



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: | OTHER: |
| <ul style="list-style-type: none"> • BIRDSCREEN <ul style="list-style-type: none"> ◦ 1/2" x 1/2" 19 GA. GALVANIZED ◦ 1/2" x 1/2" INTER CRIMPED ALUMINUM • INSECT SCREEN - 18 x 14 MESH | <ul style="list-style-type: none"> • 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 |

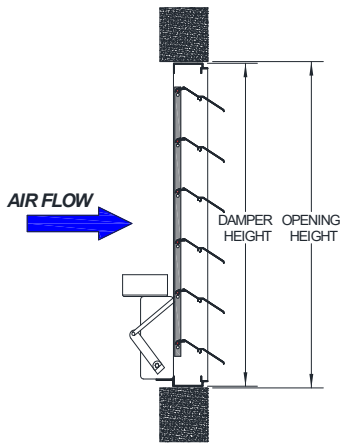
| TAG | QTY. | OPENING WIDTH | OPENING HEIGHT | FRAME STYLE | ACCESSORIES |
|-----|------|---------------|----------------|-------------|-------------|
| | | | | | |
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UNITS: INCHES

| | | | |
|----------------------|--|------------------------|--|
| PROJECT NAME: | | ENGINEER: | |
| CONTRACTOR: | | SUBMITTAL DATE: | |

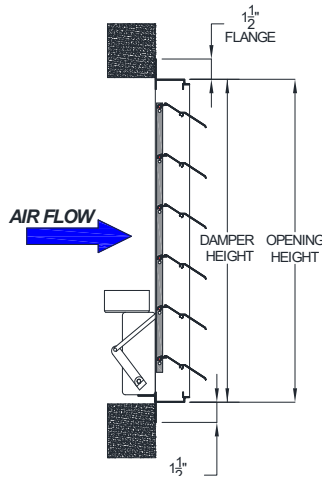
FRAME STYLE

DM
DUCT MOUNT



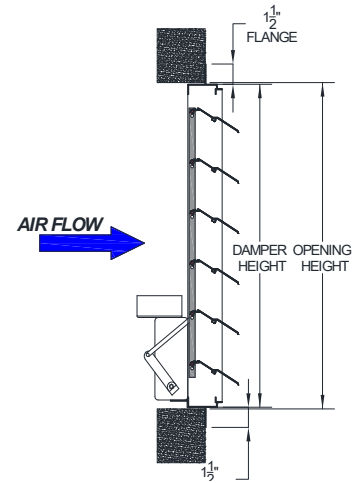
*DM DAMPER SIZE = OPENING SIZE - 1/4"

FM
FLANGE MOUNT



*FM DAMPER SIZE = OPENING SIZE

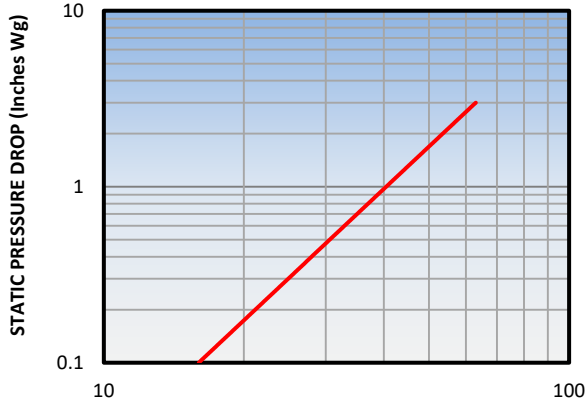
FFM
FRONT FLANGE MOUNT



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

AIR LEAKAGE - BDD

FIGURE 5.4, TEST SIZE 24" x 24"

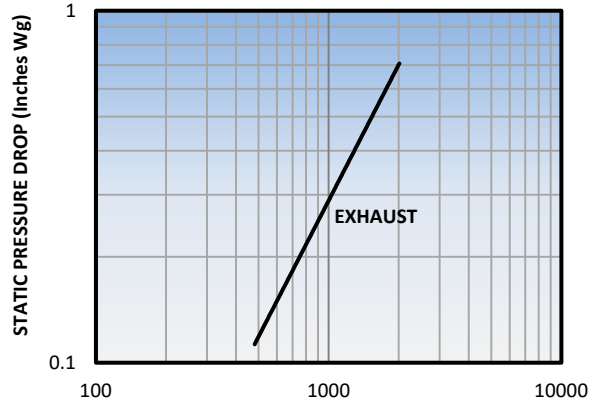


LEAKAGE CFM/Sq.Ft. OF FACE AREA (FPM)

*DAMPER CLOSED

PRESSURE DROP - BDD

FIGURE 5.5, TEST SIZE 24" x 24"



FACE VELOCITY (FPM)

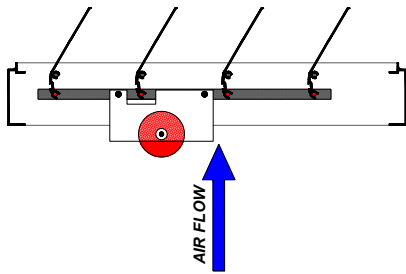
*DAMPER OPEN

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

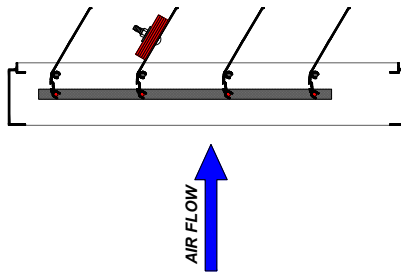
RECOMMENDED SPECIFICATION

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.

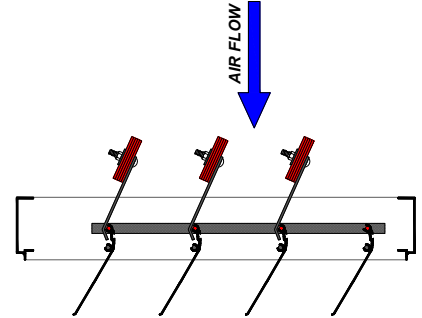
COUNTER BALANCE ARRANGEMENTS



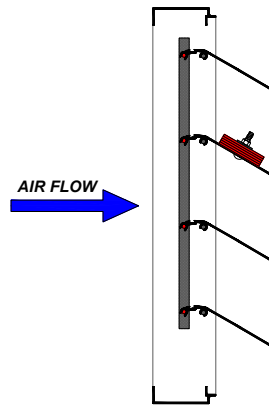
1
 MOUNT CONFIGURATION: HORIZONTAL
 AIR FLOW: UPWARD
 ASSIST: OPEN



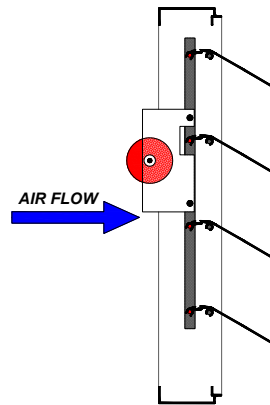
2
 MOUNT CONFIGURATION: HORIZONTAL
 AIR FLOW: UPWARD
 ASSIST: CLOSE



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



4
 MOUNT CONFIGURATION: VERTICAL
 ASSIST: CLOSE



5
 MOUNT CONFIGURATION: VERTICAL
 ASSIST: OPEN