

# Air Flow Company, Inc.

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## AL-A8

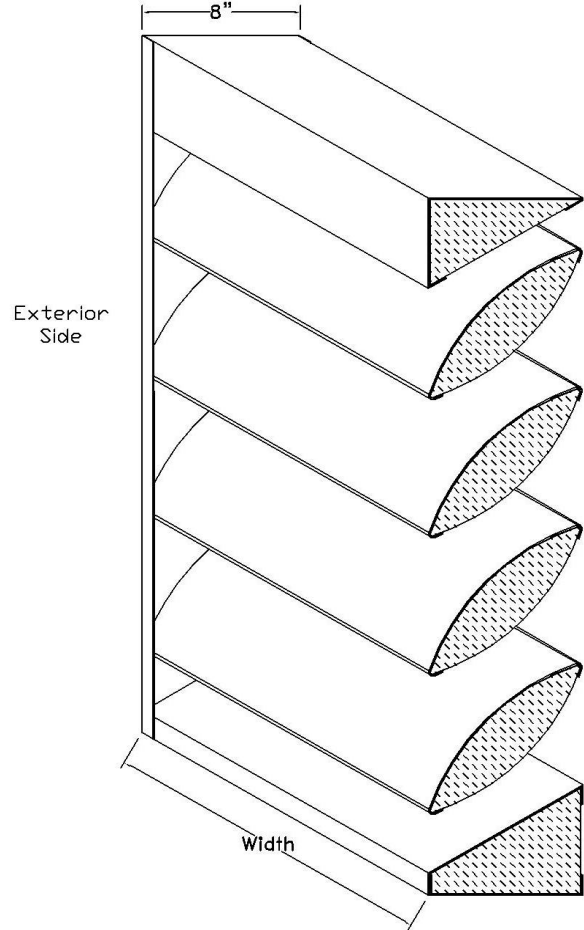
### 8" Deep Formed Steel Acoustical Louver

#### Standard Louver Construction

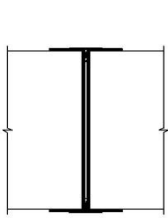
✓ Frame	Channel
✓ Frame Thickness	16 Gauge galvanized steel
✓ Blades Thickness	18 Ga. galvanized steel-exterior surface 22 Ga. galvanized perforated -interior surface
✓ Blade Positioning	45° angle
✓ Sound Insulation	6# density pcf mineral wool
✓ Fasteners	3/16" plated steel rivets exposed to view
✓ Screen	12" x 19 Ga. Galvanized screen in frame
✓ Finish	Mill
✓ Undersized	¼" under opening sizes
✓ Mullions	Visible
✓ Minimum Size	12" W x 12" H
✓ Maximum Single Section	60" W x 120" H

#### Optional Construction

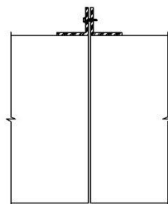
Frames	Heavier gauge		
	Stainless steel		
	Formed aluminum		
Blades	Heavier gauge		
	Stainless steel		
	Formed aluminum		
Fasteners	Stainless Steel Fasteners		
Screen	.063" x ¾" expanded aluminum		
	18 x 16 Insect screen		
Finish	Prime coat		
	Baked enamel		
	Powder coat		
	Kynar 500	2 Coat	3 Coat
	Anodized	Clear	Color
Frame Accessories	Flange		
	Pan		
	Extended sill		



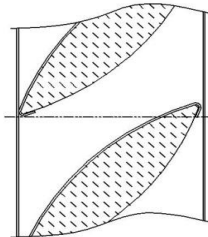
**Air Flow Model AL-A8.** The ratings shown are based on tests & Procedures Made in accordance with AMCA standard 500-L. The actual test results of water penetration & air performance may vary (+/-10%) depending on the actual application. Free area calculations are (+/-5%)



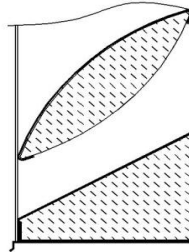
Exposed Mullion



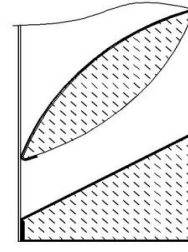
Invisible Mullion



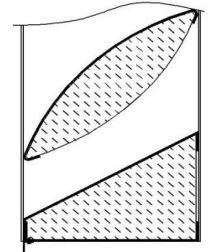
Hor. Invisible Mullion



Channel W/Sill



Channel Frame



Flanged (1-1/2")

#### Louver Schedule

Item	Qty	Opening Size (W x H)	Notes	Project:
				Location:
				Arch/Eng:
				Customer:

### Free Area Calculations (Sq. Ft.)

		W I D T H (Inches)								
		12	18	24	30	36	42	48	54	60
H E I G H T (Inches)	12	0.13	0.22	0.31	0.41	0.50	0.59	0.69	0.78	0.88
	18	0.25	0.44	0.63	0.81	1.00	1.19	1.38	1.56	1.75
	24	0.38	0.66	0.94	1.22	1.50	1.78	2.07	2.35	2.63
	30	0.50	0.88	1.25	1.63	2.00	2.38	2.75	3.13	3.50
	36	0.63	1.10	1.56	2.03	2.50	2.97	3.44	3.91	4.38
	42	0.75	1.31	1.88	2.44	3.00	3.57	4.13	4.69	5.26
	48	0.88	1.53	2.19	2.85	3.50	4.16	4.82	5.48	6.13
	54	1.00	1.75	2.50	3.25	4.01	4.76	5.51	6.26	7.01
	60	1.13	1.97	2.82	3.66	4.51	5.35	6.20	7.04	7.89
	66	1.25	2.19	3.13	4.07	5.01	5.95	6.88	7.82	8.76
	72	1.38	2.41	3.44	4.47	5.51	6.54	7.57	8.61	9.64
	78	1.50	2.63	3.76	4.88	6.01	7.13	8.26	9.39	10.51
84	1.63	2.85	4.08	5.29	6.51	7.73	8.95	10.17	11.39	
90	1.75	3.07	4.38	5.70	7.01	8.32	9.64	10.95	12.27	
96	1.88	3.29	4.69	6.10	7.51	8.92	10.33	11.74	13.14	

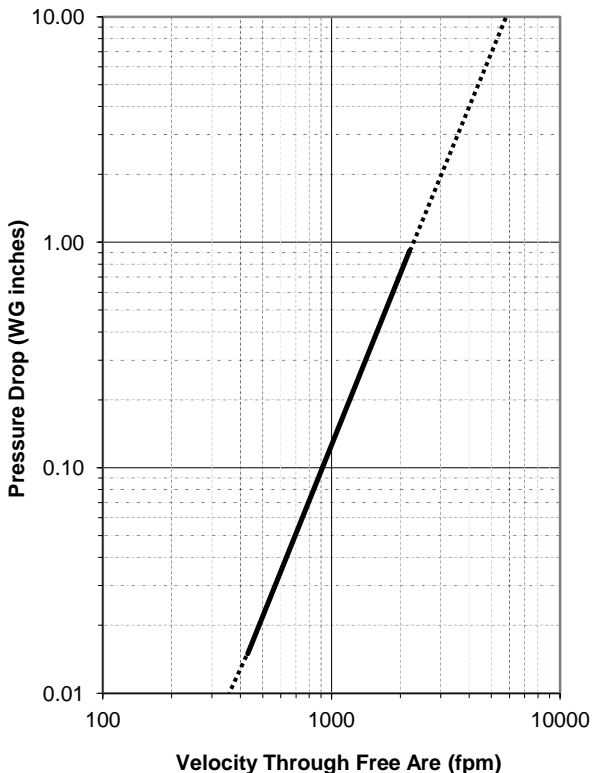
- ◆ To determine the pressure drop of a louver:  
Calculate the Velocity thru free area; divide the required CFM (volume of air) by the required free area above chart. The pressure drop is expressed in (inches w.g.)
- ◆ To determine the minimum free area required for louver:  
Divide the required CFM (volume of air) by the free area velocity before water penetration, then select the most desirable louver size from the free area chart above.
- ◆ To determine the maximum CFM (volume), knowing the louver size:  
Multiply the required free area (see above free area chart) by maximum velocity thru free area.

### Air Performance

Unit test size (48" x 48")  
Airflow rate at standard air density  
and the AMCA figure 5.5



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### CALCULATING TRANSMISSION LOSS

In order to calculate transmission loss (dB), take the Free Field Noise Reduction (dB) and subtract by 6 (dB)  
Free-Field Noise Reduction - 6 (dB) =  
**Transmission Loss (dB)**

### OCTAVE BANDS

Frequency (Hz)	63	125	250	500	1000	2000	4000	5000
Free Field Noise Reduction (dB)	12	11	12	13	20	18	16	20
Transmission Loss (dB)	6	5	6	7	14	12	10	14

