

ACOUSTICAL LOUVER - Model UFA-08

Design Features – Sound attenuating insulated blades provide a dual function of weather protection and airborne sound reduction. The airfoil shape blade reduces very high static pressure through the louver. The sound ratings are based on sound transmission standards ASTM E90-90 and ASTM E413-87.

STANDARD CONSTRUCTION

FRAME

8" deep, 16 gauge galvanized steel in style #2

BLADES

Exterior surface – 18 ga. gauge galvanized approx. spacing 6" oc.

Interior surface – 22 ga. gauge galv. perforated fastened to blade underside

SOUND INSULATION

6# density pcf mineral wool

ASSEMBLY

3/16" plated steel rivets exposed to view

MAXIMUM SINGLE SECTION

60"W x 120"H

MINIMUM SIZE

12"W x 12"H

MAXIMUM SIZE

Unlimited, with mullions, structural bracing supplied by others

MULLION

Visible

SCREEN

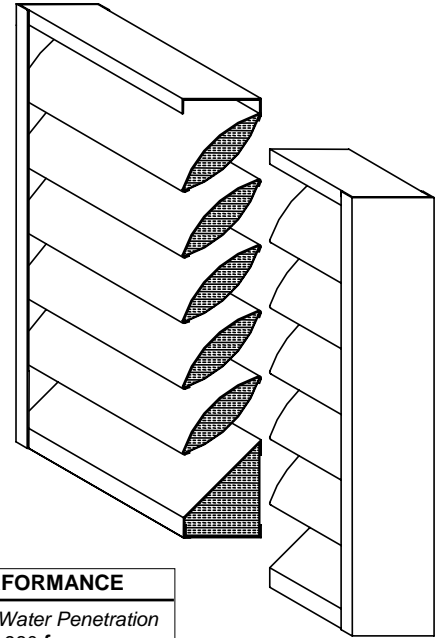
1/2" x 19 ga. galvanized screen in frame

UNDERSIZED

1/4" under ordered size unless specified Exact or Actual

FINISH

Mill



PERFORMANCE	
Point of Water Penetration	980 fpm
Free Area (48 x 48)	30%
Pressure Drop (intake)	.12" wg. @ 1000 fpm

OPTIONAL CONSTRUCTION

SPECIFIED MATERIAL – Heavier gauge or in Aluminum or stainless steel

SCREEN - Many styles available please consult screen listing

FINISH – Air-dry primer, polyurethane, epoxy, or enamel, baked epoxy or enamel, Kynar, or Powder coat.

SLEEVE AND DUCTWORK – 10 ga. to 20 ga. galvanized steel or aluminum to 30" in length.

Octave Bands								
Frequency (hz)	1	2	3	4	5	6	7	8
	63	125	250	500	1000	2000	4000	8000
Free Field Noise Reduction (DB)	12	11	12	13	20	18	16	20
Transmission Loss (DB)	6	5	6	7	14	12	10	14

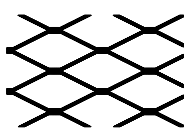
SPECIAL PURPOSE CONSTRUCTION

Fully welded construction

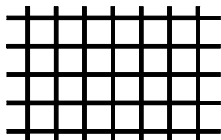
Security bar

Filter racks

TYPICAL SCREEN STYLES

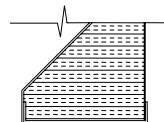


Expanded Aluminum

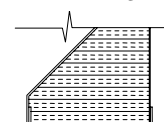


Wire Mesh Standard

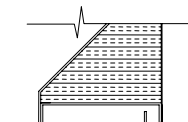
FRAME STYLE



#2 Box Frame



#1 Flange Frame

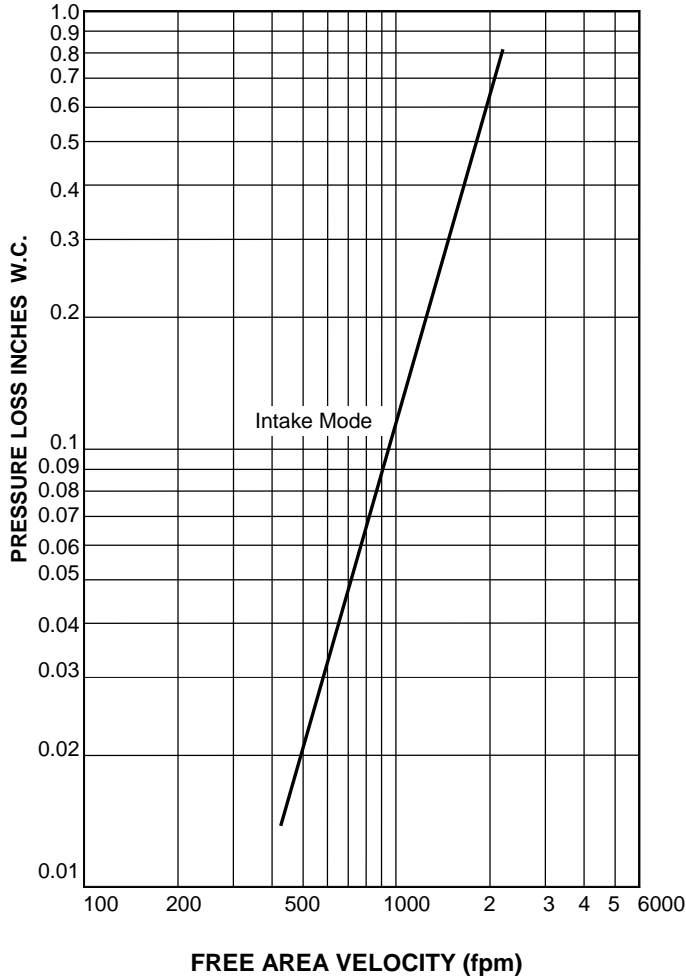


#8 Box frame and Sill Extension

DATE		ARCHITECT			CUSTOMER	
PROJECT						
ITEM	QTY	W	H	DESCRIPTION		

The sound ratings shown are based on sound transmission standards – ASTM E90-90 and ASTM E413-87. All tests were performed at an independent laboratory. The Air Performance and Free Area Calculations are made in accordance with AMCA 500 standards.

AIR PERFORMANCE



CALCULATING PRESSURE LOSS

Based upon a given flow rate (in CFM), the flowing pressure loss may be determined from the “air performance” graph, knowing the sq. ft. of free area of the louver. Alternately, the free area may be determined based upon a volumetric flow rate and a maximum pressure loss by utilizing the “air performance” graph.

Octave Bands								
Frequency (hz)	1	2	3	4	5	6	7	8
	63	125	250	500	1000	2000	4000	8000
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 CALCULATIONS IN SQ. FT.

		WIDTH											
		12	18	24	30	36	42	48	54	60	66	72	
HEIGHT	Inches	12	0.13	0.22	0.31	0.41	0.50	0.59	0.69	0.78	0.88	1.01	1.10
	18	0.25	0.44	0.63	0.81	1.00	1.19	1.38	1.56	1.75	2.02	2.21	
	24	0.38	0.66	0.94	1.22	1.50	1.78	2.07	2.35	2.63	3.03	3.31	
	30	0.50	0.88	1.25	1.63	2.00	2.38	2.75	3.13	3.50	4.04	4.41	
	36	0.63	1.10	1.56	2.03	2.50	2.97	3.44	3.91	4.38	5.05	5.52	
	42	0.75	1.31	1.88	2.44	3.00	3.57	4.13	4.69	5.26	6.06	6.62	
	48	0.88	1.53	2.19	2.85	3.50	4.16	4.82	5.48	6.13	7.06	7.72	
	54	1.00	1.75	2.50	3.25	4.01	4.76	5.51	6.26	7.01	8.07	8.82	
	60	1.13	1.97	2.82	3.66	4.51	5.35	6.20	7.04	7.89	9.08	9.93	
	66	1.25	2.19	3.13	4.07	5.01	5.95	6.88	7.82	8.76	10.09	11.03	
	72	1.38	2.41	3.44	4.47	5.51	6.54	7.57	8.61	9.64	11.10	12.13	
	78	1.50	2.63	3.76	4.88	6.01	7.13	8.26	9.39	10.51	12.11	13.24	
	84	1.63	2.85	4.07	5.29	6.51	7.73	8.95	10.17	11.39	13.12	14.34	
90	1.75	3.07	4.38	5.70	7.01	8.32	9.64	10.95	12.27	14.13	15.44		
96	1.88	3.29	4.69	6.10	7.51	8.92	10.33	11.74	13.14	15.14	16.55		
102	2.00	3.50	5.01	6.51	8.01	9.51	11.02	12.52	14.02	16.15	17.65		
108	2.13	3.72	5.32	6.92	8.51	10.11	11.70	13.30	14.90	17.16	18.75		
114	2.25	3.94	5.63	7.32	9.01	10.70	12.39	14.08	15.77	18.17	19.86		
120	2.38	4.16	5.95	7.73	9.51	11.30	13.08	14.86	16.65	19.18	20.96		