

**EXTRUDED ALUMINUM
 MANUAL BALANCING DAMPERS**

OPPOSED BLADE - PARALLEL BLADE BALANCING DAMPER

Suggested Specifications:

Furnish and install at location shown on drawing or in accordance with scheduled dampers meeting the following specifications: Rectangular damper shall have .125 extruded aluminum blades and .081 extruded aluminum frame. Damper to have nylon bushings and meet the low pressure drop equal to United Enertech MODEL MD-105 or MD-106.

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

FPM Table

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

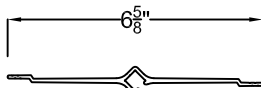
Standard Construction:

- Frame:** .081 Extruded Aluminum
- Blade:** .125 Extruded Aluminum
- Bearing:** Nylon
- Linkage:** *Concealed in frame
- Axles:** 3/8" square, zinc plated steel
- Control Shaft:** 1/2" x 6" long shaft supplied with all hand quadrant operated dampers.
- Hand Quadrant:** Standard (field installation)

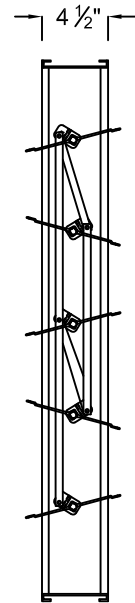
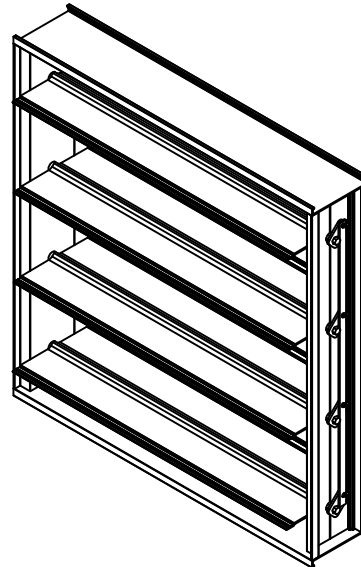
Options:

- Stand-off bracket, 2"
- Side plate (end flange)

NOTE: THESE DAMPERS ARE FOR BALANCING PURPOSES ONLY. THEY ARE NOT FOR SHUT-OFF APPLICATIONS. GAPS BETWEEN BLADES & FRAME WILL EXIST.



Blade Detail

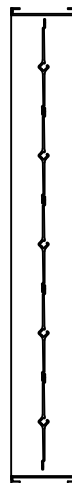


Undersized 1/4"

Minimum Size: 5"w x 4"h
 8" and under single blade

Maximum Size: 48"w x 60"h (single section)
 Multi-section: NOT AVAILABLE

*Over 36" wide or 48" high, blade linkage will be modified.



CROSS SECTIONAL VIEW

Closed position



Job Name:	<input type="checkbox"/> MODEL MD-105 (Opposed)		
Location:	<input type="checkbox"/> MODEL MD-106 (Parallel)		
Architect:	DRAWN BY:	DATE:	REV. DATE:
Engineer:	CLJ	10-1-08	3-9-12
Contractor:	REV. NO.	APPROVED BY:	DWG. NO.:
	8	BGT	A-25

Model MD-105, MD-106 Damper Performance Data

Pressure Limitations

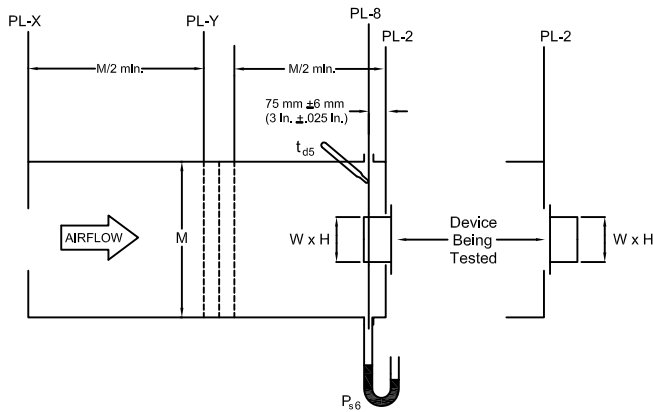
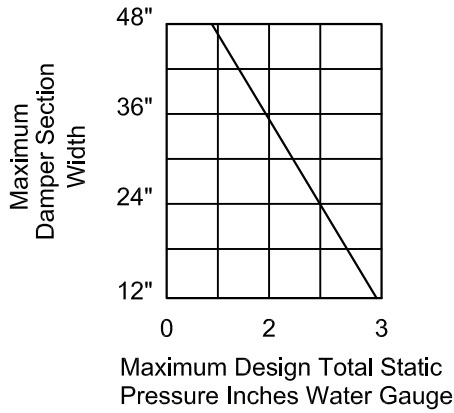
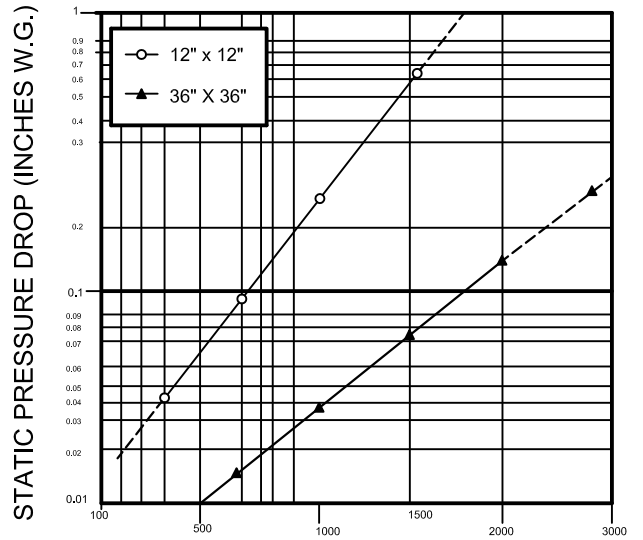


Figure 5.5- Test Device Setup with Inlet Chamber

PRESSURE DROP



Face Velocity (FT/MIN)

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

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

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

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

Face Velocity ft/min (m/s)	Pressure drop w.g. (PA)
392 (1.99)	.005 (1.24)
789 (4.01)	.02 (4.97)
1208 (6.14)	.05 (12.42)
1598 (8.12)	.09 (22.35)
2006 (10.19)	.14 (34.77)

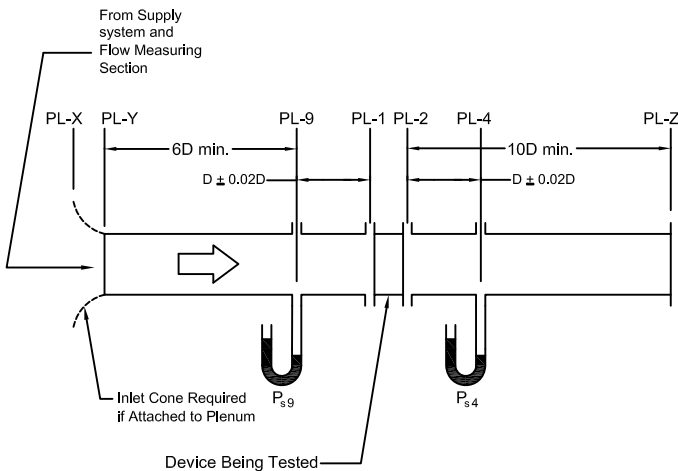


Figure 5.3- Test Device Setup with Inlet and Outlet Ducts