

**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. [996 Pa] - differential pressure
- Velocity:** 4000 fpm [20m/s]
- Temperature:** 180° F (82° C)

Standard Construction:

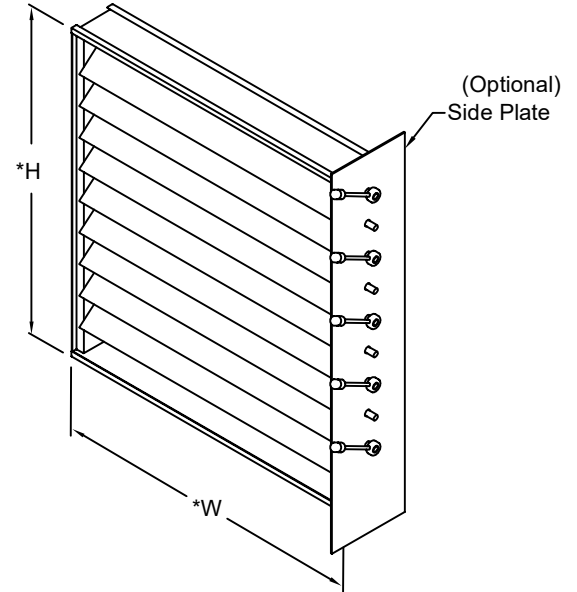
- Frame:** 0.081 [2mm] Extruded Aluminum 4-1/2" [114mm] deep
- Blade:** 6063-T5 Extruded Aluminum 0.125" [3mm] thickness
- Linkage:** Zinc plated concealed
- Axles:** 1/2" [13mm] diameter cast zinc & steel
- Blade Seals:** PVC (180°F) [82° C]
- Bearings:** Bronze Oilite

Size Limitations:

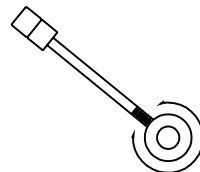
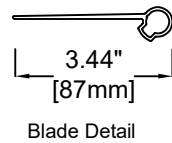
- Minimum Size:** 6" w x 6" h [152mm x 152mm]
- Maximum Single Section:** 48" w x 48" h [1219mm x 1219mm]
- Maximum Double Section:** 96" w x 96" h [2438mm x 2438mm]

Options and Accessories:

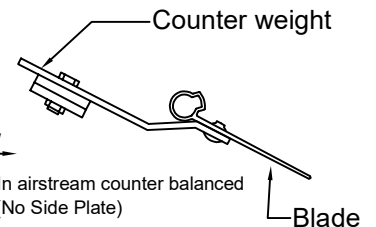
- 0.125" [3mm] Extruded Aluminum Frame (box frame)
- 1-1/2" [38mm] flanged frame- 0.125" [3mm] extruded aluminum (no side plate)
- In airstream counterbalanced weights (no side plate)
- Epoxy coated (powder coated @ 415°F [213° C])
- 450°F [232° C] Silicone blade seals
- Side Plate (20ga. galvanized steel) 6-1/4" w x (H+1") (159mm W x (H+25mm))



*W & H dimensions furnished approximately 1/4" [6mm]undersize
Note: For discharge applications, see fan manufacturer's recommendation for minimum distance between damper and fan.



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 | |
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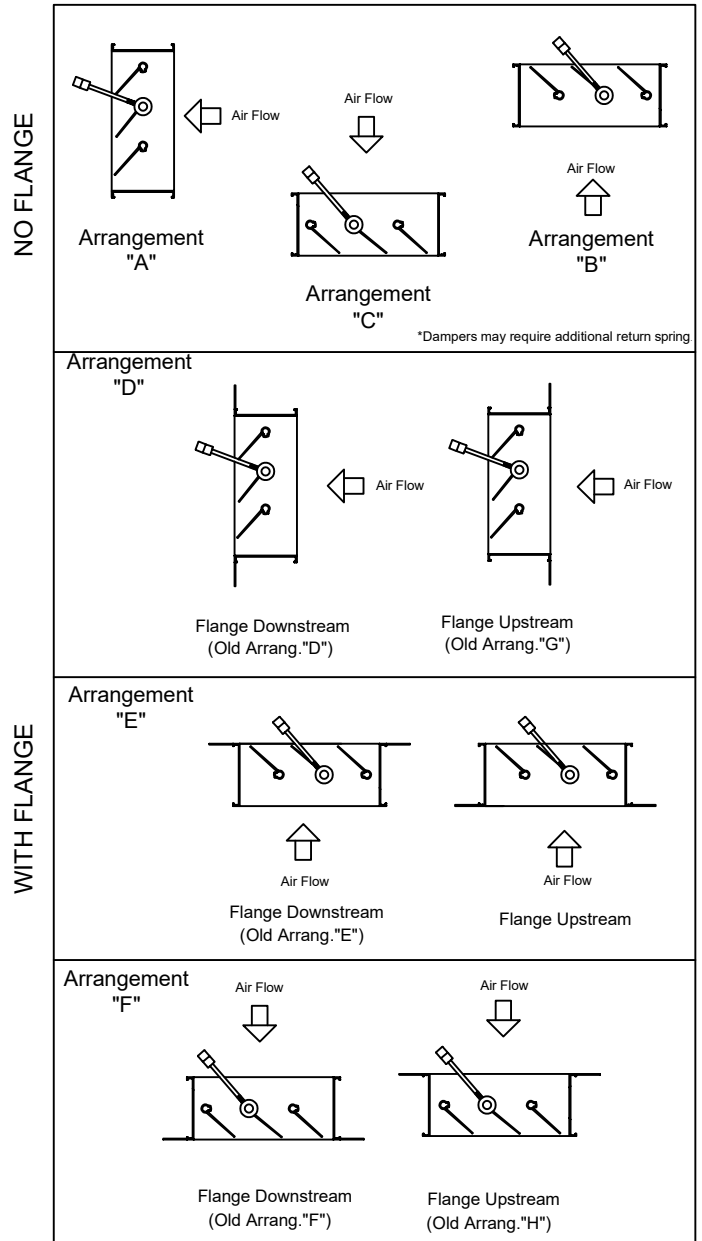
Due to continuing research, United Energetech reserves the right to change specifications without notice.

| | | | |
|-------------|--|--------------|-------------|
| Job Name: | <input type="checkbox"/> MODEL HCB-700 (4000 FPM) | | |
| Location: | | | |
| Architect: | DRAWN BY: | DATE: | REV. DATE: |
| Engineer: | CLJ | 12-03-99 | 6-24-2020 |
| Contractor: | REV. NO. | APPROVED BY: | DWG. NO.: |
| | 31 | BGT | F-10 |

For damper performance, consult factory.

HCB-700 AIR FLOW ARRANGEMENTS

Standard weights at jamb
(assist to CLOSE)



DISCLAIMER:

When used in fan discharge applications, the damper should be installed at LEAST $\frac{1}{2}$ the fan diameter away from the fan to mitigate premature product wear.