

Aluminum Acoustical Louver Model UEB-04 & UEB-06

Features — Sound attenuating insulated blades provide a dual function of weather protection and airborne sound reduction. The stepped blade provides additional weather protection than our straight blade design.

STANDARD CONSTRUCTION

FRAME

UEB-04" thick, is .081 ga. (2.1) extruded aluminum in style #3
 UEB-06" thick, is .081 ga. (2.1) extruded aluminum in style #3

BLADES

UEB-04" are .081 ga. (2.1) extruded aluminum approx, spacing is 4" (102) @ 45°
 UEB-06" are .081 ga. (2.1) extruded aluminum approx, spacing is 6" (152) @ 45°
 Interior surface — 22 ga galv perforated steel fastened to blade underside

SOUND INSULATION

6# density pcf mineral wool

FASTENERS

Plated steel, tek screw

MAXIMUM SIZE

Unlimited, with mullions, structural bracing supplied by others

MAXIMUM SINGLE SECTION

60"W x 120"H (1524 x 3048)

MULLIONS

Visible

MINIMUM SIZE

12" W x 16" H (305 x 406)

UNDERSIZED

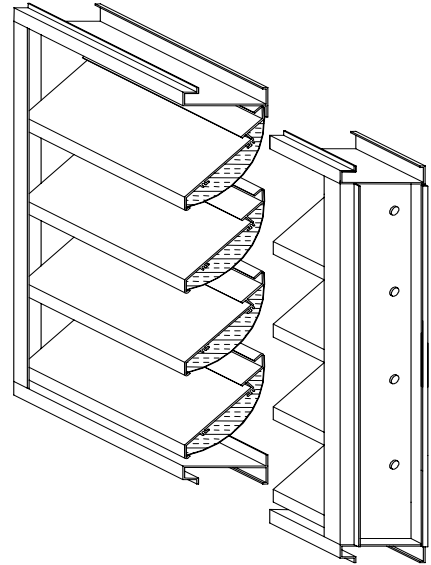
1/4" (6) under ordered size unless specified Exact or Actual

SCREEN

3/4" x .051" ga. (13 x 1.3) Flattened expanded aluminum bird screen no frame

FINISH

Mill



OPTIONAL CONSTRUCTION

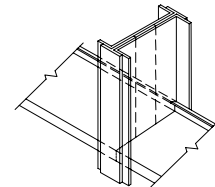
MATERIAL — Available in galvanized or stainless steel

SCREENS - Many styles available please consult screen listing

FINISH — Air-dry primer, polyurethane, epoxy, or enamel, baked epoxy or enamel, Kynar, Powdercoat or Anodized.

SLEEVE AND DUCTWORK CONNECTION — 10 ga. (3.5) to 20 ga. (1.0) galvanized steel or aluminum to 30" (762) in length — Transitions available in; round, oval, rectangular or custom. Factory can install access door, retaining angles, or flange connections.

MULLION STYLES



Visible

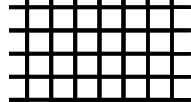
SPECIAL PURPOSE CONSTRUCTION

Fully welded assembly
 Security bars
 Filter racks

TYPICAL SCREEN STYLE

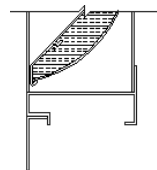


Expanded Aluminum Standard

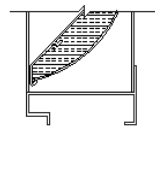


Wire Mesh

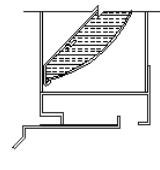
FRAME STYLES



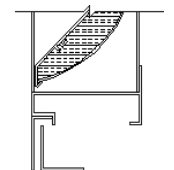
1- Flange (1.5")



3 - Box



8- Box with Sill Extension

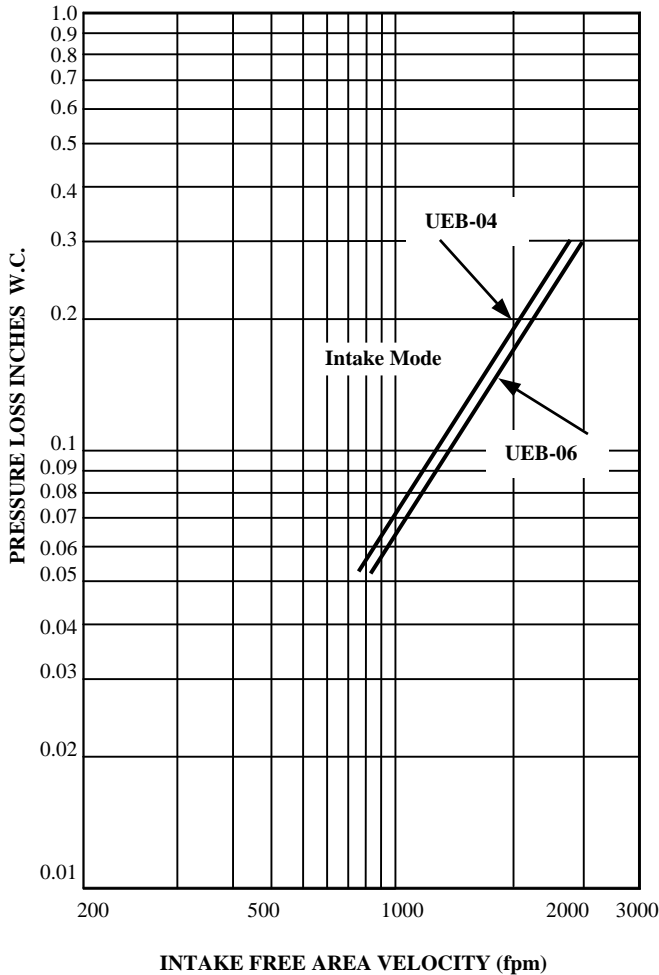


9 - Flange with Sub Frame

DATE	ARCHITECT			ENGINEER
PROJECT				
ITEM	QTY	W	H	DESCRIPTION

All tests performed at an independent laboratory and based on AMCA standard 500 – 91 for air performance and water penetration.

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. Utilizing the “air performance” graph.

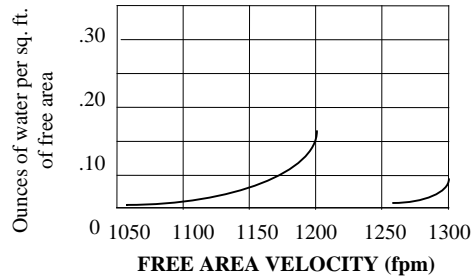
_____ in. W.C. Max. Pressure Loss Intake or Exhaust
 _____ FPM (Free Area Velocity From “Air Performance” Graph)
 _____ CFM / _____ FPM Free Area Velocity = _____ Sq. Ft. Free Area

CALCULATING MAXIMUM AIRFLOW BEFORE WATER PENETRATION

The “free area flow rate” at which water penetration commences (.01 oz. of water) is established at, 1262 fpm for UEB-04 & 06, and will vary depending upon actual weather conditions. The “water penetration” graph illustrates the results of actual laboratory test on a 48” x 48” test sample subjected to hypothetical rainfall conditions. To determine the free area (in sq. ft.) based upon a known volumetric flow rate in CFM;

_____ CFM / _____ FPM = _____ SQ. FT. FREE AREA
 (System Requirements)

		UEB-04					
		.01	.02	.05	.1	.2	.3 (H2O)
Water Penetration Graph	1062	1200	1250	n/a	n/a	n/a	(fpm)
in oz. of water per sq. ft. of							
free area over a 15 min. test period							
		UEB-06					
		.01	.02	.05	.1	.2	.3 (H2O)
	1262	1300	1350	n/a	n/a	n/a	(fpm)



1050 (UEB-04) & 1262 (UEB-06) fpm beginning of water penetration

WIDTH FREE AREA CALCULATIONS IN SQ. FT.

HEIGHT		WIDTH									
		12	18	24	30	36	42	48	54	60	
12	4"	0.21	0.33	0.46	0.58	0.70	0.83	0.95	1.08	1.20	
	6"	0.22	0.35	0.48	0.61	0.74	0.87	1.00	1.13	1.26	
18	4"	0.34	0.55	0.76	0.97	1.17	1.38	1.59	1.80	2.00	
	6"	0.36	0.58	0.80	1.02	1.23	1.45	1.67	1.89	2.10	
24	4"	0.50	0.80	1.10	1.39	1.70	1.99	2.29	2.59	2.89	
	6"	0.52	0.84	1.15	1.46	1.78	2.09	2.40	2.72	3.03	
30	4"	0.64	1.03	1.41	1.80	2.18	2.57	2.95	3.34	3.72	
	6"	0.67	1.08	1.48	1.89	2.29	2.70	3.10	3.51	3.91	
36	4"	0.79	1.26	1.73	2.21	2.68	3.15	3.63	4.10	4.57	
	6"	0.83	1.32	1.82	2.32	2.81	3.31	3.81	4.30	4.80	
42	4"	0.93	1.50	2.06	2.61	3.17	3.73	4.30	4.86	5.41	
	6"	0.98	1.57	2.16	2.74	3.33	3.92	4.51	5.10	5.68	
48	4"	1.08	1.72	2.37	3.02	3.67	4.31	4.96	5.61	6.26	
	6"	1.13	1.81	2.49	3.17	3.85	4.53	5.21	5.89	6.57	
54	4"	1.23	1.96	2.70	3.43	4.16	4.90	5.63	6.36	7.10	
	6"	1.29	2.06	2.83	3.60	4.37	5.14	5.91	6.68	7.45	
60	4"	1.37	2.19	3.01	3.84	4.66	5.48	6.30	7.12	7.94	
	6"	1.44	2.30	3.16	4.03	4.89	5.75	6.61	7.48	8.34	
66	4"	1.51	2.42	3.33	4.24	5.15	6.06	6.97	7.88	8.78	
	6"	1.59	2.54	3.50	4.45	5.41	6.36	7.32	8.27	9.22	
72	4"	1.66	2.66	3.65	4.65	5.65	6.64	7.64	8.63	9.63	
	6"	1.74	2.79	3.83	4.88	5.93	6.97	8.02	9.06	10.11	
78	4"	1.81	2.89	3.97	5.06	6.14	7.22	8.30	9.39	10.47	
	6"	1.90	3.03	4.17	5.31	6.45	7.58	8.72	9.86	10.99	
84	4"	1.95	3.12	4.30	5.47	6.63	7.80	8.97	10.14	11.31	
	6"	2.05	3.28	4.51	5.74	6.96	8.19	9.42	10.65	11.88	
90	4"	2.10	3.35	4.61	5.87	7.12	8.38	9.64	10.90	12.16	
	6"	2.20	3.52	4.84	6.16	7.48	8.80	10.12	11.44	12.77	
96	4"	2.24	3.59	4.93	6.28	7.62	8.96	10.31	11.66	13.00	
	6"	2.35	3.77	5.18	6.59	8.00	9.41	10.83	12.24	13.65	