



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

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:**

- FL** Flanged Frame.
- BSSS** Type 304 S.S. Bird Screen.
- BSN** No Bird Screen.
- ISA** Aluminum Insect Screen.
- ISSS** Type 304 S.S. Insect Screen.
- WE** Welded Construction.
- ESI** Extended Sill.
- FR1** 1" (25) Filter Rack.
- FR2** 2" (51) Filter Rack.
- PAC** Perimeter Anchor Clips.
- Other:** \_\_\_\_\_

**OPTIONAL FINISHES:**

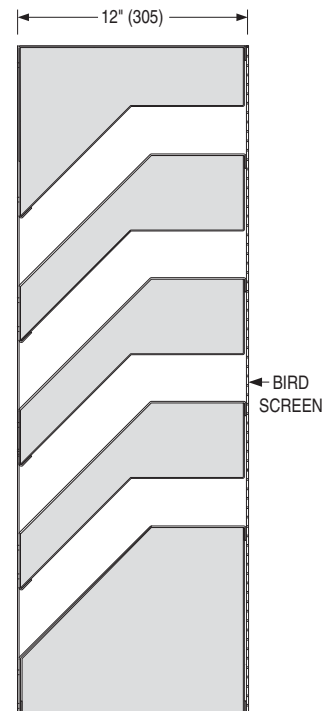
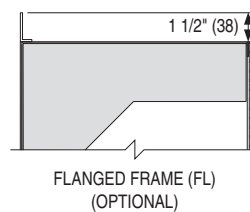
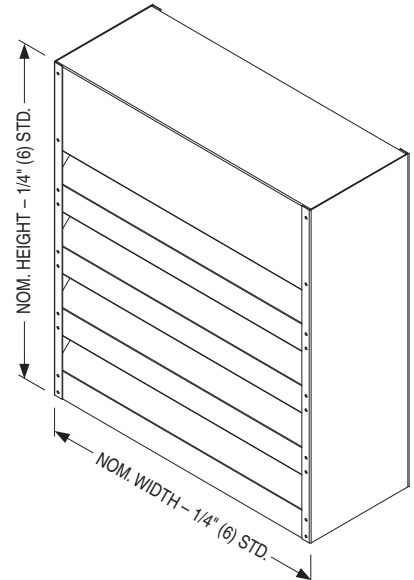
- PC3** Powder Coat AAMA 2603. Color: \_\_\_\_\_
- PC4** High Performance Powder Coat AAMA 2604 (Equivalent to 50% Kynar®). Color: \_\_\_\_\_
- PC5** Fluoropolymer Powder Coat AAMA 2605 (Equivalent to 70% Kynar®). Color: \_\_\_\_\_
- PCC** Prime Coat.
- AN04** Clear Anodized 204-R1.
- AN15** Clear Anodized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



<b>SCHEDULE TYPE:</b>
<b>PROJECT:</b>
<b>ENGINEER:</b>
<b>CONTRACTOR:</b>

Page 1 of 2  
 Dimensions are in inches (mm).

DATE	B SERIES	SUPERSEDES	DRAWING NO.
2 - 2 - 11	1600	1612AD-1 1 - 10 - 08	1612QS



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12" (305) DEEP • FORMED ALUMINUM  
PERFORMANCE DATA  
MODEL: 1612QS (1612AD)**

**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	0.49 0.05	0.59 0.06	0.69 0.07	0.80 0.08	0.90 0.08	1.01 0.09
	24 0.61	0.35 0.03	0.56 0.05	0.76 0.07	0.97 0.09	1.18 0.11	1.39 0.13	1.60 0.15	1.81 0.17	2.01 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	4.79 0.45	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	1.74 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
	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



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.)		4.79 (0.45)
I N T A K E	Free Area Velocity at Point of Beginning Water Penetration at .01 oz./sq. ft. (3 ml/sq. m) (15 min. test duration)	977 fpm (298 m/min.)
	Air Volume at 978 fpm	4680 cfm (2208 l/s)
	Free Area Velocity	
	Pressure Drop @ 978 fpm	.12 in. w.g. (29.8 Pa)

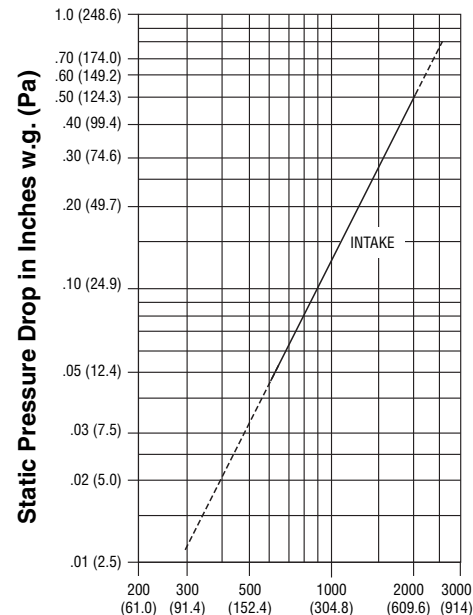
**NOTE:** To minimize water penetration when sizing intake louvers, select a Free Area Velocity that is **below** the point of beginning water penetration.

**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.

**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/ft<sup>3</sup>.

<b>SCHEDULE TYPE:</b>	Page 2 of 2			
<b>PROJECT:</b>	Dimensions are in inches (mm).			
<b>ENGINEER:</b>	<b>DATE</b>	<b>B SERIES</b>	<b>SUPERSEDES</b>	<b>DRAWING NO.</b>
<b>CONTRACTOR:</b>	2 - 2 - 11	1600	1612AD-2 1 - 10 - 08	1612QS