

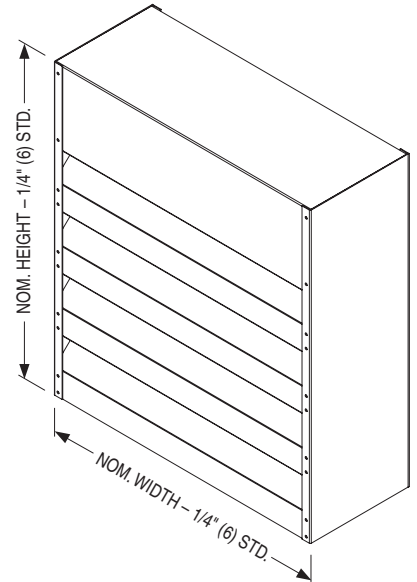


**ACOUSTICAL LOUVER • SIGHTPROOF**  
**12" (305) DEEP • FORMED ALUMINUM**  
**MODEL: 1612QS**

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).
- FL20** Flanged Frame, 2" (51).
- 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:**

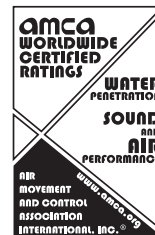
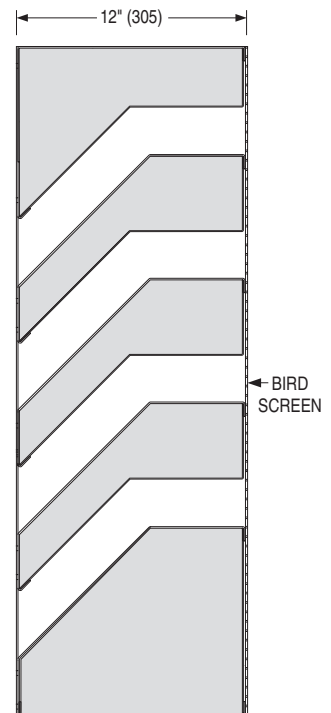
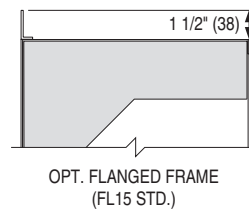
- PC3** Powder Coat AAMA 2603. Color: \_\_\_\_\_
- PC4** High Performance Powder Coat AAMA 2604 (Equivalent to 50% Kynar®). Color: \_\_\_\_\_
- PC5** Fluoropolymer Powder Coat AAMA 2605 (Equivalent to 70% Kynar®). Color: \_\_\_\_\_
- PCC** Prime Coat.
- AN04** Clear Anodized 204-R1.
- AN15** Clear Anodized 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 3  
 Dimensions are in inches (mm).

<b>DATE</b>	<b>B SERIES</b>	<b>SUPERSEDES</b>	<b>DRAWING NO.</b>
4 - 24 - 24	1600	6 - 10 - 23	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
<b>Height in Inches and Meters</b>	<b>18</b> 0.46	<b>0.17</b> 0.02	<b>0.28</b> 0.03	<b>0.38</b> 0.04	<b>0.48</b> 0.04	<b>0.58</b> 0.05	<b>0.69</b> 0.06	<b>0.79</b> 0.07	<b>0.89</b> 0.08	<b>1.00</b> 0.09
	<b>24</b> 0.61	<b>0.34</b> 0.03	<b>0.55</b> 0.05	<b>0.76</b> 0.07	<b>0.96</b> 0.09	<b>1.17</b> 0.11	<b>1.38</b> 0.13	<b>1.58</b> 0.15	<b>1.79</b> 0.17	<b>1.99</b> 0.19
	<b>30</b> 0.76	<b>0.52</b> 0.05	<b>0.83</b> 0.08	<b>1.15</b> 0.11	<b>1.46</b> 0.14	<b>1.77</b> 0.16	<b>2.08</b> 0.19	<b>2.40</b> 0.22	<b>2.71</b> 0.25	<b>3.02</b> 0.28
	<b>36</b> 0.91	<b>0.69</b> 0.06	<b>1.11</b> 0.10	<b>1.53</b> 0.14	<b>1.94</b> 0.18	<b>2.36</b> 0.22	<b>2.78</b> 0.26	<b>3.19</b> 0.30	<b>3.61</b> 0.34	<b>4.03</b> 0.37
	<b>42</b> 1.07	<b>0.87</b> 0.08	<b>1.39</b> 0.13	<b>1.91</b> 0.18	<b>2.43</b> 0.23	<b>2.95</b> 0.27	<b>3.47</b> 0.32	<b>3.99</b> 0.37	<b>4.51</b> 0.42	<b>5.03</b> 0.47
	<b>48</b> 1.22	<b>1.04</b> 0.10	<b>1.67</b> 0.15	<b>2.29</b> 0.21	<b>2.92</b> 0.27	<b>3.54</b> 0.33	<b>4.17</b> 0.39	<b>4.44</b> 0.41	<b>5.42</b> 0.50	<b>6.04</b> 0.56
	<b>54</b> 1.37	<b>1.22</b> 0.11	<b>1.94</b> 0.18	<b>2.67</b> 0.25	<b>3.40</b> 0.32	<b>4.13</b> 0.38	<b>4.86</b> 0.45	<b>5.59</b> 0.52	<b>6.32</b> 0.59	<b>7.05</b> 0.65
	<b>60</b> 1.52	<b>1.39</b> 0.13	<b>2.22</b> 0.21	<b>3.06</b> 0.28	<b>3.89</b> 0.36	<b>4.72</b> 0.44	<b>5.56</b> 0.52	<b>6.39</b> 0.59	<b>7.22</b> 0.67	<b>8.06</b> 0.75
	<b>66</b> 1.68	<b>1.56</b> 0.15	<b>2.50</b> 0.23	<b>3.44</b> 0.32	<b>4.38</b> 0.41	<b>5.31</b> 0.49	<b>6.25</b> 0.58	<b>7.19</b> 0.67	<b>8.13</b> 0.75	<b>9.06</b> 0.84
	<b>72</b> 1.83	<b>1.74</b> 0.16	<b>2.78</b> 0.26	<b>3.82</b> 0.35	<b>4.86</b> 0.45	<b>5.90</b> 0.55	<b>6.94</b> 0.65	<b>7.99</b> 0.74	<b>9.03</b> 0.84	<b>10.07</b> 0.94
	<b>78</b> 1.98	<b>1.91</b> 0.18	<b>3.06</b> 0.28	<b>4.20</b> 0.39	<b>5.35</b> 0.50	<b>6.49</b> 0.60	<b>7.64</b> 0.71	<b>8.78</b> 0.82	<b>9.93</b> 0.92	<b>11.08</b> 1.03
	<b>84</b> 2.13	<b>1.91</b> 0.18	<b>3.06</b> 0.28	<b>4.20</b> 0.39	<b>5.35</b> 0.50	<b>6.49</b> 0.60	<b>7.64</b> 0.71	<b>8.78</b> 0.82	<b>9.93</b> 0.92	<b>11.08</b> 1.03
	<b>90</b> 2.29	<b>2.08</b> 0.19	<b>3.33</b> 0.31	<b>4.58</b> 0.43	<b>5.83</b> 0.54	<b>7.08</b> 0.66	<b>8.33</b> 0.77	<b>9.58</b> 0.89	<b>10.83</b> 1.01	<b>12.08</b> 1.12
	<b>96</b> 2.44	<b>2.26</b> 0.21	<b>3.61</b> 0.34	<b>4.97</b> 0.46	<b>6.32</b> 0.59	<b>7.67</b> 0.71	<b>9.03</b> 0.84	<b>10.38</b> 0.96	<b>11.74</b> 1.09	<b>13.09</b> 1.22



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

Page 2 of 3  
Dimensions are in inches (mm).

<b>DATE</b>	<b>B SERIES</b>	<b>SUPERSEDES</b>	<b>DRAWING NO.</b>
4 - 24 - 24	1600	6 - 10 - 23	1612QS



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

**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)

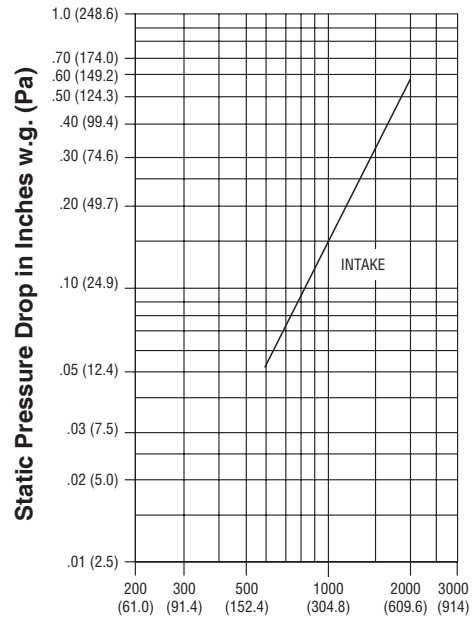
**NOTE:** To minimize water penetration when sizing intake louvers, select a Free Area Velocity that is **below** the point of beginning water penetration.

**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**

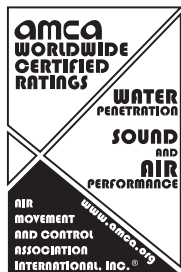


**Air Velocity in Feet (Meters) Per Minute Through Free Area**

Louver test size: 48" x 48" (1219 x 1219 mm).

Standard air density @ 0.075 lbs/ft<sup>3</sup>.

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.

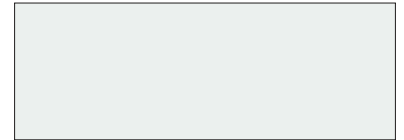
<b>SCHEDULE TYPE:</b>	Page 3 of 3			
<b>PROJECT:</b>	Dimensions are in inches (mm).			
<b>ENGINEER:</b>	<b>DATE</b>	<b>B SERIES</b>	<b>SUPERSEDES</b>	<b>DRAWING NO.</b>
<b>CONTRACTOR:</b>	4 - 24 - 24	1600	6 - 10 - 23	1612QS

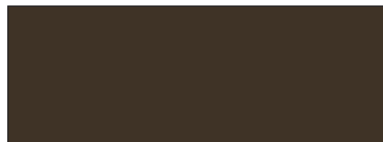

 Slate Blue **LF01**

 Medium Bronze **LF02**

 Sandstone **LF03**

 Light Gray **LF04**

 Charcoal **LF05**

 Bone White **LF06**

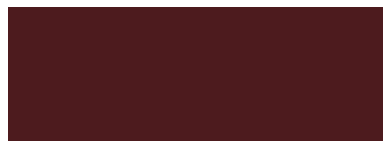
 Western Tan **LF07**

 Architectural Bronze **LF08**

 Regal Blue **LF09**

 Forest Green **LF10**

 Surrey Beige **LF11**

 Royal Brown **LF12**

 Barn Red **LF13**

 Burgundy **LF14**

 Clay **LF15**

 Almond **LF16**

 Coastal White **LF17**

 Vista Green **LF18**

 Black **LF19**

 Gloss Black **LF20**

 Campus Green **LF21**

Nailor offers 21 standard paint colors selected for architectural exterior use which meet or exceed AAMA specifications and performance requirements for color retention, chalk resistance, gloss retention, erosion, corrosion and chemical resistance as well as dry film thickness and hardness. Our state-of-the-art powder coat system provides an environment friendly finishing solution with more uniform coverage and coating thickness. The result is an exceptional finish that better resists scratching, fading and general wear. Additional liquid coat facilities for special requirements complete our ability to provide unmatched beauty and durability for any application.

Custom color matching is also available upon request. Contact your local Nailor representative.

# Available Finishes

FINISH TYPE	DESCRIPTION	STANDARD WARRANTY
<b>Fluoropolymer Powder Coat</b> AAMA 2605-Superior Finish (AKA: Powdura® 5000, Corafalon® Powder, Interpon® D3000-Fluoromax, IFS 500FP)	<b>"Ultimate"</b> - A next generation hyper durable powder coating, based on FEVE fluoropolymer resins and ceramic pigmentation that the industry has acknowledged as the foundation for superior performance coatings. They provide a hard surface that is resistant to scratching and scuffing, with superior color and gloss retention, when applied to a variety of exterior architectural applications. This technology represents the "ultimate" in environmentally friendly finishes, with Zero-VOC emissions.  A superior alternative to traditional 70% Kynar 500® / Hylar 500® PVDF fluoropolymer liquid coatings.	10 years (Consult Nailor for availability of extended warranty)
<b>High Performance Powder Coat</b> AAMA 2604 - High Performance Finish (AKA: Powdura® 4000, Envirocron® Ultra Durable Powder, Dynadure™ 400, Interpon® D2000, IFS 400SD)	<b>"Better"</b> - A high performance polyester powder coating, based on "super durable" resins that utilize infrared reflective pigments, which provides excellent resistance to outdoor weathering. A harder and more environmentally friendly coating than other liquid paint counterparts and with Zero-VOC emissions.  A good alternative to 50% Kynar 500® / Hylar 5000® liquid coatings.	5 years
<b>Durable Powder Coat</b> AAMA 2603 - Pigmented Organic Coatings (AKA: Powdura® 3000, Envirocron® Durable Powder, Dynadure™ 300, Interpon® D1000, IFS 300SP)	<b>"Good"</b> - A durable powder coat based on thermosetting polyester resin technology.  Provides a good economical combination of physical and chemical resistance properties. Environmentally superior to liquid spray paints and Zero – VOC emissions.	1 year
<b>Clear Anodize 215-R1</b> AA-M10C22A41 (0.7 mil. min.)	Architectural Class I. Clear, colorless and hard oxide aluminum coating that resists weathering and chemical attack. Recommended for severely corrosive and abrasive atmospheric exposure.	5 years
<b>Clear Anodize 204-R1</b> AA-M10C22A31 (0.4 - 0.7 mil.)	Architectural Class II. Clear, colorless and hard oxide aluminum coating that resists weathering and chemical attack. Recommended for normal weather exposure.	1 year
<b>Color Anodize</b> AA-M10C22A44 (0.7 mil. min.)	Architectural Class I. "Two-step" aluminum coating process. Following a standard anodizing procedure, a second electrolytic process deposits colored metallic pigments which penetrate the aluminum oxide pores, producing a corrosion resistant, colorfast finish. Available in light, medium, dark bronze and black.	5 years
<b>Prime Coat</b>	Prime coat provides a stable base for painting of louvers in the field. Surface pretreatment includes degreasing and a chemical cleaning before an epoxy prime coat is applied. Finish coat should be field applied as soon as possible for best adhesion, after a thorough cleaning for dust etc. that can contaminate the final finish and cause premature flaking or peeling.	N/A

*Paint finish warranties are not applicable to steel products.*

*Powdura® is a registered trademark of The Sherwin-Williams Company.*

*Corafalon® and Envirocron® are registered trademarks of PPG Industries Ohio, Inc.*

*Interpon® is a registered trademark of Akzo Nobel Powder Coatings Ltd.*

*Kynar 500® is a registered trademark of Arkema, Inc.*

*Hylar 5000® is a registered trademark of Solvay Solexis, Inc.*