

ACOUSTICAL LOUVER - Model UFD-12

Design Features – Sound attenuating insulated blades provide multiple functions of weather protection, vision proof design and maximum airborne sound reduction. Sound ratings shown based on sound transmission standards ASTM E90-90 and ASTM E413-87.

STANDARD CONSTRUCTION

FRAME

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

BLADES

Exterior surface – 18 ga. gauge galvanized approx. spacing 12" 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 16"H

MAXIMUM SIZE

Unlimited, with mullions, structural bracing supplied by others

MULLION

Visible

SCREEN

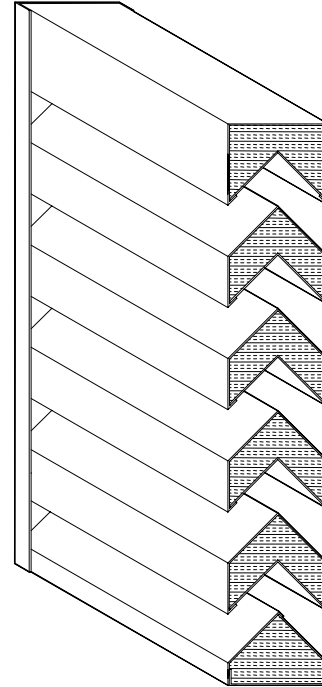
1/2" x 19 ga. galvanized in frame

UNDERSIZED

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

FINISH

Mill



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.

SPECIAL PURPOSE CONSTRUCTION

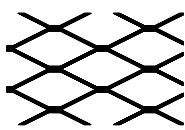
Fully welded construction

Security bar

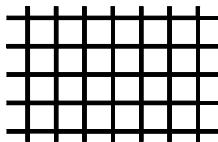
Filter racks

PERFORMANCE	
Point of Water Penetration	855 fpm
Free Area (48 x 48)	29%
Pressure Drop (intake)	.20" wg. @ 1000 fpm

TYPICAL SCREEN STYLES



Expanded Aluminum



Wire Mesh Standard

Frequency (hz)	Octave Bands							
	1	2	3	4	5	6	7	8
63	125	250	500	1000	2000	4000	8000	
Free Field Noise Reduction (DB)	15	14	15	19	30	31	29	29
Transmission Loss (DB)	9	8	9	13	24	25	23	23

DATE	ARCHITECT			CUSTOMER	
PROJECT					
ITEM	QTY	W	H	DESCRIPTION	



DEPENDABLE PRODUCTS SINCE 1955

SAFE-AIR/DOWCO

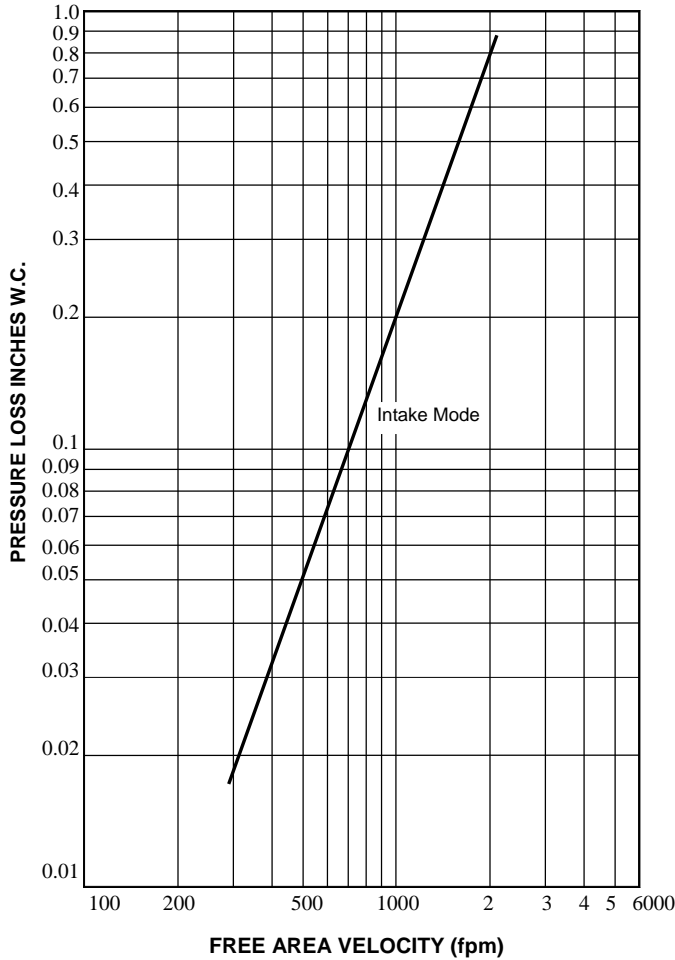
Engineering and General Offices

1855 South 54th Avenue, Cicero, Illinois 60804

Phone 708-652-9100 FAX 708-652-9158

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. Factory assembled louver sections are designed to withstand wind loadings of 25 psf (100 mph). Consult factory for higher wind pressures.

AIR PERFORMANCE

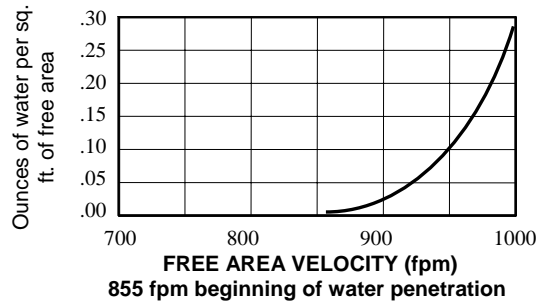


CALCULATING PRESSURE LOSS

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							
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Water Penetration Graph
in oz. of water per sq. ft. of free area over a 15 min. test period



FREE AREA CALCULATIONS IN SQ. FT.

		WIDTH														
		12	18	24	30	36	42	48	54	60	66	72	78	84	90	96
HEIGHT	12	MINIMUM HEIGHT - 14"														
	18	0.29	0.46	0.63	0.80	0.98	1.15	1.32	1.49	1.66	1.84	2.01	2.18	2.35	2.53	2.70
	24	0.43	0.69	0.95	1.21	1.47	1.73	1.99	2.25	2.51	2.77	3.02	3.28	3.54	3.80	4.06
	30	0.58	0.92	1.27	1.62	1.96	2.31	2.66	3.00	3.35	3.70	4.04	4.39	4.74	5.08	5.43
	36	0.72	1.16	1.59	2.02	2.46	2.89	3.33	3.76	4.19	4.63	5.06	5.49	5.93	6.36	6.80
	42	0.87	1.39	1.91	2.43	2.95	3.47	3.99	4.51	5.04	5.56	6.08	6.60	7.12	7.64	8.16
	48	1.01	1.62	2.23	2.84	3.44	4.05	4.66	5.27	5.88	6.48	7.09	7.70	8.31	8.92	9.52
	54	1.16	1.85	2.55	3.24	3.94	4.63	5.33	6.02	6.72	7.41	8.11	8.80	9.50	10.19	10.89
	60	1.30	2.08	2.87	3.65	4.43	5.21	5.99	6.78	7.56	8.34	9.12	9.90	10.68	11.47	12.25
	66	1.45	2.32	3.18	4.05	4.92	5.79	6.66	7.53	8.39	9.26	10.13	11.00	11.87	12.74	13.60
	72	1.59	2.55	3.50	4.46	5.41	6.37	7.32	8.28	9.23	10.19	11.14	12.10	13.05	14.01	14.96
	78	1.74	2.78	3.82	4.86	5.90	6.95	7.99	9.03	10.07	11.11	12.15	13.20	14.24	15.28	16.32
	84	1.88	3.01	4.14	5.27	6.39	7.52	8.65	9.78	10.91	12.04	13.16	14.29	15.42	16.55	17.68
	90	2.02	3.24	4.45	5.67	6.88	8.10	9.31	10.53	11.74	12.96	14.17	15.38	16.60	17.81	19.03
96	2.17	3.47	4.77	6.07	7.37	8.67	9.98	11.28	12.58	13.88	15.18	16.48	17.78	19.08	20.38	
102	2.31	3.70	5.09	6.47	7.86	9.25	10.64	12.02	13.41	14.80	16.18	17.57	18.96	20.35	21.73	
108	2.46	3.93	5.40	6.88	8.35	9.82	11.30	12.77	14.24	15.72	17.19	18.66	20.14	21.61	23.08	
114	2.60	4.16	5.72	7.28	8.84	10.40	11.96	13.52	15.08	16.64	18.20	19.76	21.31	22.87	24.43	
120	2.74	4.39	6.03	7.68	9.33	10.97	12.62	14.26	15.91	17.56	19.20	20.85	22.49	24.14	25.78	