



ACOUSTICAL LOUVER • SIGHTPROOF
12" (305) DEEP • FORMED ALUMINUM
MODEL: 1612QS

Model 1612QS acoustical louver combines the most effective sound attenuation performance with protection from the elements in an architecturally pleasing design. Fiberglass blade insulation provides good sound absorption and the closely centered multiple formed J blade design is sightproof and provides excellent weather protection. The model is suitable for either intake or exhaust applications and the 30% free area provides good air performance throughout the airflow range.

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 6 1/2" (165) on centers.

MULLIONS: Visible type, as required, depending upon width.

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 SECTION SIZE: 60" W x 96" H (1524 x 3048). Larger louvers will require field assembly of smaller sections.

OPTIONS:

- | | |
|---|--|
| ☐ FL15 Flanged Frame, 1 1/2" (38). | ☐ ESI Extended Sill. |
| ☐ FL20 Flanged Frame, 2" (51). | ☐ FR1 1" (25) Filter Rack. |
| ☐ BSSS Type 304 S.S. Bird Screen. | ☐ FR2 2" (51) Filter Rack. |
| ☐ BSN No Bird Screen. | ☐ PACA Perimeter Anchor Clips. |
| ☐ ISA Aluminum Insect Screen. | ☐ Other: _____. |
| ☐ ISSS Type 304 S.S. Insect Screen. | |

OPTIONAL FINISHES:

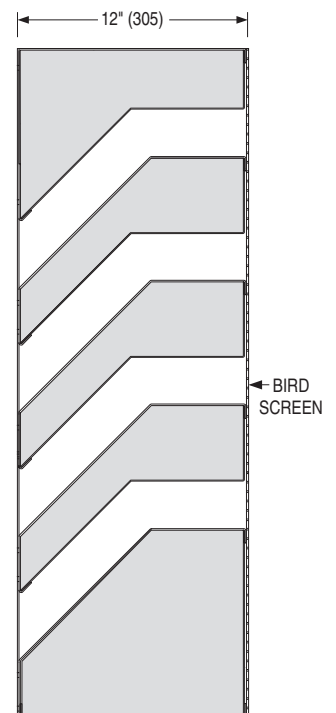
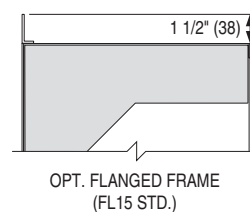
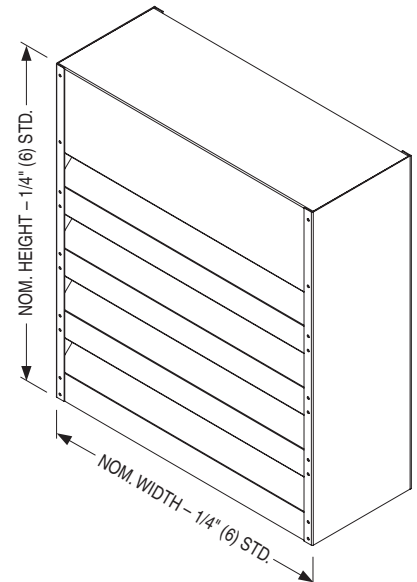
- | |
|--|
| ☐ PC3 Powder Coat AAMA 2603. Color: _____. |
| ☐ PC4 High Performance Powder Coat AAMA 2604 (Equivalent to 50% Kynar®). Color: _____. |
| ☐ PC5 Fluoropolymer Powder Coat AAMA 2605 (Equivalent to 70% Kynar®). Color: _____. |
| ☐ PCC Prime Coat. |
| ☐ AN04 Clear Anodized 204-R1. |
| ☐ AN15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



SCHEDULE TYPE:

PROJECT:

ENGINEER:

CONTRACTOR:

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Dimensions are in inches (mm).

DATE	B SERIES	SUPERSEDES	DRAWING NO.
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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	18 0.46	0.17 0.02	0.28 0.03	0.38 0.04	0.48 0.04	0.58 0.05	0.69 0.06	0.79 0.07	0.89 0.08	1.00 0.09
	24 0.61	0.34 0.03	0.55 0.05	0.76 0.07	0.96 0.09	1.17 0.11	1.38 0.13	1.58 0.15	1.79 0.17	1.99 0.19
	30 0.76	0.52 0.05	0.83 0.08	1.15 0.11	1.46 0.14	1.77 0.16	2.08 0.19	2.40 0.22	2.71 0.25	3.02 0.28
	36 0.91	0.69 0.06	1.11 0.10	1.53 0.14	1.94 0.18	2.36 0.22	2.78 0.26	3.19 0.30	3.61 0.34	4.03 0.37
	42 1.07	0.87 0.08	1.39 0.13	1.91 0.18	2.43 0.23	2.95 0.27	3.47 0.32	3.99 0.37	4.51 0.42	5.03 0.47
	48 1.22	1.04 0.10	1.67 0.15	2.29 0.21	2.92 0.27	3.54 0.33	4.17 0.39	4.44 0.41	5.42 0.50	6.04 0.56
	54 1.37	1.22 0.11	1.94 0.18	2.67 0.25	3.40 0.32	4.13 0.38	4.86 0.45	5.59 0.52	6.32 0.59	7.05 0.65
	60 1.52	1.39 0.13	2.22 0.21	3.06 0.28	3.89 0.36	4.72 0.44	5.56 0.52	6.39 0.59	7.22 0.67	8.06 0.75
	66 1.68	1.56 0.15	2.50 0.23	3.44 0.32	4.38 0.41	5.31 0.49	6.25 0.58	7.19 0.67	8.13 0.75	9.06 0.84
	72 1.83	1.74 0.16	2.78 0.26	3.82 0.35	4.86 0.45	5.90 0.55	6.94 0.65	7.99 0.74	9.03 0.84	10.07 0.94
	78 1.98	1.91 0.18	3.06 0.28	4.20 0.39	5.35 0.50	6.49 0.60	7.64 0.71	8.78 0.82	9.93 0.92	11.08 1.03
	84 2.13	1.91 0.18	3.06 0.28	4.20 0.39	5.35 0.50	6.49 0.60	7.64 0.71	8.78 0.82	9.93 0.92	11.08 1.03
	90 2.29	2.08 0.19	3.33 0.31	4.58 0.43	5.83 0.54	7.08 0.66	8.33 0.77	9.58 0.89	10.83 1.01	12.08 1.12
	96 2.44	2.26 0.21	3.61 0.34	4.97 0.46	6.32 0.59	7.67 0.71	9.03 0.84	10.38 0.96	11.74 1.09	13.09 1.22



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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 %	28%
	Free Area sq. ft. (sq. m.)	4.44 (0.41)
	Free Area Velocity at Point of Beginning Water Penetration at .01 oz./sq. ft. (3 ml/sq. m) (15 min. test duration)	878 fpm (268 m/min.)
	Air Volume at 878 fpm	3898 cfm (1840 l/s)
	Free Area Velocity	
	Pressure Drop @ 878 fpm	.10 in. w.g. (25 Pa)

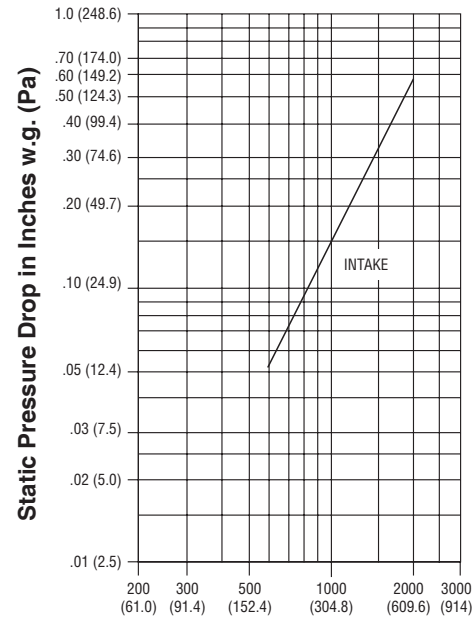
NOTE: To minimize water penetration when sizing intake louvers, select a Free Area Velocity that is **below** the point of beginning water penetration.

FREE FIELD NOISE REDUCTION

Octave Band (Frequency)(Hz)	Free Field Noise Reduction (db)	Transmission Loss (db)	Sound Transmission Class
2 (125)	12	6	15
3 (250)	13	7	
4 (500)	17	11	
5 (1000)	21	15	
6 (2000)	24	18	
7 (4000)	23	17	

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 E413-04. The higher the STC rating number, the less sound is transmitted through the louver. STC is not AMCA certified.

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 1612QS 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.



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