

Reference:

Client:

Project:

Consultant:

Location:

Contractor:

Date:

Submitted by:



Manufacturing Excellence

Model FDD-MB-3V-FA

Manual Quadrant Dynamic Fire Damper
Front Access & Out-of-Wall/Floor Application

1-1/2, 3V Blade, UL-Classified

Application:

The CVS-SAFE4 model FDD-MB-3V-FA is a fire damper with 3V style blades intended for installation outside the plane of a wall or floor with front (or grille) access to the quadrant. The FDD-MB-3V-FA is used to prevent the spread of fire through a penetration in a fire rated barrier made by an HVAC duct or transfer. The FDD-MB-3V-FA can be installed vertically (with blades running horizontally) or horizontally. The FDD-MB-3V-FA can be installed in static or dynamic systems up to the allowable tested pressures and velocities below.

MAXIMUM VELOCITY: 2000 fpm (10.2 m/s) on all sizes.

MAXIMUM PRESSURE: 4" wg (1kPa) on all sizes.

Standard Construction:

Table with 3 columns: Standard, Optional, and a blank header column. Rows include Frame Material, Blade Material and Type, Blade Sizes, Frame Depth, Dimensions, Axle Bearings, Axle Material, Linkage, Sleeve, Thermal Blanket, Front Access Panel, Heat Responsive Device, Blade Operator, and UL Hour Rating.

Minimum & Maximum Sizes:

Table with 3 columns: Front Access Damper Model, Minimum Size, and Maximum Size. Row for FDD-MB-3V-FA Vertical shows sizes 12 x 12 (305 x 305) and 36 x 48 (914 x 1219).

1Contact Factory for smaller sizes.

All dimensions shown in inches, parentheses () indicate millimeters.



LISTINGS:

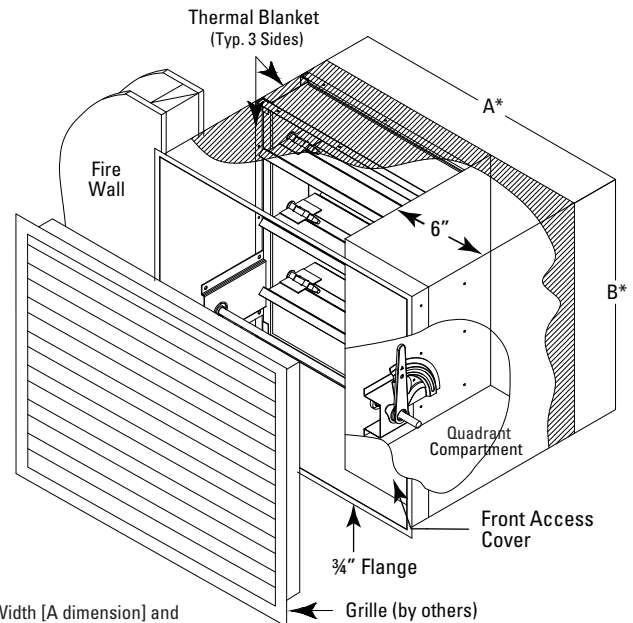
UL 555 Listing: R27700(UAE), R41135(KSA), R40068(Qatar), R41122(Egypt)

STANDARDS MET:

NFPA Standards: 80, 90A, 92A, 92B and 101

Building Code Standard:

ICC International Building Code



*Width [A dimension] and *Height [B Dimension] are approximately 1/4" undercut. Sleeved dampers are furnished approximately same size as given duct dimension plus 0.25" (6) for insulation.

Optional Construction:

Factory Installed Sleeve:

Length: _____ (Std. 16" [406])

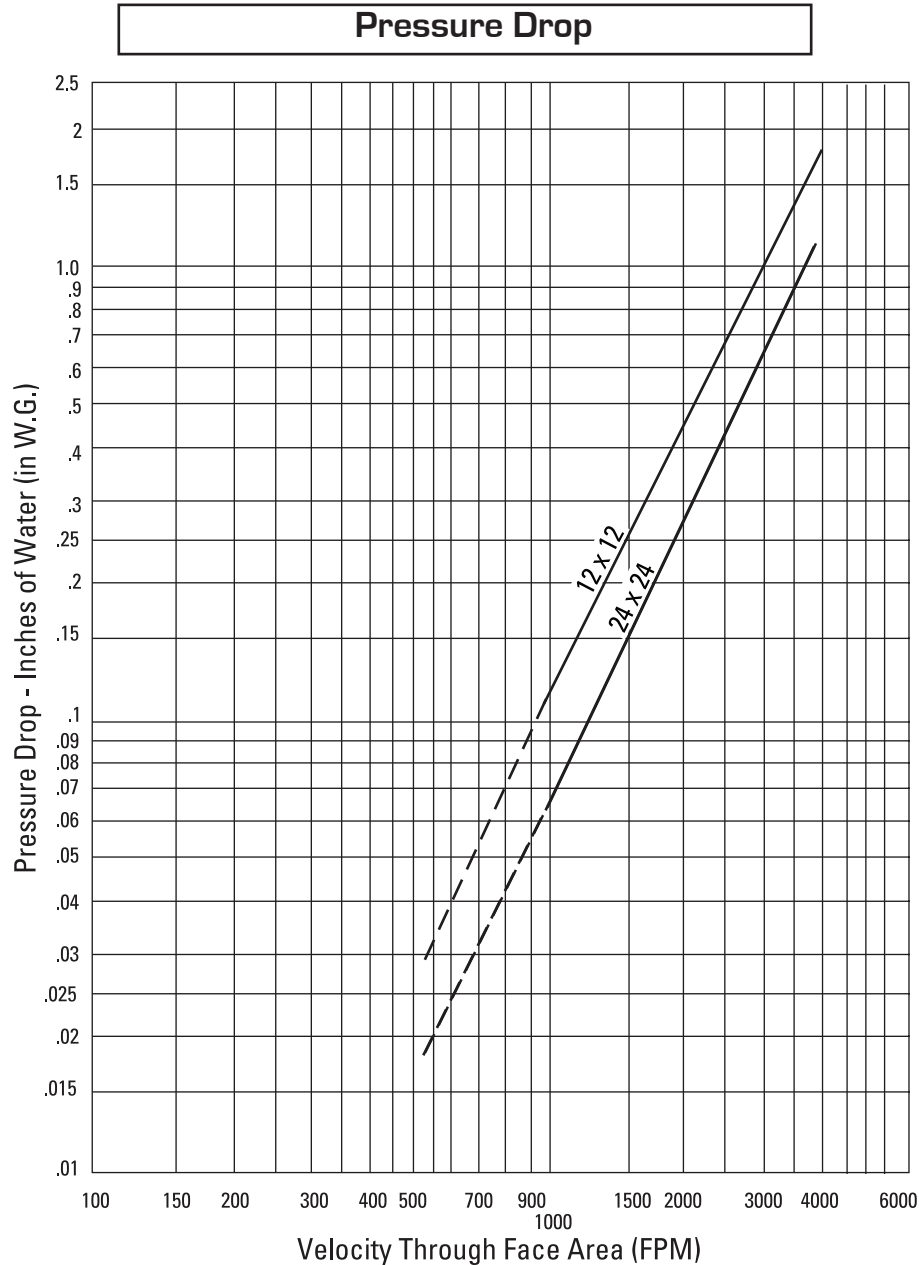
Gauge: 20 (1.0) 18 (1.2) 16 (1.5) 14 (2.0) 10 (3.5)

Framed Retaining Angles (FRA)

1-Side 2-Sides

Remote Control Box

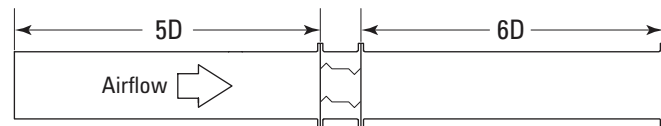
RCB-1 RCB-2 RCB-3



- To determine pressure drop:**
1. Locate the applicable face velocity on the bottom of the chart.
 2. Move up the chart to the most appropriate size damper line.
 3. From the intersection point, move left to determine the pressure drop.

AMCA Figure 5.3 - Ducted Inlet and Outlet

Pressure drop testing was performed by an independent laboratory to the AMCA Standard 500-D, Fig. 5.3 (ductwork upstream and downstream).



Note:

Pressure Drop for both sizes reflect damper face area only, and does not take into account the 6" deep quadrant compartment.

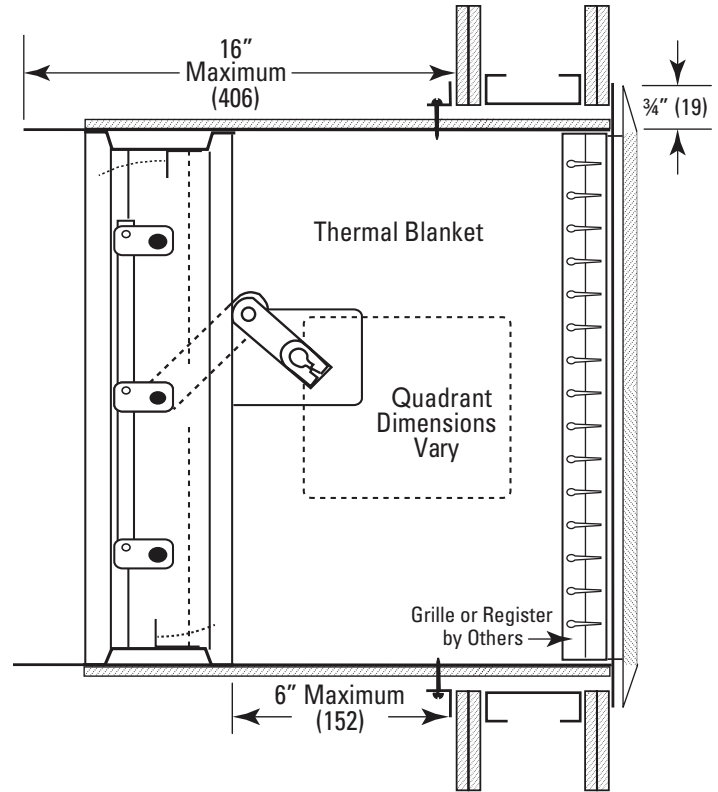
Sleeve Requirements:

Sleeve must be installed at the factory for out of wall/floor products. As with all fire rated damper installations, the sleeve must fully penetrate the wall/floor being protected.

Sleeve length is dependent upon damper height, grille depth (including OBD) and quadrant selection:

- Standard clearance allowance for grille inset is 3" (76).
- Maximum sleeve length is 16"(406) plus the total wall depth.

Sleeve is provided with a 3/4" (19) flange on the quadrant end of the sleeve by default. Flange must be on top of barrier in horizontal installations.



*Thermal Blanket provided 3 sides for Vertical and 4 sides for Horizontal.

Thermal Requirements:

A factory installed thermal blanket is provided on three sides (bottom excluded) for dampers ordered for vertical installation and on all four sides for dampers ordered for horizontal installation.

Due to the nature of the application for Out-of-Wall and Out-of-Floor Fire dampers, a 0.25" (6) thermal blanket is installed around the sleeve at the factory.

This insulation is required as part of the UL Listing of the out of wall/out of floor assembly and must not be removed.

