

## Model CD-200-AL & CD-201-AL Opposed Blade & Parallel Blade Damper

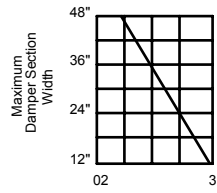
Pressure - up to 3" w.g. - See pressure limit table

FPM Table

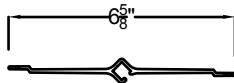
12" wide	- 2600 FPM
24"	- 2200
36"	- 2000
48"	- 1700
52"	- 1600

Jackshafting provided over 52" wide

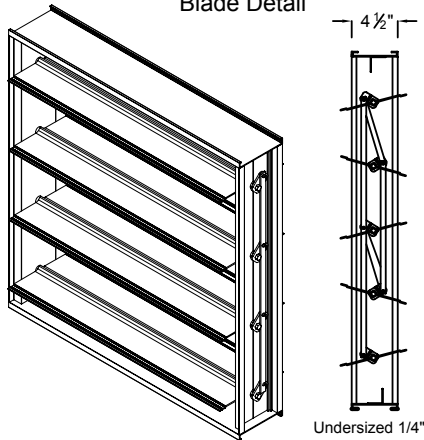
Pressure Limitations



Maximum Design Total Static Pressure Inches Water Gauge



Blade Detail



Undersized 1/4"



### Suggested Specifications

Furnish and install at location shown on drawing, or in accordance with schedules, dampers meeting the following specifications: Rectangular damper shall have .125 airfoil extruded aluminum blades and .081 extruded aluminum frame. Damper to have thrust bushings and meet the low pressure drop equal to Metropolitan Air Technology's model CD-200-AL or CD-201-AL.

### Standard Construction

- Frame: .081 Extruded Aluminum
- Blade: .125 Extruded Aluminum
- Bearing: Nylon
- Linkage: Concealed in frame
- Axles: 1/2"Ø Cast Zinc with thrust bushings
- Control Shaft: 1/2" x 6" long outboard support bearing supplied with all single section dampers for field mounted actuators. Factory-installed jackshaft supplied with all multi-section dampers.

### Options

- .125 Extruded Aluminum Frame (box frame)
- 1-1/2" .125 Extruded Aluminum Flanged Frame
- Bronze Bushing
- Blade Seals PVC (175°F)
- Blade Seals Silicone (400°F & #304 Stainless Steel Bushing)
- Compression Jamb Seals (stainless steel)
- Header Plates (End Flange)
- Hand Quadrant
- Factory Installed Pneumatic or Electric Actuators
- Stand Off Bracket, 2"
- Position Switch
- Face and By-pass Damper
- Chain Operator
- Heresite coated (air dry)
- Epoxy Coated (powder coated @ 415°)
- Weather Shield Enclosure for Actuator
- Explosion-proof Enclosure for Actuator

**Min. Size** 5"w x 4"h

8" and under single blade

**Max. Size** 52"w x 72"h (single section)

Multi-section: unlimited



Sizes tested: 36"w x 36"h,  
12"w x 12"h

### Model CD-200-AL (opposed) & CD-201-AL (parallel)

6235 South Oak Park Avenue Chicago, IL 60638 USA  
Toll free: 800.585.7686 +1.708.552.4040  
Fax: +1.708.594.0396 www.metairtech.com

Represented by:

## Model CD-200-AL & CD-201-AL Opposed Blade & Parallel Blade Damper Performance Data

### Leakage Performance

Damper Width X Height	1 in. w.g. Class	4 in. w.g. Class	8 in. w.g. Class
12" x 12"	3.6 (Class 1A)	7.6 (Class 1A)	10.3 (Class 1A)
36" x 36"	0.5 (Class 1A)	5.6 (Class 1A)	20.8 (Class 1A)

Note: At 1" w.g. 12"x12" damper leaks 3.6 cfm per square foot.  
Note: At 1" w.g. 36"x36" damper leaks 0.5 cfm per square foot.

### AMCA Standards

Class	Pressure	Leakage, ft <sup>3</sup> /min /ft <sup>2</sup>			
		Required Rating		Extended Ranges (optional)	
		0.25 kPa (1")	1.0 kPa (4")	2.0 kPa (8")	3.0 kPa (12")
1A		15.2 (3)	40.6 (8)	55.9 (11)	71.1 (14)
1		20.3 (3)	40.6 (8)	55.9 (11)	71.1 (14)
2		50.8 (10)	102 (20)	142 (28)	178 (35)
3		203 (40)	406 (80)	569 (112)	711 (140)

Leakage Classification per AMCA publication 511-99

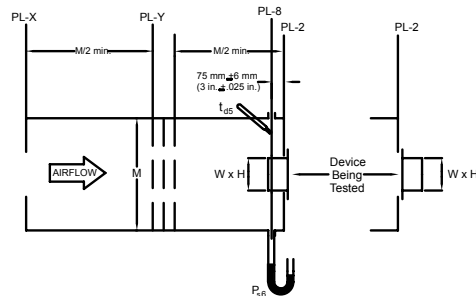


Figure 5.5- Test Device Setup with Inlet Chamber

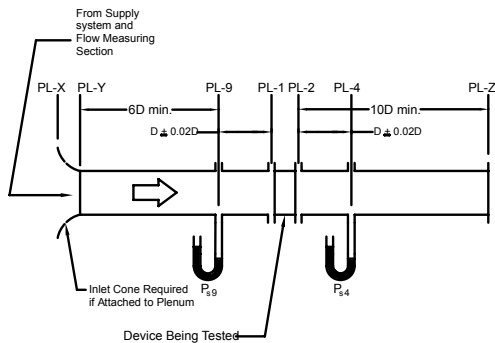
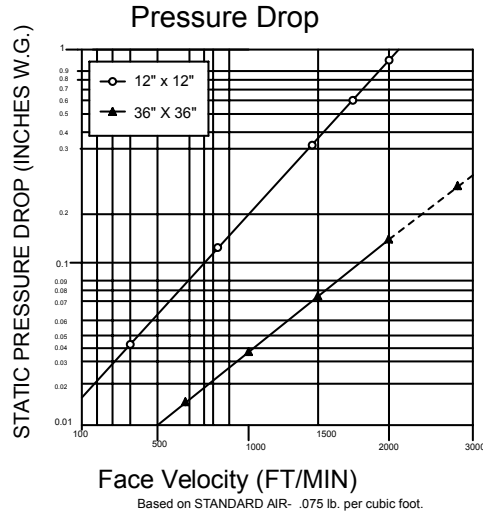


Figure 5.3- Test Device Setup with Inlet and Outlet Ducts



12" x 12" (305mm x 305mm)

Face Velocity ft/min (m/s)	Pressure drop w.g. (PA)	CFM
407 (2.0)	.040 (1.24)	407
820 (4.1)	.150 (4.97)	820
1234 (6.3)	.340 (12.42)	1234
1641 (8.3)	.610 (22.35)	1641
2057 (10.4)	.950 (34.77)	2057

36" x 36" (914mm x 914mm)

Face Velocity ft/min (m/s)	Pressure drop w.g. (PA)	CFM
392 (1.99)	.005 (1.24)	3528
789 (4.01)	.02 (4.97)	7100
1208 (6.14)	.05 (12.42)	10,877
1598 (8.12)	.09 (22.35)	14,382
2006 (10.19)	.14 (34.77)	18,061



The ratings shown are based on tests made in accordance with AMCA standard 500.

Represented by:

6235 South Oak Park Avenue Chicago, IL 60638 USA  
Toll free: 800.585.7686 +1.708.552.4040  
Fax: +1.708.594.0396 www.metairtech.com