Air Flow Company, Inc.

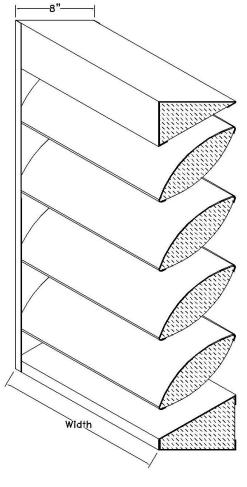
850 W. Fullerton Ave. • Addison, IL. 6010 Tel (630) 628-1138 Fax (630) 628-1149

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	1/4" under opening sizes					
✓	Mullions	Visible					
✓	Minimum Size	12" W x 12" H					
✓	Maximum Single Section	60" W x 120" H					

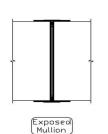
Exterior
Side



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

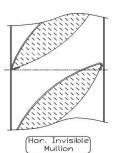


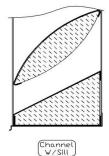
Air Flow Model AL-A8. The ratings shown are based on tests & Procedures Made in accordance with AMCA standard 500-L. The actual test results of water penetration & air performance may vary (+/-10%) depending on the actual application. Free area calculations are (+/-5%)

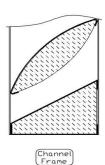


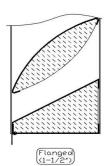
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Invisible Mullion









Lo	uv	er	S	cl	16	d	u	le

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

Air Flow Company, Inc.

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AL-A8

8" Deep Formed Steel Acoustical Louver

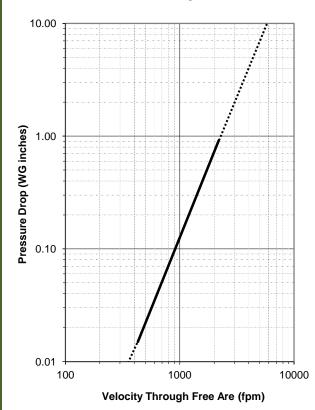
Free Area Calculations (Sq. Ft.)

Tree Area Galdalations (GG. 1 t.)											
				WID	TH (In	ches)					
	12	18	24	30	36	42	48	54	60		
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	964		
78	1.50	2.63	3.76	4.88	6.01	7.13	8.26	9.39	1051		
84	1.63	2.85	4.08	5.29	6.51	7.73	8.95	10.17	1139		
90	1.75	3.07	4.38	5.70	7.01	8.32	964	10.95	12 <i>2</i> 7		
96	1.88	3.29	4.69	6.10	7.51	8.92	10.33	11.74	1314		
	18 24 30 36 42 48 54 60 66 72 78 84	12 0.13 18 0.25 24 0.38 30 0.50 36 0.63 42 0.75 48 0.88 54 1.00 60 1.13 66 1.25 72 1.38 78 1.50 84 1.63 90 1.75	12 0.13 0.22 18 0.25 0.44 24 0.38 0.66 30 0.50 0.88 36 0.63 1.10 42 0.75 1.31 48 0.88 1.53 54 1.00 1.75 60 1.13 1.97 66 1.25 2.19 72 1.38 2.41 78 1.50 2.63 84 1.63 2.85 90 1.75 3.07	12 0.13 0.22 0.31 18 0.25 0.44 0.63 24 0.38 0.66 0.94 30 0.50 0.88 1.25 36 0.63 1.10 1.56 42 0.75 1.31 1.88 48 0.88 1.53 2.19 54 1.00 1.75 2.50 60 1.13 1.97 2.82 66 1.25 2.19 3.13 72 1.38 2.41 3.44 78 1.50 2.63 3.76 84 1.63 2.85 4.08 90 1.75 3.07 4.38	12 18 24 30 12 0.13 0.22 0.31 0.41 18 0.25 0.44 0.63 0.81 24 0.38 0.66 0.94 1.22 30 0.50 0.88 1.25 1.63 36 0.63 1.10 1.56 2.03 42 0.75 1.31 1.88 2.44 48 0.88 1.53 2.19 2.85 54 1.00 1.75 2.50 3.25 60 1.13 1.97 2.82 3.66 66 1.25 2.19 3.13 4.07 72 1.38 2.41 3.44 4.47 78 1.50 2.63 3.76 4.88 84 1.63 2.85 4.08 5.29 90 1.75 3.07 4.38 5.70	12 18 24 30 36 12 0.13 0.22 0.31 0.41 0.50 18 0.25 0.44 0.63 0.81 1.00 24 0.38 0.66 0.94 1.22 1.50 30 0.50 0.88 1.25 1.63 2.00 36 0.63 1.10 1.56 2.03 2.50 42 0.75 1.31 1.88 2.44 3.00 48 0.88 1.53 2.19 2.85 3.50 54 1.00 1.75 2.50 3.25 4.01 60 1.13 1.97 2.82 3.66 4.51 66 1.25 2.19 3.13 4.07 5.01 72 1.38 2.41 3.44 4.47 5.51 78 1.50 2.63 3.76 4.88 6.01 84 1.63 2.85 4.08 5.29 6.51 <th>12 0.13 0.22 0.31 0.41 0.50 0.59 18 0.25 0.44 0.63 0.81 1.00 1.19 24 0.38 0.66 0.94 1.22 1.50 1.78 30 0.50 0.88 1.25 1.63 2.00 2.38 36 0.63 1.10 1.56 2.03 2.50 2.97 42 0.75 1.31 1.88 2.44 3.00 3.57 48 0.88 1.53 2.19 2.85 3.50 4.16 54 1.00 1.75 2.50 3.25 4.01 4.76 60 1.13 1.97 2.82 3.66 4.51 5.35 66 1.25 2.19 3.13 4.07 5.01 5.95 72 1.38 2.41 3.44 4.47 5.51 6.54 78 1.50 2.63 3.76 4.88 6.01 7.13</th> <th>12 18 24 30 36 42 48 12 0.13 0.22 0.31 0.41 0.50 0.59 0.69 18 0.25 0.44 0.63 0.81 1.00 1.19 1.38 24 0.38 0.66 0.94 1.22 1.50 1.78 2.07 30 0.50 0.88 1.25 1.63 2.00 2.38 2.75 36 0.63 1.10 1.56 2.03 2.50 2.97 3.44 42 0.75 1.31 1.88 2.44 3.00 3.57 4.13 48 0.88 1.53 2.19 2.85 3.50 4.16 4.82 54 1.00 1.75 2.50 3.25 4.01 4.76 5.51 60 1.13 1.97 2.82 3.66 4.51 5.35 6.20 66 1.25 2.19 3.13 4.07 5.01 <</th> <th>12 18 24 30 36 42 48 54 12 0.13 0.22 0.31 0.41 0.50 0.59 0.69 0.78 18 0.25 0.44 0.63 0.81 1.00 1.19 1.38 1.56 24 0.38 0.66 0.94 1.22 1.50 1.78 2.07 2.35 30 0.50 0.88 1.25 1.63 2.00 2.38 2.75 3.13 36 0.63 1.10 1.56 2.03 2.50 2.97 3.44 3.91 42 0.75 1.31 1.88 2.44 3.00 3.57 4.13 4.69 48 0.88 1.53 2.19 2.85 3.50 4.16 4.82 5.48 54 1.00 1.75 2.50 3.25 4.01 4.76 5.51 6.26 60 1.13 1.97 2.82 3.66 4.51</th>	12 0.13 0.22 0.31 0.41 0.50 0.59 18 0.25 0.44 0.63 0.81 1.00 1.19 24 0.38 0.66 0.94 1.22 1.50 1.78 30 0.50 0.88 1.25 1.63 2.00 2.38 36 0.63 1.10 1.56 2.03 2.50 2.97 42 0.75 1.31 1.88 2.44 3.00 3.57 48 0.88 1.53 2.19 2.85 3.50 4.16 54 1.00 1.75 2.50 3.25 4.01 4.76 60 1.13 1.97 2.82 3.66 4.51 5.35 66 1.25 2.19 3.13 4.07 5.01 5.95 72 1.38 2.41 3.44 4.47 5.51 6.54 78 1.50 2.63 3.76 4.88 6.01 7.13	12 18 24 30 36 42 48 12 0.13 0.22 0.31 0.41 0.50 0.59 0.69 18 0.25 0.44 0.63 0.81 1.00 1.19 1.38 24 0.38 0.66 0.94 1.22 1.50 1.78 2.07 30 0.50 0.88 1.25 1.63 2.00 2.38 2.75 36 0.63 1.10 1.56 2.03 2.50 2.97 3.44 42 0.75 1.31 1.88 2.44 3.00 3.57 4.13 48 0.88 1.53 2.19 2.85 3.50 4.16 4.82 54 1.00 1.75 2.50 3.25 4.01 4.76 5.51 60 1.13 1.97 2.82 3.66 4.51 5.35 6.20 66 1.25 2.19 3.13 4.07 5.01 <	12 18 24 30 36 42 48 54 12 0.13 0.22 0.31 0.41 0.50 0.59 0.69 0.78 18 0.25 0.44 0.63 0.81 1.00 1.19 1.38 1.56 24 0.38 0.66 0.94 1.22 1.50 1.78 2.07 2.35 30 0.50 0.88 1.25 1.63 2.00 2.38 2.75 3.13 36 0.63 1.10 1.56 2.03 2.50 2.97 3.44 3.91 42 0.75 1.31 1.88 2.44 3.00 3.57 4.13 4.69 48 0.88 1.53 2.19 2.85 3.50 4.16 4.82 5.48 54 1.00 1.75 2.50 3.25 4.01 4.76 5.51 6.26 60 1.13 1.97 2.82 3.66 4.51		

- 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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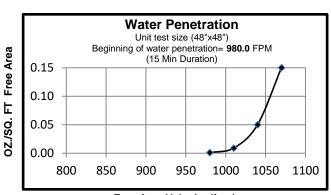
CALCULATING TRANSMISSION LOSS

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)=

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	



Free Area Velocity (fpm)