CBD6
Counterbalanced Backdraft Damper

RUSKIN
AUTHORITY IN AIR CONTROL

APPLICATION

The CBD6 counterbalanced backdraft damper will relieve at extremely low pressures (approximately .02" w.g.). It also features heavy duty aluminum construction, with the ability to handle large air flows and has maximum spot velocities up to 3,500 fpm. To maintain quiet operation synthetic corrosion resistant bearings are used. The CBD6 also offers excellent weather resistance for relief air applications in exterior walls.

STANDARD CONSTRUCTION

Frame	6063T6 extruded aluminum .125" (3.2) wall thickness
Blades	6063T6 extruded aluminum .070" (1.8) wall thickness with extruded vinyl edge seals
Bearings	Zytel
Linkage	1/8 " x 1/2 " (3 x 13) aluminum tiebars
Counterbalance	Zinc plated bar on blades (except top blade). Adjustable for final "on the job" setting
Finish	Mill
Maximum Size	Single section – 48"w x 52"h (1219 x 1321). Assembly of sections – unlimited
Minimum Size	6" w x 10"h (152 x 254)
Temperature Limits	-40°F (-40°C) minimum and +200°F (93°C) maximum

U.S. GREEN BUILDING COUNCIL MEMBER

ISO9001 CERTIFIED

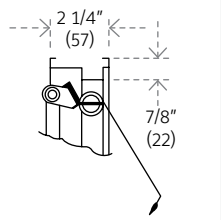
5 YEAR LIMITED WARRANTY

VARIATIONS

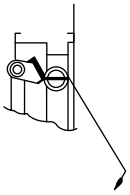
The following variations to the CBD6 are available at additional cost:

- Special finishes
- Bird or insect screens

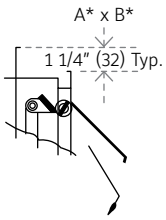
FRAME CONSTRUCTION



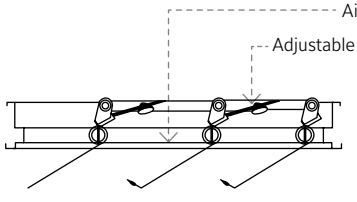
CHANNEL



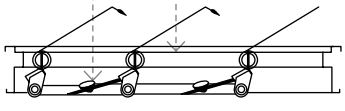
FRONT FLANGE



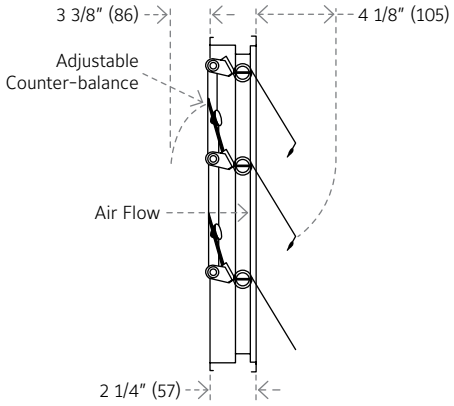
REAR FLANGE



HORIZONTAL MOUNT - AIR FLOW DOWN



HORIZONTAL MOUNT – AIR FLOW UP



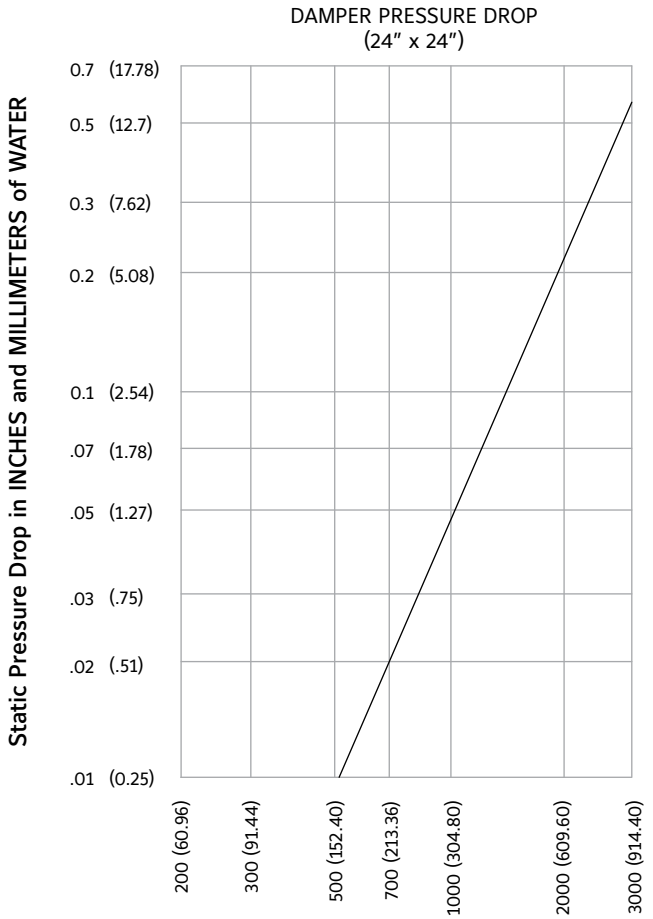
VERTICAL MOUNT -
HORIZONTAL AIR FLOW

Note:
- Unit furnished approx. 1/4" (6) smaller than given opening dimensions.
- Dimensions shown in parentheses ( ) indicate millimeters.

PERFORMANCE DATA

Damper Performance						
Damper Width	Maximum Back Pressure	Maximum System Velocity	Leakage*		Blades Start To Open	Blades Fully Open
			% Of Max. Flow	CFM/Sq. Ft.		
48" (1219)	4.0" w.g.	2500 FPM	0.6%	15	0.01" w.g.	0.05" w.g.
36" (914)	8.0" w.g.	2500 FPM	0.6%	15		
24" (610)	12.0" w.g.	2500 FPM	0.7%	17.5		
12" (305)	16.0" w.g.	2500 FPM	1%	25		

*Leakage information based on pressure differential of 1" w.g. tested per AMCA Std. 500.



Air Velocity in FEET and METERS per minute through FACE AREA.
Tested per AMCA Std. 500, Fig. 5.3, ductwork upstream and downstream.

INSTALLATION

- When used in fan discharge applications, damper should be located at least one-half the fan diameter away from the fan.
- For proper operation, damper must be installed square and free from racking.
- Bracing of multiple section assemblies:
  The CBD6 is intended to be self supporting only in the largest single section size. Multiple section damper assemblies may require bracing to support the weight of the assembly and to hold against system pressure. Ruskin recommends appropriate bracing to support the damper horizontally at least once for every 8 feet of damper width. Vertical assemblies and higher system pressures may require more bracing.

SUGGESTED SPECIFICATION

Furnish and install, at locations shown on plans or in accordance with schedules, heavy duty backdraft dampers that meet the following minimum construction standards: Frame shall be .125" (3.2) wall thickness 6063T6 extruded aluminum with 12 gage (2.8) galvanized steel structural brace at each corner. Blades shall be .070" (1.8) wall thickness 6063T6 extruded aluminum with extruded vinyl blade edge seals mechanically locked into blade edge. Adhesive or clip on type seals are unacceptable. Bearings shall be corrosion resistant, long life synthetic type for quiet operation. Linkage shall be 1/2" (13) wide tiebar connected to stainless steel pivot pins. Dampers shall be designed for maximum 3500 fpm spot velocities and minimum 4 inches w.g. back pressure depending on damper size. Dampers shall be in all respects equivalent to Ruskin model CBD6.

LINKS TO IMPORTANT DOCUMENTS

Document Title
Limited Warranty Document

RUSKIN®
AUTHORITY IN AIR CONTROL

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