

Air Flow Company, Inc.

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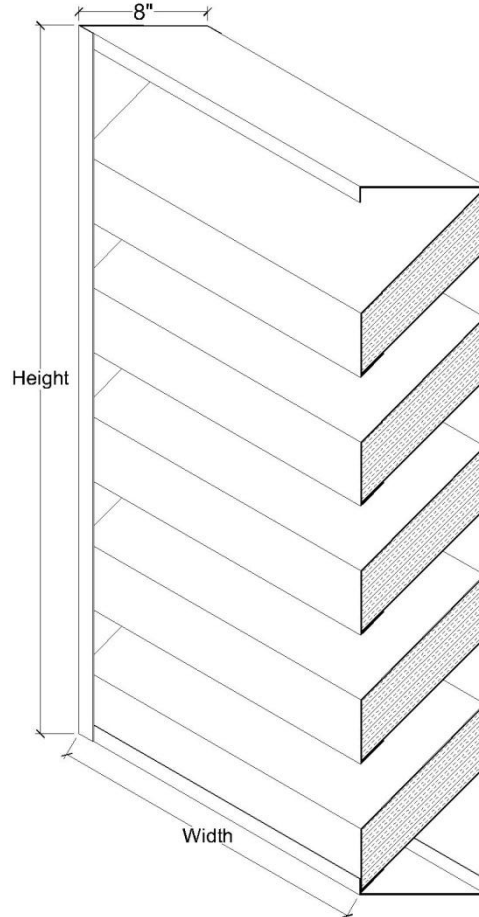
AL-808 8" Deep Formed Steel Acoustical Louver

Standard Louver Construction

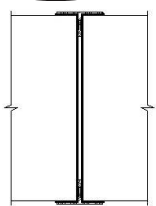
✓ Frame	Channel
✓ Frame Thickness	16 Gauge galvanized steel
✓ Blades Thickness	18 Ga. galvanized steel-exterior surface 22 Ga. galvanized perforated -interior surface
✓ Blade Positioning	45° angle
✓ Sound Insulation	6# density pcf mineral wool
✓ Fasteners	3/16" plated steel rivets exposed to view
✓ Screen	1/2" x 19 Ga. Galvanized screen in frame
✓ Finish	Mill
✓ Undersized	1/4" under opening sizes
✓ Mullions	Visible
✓ Minimum Size	12" W x 12" H
✓ Maximum Single Section	60" W x 120" H

Optional Construction

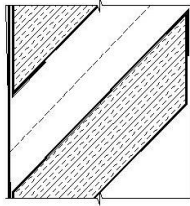
Frames	Heavier gauge		
	Stainless steel		
	Formed aluminum		
Blades	Heavier gauge		
	Stainless steel		
	Formed aluminum		
Fasteners	Stainless Steel Fasteners		
Screen	.063" x 3/4" expanded aluminum		
	18 x 16 Insect screen		
Finish	Prime coat		
	Baked enamel		
	Powder coat		
	Kynar 500	2 Coat	3 Coat
	Anodized	Clear	Color
Frame Accessories	Flange		
	Pan		
	Extended sill		



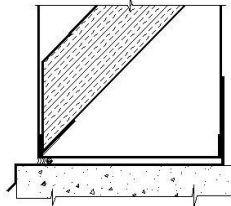
Air Flow Model AL-808. The ratings shown are based on tests & Procedures Made in accordance with AMCA standard 500-L. The actual test results of water penetration & air performance may vary (+/-10%) depending on the actual application. Free area calculations are (+/-5%)



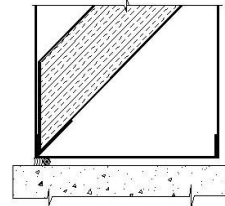
Visible Mullion



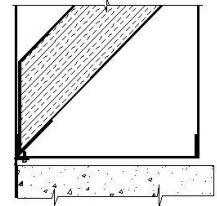
Hor. Invisible Mullion



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	0.19	0.31	0.43	0.54	0.66	0.78	0.90	1.01	1.13
	18	0.39	0.62	0.86	1.09	1.32	1.56	1.79	2.02	2.26
	24	0.39	0.62	0.86	1.09	1.32	1.56	1.79	2.02	2.26
	30	0.58	0.93	1.28	1.63	1.99	2.34	2.69	3.04	3.39
	36	0.78	1.25	1.71	2.18	2.65	3.11	3.58	4.05	4.52
	42	0.97	1.56	2.14	2.72	3.31	3.89	4.48	5.06	5.64
	48	0.97	1.56	2.14	2.72	3.31	3.89	4.48	5.06	5.64
	54	1.17	1.87	2.57	3.27	3.97	4.67	5.37	6.07	6.77
	60	1.36	2.18	3.00	3.81	4.63	5.45	6.27	7.08	7.90
	66	1.56	2.49	3.43	4.36	5.29	6.23	7.16	8.10	9.03
	72	1.56	2.49	3.43	4.36	5.29	6.23	7.16	8.10	9.03
	78	1.75	2.80	3.85	4.90	5.96	7.01	8.06	9.11	10.16
84	1.95	3.11	4.28	5.45	6.62	7.79	8.95	10.12	11.29	
90	2.14	3.43	4.71	5.99	7.28	8.56	9.85	11.13	12.42	
96	2.14	3.43	4.71	5.99	7.28	8.56	9.85	11.13	12.42	

◆ 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.

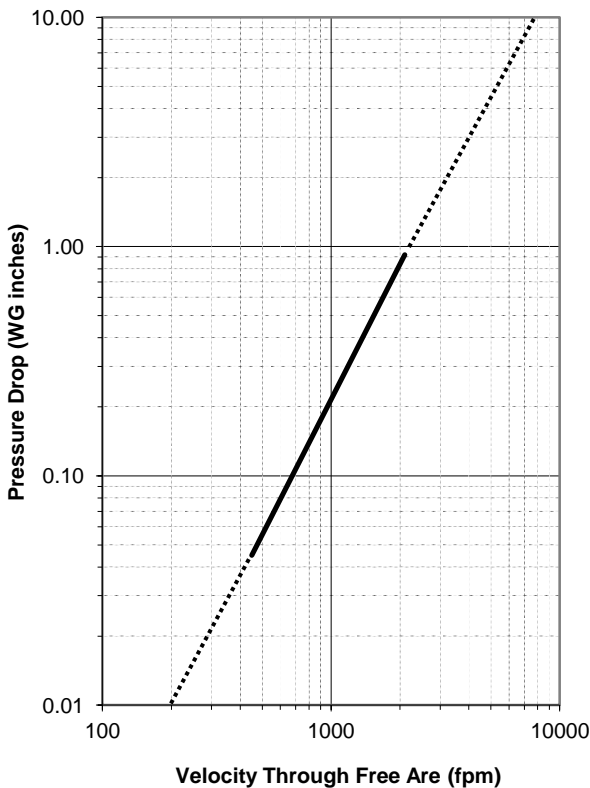
◆ To determine the maximum CFM (volume), knowing the louver size: Multiply the required free area (see above free area chart) by maximum velocity thru free area.

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)

$$\text{Free-Field Noise Reduction} - 6 \text{ (dB)} = \text{Transmission Loss (dB)}$$

OCTAVE BANDS

Frequency (Hz)	63	125	250	500	1000	2000	4000	8000
Free Field Noise Reduction (dB)	11	13	12	16	22	24	21	20
Transmission Loss (dB)	5	7	6	10	16	18	15	14

