (25) larger than the overall size of the damper/sleeve assembly. No clearance is required when the damper assembly is installed with the flange within the cavity of the metal stud (refer to detail 4).

2. Opening Construction

For dampers installed with flange within the cavity of the metal stud (refer to detail 3) the opening shall be constructed with the open side of stud channels facing the fire damper. Refer to page 4 for recommended framing details.

3. Fasteners

The 11/2" (38) flange of the damper is fastened directly to the metal stud itself (refer to detail 1) or to the metal stud through the gypsum wallboard (refer to detail 2). Use #10 (M5) bolts, minimum 1/2" (13) sheet metal screws, 1/2" (13) long tack welds or 3/16" (5) diameter steel rivets. The sleeve fasteners shall be spaced at 6" (152) o.c. and the wall fasteners shall be spaced at 12" o.c. with a minimum of 2 fasteners on each side, top and bottom. Screw fasteners used in metal stud must engage the metal stud a minimum of 1/2" (13). Screw fasteners used in masonry walls must engage the wall a minimum of 11/2" (38).

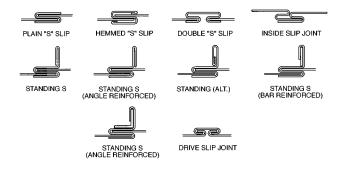
4. Damper Orientation

Use "Air Flow" and "Mount With Arrow Up" labels on Dynamic DIBD model for proper damper orientation. For Static IBD models use only "Mount With Arrow Up" label on damper for proper damper orientation.

5. Duct/Sleeve Connections

a. Break-away Duct/Sleeve Connections

Rectangular ducts must use one or more of the connections depicted below:



A maximum of two #10 sheet metal screws on each side and the bottom, located in the center of the slip pocket and penetrating both sides of the slip pocket may be used. Connections using these slip joints on the top and bottom with flat drive slips up to 20" (508) long on the sides may also be used.

b. Round and Oval Break-away Connections

Round and flat oval break-away connections must use either a 4" (102) wide drawband or #10 sheet metal screws spaced equally around the circumference of the duct as follows:

- Duct diameters 22" (559) and smaller Maximum 3 screws.
- Duct diameters over 22" (559) and including 36" (914) Maximum 5 screws.
- Duct diameters over 36" (914) and up to and including 191" (4851) total perimeter – Maximum 8 screws. For flat oval ducts, the diameter is considered the largest (major) dimension of the duct.

Note: When optional sealing of these joints is desired, the following sealants may be applied in accordance with the sealant manufacturer's instructions:

Hardcast, Inc. – Iron Grip 601 Eco Duct Seal 44-52 Precision – PA2084T Design Polymerics – DP 1010

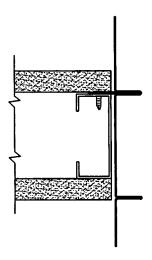
c. Flanged Break-away Style Duct Sleeve Connections.

Flanged connection systems manufactured by Ductmate, Nexus or Ward are approved break-away connections when installed as shown on the Flanged System Breakaway Connection Supplement.

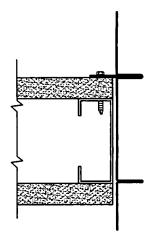
TDC and TDF roll-formed flanged connections using 3/8" (10) steel bolts and nuts and metal cleats, as tested by SMACNA, are approved break-away connections when installed as shown on the Flanged System Breakaway Connection Supplement.

6. Installation and Maintenance

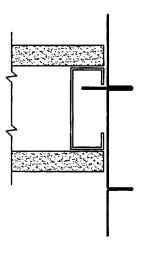
To ensure optimum operation and performance, the damper must be installed so it is square and free from racking. Do not compress or stretch the damper frame into the duct or opening. Lift or handle the damper using sleeve or frame. Do not lift damper using blades. Dampers shall be maintained, cycled and tested in intervals recommended by NFPA unless local codes require more frequent inspections. Care should be exercised to ensure that such tests are performed safely and do not cause system damage.



Detail 1
METAL STUD
(Flange under gypsum wallboard)

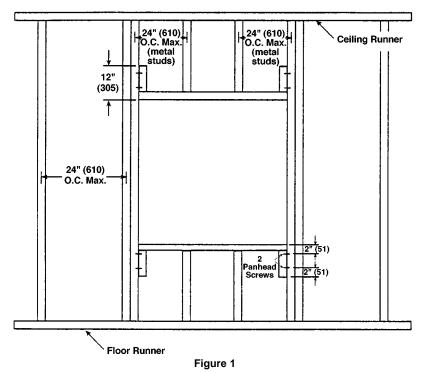


Detail 2 METAL STUD (Flange over gypsum wallboard)



Detail 3 METAL STUD (Flange within stud cavity)

RECOMMENDED FRAMING FOR OPENINGS IN WOOD AND METAL STUD WALLS



INSTRUCTIONS

- 1. Frame wall openings per figure 1 or 2 as shown.
- Double vertical studs are not required for openings 36"w x 36"h (914 x 914) or smaller.
- All construction and fasteners must meet the requirements of the appropriate wall design and/or local codes.
- Consult the authority having jurisdiction for other acceptable framing methods.

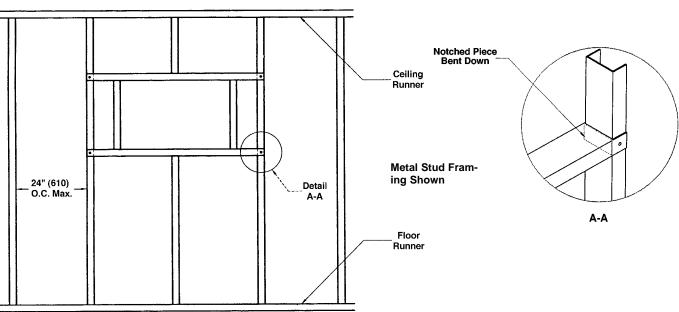


Figure 2

