



ACOUSTICAL LOUVER

6" (152) DEEP • J BLADE • FORMED ALUMINUM
MODEL: 1606QJ

Model 1606QJ 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 model is suitable for both intake and exhaust applications and features a 40% free area ensuring optimal air performance.

STANDARD CONSTRUCTION:

FRAME: 6" (152) 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 6" (152) 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 12" H (305 x 305).

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:

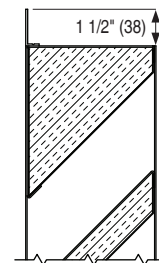
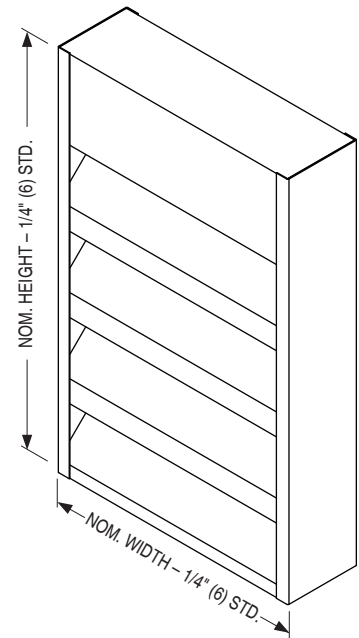
- ☐ **PC3** Powder Coat AAMA 2603. Color: _____.
- ☐ **PC4** High Performance Powder Coat AAMA 2604 (Equivalent to 50% Kynar®). Color: _____.
- ☐ **PC5** Fluoropolymer Powder Coat AAMA 2605 (Equivalent to 70% Kynar®). Color: _____.
- ☐ **PCC** Prime Coat.
- ☐ **AN04** Clear Anodized 204-R1.
- ☐ **AN15**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

Color Anodized:

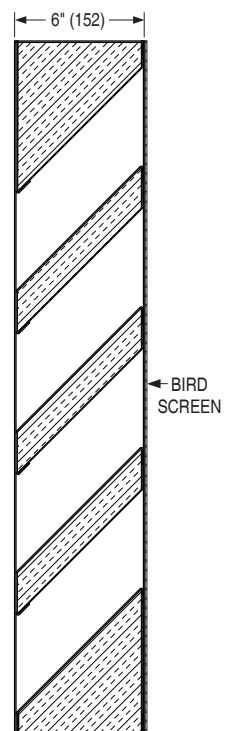
- | | |
|--|---|
| ☐ ANLB Light Bronze. | ☐ ANMB Medium Bronze. |
| ☐ ANDB Dark Bronze. | ☐ ANBK Black. |

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.

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1600

NEW

1606QJ

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Dimensions are in inches (mm).



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PERFORMANCE DATA
MODEL: 1606QJ

FREE AREA in Square Feet and Square Meters

		Width in Inches and Meters								
		12 0.30	18 0.46	24 0.61	30 0.76	36 0.91	42 1.07	48 1.22	54 1.37	60 1.52
Height in Inches and Meters	12 0.30	0.20 0.02	0.31 0.03	0.43 0.04	0.55 0.05	0.67 0.06	0.79 0.07	0.90 0.08	1.02 0.09	1.14 0.11
	18 0.46	0.39 0.04	0.63 0.06	0.86 0.08	1.10 0.10	1.34 0.12	1.57 0.15	1.81 0.17	2.04 0.19	2.28 0.21
	24 0.61	0.59 0.05	0.94 0.09	1.30 0.12	1.65 0.15	2.00 0.19	2.36 0.22	2.71 0.25	3.07 0.28	3.42 0.32
	30 0.76	0.79 0.07	1.26 0.12	1.73 0.16	2.20 0.20	2.67 0.25	3.14 0.29	3.62 0.34	4.09 0.38	4.56 0.42
	36 0.91	0.98 0.09	1.57 0.15	2.16 0.20	2.75 0.26	3.34 0.31	3.93 0.37	4.52 0.42	5.11 0.47	5.70 0.53
	42 1.07	1.18 0.11	1.89 0.18	2.59 0.24	3.30 0.31	4.01 0.37	4.72 0.44	5.42 0.50	6.13 0.57	6.84 0.64
	48 1.22	1.38 0.13	2.20 0.20	3.03 0.28	3.85 0.36	4.68 0.43	5.50 0.51	6.33 0.59	7.15 0.66	7.98 0.74
	54 1.37	1.57 0.15	2.52 0.23	3.46 0.32	4.40 0.41	5.35 0.50	6.29 0.58	7.23 0.67	8.18 0.76	9.12 0.85
	60 1.52	1.77 0.16	2.83 0.26	3.89 0.36	4.95 0.46	6.01 0.56	7.08 0.66	8.14 0.76	9.20 0.85	10.26 0.95
	66 1.68	1.97 0.18	3.14 0.29	4.32 0.40	5.50 0.51	6.68 0.62	7.86 0.73	9.04 0.84	10.22 0.95	11.40 1.06
	72 1.83	2.16 0.20	3.46 0.32	4.76 0.44	6.05 0.56	7.35 0.68	8.65 0.80	9.94 0.92	11.24 1.04	12.54 1.16
	78 1.98	2.36 0.22	3.77 0.35	5.19 0.48	6.60 0.61	8.02 0.74	9.43 0.88	10.85 1.01	12.26 1.14	13.68 1.27
	84 2.13	2.55 0.24	4.09 0.38	5.62 0.52	7.15 0.66	8.69 0.81	10.22 0.95	11.75 1.09	13.29 1.23	14.82 1.38
	90 2.29	2.75 0.26	4.40 0.41	6.05 0.56	7.70 0.72	9.35 0.87	11.01 1.02	12.66 1.18	14.31 1.33	15.96 1.48
	96 2.44	2.95 0.27	4.72 0.44	6.49 0.60	8.25 0.77	10.02 0.93	11.79 1.10	13.56 1.26	15.33 1.42	17.10 1.59
	102 2.59	3.14 0.29	5.03 0.47	6.92 0.64	8.80 0.82	10.69 0.99	12.58 1.17	14.46 1.34	16.35 1.52	18.24 1.69
	108 2.74	3.34 0.31	5.35 0.50	7.35 0.68	9.35 0.87	11.36 1.06	13.36 1.24	15.37 1.43	17.37 1.61	19.38 1.80
	114 2.90	3.54 0.33	5.66 0.53	7.78 0.72	9.91 0.92	12.03 1.12	14.15 1.31	16.27 1.51	18.40 1.71	20.52 1.91
	120 3.05	3.73 0.35	5.97 0.56	8.21 0.76	10.46 0.97	12.70 1.18	14.94 1.39	17.18 1.60	19.42 1.80	21.66 2.01



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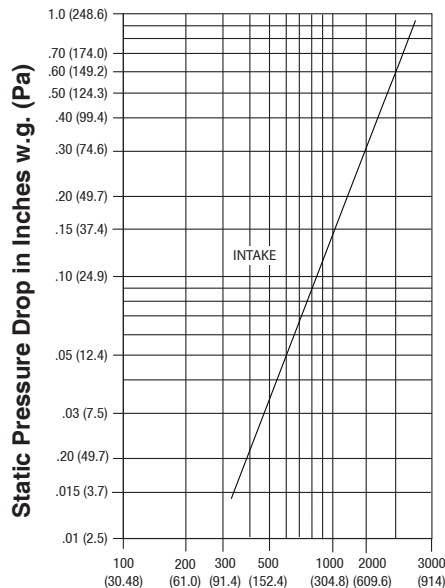
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AIRFLOW/WATER PENETRATION DATA for 48" x 48" (1219 x 1219) Louver Size

I N T A K E	Free Area %	40%
	Free Area sq. ft. (sq. m.)	6.33 (0.59)
	Free Area Velocity at Point of Beginning Water Penetration at .01 oz./sq. ft. (3 ml/sq. m) (15 min. test duration)	788 fpm (240 m/min.)
	Air Volume at 788 fpm	4988 cfm (2354 l/s)
	Free Area Velocity	
	Pressure Drop @ 788 fpm	.08 in. w.g. (20 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.



Nailor Industries Inc. certifies that the Model 1606QJ 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)	11	5	8
3 (250)	9	3	
4 (500)	10	4	
5 (1000)	13	7	
6 (2000)	20	14	
7 (4000)	15	9	

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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