

**INDUSTRIAL
BACKDRAFT DAMPER**

Application and Design

The ICB-950 Series is a heavy duty flanged frame style industrial backdraft damper. It is designed to control backflow and provide shut off in HVAC or industrial process control systems. A variety of optional features (see page 3), makes Model ICB-950 extremely versatile, allowing its capabilities to be tailored to the application.

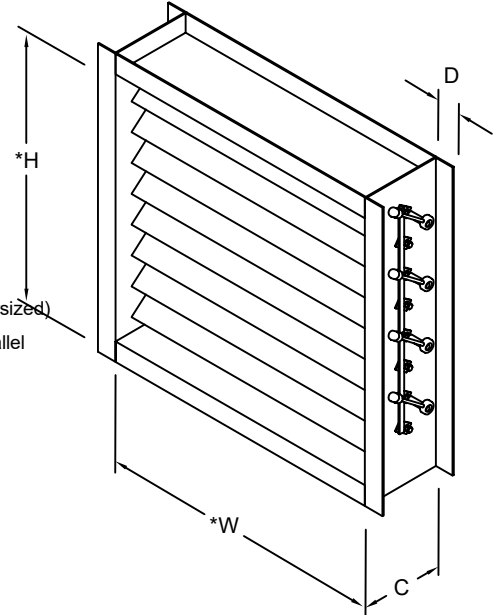
Ratings:

- Pressure:** 4 to 8-1/2 in. w.g. - differential pressure
- Velocity:** 5000 fpm
- Temperature:** 180° F [82.2° C]

Standard Construction:

- Frame:** 2" x 8" [50.8 x 203.2mm] 14 Ga. Galvanized Steel Channel
- Blade:** 18 Ga. double skin airfoil
- Linkage:** concealed
- Axles:** 3/4" [19.05mm] diameter steel
- Bearings:** Stainless Steel sleeve type
- Counterbalance weights:** External arm, OAS

*Actual Inside Dimensions (not undersized)
** The W dimension is ALWAYS parallel with the damper blade length.

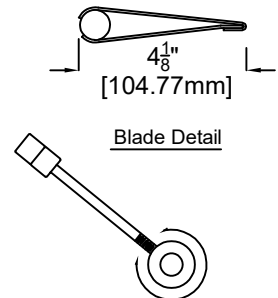


Size Limitations:

- Minimum Size:** Single blade- 6" w x 5" h [152.4 x 127]
Multiple blades- 6" w x 9" h [152.4 x 228.6]
- Maximum Single Section:** 48" w x 48" h [1219.2 x 1219.2]
- Maximum Double Section:** 96" w x 96" h [2438.4 x 2438.4]

Options and Accessories:

- All Aluminum Construction (linkage epoxy coated)
- All #304 Stainless Steel Construction
- All #316 Stainless Steel Construction
- Pressed Ball Bearings
- Heavy Duty Ball Bearings (2 hole flange)
- 12 Ga. Galvanized Frame
- 10 Ga. Galvanized Frame
- Bolt Holes (both sides)
- 450°F Silicone Blade Seals
- Counterbalance weight/constant tension springs in airstream



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

QUANTITY:	max.temp. (if higher than 250°)	W width	H height	frame depth C 8" std.	flange width D 2" std.	Bolt hole information							REMARKS	
						J	F	L spacing	M dia.	U	V	Y		

Job Name:	<input type="checkbox"/> MODEL ICB-950 (5000 FPM)				
Location:					
Architect:					
Engineer:					
Contractor:					
DRAWN BY: CLJ		DATE: 8-26-05		REV. DATE: 6-24-2020	
REV. NO. 9		DWG. NO.: F-21			

FRAME CONSTRUCTION OPTIONS

Flange (D Dim): Standard- 2" [50.8mm] Bolt holes: (Standard does not include bolt holes)

Optional- 1-1/2"- 4"
[38.1-101.6mm]

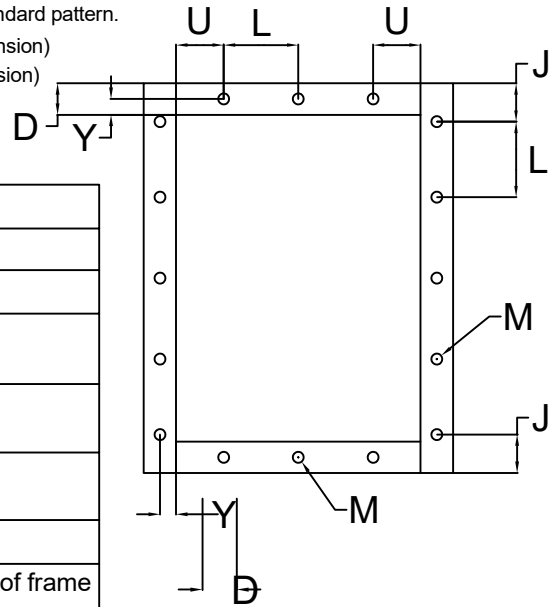
Optional- United Enertech recommended standard pattern.

7/16" [11.11mm] dia. holes (M dimension)
Spaced 6" [152.4mm] C-C (L dimension)

Web (C Dim): Standard- 10" [254mm]

Optional- 8" - 12"
[203.2-304.8mm]

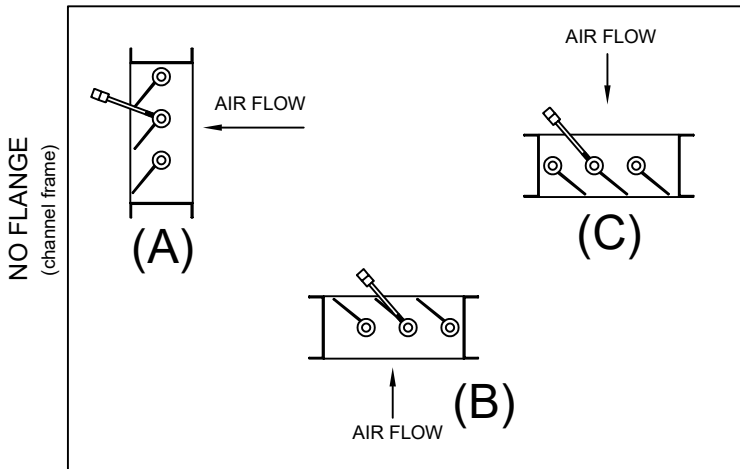
Optional- Customer may specify within
limits shown in table below.

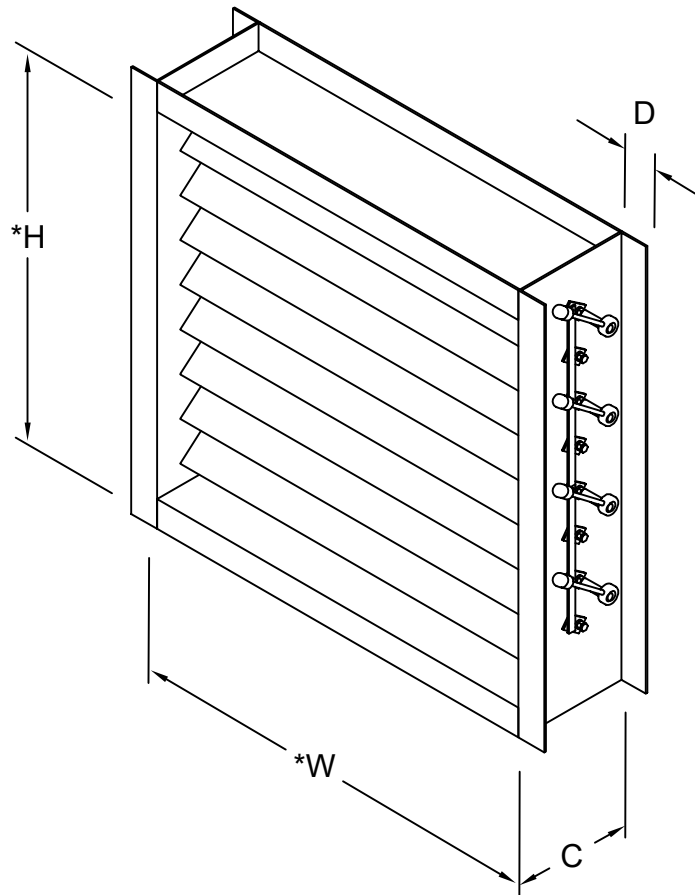


Dim.	Standard (Min./Max)	Description
J	(D/2 min.)	First/Last Space in Jamb
F	(1 min.)	No. of holes in Jamb
L	6" (2"/12") [152.4] [50.8/304.8]	Hole Spacing
M	7/16" (1/4"/11/16") [11.11] [6.35/279.4/406.4]	Mounting hole Diameter
U	(3/4" min.) [19.05]	First/Last Space in Head/Sill
V	(1 min.)	No. of holes in Head/Sill
Y	D/2M (3/4"/D-3/4") [19.05]	Centerline of bolt hole from inside edge of frame

ICB-950 AIR FLOW ARRANGEMENTS

Standard counter weights at jamb
(assist to close)





SPECIFICATIONS:

Industrial grade control dampers meeting the following specifications shall be furnished and installed where shown on plans and/or as described in schedules. Dampers shall consist of: a 14 ga. galvanized steel channel frame with 8" [203.2mm] minimum depth and 2" [50.8mm] flanges; 18 ga. steel hollow airfoil blade, 3/4" [19.05mm] steel axles turning in stainless steel sleeve bearings; and external (out of the airstream). Damper manufacturer's printed application and performance data including pressures to 8-1/2" [215.9mm] w.g. velocities to 5000 fpm and temperatures to 180°F [82.2°C]. Basis of design is United Enertech Model ICB-950

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. Consult the factory for custom options to accommodate for damper installation within the suggested fan proximity.

