



1300 / 1305 / 1307

EXTRUDED ALUMINUM BACK DRAFT DAMPERS (FORMERLY MBD)

The Ventex **BDD** is a superior concept in back draft dampers. This unique, all aluminum product eliminates the shortcomings of previous designs on the market. Pivot pins that quickly wear out or rust, or rivets that shake loose and pull through the blade are no longer a problem. The extruded blades are cleverly engineered to combine strength and durability with smooth operation by virtue of their aerodynamic design.



*DM MODEL SHOWN

STANDARD CONSTRUCTION

MATERIAL:	EXTRUDED ALUMINUM - 6063-T5 ALLOY
FRAME STYLE:	SPECIFY DM FOR DUCT MOUNT FRAME SPECIFY FM FOR FLANGE FRAME (1 1/2" FLANGE) SPECIFY FFM FOR FRONT FLANGE FRAME (1 1/2" FLANGE)
DEPTH (BLADES CLOSED):	2.75" (70 mm)
DEPTH (BLADES OPEN):	5.625" (143 mm)
FRAME THICKNESS:	0.062" (1.57 mm)
BLADE THICKNESS:	0.062" (1.57 mm)
BLADE CENTRES:	3.75" (95 mm)
SEALS:	VINYL BLADE SEAL
OPERATION METHOD:	GRAVITY
FINISH:	MILL

SIZE LIMITATIONS

	MINIMUM	MAXIMUM
WIDTH	8" (203 mm)	60" (1524 mm)
HEIGHT	8" (203 mm)	60" (1524 mm)
AREA	0.44 ft ² (0.04 m ²)	25 ft ² (2.32 m ²)

*DM AND FFM DAMPERS WILL BE MANUFACTURED 1/4" (6.4 mm) SMALLER THAN GIVEN OPENING DIMENSIONS UNLESS OTHERWISE SPECIFIED

*FM DAMPERS WILL BE MANUFACTURED TO THE EXACT SIZE OF GIVEN OPENING DIMENSIONS UNLESS OTHERWISE SPECIFIED

AVAILABLE ACCESSORIES

SCREENS:

- BIRDSCREEN
 - 1/2" x 1/2" 19 GA. GALVANIZED
 - 1/2" x 1/2" INTER CRIMPED ALUMINUM
- INSECT SCREEN - 18 x 14 MESH

OTHER:

- COUNTER BALANCING WITHOUT SPRINGS
- CONDUIT HOLE
- MANUAL LOCKING DEVICE TO KEEP BLADES OPEN
- MANUAL OPERATION COMPLETE WITH 6 FT. OF CHAIN
- JACK SHAFTS TO OPERATE MULTIPLE SECTIONS WITH A SINGLE MOTOR
- GALVANIZED BIRD SCREEN
- END SWITCH
- BELIMO MOTORS AVAILABLE

TAG	QTY.	OPENING WIDTH	OPENING HEIGHT	FRAME STYLE	ACCESSORIES

UNITS: INCHES

PROJECT NAME:

CONTRACTOR:

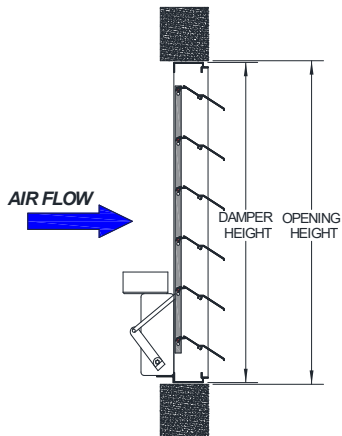
ENGINEER:

SUBMITTAL DATE:

DWG. 1300/1305/1307 DECEMBER 2024

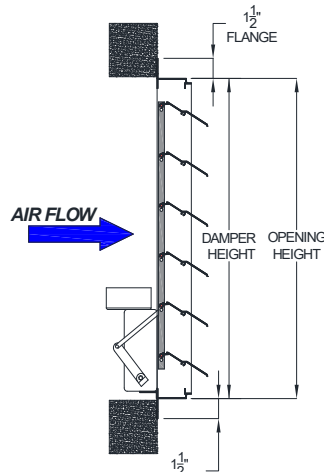
FRAME STYLE

MODEL 1300 DM DUCT MOUNT



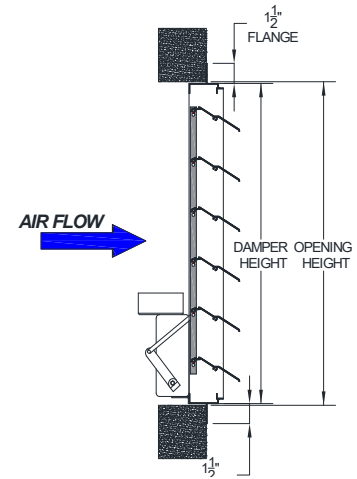
*DM DAMPER SIZE = OPENING SIZE - 1/4"

MODEL 1305 FM FLANGE MOUNT



*FM DAMPER SIZE = OPENING SIZE

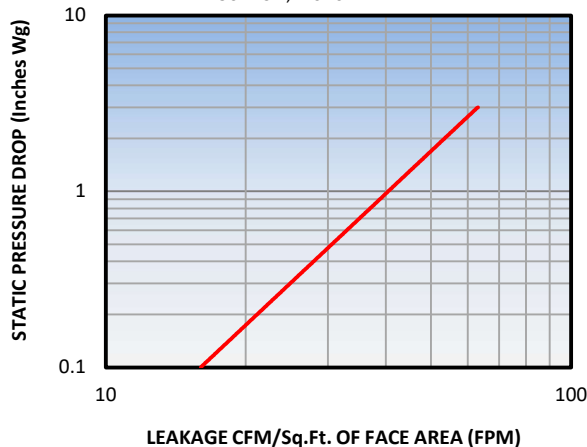
MODEL 1307 FFM FRONT FLANGE MOUNT



*FFM DAMPER SIZE = OPENING SIZE - 1/4"

AIR LEAKAGE - BDD

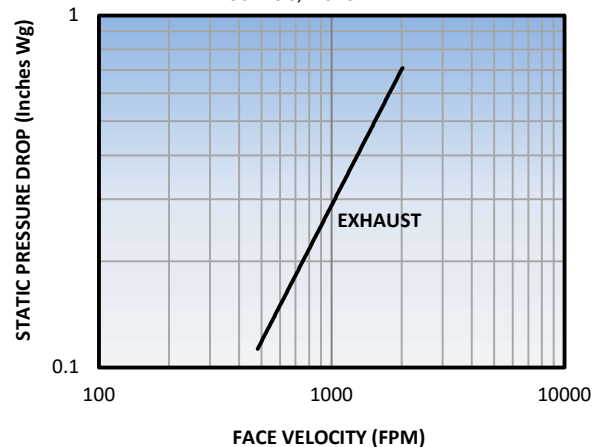
FIGURE 5.4, TEST SIZE 24" x 24"



*DAMPER CLOSED

PRESSURE DROP - BDD

FIGURE 5.5, TEST SIZE 24" x 24"



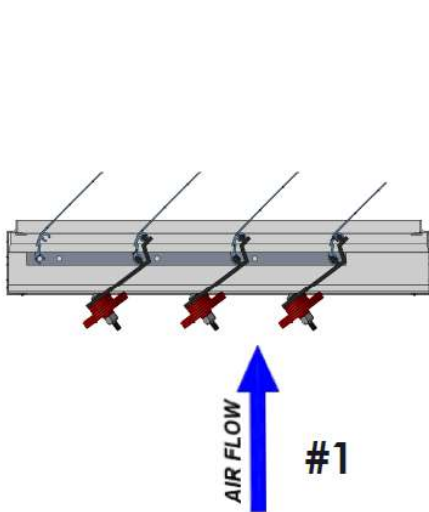
*DAMPER OPEN

*AIR LEAKAGE IS BASED UPON OPERATION BETWEEN 50°F (10°C) – 104°F (40°C)
*TEST RESULTS DO NOT INCLUDE THE EFFECTS OF BIRDSCREEN

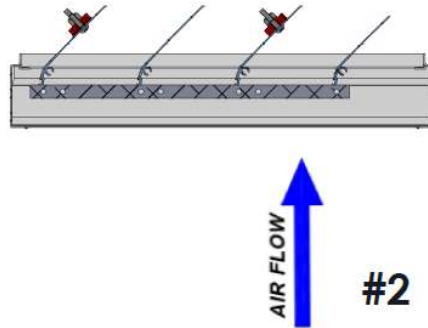
RECOMMENDED SPECIFICATION

Furnish and install back draft damper model BDD as manufactured by Ventex Inc, Alliston, Ontario. Dampers must be licensed to bear the AMCA seal. Dampers shall be 2.75" (70 mm) deep when the blades are closed and 5.625" (143 mm) when the blades are open. Blades shall be 0.062" (1.57 mm) extruded 6063-T5 aluminum alloy and frame shall be 0.062" (1.57 mm) extruded 6063-T5 aluminum alloy. The blades must have vinyl edge seals integral to each blade. Linkage is to be concealed from the front view of the damper and cannot be mechanically fastened to the damper blades.

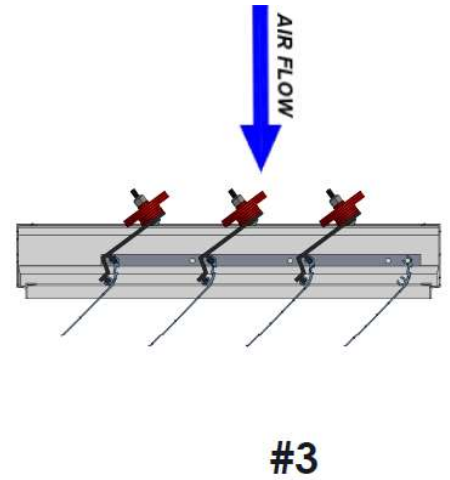
COUNTER BALANCE ARRANGEMENTS



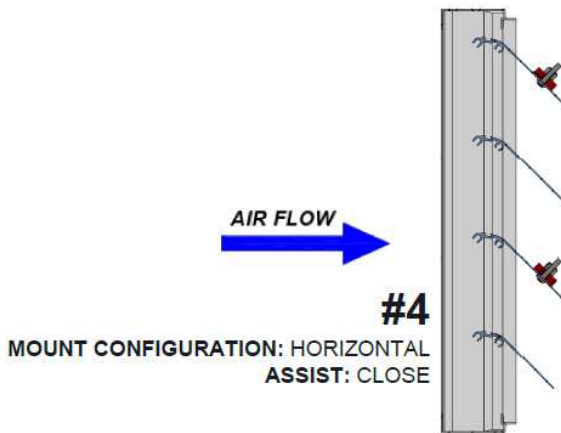
#1
MOUNT CONFIGURATION: HORIZONTAL
AIR FLOW: UPWARD
ASSIST: OPEN



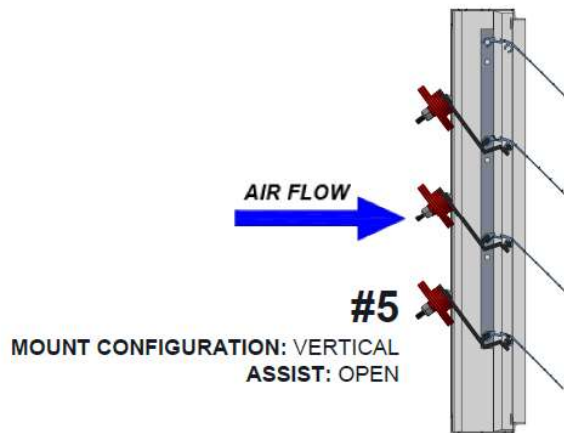
#2
MOUNT CONFIGURATION: HORIZONTAL
AIR FLOW: UPWARD
ASSIST: CLOSE



#3
MOUNT CONFIGURATION: HORIZONTAL
AIR FLOW: DOWNWARD
ASSIST: CLOSE



#4
MOUNT CONFIGURATION: HORIZONTAL
ASSIST: CLOSE



#5
MOUNT CONFIGURATION: VERTICAL
ASSIST: OPEN