



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:

- | | |
|---|---|
| <input type="checkbox"/> FL Flanged Frame. | <input type="checkbox"/> ESI Extended Sill. |
| <input type="checkbox"/> BSSS Type 304 S.S. Bird Screen. | <input type="checkbox"/> FR1 1" (25) Filter Rack. |
| <input type="checkbox"/> BSN No Bird Screen. | <input type="checkbox"/> FR2 2" (51) Filter Rack. |
| <input type="checkbox"/> ISA Aluminum Insect Screen. | <input type="checkbox"/> PAC Perimeter Anchor Clips. |
| <input type="checkbox"/> ISSS Type 304 S.S. Insect Screen. | <input type="checkbox"/> Other: _____. |
| <input type="checkbox"/> WE Welded Construction. | |

OPTIONAL FINISHES:

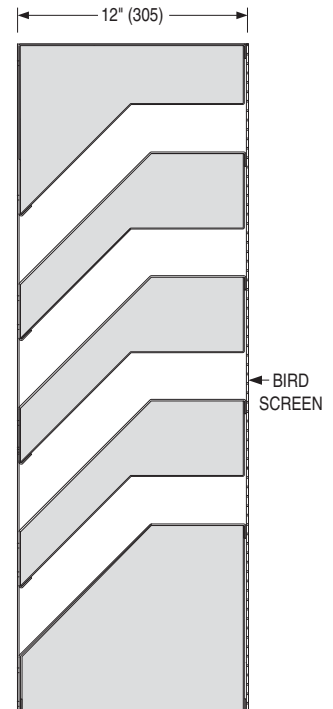
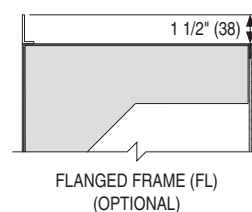
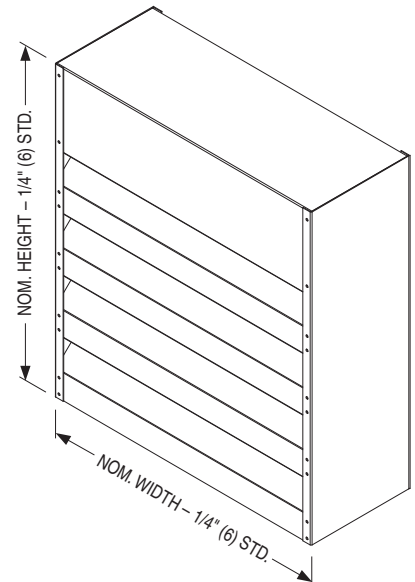
- ☐ **PC3** Powder Coat AAMA 2603. Color: _____.
- ☐ **PC4** High Performance Powder Coat AAMA 2604 (Equivalent to 50% Kynar®). Color: _____.
- ☐ **PC5** Fluoropolymer Powder Coat AAMA 2605 (Equivalent to 70% Kynar®). Color: _____.
- ☐ **PCC** Prime Coat.
- ☐ **AN04** Clear Anodized 204-R1.
- ☐ **AN15**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

Color Anodized:

- | | |
|--|---|
| <input type="checkbox"/> ANLB Light Bronze. | <input type="checkbox"/> ANMB Medium Bronze. |
| <input type="checkbox"/> ANDB Dark Bronze. | <input type="checkbox"/> 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.

10 - 17 - 12

1600

2 - 2 - 11

1612QS



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

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	0.27 0.03	0.44 0.04	0.61 0.06	0.77 0.07	0.94 0.09	1.11 0.10	1.27 0.12	1.44 0.13	1.61 0.15
	24 0.61	0.41 0.04	0.66 0.06	0.92 0.09	1.17 0.11	1.42 0.13	1.68 0.16	1.93 0.18	2.18 0.20	2.44 0.23
	30 0.76	0.56 0.05	0.91 0.08	1.26 0.12	1.60 0.15	1.95 0.18	2.30 0.21	2.64 0.25	2.99 0.28	3.34 0.31
	36 0.91	0.71 0.07	1.14 0.11	1.58 0.15	2.01 0.19	2.45 0.23	2.88 0.27	3.32 0.31	3.75 0.35	4.19 0.39
	42 1.07	0.85 0.08	1.37 0.13	1.90 0.18	2.42 0.22	2.94 0.27	3.47 0.32	3.99 0.37	4.51 0.42	5.04 0.47
	48 1.22	0.99 0.09	1.61 0.15	2.22 0.21	2.83 0.26	3.44 0.32	4.05 0.38	4.72 0.44	5.28 0.49	5.89 0.55
	54 1.37	1.14 0.11	1.84 0.17	2.54 0.24	3.24 0.30	3.94 0.37	4.64 0.43	5.34 0.50	6.04 0.56	6.74 0.63
	60 1.52	1.28 0.12	2.07 0.19	2.86 0.27	3.65 0.34	4.44 0.41	5.23 0.49	6.02 0.56	6.81 0.63	7.59 0.71
	66 1.68	1.43 0.13	2.30 0.21	3.18 0.30	4.06 0.38	4.94 0.46	5.81 0.54	6.69 0.62	7.57 0.70	8.45 0.78
	72 1.83	1.57 0.15	2.54 0.24	3.50 0.33	4.47 0.41	5.43 0.50	6.40 0.59	7.36 0.68	8.33 0.77	9.30 0.86
	78 1.98	1.71 0.16	2.77 0.26	3.82 0.36	4.88 0.45	5.93 0.55	6.98 0.65	8.04 0.75	9.09 0.84	10.15 0.94
	84 2.13	1.86 0.17	3.00 0.28	4.14 0.38	5.28 0.49	6.43 0.60	7.57 0.70	8.71 0.81	9.85 0.92	11.00 1.02
	90 2.29	2.14 0.20	3.46 0.32	4.78 0.44	6.10 0.57	7.42 0.69	8.74 0.81	10.06 0.93	11.38 1.06	12.70 1.18
	96 2.44	2.29 0.21	3.70 0.34	5.10 0.47	6.51 0.60	7.92 0.74	9.33 0.87	10.73 1.00	12.14 1.13	13.55 1.26



Nailor Industries certifies the Model 1612QS shown herein is licensed to bear the AMCA 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 Seal applies to Water Penetration, Air Performance and Sound ratings.

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

Free Area %		30%
Free Area sq. ft. (sq. m.)		4.72 (0.44)
INTAKE	Free Area Velocity at Point of Beginning Water Penetration at .01 oz./sq. ft. (3 ml/sq. m) (15 min. test duration)	826 fpm (252 m/min.)
	Air Volume at 826 fpm	3899 cfm (1840 l/s)
	Free Area Velocity	
	Pressure Drop @ 826 fpm	.10 in. w.g. (25 Pa)

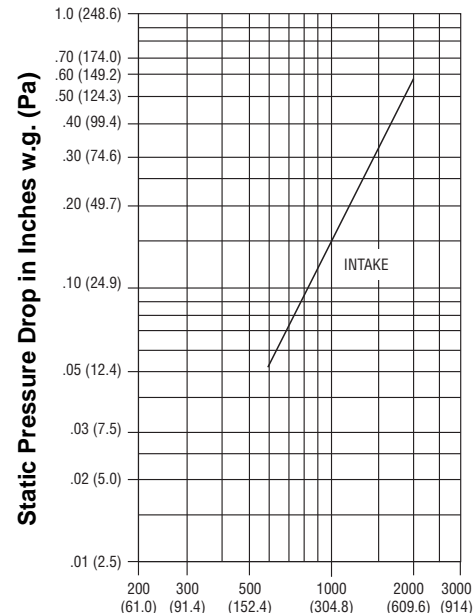
NOTE: To minimize water penetration when sizing intake louvers, select a Free Area Velocity that is **below** the point of beginning water penetration.

FREE FIELD NOISE REDUCTION

Octave Band (Frequency)(Hz)	Free Field Noise Reduction (db)	Transmission Loss (db)	Sound Transmission Class
2 (125)	11	5	13
3 (250)	11	5	
4 (500)	16	10	
5 (1000)	25	19	
6 (2000)	20	14	
7 (4000)	19	13	

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.

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