

Acoustical Louver in 4" 6" 8" & 12" deep frame design - Model UFC / Galvanized

Design Features – Sound attenuating insulated blades provide a dual function of weather protection and airborne sound reduction. The sound ratings are based on sound transmission standards ASTM E90-90 and ASTM E413-87.

STANDARD CONSTRUCTION

FRAME

- 4" deep, 16 gauge galvanized steel in style #2
- 6" deep, 16 gauge galvanized steel in style #2
- 8" deep, 16 gauge galvanized steel in style #2
- 12" deep, 16 gauge galvanized steel in style #2

BLADES

- 4" deep, 18 gauge galvanized steel approx. spacing 5" @ 45°
- 6" deep, 18 gauge galvanized steel approx. spacing 6" @ 45°
- 8" deep, 18 gauge galvanized steel approx. spacing 8" @ 45°
- 12" deep, 18 gauge galvanized steel approx. spacing 12" @ 45°
- 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

- 4" - 12"W x 9"H 8" - 12"W x 14"H
- 6" - 12"W x 12"H 12" - 12"W x 18"H

MAXIMUM SIZE

Unlimited, with mullions, structural bracing supplied by others

MULLION

Visible

SCREEN

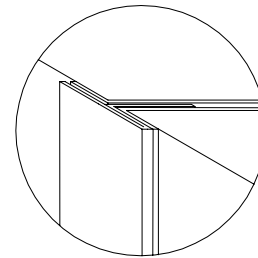
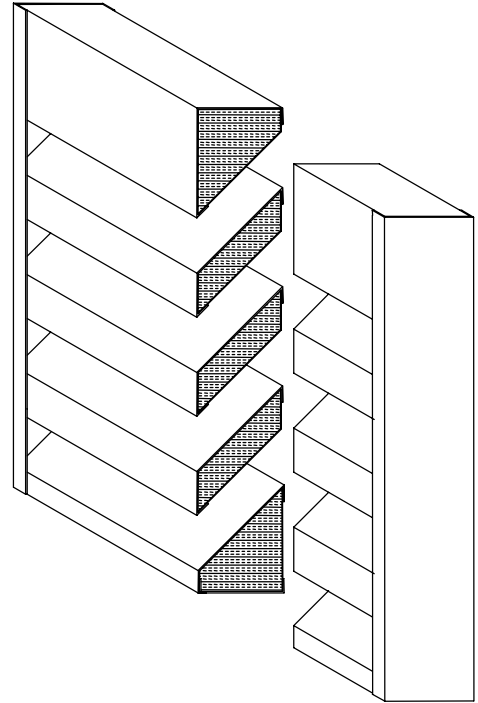
1/2" x 19 ga. galvanized screen in frame

UNDERSIZED

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

FINISH

Mill



MULLION STYLE

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.

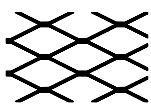
SPECIAL PURPOSE CONSTRUCTION

Fully welded construction

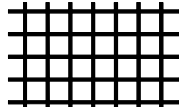
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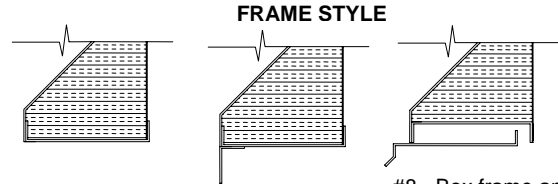
TYPICAL SCREEN STYLES



Expanded Aluminum



Wire Mesh Standard



#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. Water Penetration, Air Performance and Free Area Calculations are tested and made in accordance with AMCA 500 standards.

FREE FIELD NOISE REDUCTION

Frequency (hz)	Octave Bands							
	1 63	2 125	3 250	4 500	5 1000	6 2000	7 4000	8 8000
4" deep	9	10	9	10	12	19	16	15
6" deep	9	10	9	10	14	19	16	15
8" deep	11	13	12	16	22	24	21	20
12" deep	11	14	15	19	23	24	19	20

FREE AREA CALCULATIONS IN SQ. FT.
WIDTH

HEIGHT	Inches	WIDTH							
		12	18	24	30	36	42	48	54
12 - 4"	0.22	0.35	0.48	0.61	0.74	0.87	0.99	1.12	1.25
	0.2	0.32	0.44	0.56	0.68	0.8	0.92	1.04	1.16
	0.16	0.25	0.34	0.44	0.53	0.62	0.71	0.81	0.9
	UFC-08 min. ht. = 14" UFC-12 min. ht. = 18"								
18 - 4"	0.42	0.67	0.92	1.17	1.42	1.67	1.91	2.16	2.41
	0.41	0.65	0.89	1.13	1.37	1.61	1.85	2.1	2.34
	0.2	0.32	0.44	0.56	0.68	0.8	0.92	1.04	1.16
	0.22	0.35	0.47	0.6	0.73	0.86	0.98	1.11	1.24
24 - 4"	0.61	0.98	1.34	1.71	2.07	2.44	2.8	3.17	3.54
	0.61	0.97	1.33	1.69	2.05	2.41	2.77	3.14	3.5
	0.41	0.65	0.89	1.13	1.37	1.61	1.85	2.1	2.34
	0.3	0.48	0.66	0.84	1.02	1.2	1.38	1.56	1.74
30 - 4"	0.76	1.22	1.67	2.13	2.58	3.04	3.49	3.95	4.41
	0.81	1.29	1.77	2.25	2.73	3.21	3.69	4.18	4.66
	0.61	0.97	1.33	1.69	2.05	2.41	2.77	3.14	3.5
	0.52	0.83	1.13	1.44	1.75	2.06	2.36	2.67	2.98
36 - 4"	0.92	1.46	2.01	2.56	3.1	3.65	4.19	4.74	5.29
	1.01	1.61	2.21	2.82	3.42	4.02	4.62	5.23	5.83
	0.72	1.15	1.57	2	2.43	2.86	3.28	3.71	4.14
	0.6	0.96	1.32	1.68	2.04	2.4	2.76	3.12	3.48
42 - 4"	1.13	1.81	2.48	3.16	3.83	4.51	5.18	5.86	6.54
	1.21	1.93	2.65	3.38	4.1	4.82	5.54	6.27	6.99
	0.81	1.29	1.77	2.25	2.73	3.21	3.69	4.18	4.66
	0.82	1.3	1.79	2.28	2.76	3.25	3.73	4.22	4.71
48 - 4"	1.33	2.13	2.92	3.72	4.51	5.31	6.1	6.9	7.7
	1.41	2.26	3.1	3.94	4.79	5.63	6.47	7.32	8.16
	1.01	1.61	2.21	2.82	3.42	4.02	4.62	5.23	5.83
	0.9	1.44	1.98	2.52	3.06	3.6	4.13	4.67	5.21
54 - 4"	1.52	2.44	3.35	4.26	5.17	6.08	6.99	7.91	8.82
	1.61	2.58	3.54	4.5	5.47	6.43	7.39	8.36	9.32
	1.21	1.93	2.65	3.38	4.1	4.82	5.54	6.27	6.99
	1.12	1.78	2.45	3.12	3.78	4.45	5.11	5.78	6.45
60 - 4"	1.68	2.68	3.68	4.69	5.69	6.69	7.69	8.7	9.7
	1.81	2.9	3.98	5.06	6.15	7.23	8.31	9.4	10.48
	1.41	2.26	3.1	3.94	4.79	5.63	6.47	7.32	8.16
	1.2	1.92	2.64	3.36	4.08	4.8	5.51	6.23	6.95
66 - 4"	1.83	2.92	4.02	5.11	6.21	7.3	8.39	9.49	10.58
	2.01	3.22	4.42	5.63	6.83	8.04	9.24	10.45	11.66
	1.52	2.43	3.34	4.25	5.16	6.07	6.98	7.9	8.81
	1.42	2.26	3.11	3.96	4.8	5.65	6.49	7.34	8.19
72 - 4"	2.04	3.26	4.49	5.71	6.93	8.15	9.37	10.6	11.82
	2.21	3.54	4.86	6.19	7.51	8.84	10.16	11.49	12.82
	1.61	2.58	3.54	4.5	5.47	6.43	7.39	8.36	9.32
	1.5	2.4	3.3	4.2	5.1	6	6.89	7.79	8.69
78 - 4"	2.22	3.54	4.87	6.2	7.53	8.85	10.18	11.51	12.84
	2.41	3.86	5.31	6.75	8.2	9.64	11.09	12.54	13.98
	1.82	2.91	4	5.1	6.19	7.28	8.37	9.46	10.55
	1.59	2.54	3.49	4.44	5.39	6.34	7.29	8.25	9.2
84 - 4"	2.4	3.83	5.27	6.71	8.14	9.58	11.01	12.45	13.88
	2.62	4.18	5.75	7.31	8.88	10.45	12.01	13.58	15.15
	1.98	3.17	4.35	5.54	6.73	7.91	9.1	10.28	11.47
	1.68	2.68	3.68	4.69	5.69	6.69	7.69	8.7	9.7
90 - 4"	2.58	4.12	5.67	7.21	8.75	10.3	11.84	13.39	14.93
	2.82	4.5	6.19	7.88	9.56	11.25	12.94	14.63	16.31
	2.14	3.42	4.7	5.98	7.26	8.55	9.83	11.11	12.39
	1.76	2.82	3.87	4.93	5.98	7.04	8.09	9.15	10.21
96 - 4"	2.76	4.41	6.06	7.72	9.37	11.02	12.67	14.33	15.98
	3.02	4.82	6.63	8.44	10.25	12.05	13.86	15.67	17.48
	2.3	3.67	5.05	6.43	7.8	9.18	10.56	11.93	13.31
	1.9	3.04	4.18	5.32	6.46	7.6	8.74	9.88	11.02

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.

WATER PENETRATION

Test sample 48" x 48" subjected to hypothetical rainfall conditions over 15 minutes test period.

Model UFC-04

Beginning point of water penetration @ .01 oz/sq. ft. is 707 FPM (free area velocity)

Model UFC-06

Beginning point of water penetration @ .01 oz/sq. ft. is 875 FPM (free area velocity)

Model UFC-08

Beginning point of water penetration @ .01 oz/sq. ft. is 980 FPM (free area velocity)

Model UFC-12

Beginning point of water penetration @ .01 oz/sq. ft. is 1140 FPM (free area velocity)

AIR PERFORMANCE

