

Model UFC-12 acoustical louver offers a blend of sound attenuation and weather protection within an aesthetically appealing design. The fiberglass blade insulation ensures effective sound absorption, while the formed J-blade delivers protection against elements. The 12" frame provides greater noise reduction and a higher beginning of water penetration compared to models with thinner frames.

STANDARD CONSTRUCTION:

FRAME: 12" (305) deep, formed aluminum, .080" (2.03) nominal thickness.

BLADES: Formed aluminum, .080" (2.03) nominal thickness. Perforated interior retains and protects internal insulation.

ACOUSTICAL INSULATION: Fiberglass.

BLADE ANGLE: Fixed at 45 degrees.

BLADE SPACING: Approximately 12" (305) on centers.

SCREEN: 3/4" x .051" (19 x 1.3) expanded, flattened aluminum bird screen in removable frame (adds approximately 3/8" [10] to louver depth).

FINISH: Mill.

MINIMUM SIZE: 12" W x 18" H (305 x 457).

MAX. SINGLE 60" W x 120" H (1524 x 3048).

SECTION SIZE: Larger louvers will require field assembly of smaller sections.

OPTIONS:

- | | |
|---|--|
| ☐ FL15 Flanged Frame, 1 1/2" (38). | ☐ 18GA 18 ga. Galv. Steel Construction. (Supplied with 1/2" (38) x 19 ga. (1.0) Galv. Bird Screen) |
| ☐ FL20 Flanged Frame, 2" (51). | ☐ ESI Extended Sill. |
| ☐ WE Welded Construction. | ☐ FR1 1" (25) Filter Rack. |
| ☐ BSSS Type 304 S.S. Bird Screen. | ☐ FR2 2" (51) Filter Rack. |
| ☐ BSN No Bird Screen. | ☐ PAC Perimeter Anchor Clips. |
| ☐ ISA Aluminum Insect Screen. | ☐ Other: _____. |
| ☐ ISSS Type 304 S.S. Insect Screen. | |

OPTIONAL FINISHES:

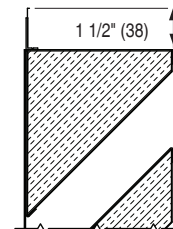
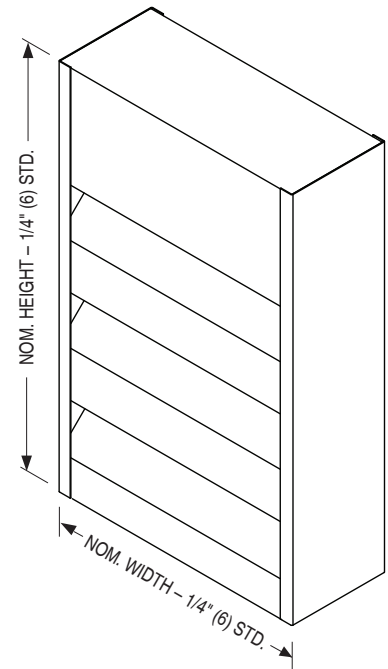
- ☐ **PC3** Powder Coat AAMA 2603. Color: _____.
- ☐ **PC4** High Performance Powder Coat AAMA 2604 (Equivalent to 50% Kynar®). Color: _____.
- ☐ **PC5** Fluoropolymer Powder Coat AAMA 2605 (Equivalent to 70% Kynar®). Color: _____.
- ☐ **PCC** Prime Coat.
- ☐ **AN04** Clear Anodized 204-R1.
- ☐ **AN15** Clear Anodized 215-R1.

Color Anodized:

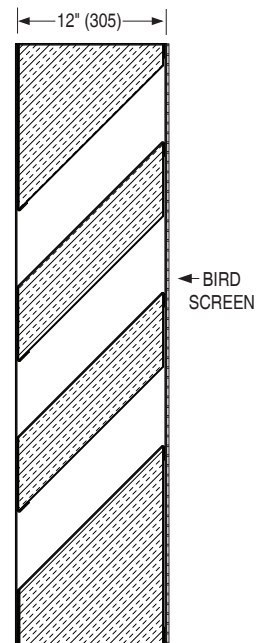
- | | |
|--|---|
| ☐ ANLB Light Bronze. | ☐ ANMB Medium Bronze. |
| ☐ ANDB Dark Bronze. | ☐ ANBK Black. |

OPTIONAL W x H SIZING (1/4" [6.5] Undersize standard):

- ☐ **U00** Exact Size.
- ☐ **U38** Undersize 3/8" (9.5).
- ☐ **U50** Undersize 1/2" (12.7).



OPT. FLANGED FRAME



SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

DATE

B SERIES

SUPERSEDES

DRAWING NO.

2 - 19 - 25

UFC

NEW

UFC-12



ACOUSTICAL LOUVER
12" (305) DEEP • J BLADE • FORMED ALUMINUM
PERFORMANCE DATA
MODEL: UFC-12

FREE AREA in Square Feet and Square Meters

		Width in Inches and Meters								
		12	18	24	30	36	42	48	54	60
Height in Inches and Meters	18	0.20	0.31	0.43	0.55	0.67	0.79	0.90	1.02	1.14
	0.46	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	0.11
	24	0.29	0.47	0.65	0.82	1.00	1.18	1.35	1.53	1.71
	0.61	0.03	0.04	0.06	0.08	0.09	0.11	0.13	0.14	0.16
	30	0.49	0.79	1.08	1.37	1.67	1.96	2.26	2.55	2.85
	0.76	0.05	0.07	0.10	0.13	0.16	0.18	0.21	0.24	0.26
	36	0.59	0.94	1.30	1.65	2.00	2.36	2.71	3.06	3.42
	0.91	0.05	0.09	0.12	0.15	0.19	0.22	0.25	0.28	0.32
	42	0.79	1.26	1.73	2.20	2.67	3.14	3.61	4.08	4.56
	1.07	0.07	0.12	0.16	0.20	0.25	0.29	0.34	0.38	0.42
	48	0.88	1.41	1.94	2.47	3.00	3.53	4.06	4.59	5.12
	1.22	0.08	0.13	0.18	0.23	0.28	0.33	0.38	0.43	0.48
	54	1.08	1.73	2.38	3.02	3.67	4.32	4.97	5.62	6.26
	1.37	0.10	0.16	0.22	0.28	0.34	0.40	0.46	0.52	0.58
	60	1.18	1.88	2.59	3.30	4.00	4.71	5.42	6.12	6.83
	1.52	0.11	0.18	0.24	0.31	0.37	0.44	0.50	0.57	0.63
Height in Inches and Meters	66	1.37	2.20	3.02	3.85	4.67	5.50	6.32	7.15	7.97
	1.68	0.13	0.20	0.28	0.36	0.43	0.51	0.59	0.66	0.74
	72	1.47	2.36	3.24	4.12	5.01	5.89	6.77	7.66	8.54
	1.83	0.14	0.22	0.30	0.38	0.47	0.55	0.63	0.71	0.79
	78	1.67	2.67	3.67	4.67	5.67	6.68	7.68	8.68	9.68
	1.98	0.16	0.25	0.34	0.43	0.53	0.62	0.71	0.81	0.90
	84	1.77	2.83	3.89	4.95	6.01	7.07	8.13	9.19	10.25
	2.13	0.16	0.26	0.36	0.46	0.56	0.66	0.75	0.85	0.95
	90	1.96	3.14	4.32	5.50	6.67	7.85	9.03	10.21	11.39
	2.29	0.18	0.29	0.40	0.51	0.62	0.73	0.84	0.95	1.06
	96	2.06	3.30	4.53	5.77	7.01	8.24	9.48	10.72	11.95
	2.44	0.19	0.31	0.42	0.54	0.65	0.77	0.88	1.00	1.11
	102	2.26	3.61	4.97	6.32	7.68	9.03	10.39	11.74	13.09
	2.59	0.21	0.34	0.46	0.59	0.71	0.84	0.96	1.09	1.22
	108	2.36	3.77	5.18	6.60	8.01	9.42	10.84	12.25	13.66
	2.74	0.22	0.35	0.48	0.61	0.74	0.88	1.01	1.14	1.27
Height in Inches and Meters	114	2.55	4.08	5.61	7.15	8.68	10.21	11.74	13.27	14.80
	2.90	0.24	0.38	0.52	0.66	0.81	0.95	1.09	1.23	1.38
Height in Inches and Meters	120	2.65	4.24	5.83	7.42	9.01	10.60	12.19	13.78	15.37
	3.05	0.25	0.39	0.54	0.69	0.84	0.98	1.13	1.28	1.43



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Dimensions are in inches (mm).

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ACOUSTICAL LOUVER

12" (305) DEEP • J BLADE • FORMED ALUMINUM

PERFORMANCE DATA

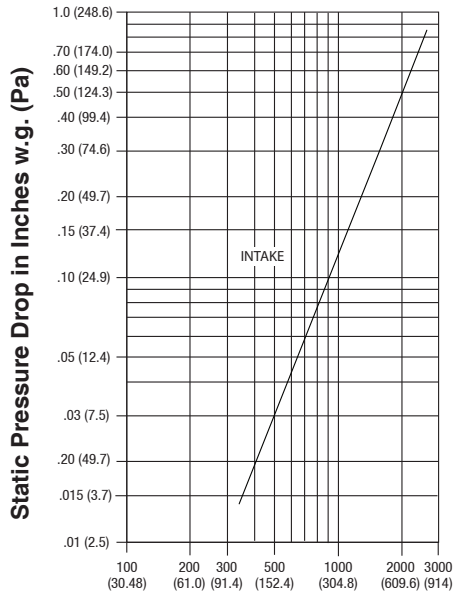
MODEL: UFC-12

AIRFLOW / WATER PENETRATION DATA for 48" x 48" (1219 x 1219) Louver Size

I N T A K E	Free Area %	25%
	Free Area sq. ft. (sq. m.)	4.06 (0.38)
	Free Area Velocity at Point of Beginning Water Penetration at .01 oz./sq. ft. (3 ml/sq. m) (15 min. test duration)	910 fpm (277 m/min.)
	Air Volume at 910 fpm	3695 cfm (1744 l/s)
	Free Area Velocity	
	Pressure Drop @ 910 fpm	.10 in. w.g. (24 Pa)

NOTE: To minimize water penetration when sizing intake louvers, select a Free Area Velocity that is **below** the point of beginning water penetration.

PRESSURE DROP



Air Velocity in Feet (Meters) Per Minute Through Free Area

Louver test size: 48" x 48" (1219 x 1219 mm).
Standard air density @ 0.075 lbs/ft³.
Tested to AMCA Fig. 5.5 – 6.5.



Safe-Air certifies that the Model UFC-12 shown herein is licensed to bear the AMCA Certified Ratings Program seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Program seal applies to air performance, water penetration and sound performance ratings.

Louvers were tested in accordance with AMCA Standard 500-L.



FREE FIELD NOISE REDUCTION

Octave Band (Frequency)(Hz)	Free Field Noise Reduction (db)	Transmission Loss (db)	Sound Transmission Class
2 (125)	12	6	14
3 (250)	13	7	
4 (500)	19	13	
5 (1000)	23	17	
6 (2000)	22	16	
7 (4000)	18	12	

NOTE: The Sound Transmission Class (STC) is a single number rating of the louver's resistance to transfer airborne sound, calculated in accordance with ASTM E413-22. The higher the STC rating number, the less sound is transmitted through the louver. STC is not AMCA certified.

SOUND TRANSMISSION CLASS

The Sound Transmission Class (STC) measures how an assembly reduces or blocks airborne sound transmission. It is a single numerical value that summarizes the sound insulation performance of an assembly. Higher STC ratings indicate better soundproofing capabilities. The STC rating is determined based on the guidelines set by ASTM E413-22.

TRANSMISSION LOSS

Transmission loss (TL) measures the reduction in sound power (dB) as sound passes through a material at a specific frequency. A higher TL indicates better sound reduction. When testing a louver's sound performance, TL shows how effectively it blocks sound. This is typically tested in accordance with ASTM E90-09.

FREE FIELD NOISE REDUCTION IN DECIBELS

Free Field Noise Reduction is determined by adding 6 dB to the Transmission Loss.

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