



**HEAVY DUTY
BACKDRAFT DAMPER**

Application and Design

The **HCB-700** Series is a vertically or horizontally mounted backdraft damper that is designed to allow vertical or horizontal airflow and prevent reverse airflow.

Ratings:

Pressure: 4 in. w.g. - differential pressure

Velocity: 4000 fpm

Temperature: 180° F

Standard Construction:

Frame: .081 Extruded Aluminum 4-1/2" deep

Blade: 6060T5 Extruded Aluminum .125 thickness

Linkage: Zinc plated concealed

Axles: 1/2" diameter cast zinc & steel

Blade Seals: PVC (180°F)

Bearings: Bronze Oilite

Size Limitations:

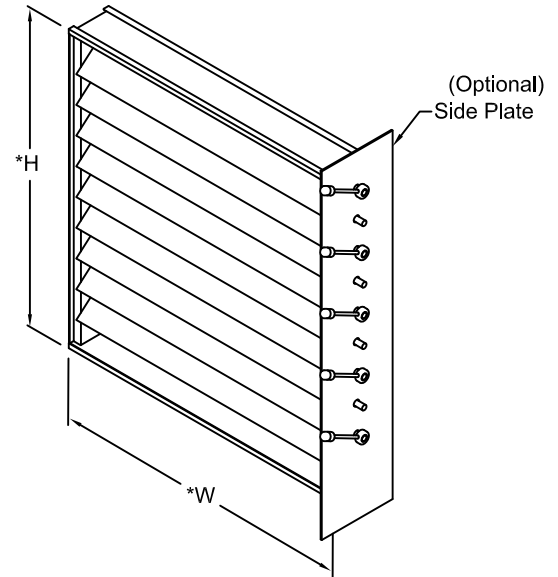
Minimum Size: 6" w x 6" h

Maximum Single Section: 48" w x 48" h

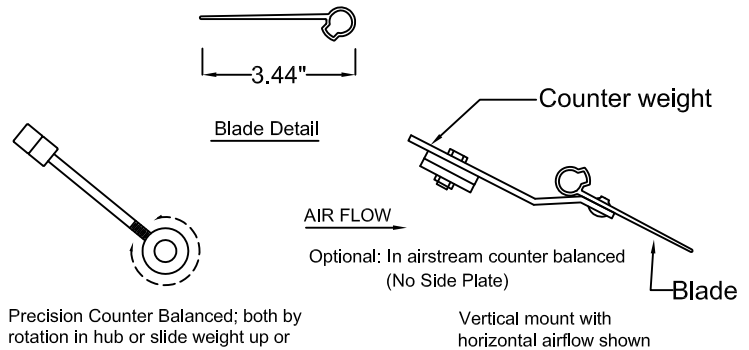
Maximum Double Section: 96" w x 96" h

Options and Accessories:

- ☐ .125 Extruded Aluminum Frame (box frame)
- ☐ 1-1/2" flanged frame- .081" extruded aluminum (no side plate)
- ☐ In airstream counterbalanced weights (no side plate)
- ☐ Epoxy coated (powder coated @ 415°F)
- ☐ 450°F Silicone blade seals
- ☐ Side Plate (20ga. galvanized steel)



*W & H dimensions furnished approximately 1/4" undersize.



Precision Counter Balanced; both by rotation in hub or slide weight up or down the rod in addition to removal or adding weights.

Vertical mount with horizontal airflow shown



Optional: In airstream counter balanced
(No Side Plate)

Quantity	Size		Other Options
	'W' Width	'H' Height	

Job Name:

Location:

Architect:

Engineer:

Contractor:

☐ **MODEL HCB-700 (4000 FPM)**

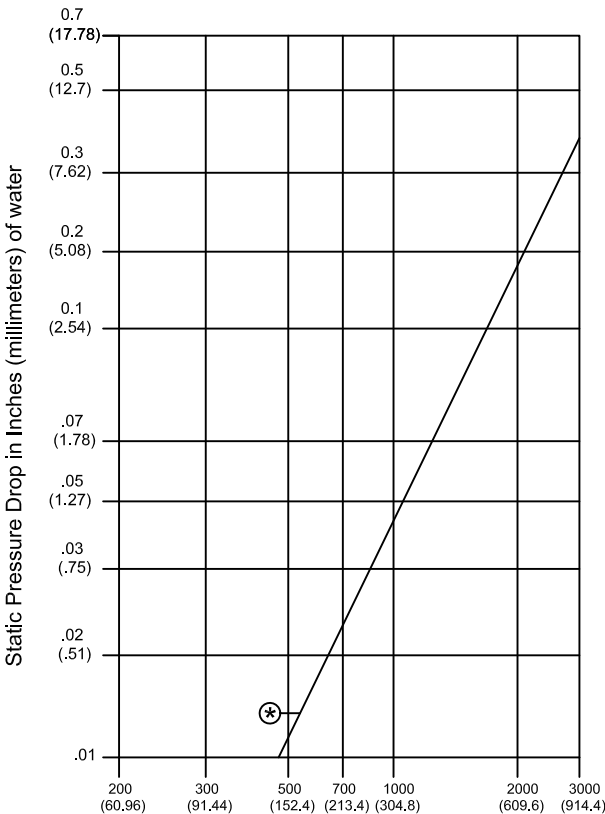
DAMPER PERFORMANCE

DAMPER WIDTH	MAXIMUM BACK PRESSURE	MAXIMUM SYSTEM VELOCITY	LEAKAGE*		BLADES START TO OPEN	BLADES FULLY OPEN
			Percent of Max. Flow	CFM/ Sq. Ft.		
48" (1219)	4.0" w.g.	4000 FPM	.61	15	**.01" w.g.	**.05" w.g.
36" (914)	8.0" w.g.	4000 FPM	.6	15		
24" (610)	12.0" w.g.	4000 FPM	.72	18		
12" (305)	16.0" w.g.	4000 FPM	1	24		

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

**set at least resistant to open

DAMPER PRESSURE DROP
(24" X 24")



HCB-700 AIR FLOW ARRANGEMENTS
Standard weights at jamb
(assist to CLOSE)

