

## ACOUSTICAL LOUVER - Model UFC-29

**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**

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 14"H

**MAXIMUM SIZE**

Unlimited, with mullions, structural bracing supplied by others

**MULLION**

Visible

**SCREEN**

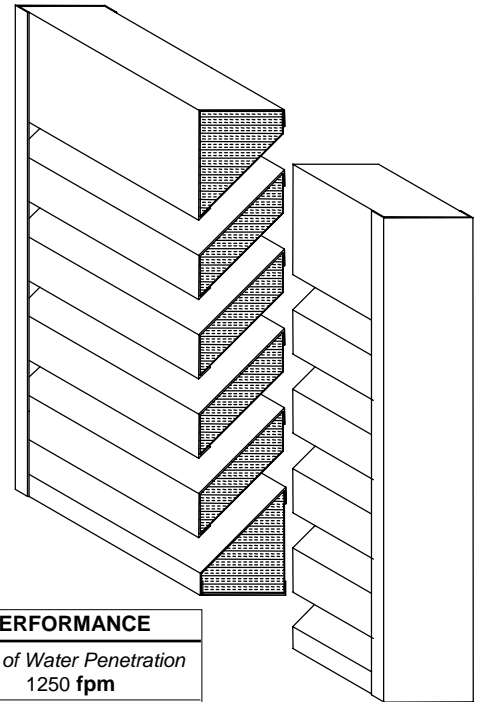
1/2" x 19 ga. galvanized screen in frame

**UNDERSIZED**

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

**FINISH**

Mill



PERFORMANCE	
Point of Water Penetration	1250 fpm
Free Area (48 x 48)	18%
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.

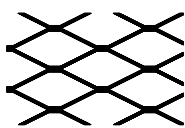
**SLEEVE AND DUCTWORK** – 10 ga. to 20 ga. galvanized steel or aluminum to 30" in length.

### SPECIAL PURPOSE CONSTRUCTION

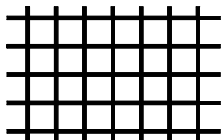
Fully welded construction  
Security bar  
Filter racks

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)	11	12	17	21	27	33	30	26
Transmission Loss (DB)	5	6	11	15	21	27	24	20

### TYPICAL SCREEN STYLES

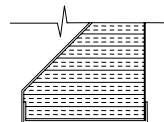


Expanded Aluminum

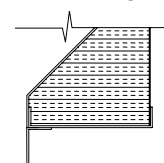


Wire Mesh Standard

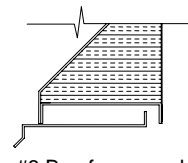
### FRAME STYLE



#2 Box Frame



#1 Flange Frame

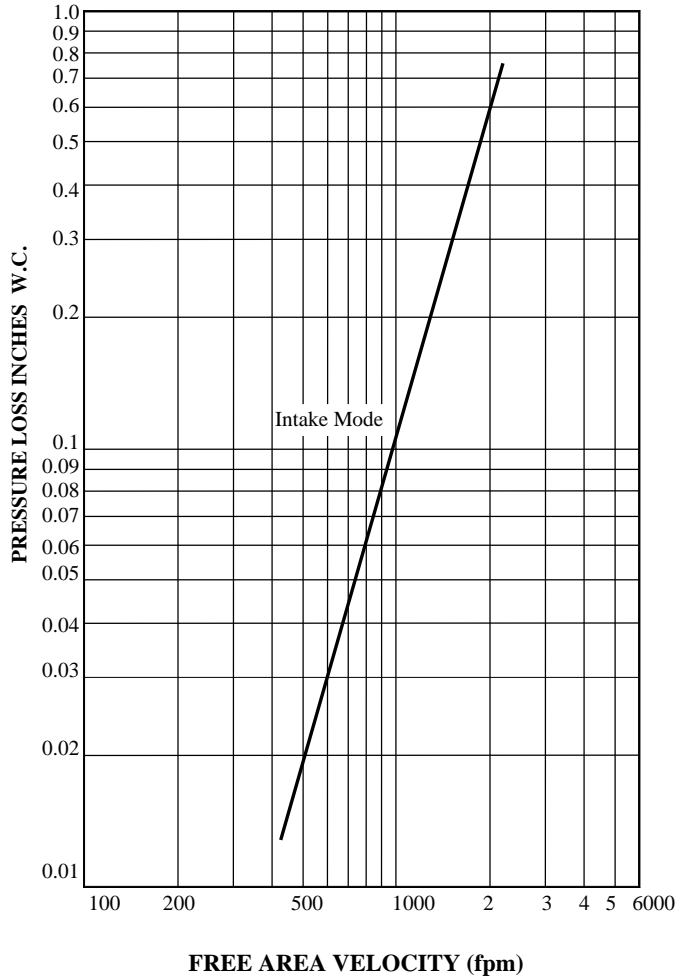


#8 Box frame and Sill Extension

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.

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)	11	12	17	21	27	33	30	26
Transmission Loss (DB)	5	6	11	15	21	27	24	20

**FREE AREA CALCULATIONS IN SQ. FT.**

		WIDTH															
		Inches	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96
<b>HEIGHT</b>	<b>12</b>	MINIMUM HEIGHT - 14"															
	<b>18</b>	0.18	0.28	0.39	0.50	0.60	0.71	0.81	0.92	1.03	1.13	1.24	1.35	1.45	1.56	1.66	
	<b>24</b>	0.27	0.43	0.59	0.75	0.91	1.07	1.23	1.39	1.55	1.71	1.87	2.03	2.19	2.35	2.51	
	<b>30</b>	0.36	0.57	0.78	1.00	1.21	1.43	1.64	1.85	2.07	2.28	2.50	2.71	2.92	3.14	3.35	
	<b>36</b>	0.45	0.71	0.98	1.25	1.52	1.78	2.05	2.32	2.59	2.86	3.12	3.39	3.66	3.93	4.19	
	<b>42</b>	0.54	0.86	1.18	1.50	1.82	2.14	2.46	2.79	3.11	3.43	3.75	4.07	4.39	4.71	5.04	
	<b>48</b>	0.63	1.00	1.38	1.75	2.13	2.50	2.88	3.25	3.63	4.00	4.38	4.75	5.13	5.50	5.88	
	<b>54</b>	0.71	1.14	1.57	2.00	2.43	2.86	3.29	3.72	4.14	4.57	5.00	5.43	5.86	6.29	6.72	
	<b>60</b>	0.80	1.29	1.77	2.25	2.73	3.22	3.70	4.18	4.66	5.15	5.63	6.11	6.59	7.07	7.56	
	<b>66</b>	0.89	1.43	1.96	2.50	3.04	3.57	4.11	4.64	5.18	5.72	6.25	6.79	7.32	7.86	8.39	
	<b>72</b>	0.98	1.57	2.16	2.75	3.34	3.93	4.52	5.11	5.70	6.29	6.87	7.46	8.05	8.64	9.23	
	<b>78</b>	1.07	1.71	2.36	3.00	3.64	4.29	4.93	5.57	6.21	6.86	7.50	8.14	8.79	9.43	10.07	
	<b>84</b>	1.16	1.86	2.55	3.25	3.95	4.64	5.34	6.03	6.73	7.43	8.12	8.82	9.52	10.21	10.91	
	<b>90</b>	1.25	2.00	2.75	3.50	4.25	5.00	5.75	6.49	7.24	7.99	8.74	9.49	10.24	10.99	11.74	
	<b>96</b>	1.34	2.14	2.94	3.75	4.55	5.35	6.15	6.96	7.76	8.56	9.37	10.17	10.97	11.77	12.58	
	<b>102</b>	1.43	2.28	3.14	3.99	4.85	5.71	6.56	7.42	8.27	9.13	9.99	10.84	11.70	12.55	13.41	
<b>108</b>	1.52	2.42	3.33	4.24	5.15	6.06	6.97	7.88	8.79	9.70	10.61	11.52	12.43	13.33	14.24		
<b>114</b>	1.60	2.57	3.53	4.49	5.45	6.42	7.38	8.34	9.30	10.26	11.23	12.19	13.15	14.11	15.08		
<b>120</b>	1.69	2.71	3.72	4.74	5.75	6.77	7.79	8.80	9.82	10.83	11.85	12.86	13.88	14.89	15.91		