

**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:

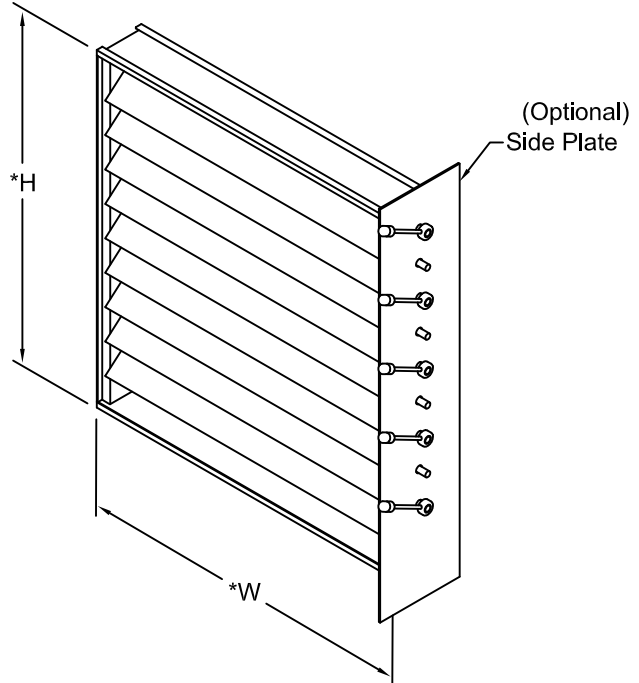
- Pressure:** 4 in. w.g. - differential pressure
- Velocity:** 4000 fpm
- Temperature:** 180° F

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:

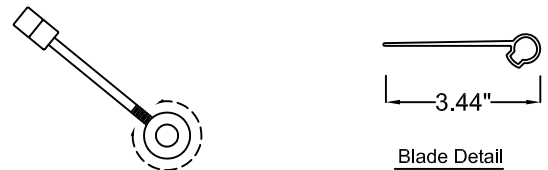
- Minimum Size:** 6" w x 6" h
- Maximum Single Section:** 48" w x 48" h
- Maximum Double Section:** 96" w x 96" h



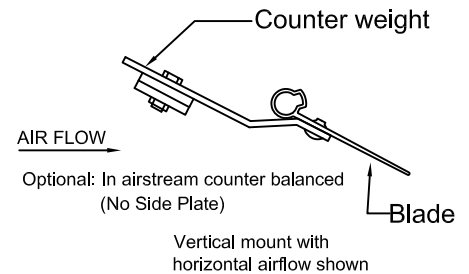
*W & H dimensions furnished approximately 1/4" undersize.

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)
- Silicone blade seals
- Side Plate (20ga. galvanized steel)



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



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

Job Name: _____

Location: _____

Architect: _____

Engineer: _____

Contractor: _____

MODEL HCB-700 (4000 FPM)

DRAWN BY: CLJ	DATE: 12-03-99	REV. DATE: 12-01-09
REV. NO. 24	APPROVED BY: BGT	DWG. NO.: G-2

HCB-700 PERFORMANCE DATA

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		

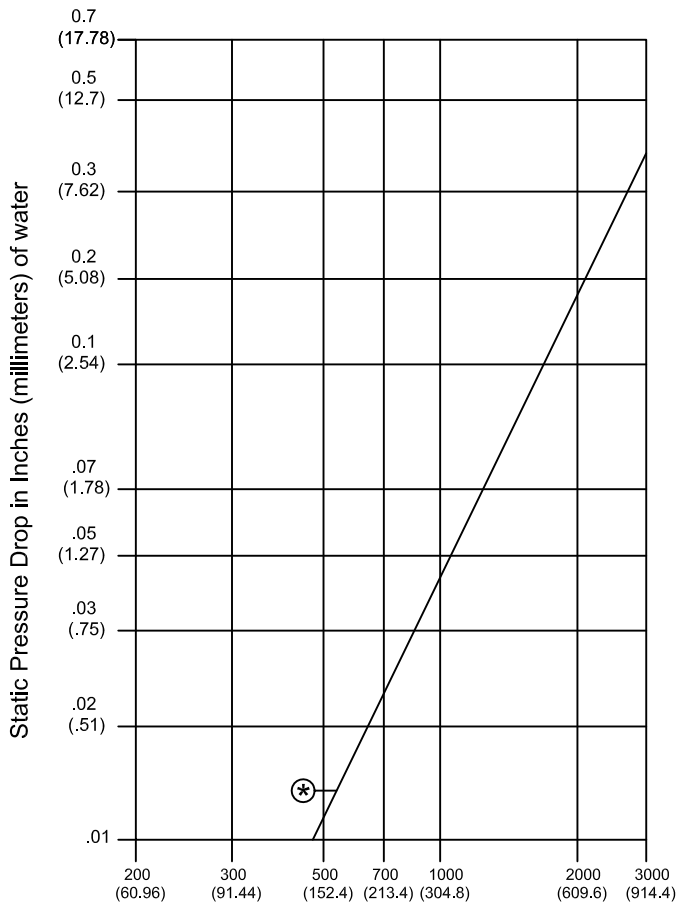
*Leakage information based on pressure differential of 1" w.g. tested per AMCA Std. 500.

**set at least resistant to open

HCB-700 AIR FLOW ARRANGEMENTS

Standard counter weights at jamb
(assist to close)

DAMPER PRESSURE DROP
(24" X 24")



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

⊕ Set at least resistant to open

