

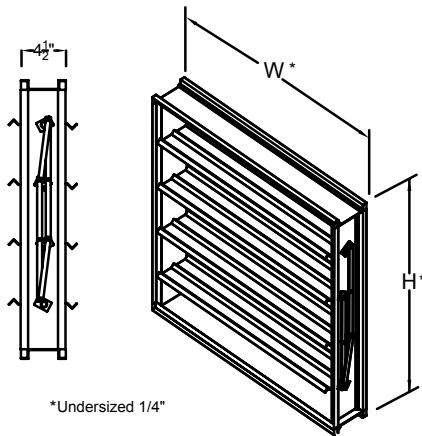
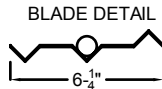
Model CD-200-HD & CD-201-HD Opposed Blade & Parallel Blade Damper

Ratings:

Pressure - up to 12" w.g.
See pressure limit table

FPM Table

12" wide	- 3500 FPM
24"	- 2800
36"	- 2300
48"	- 2100
52"	- 2000



Min. Size 6"w x 8"h (single blade)
6"w x 13"h (multiple blades)
Max. Size 48"w x 60"h (single section)
Multi-section: unlimited

Suggested Specifications

Furnish and install at location shown on drawing, or in accordance with schedules, dampers meeting the following specifications: Rectangular damper shall have 16 gauge galvanized steel blades with galvanized steel frame. Damper to be equal to MAT's model CD-200-HD or CD-201-HD.

Standard Construction

- Frame: 4-1/2" deep, 16ga. Formed Galv. Steel
- Blades: 6" wide, 16ga. Formed Galv. Steel
- Bearing: Bronze Oilite
- Linkage: Concealed in frame
- Axles: Ø1/2" plated steel
- Control Shaft: Ø1/2" x 6" long shaft supplied with all single section dampers for field mounted actuators. Factory-installed jackshaft supplied with all multiple section dampers

Options

- Blade Seals PVC (180° F)
- Compression Jamb Seals (stainless steel)
- Header Plates (end flange)
- Hand Quadrant
- Stand Off Bracket, 2"
- Factory Installed Pneumatic or Electric Actuators
- Chain Operator
- Position Switch
- Heresite coated (air dry)
- Epoxy coated (powder coated)
- Stainless Steel bushings
- Flange frame (one side)
- Single Flange
- Double Flange
 - Bolt holes in flange
- 304 Stainless Steel construction
- 304L Stainless Steel construction*
- 316 Stainless Steel construction*
- 316L Stainless Steel construction*
- 14ga. construction
- 12ga. construction
- 10ga. construction
- 6-1/2" deep frame
- Face and Bypass Damper (*304 stainless steel linkage)



Model CD-200-HD (opposed) & CD-201-HD (parallel)

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

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

AMCA Standards

		Leakage, ft ³ /min /ft			
		Required Rating		Extended Ranges (optional)	
Pressure	Class	1"	4"	8"	12"
I		4	8	11	14
II		10	20	28	35
III		40	80	1121	40

All data corrected to represent standard air at a density of 0.075 lbs/ft³.

		Leakage, L/s /m ²			
		Required Rating		Extended Ranges (optional)	
Pressure	Class	0.25 kPa	1.0 kPa	2.0 kPa	3.0 kPa
I		20.3	40.6	55.9	71.1
II		50.8	102	142	178
III		203	406	569	711

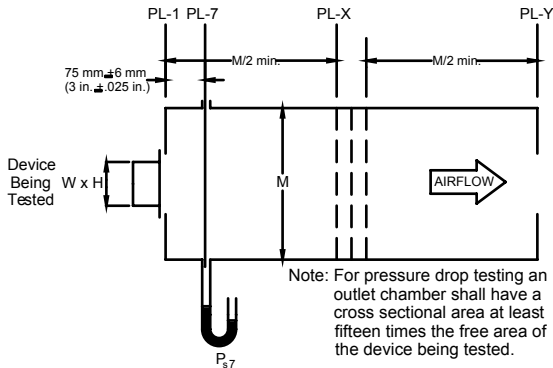


Figure 5.4- Test Device Setup with Outlet Chamber

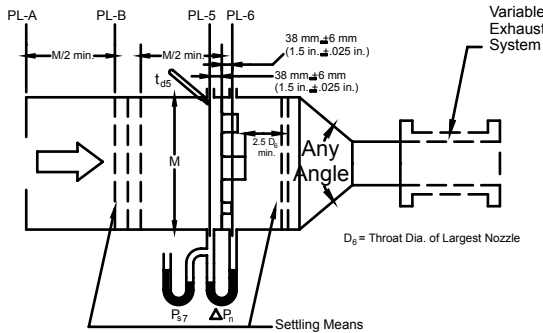


Figure 6.3- Airflow Rate Measurement Setup- Multiple Nozzle Chamber on Fan Inlet

Leakage Performance

Imperial Units (Forward Flow)

Damper Width X Height	1 in. w.g. Class	4 in. w.g. Class	8 in. w.g. Class	*Torque (per sq. ft.)
36" x 36"	Class III	Class III	Class III	5.55 lbs-in

*Torque applied to hold damper in closed position

Imperial Units (Back Flow)

Damper Width X Height	1 in. w.g. Class	4 in. w.g. Class	8 in. w.g. Class	*Torque (per sq. ft.)
36" x 36"	Class III	Class III	Class III	5.55 lbs-in

*Torque applied to hold damper in closed position

Air leakage is based on operation between 50° F to 104° F. All data corrected to represent air density of 0.075 lbs/ft³.

Standard International Units(Forward Flow)

Damper Width X Height (mm)	250 Pa Class	1 KPa Class	2 KPa Class	*Torque
915 X 915	Class III	Class III	Class III	6,394 grams-cm

*Torque applied to hold damper in closed position

Standard International Units(Back Flow)

Damper Width X Height (mm)	250 Pa Class	1 KPa Class	2 KPa Class	*Torque
915 X 915	Class III	Class III	Class III	6,394 grams-cm

*Torque applied to hold damper in closed position

Air leakage is based on operation between 10°C to 40°C. All data corrected to represent air density of 1.201 kg/m³.



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

CD-200-HD, CD-201-HD
Pressure Limitations

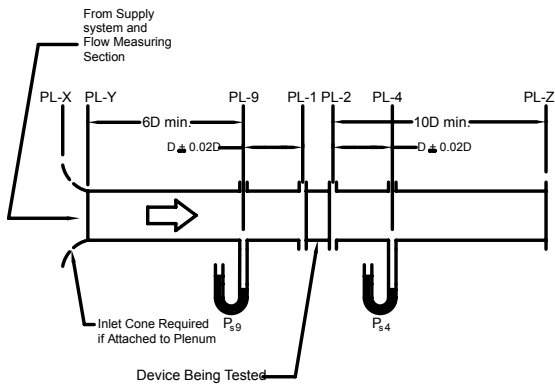
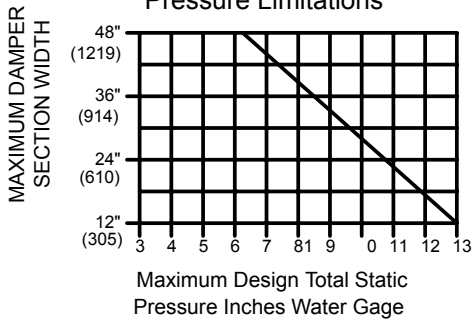


Figure 5.3- Test Device Setup with Inlet and Outlet Ducts

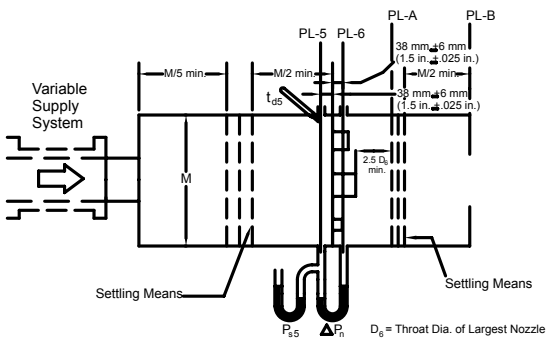
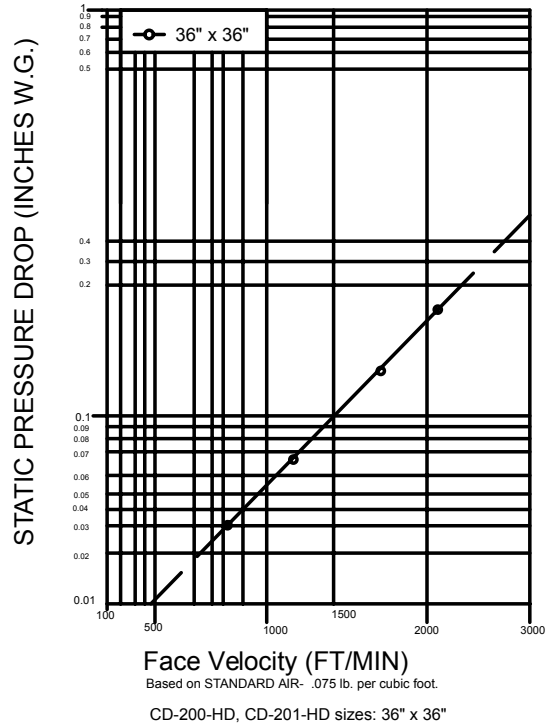


Figure 6.5- Airflow Rate Measurement Setup- Multiple Nozzle Chamber on Fan Outlet

Pressure Drop



Face Velocity (FT/MIN)

Based on STANDARD AIR- .075 lb. per cubic foot.

CD-200-HD, CD-201-HD sizes: 36" x 36"

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

Face Velocity ft/min (m/s)	Pressure Drop in. w.g. (Pa)
1000 (5.08)	0.055 (13.7)
1500 (7.62)	0.100 (24.9)
2000 (10.16)	0.175 (43.6)



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