

## CBD2 COUNTERBALANCED BACKDRAFT DAMPER Aluminum

### STANDARD CONSTRUCTION (Spot velocities up to 1500 fpm)

**FRAME**

6063T5 extruded aluminum .090" (2.3) wall thickness. Mitered corners.

**BLADES**

.025" (.6) formed aluminum with ex-truded vinyl edge seals.

**BEARINGS**

Synthetic.

**LINKAGE**

1/8" x 1/2" (3.2 x 13) aluminum tiebars concealed in frame.

**COUNTERBALANCE**

Zinc plated steel weights on blades. Adjustable for final "on the job" setting.

**FINISH**

Mill.

**MINIMUM SIZE**

6" w x 7" h (152 x 178)

**MAXIMUM SIZE**

Single section – 40"w x 48"h (1016 x 1219).  
Assembly of sections – size unlimited.

**TEMPERATURE LIMITS**

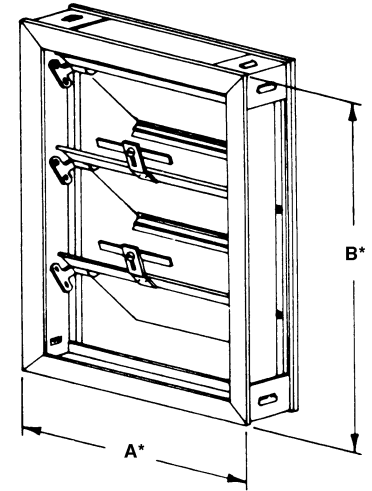
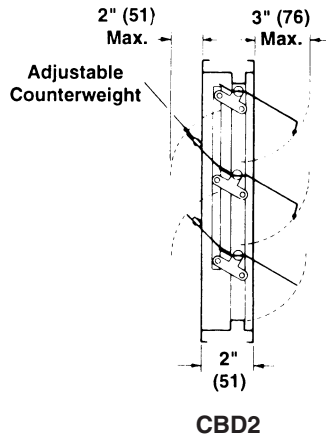
-40°F (-40°C) +200°F (93°C).

### FEATURES

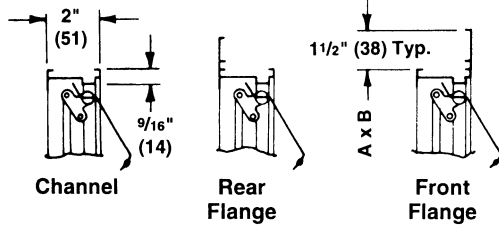
Extremely sensitive gravity operated backdraft damper. Counterbalance weights can be set to relieve air at pressure differentials less than .01 inches w.g.

**Note:**

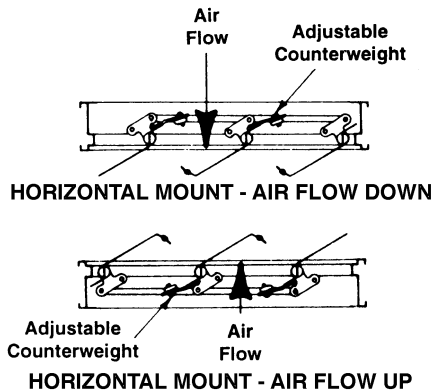
When used in fan discharge applications, damper should be located at least 1/2 fan diameter from fan discharge.



### FRAME CONSTRUCTION



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



## SUGGESTED SPECIFICATION

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Furnish and install, at locations shown on plans or in accordance with schedules, backdraft dampers that meet the following minimum construction standards: Frame shall be .090" minimum wall thickness 6063T5 extruded aluminum with 12 gage galvanized steel structural brace at each corner. Blades shall be .025" minimum roll-formed aluminum with extruded vinyl blade edge seals mechanically locked into blade edge. Adhesive or clip on type seals are unacceptable. Blades shall include field adjustable, zinc plated

steel counter balance weights to allow pressure relief at less than .01 inches w.g. Bearings shall be corrosive resistant, long life synthetic type for quiet operation. Linkage shall be 1/2" wide tiebar concealed in the frame. Dampers shall be designed for maximum 1500 fpm spot velocities and up to 4" w.g. back pressure depending on damper size. Dampers shall be in all respects equivalent to Ruskin model CBD2.

## INSTALLATION

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Install with frame square without twisting or racking. Shims should be used between damper frame and opening or duct to prevent distortion of the frame. Multiple section assemblies must be fastened together on all sides, and top and bottom. Appropriate bracing must be supplied at every horizontal mullion and vertical bracing every 8 feet of damper width. Blade counter balance

weights must be positioned to set desired blade opening pressure to complete installation.

When used in fan discharge applications, damper should be located at least 1/2 fan diameter from fan discharge. Isolation from excessive fan vibration is recommended.

## CBD2 PERFORMANCE DATA

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Damper Width	Maximum Back Pressure (External wind velocity)	Maximum System Velocity	Leakage*	
			% of max. flow	CFM/sq. ft.
40"	55 mph/1.5" w.g.	1000 fpm	1.5	15.0
36"	70 mph/2.5"	1000	1.5	15.0
24"	85 mph/3.5"	1000	2.0	20.0
12"	95 mph/4.5"	1000	4.0	40.0

\*Leakage information based on pressure differential of 1" w.g.

**RUSKIN**<sup>®</sup>

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