MODEL 1612QS FORMED ALUMINUM (OR STEEL) LOUVERS ACOUSTICAL, SIGHTPROOF

Nailor Model 1612QS Acoustical Louver combines effective sound attenuation and good airflow performance with protection from the elements in an architecturally pleasing design. Acoustical blade insulation provides outstanding sound absorption qualities and the closely centered multiple formed J blade design is sight-proof, providing additional protection from vandalism in ground level applications. Available in channel or flanged type, the 12" (305) deep frame installs easily in most common wall configurations. Suitable for either intake or exhaust applications. Nailor Model 1612QS is AMCA Licensed for Water Penetration, Sound and Air Performance.



Model 1612QS



MODELS 1704J & 1706J FORMED STEEL LOUVERS ARCHITECTURAL BLADE

Nailor Models 1704J and 1706J are architecturally styled louvers utilizing J style blades, designed with smooth, clean lines that visually compliment any structure's exterior styling. Galvanized steel construction is economical, durable and can withstand the most demanding conditions. The blade design features a rear water baffle and provides good protection against general weather conditions, with low pressure drop characteristics and a high free area. Suitable for use in ventilation, exhaust and low to medium velocity intake applications. Available in channel or flanged type, the 4" (102) or 6" (152) deep frame installs easily in most common wall configurations.

Models 1704J and 1706J

MODELS 1704JD & 1706JD FORMED STEEL LOUVERS DRAINABLE HEAD. DRAINABLE BLADE

Nailor Models 1704JD and 1706JD are architecturally styled louvers combining J style blades with a drainable head feature that utilizes a top rain gutter to collect cascading water and channel it out through concealed downspouts in the side frame, preventing it from entering into the building. Durable galvanized steel construction, good weather protection and great air performance result in an outstanding functional louver at an affordable cost. Suitable for use in ventilation, exhaust and low to medium velocity intake applications where water penetration is a concern. Available in channel or flanged type, the 4" (102) or 6" (152) deep frame installs easily in most common wall configurations.



Models 1704JD and 1706JD

APPLICATIONS AND SIZING GUIDE

Selection of a louver for a specific application is determined by many variables including: aesthetic requirements, wall type/depth, pressure loss criteria and water penetration criteria. After determining the relative importance of each variable, a louver style and model can be selected by comparing individual design details and performance data, all included within this catalog. Use the following Applications Guide to assist in determining the appropriate louver type for your application:

Louver Application	Louver Type	Model
EXTRUDED ALUMINUM - 1600 Series Louvers by Application		
Decorative, A/C units, Curtain wall, Ventilation, Exhaust, Low to medium velocity intake	Thinline Frame Louver	1602J, 1602K
Decorative, Specialty Shapes, Ventilation, Exhaust, Low to medium velocity intake	Architectural Blade Louver	1604J, 1606J
Light to moderate rain, Ventilation, Exhaust, Low to medium velocity intake	Drainable Head, Architectural J Blade Louver	1604JD, 1606JD
Light to moderate rain w/ light wind, Exhaust, Low to medium velocity intake	Drainable Head, K Blade Louver	1604KD, 1606KD
Light to moderate rain, Exhaust, Low to medium velocity intake, Low pressure loss	Drainable Blade Louver	1602D, 1604D, 1606D
Moderate to heavy rain, Exhaust, Medium to high velocity intake, Low pressure loss	Dual Drainable Blade Louver	1604DD, 1606DD
Moderate to high winds w/ moderate to heavy rain, Exhaust, Higher velocity intake	Wind Driven Rain Louver	1605WD
Air Control & Shut-off, Light to moderate rain, Exhaust, Low to medium velocity intake	Combination & Adjustable, Drainable Blade Louver	1606CDAF, 1604AD, 1606AD
Sound control, Ventilation, Exhaust, Low to medium velocity intake	Acoustical Louver	1612QS
Visual screen, Vandalism concerns, Ventilation, Exhaust, Low to medium velocity intake	Sightproof Louver	1604Y
Foundation, Crawl space & utility area ventilation, Exhaust, Low to medium velocity intake	Brick Vent	16BVC, 16BVE, 16BVF
FORMED STEEL - 1700 Series Louvers by Application		
Decorative, General weather conditions, Ventilation, Exhaust, Low to medium velocity intake	Architectural Blade Louver	1704J, 1706J
Decorative, Light to moderate rain, Exhaust, Low to medium velocity intake	Drainable Head, Architectural Blade Louver	1704JD, 1706JD
Light to moderate rain, Exhaust, Low to medium velocity intake	Drainable Blade Louver	1704D, 1706D
Light to moderate rain, Exhaust, High velocity intake	Drainable Blade High Performance Louver	1704DHP, 1706DHP
Air Control, Ventilation, Exhaust, Intake	Adjustable, Drainable Blade Louver	1704AD, 1706AD

HOW TO SIZE LOUVERS

The prime factor involved in sizing a louver is the velocity of the air through its free area. The free area is the actual unobstructed area of a louver through which air can travel. Other factors such as pressure drop and amount of water penetration are dependent upon the free area velocity and can be determined by using the respective performance charts provided for each specific louver model.

1. Select Model:

Choose the louver model that is the best suited for the specific application. Use the Applications Guide and 'Quick-Select' Model Guide to assist in making a selection, if so desired.

2. Select Free area Velocity:

Select optimum free area velocity for the specific application, checking Pressure Drop and Water Penetration charts for acceptable performance. For 'exhaust only' applications, water penetration data generally does not need to be considered. For extra weather protection, select a free air velocity that is below the beginning point of water penetration.

As a rule of thumb, ASHRAE suggests 400 fpm (122 m/min.) for intake applications and 500 fpm (152 m/min.) for exhaust applications.

3. Determine Required Louver Free Area:

Divide given AIRFLOW (cfm) by the selected FREE AREA VELOCITY (fpm) to determine the required louver free area. Using the Free Area Chart for the specific louver model chosen, select a louver size that provides the required Free Area. If, in the application, the louver size is given, the maximum practical airflow can be determined by working backwards from the free area chart.

SIZING EXAMPLES:

Example A: AIRFLOW GIVEN: DETERMINE LOUVER SIZE 1. Determine required louver free area by dividing AIRFLOW by acceptable FREE AREA VELOCITY. (Use performance charts to assist in selecting Free Area Velocity): _____ cfm ÷ _____ fpm = _____ sq. ft. Free Area. 2. Using the Free Area Chart for chosen model; select a louver size with at least the required free area: _____ wide x _____ high _____ sq. ft. Free Area.

Examp	le B:						
LOUVE	R SIZE	GIVEN:	DETERMINE	MAXIMUM	AIF	RFLO	W
						_	

 Given louver size: _____ W x _____ H. Use the Free Area Chart for chosen model to determine the area.

Multiply FREE AREA x acceptable FREE AREA VELOCITY to determine maximum airflow:
 _____ sq. ft. x _____ fpm = ______ cfm maximum airflow.

3. Using the Pressure Drop Chart for chosen model; check the pressure drop at the determined airflow rate and resulting free area velocity.

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

'QUICK-SELECT' MODEL GUIDE

Model	Depth	Blade Style/Angle	Free Area Sq. Ft. (Sq. Meters)	Free Area %	Beginning Point of Water Penetration				
Extruded Aluminum • Stationary • Non-Drainable • Thinline Frame									
1602J	2" (51)	J/30°	7.14 (0.66)	45%	549 fpm (167 m/min.)				
1602K	2" (51)	K/30°	7.55 (0.70)	47%	401 fpm (122 m/min.)				
Extruded Aluminu	m • Stationar	y • Architectural Blade		•					
1604J	4" (102)	J/37°	8.62 (0.80)	54%	722 fpm (220 m/min.)				
1606J	6" (152)	J/37°	8.13 (0.76)	51%	1029 fpm (314 m/min.)				
Extruded Aluminu	m • Stationar	y • Drainable Head							
1604JD	4" (102)	J/37°	8.57 (0.80)	54%	961 fpm (293 m/min.)				
1606JD	6" (152)	J/37°	7.45 (0.69)	47%	1250 fpm (381 m/min.)				
1604KD	4" (102)	K/37°	7.51 (0.70)	47%	892 fpm (272 m/min.)				
1606KD	6" (152)	K/37°	7.93 (0.74)	50%	1017 fpm (310 m/min.)				
Extruded Aluminu	m • Stationar	ry • Drainable Head & Drainable E	Blade	•					
1602D	2" (51)	Drainable/45°	6.91 (0.64)	43%	1123 fpm (342 m/min.)				
1604D	4" (102)	Drainable/37°	8.26 (0.77)	52%	906 fpm (272 m/min.)				
1606D	6" (152)	Drainable/37°/45°	7.99 (0.74)	50%	1195 fpm (364 m/min.)				
1604DD	4" (102)	Dual Drainable/37°	8.14 (0.76)	51%	1000 fpm (305 m/min.)				
1606DD	6" (152)	Dual Drainable/37°	7.92 (0.74)	50%	1193 fpm (364 m/min.)				
Extruded Aluminu	m • Stationar	y • Wind-Driven Rain Resistant	` '		, , ,				
1605WD	5" (127)	Drainable/30°	8.64 (0.80)	54%	1025 fpm (313 m/min.)				
Extruded Aluminu	m • Adjustab	le • Drainable Blade	` ′		, , ,				
1604AD	4" (102)	Adjustable, Drainable/37 1/2°	7.10 (0.66)	44%	953 fpm (290 m/min.)				
1606AD	6" (152)	Adjustable, Drainable/37 1/2°	8.15 (0.76)	51%	970 fpm (296 m/min.)				
Extruded Aluminu	m • Combina	tion Louver/Damper • Drainable	Blade						
1606CDAF	6" (152)	Airfoil, Drainable/45°	6.89 (0.64)	43%	1142 fpm (348 m/min.)				
Extruded Aluminu	m • Stationar	y • Sightproof	` ′		, , ,				
1604Y	4" (102)	Inverted Y/45°	4.67 (0.43)	29%	_				
Formed Aluminum	(or Steel) • A	Acoustical	` '						
1612QS	12" (305)	Insulated, J Sightproof/45°	4.72 (0.44)	30%	826 fpm (252 m/min.)				
Formed Steel • Sta	tionary • Arc	hitectural Blade	` ′		, , ,				
1704J	4" (102)	J/45°	8.53 (0.79)	53%	869 fpm (265 m/min.)				
1706J	6" (152)	J/45°	8.53 (0.79)	53%	938 fpm (286 m/min.)				
Formed Steel • Sta		inable Head	, ,		, , ,				
1704JD	4" (102)	J/45°	8.38 (0.78)	52%	1123 fpm (342 m/min.)				
1706JD	6" (152)	J/45°	7.85 (0.73)	49%	1250 fpm (381 m/min.)				
Formed Steel • Sta	' '		, ,	1	1 , , , ,				
1704D	4" (102)	Drainable/45°	8.44 (0.78)	53%	976 fpm (298 m/min.)				
1706D	6" (152)	Drainable/45°	8.02 (0.75)	50%	1250 fpm (381 m/min.)				
1704DHP	4" (102)	Drainable/37 1/2°	8.55 (0.79)	53%	896 fpm (273 m/min.)				
1706DHP	6" (152)	Drainable/37 1/2°	9.05 (0.84)	56%	988 fpm (301 m/min.)				
Formed Steel • Ad			(/	1	1 (12 / /				
1704AD	4" (102)	Adjustable, Drainable/37 1/2°	8.03 (0.75)	50%	991 fpm (302 m/min.)				
1706AD	6" (152)	Adjustable, Drainable/37 1/2°	8.80 (0.82)	55%	977 fpm (298 m/min.)				

- Dimensions are in inches (mm).
- Free Area shown are for 48" x 48" (1219 x 1219).
- Beginning point of Water Penetration: 0.01 oz./sq. ft. (3 ml/sq. m), 15 minute test duration.

- AMCA LICENSED
- SOUND CONTROL
- SIGHTPROOF DESIGN
- CORROSION RESISTANT
- HIGH PERFORMANCE

Model:

1612QS 12" (305) Deep



Model 1612QS

Model 1612QS

Model 1612QS Acoustical Louvers combine effective sound attenuation and good airflow performance with protection from the elements in an architecturally pleasing design. Acoustical insulation provides outstanding sound absorption qualities and the closely centered multiple formed J blade design is sight-proof, providing additional benefits as a visual screen and safety barrier in ground level applications where vandalism is a concern. Suitable for either intake or exhaust applications where maximum noise reduction is required. Available in channel or flanged type, the 12" (305) deep frame installs easily in most common wall configurations. Model 1612QS is AMCA Licensed for Water Penetration, Sound and Air Performance.

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 Fiberglass.

Insulation:

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).

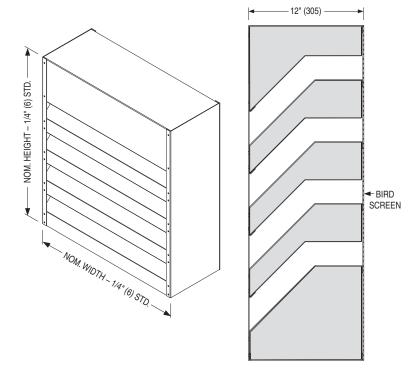
Finish: Mill.

Minimum Size: 12" W x 18" H (305 x 457).

Maximum Single 60" W x 96" H (1524 x 3048).

Section Size: Larger louvers will require field

assembly of smaller sections.



MODEL 1612QS

COMMON OPTIONS:

- Flanged Frame.
- Aluminum or Type 304 Stainless Steel Insect Screens.
- Extended Sills.
- Variety of Standard and High Performance Powder Coat finishes available in a multitude of colors.
 Custom color matching available.
- Clear or Color Anodized finishes. (Aluminum construction only).



LOUVERS

PERFORMANCE DATA:

MODEL: 1612QS

FREE AREA in Square Feet and Square Meters

			V	Vidth in	Inches	and Met	ers			
		12	18	24	30	36	42	48	54	60
		0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52
	18	0.27	0.44	0.61	0.77	0.94	1.11	1.27	1.44	1.61
	0.46	0.03	0.04	0.06	0.07	0.09	0.10	0.12	0.13	0.15
	24	0.41	0.66	0.92	1.17	1.42	1.68	1.93	2.18	2.44
	0.61	0.04	0.06	0.09	0.11	0.13	0.16	0.18	0.20	0.23
	30	0.56	0.91	1.26	1.60	1.95	2.30	2.64	2.99	3.34
	0.76	0.05	0.08	0.12	0.15	0.18	0.21	0.25	0.28	0.31
	36	0.71	1.14	1.58	2.01	2.45	2.88	3.32	3.75	4.19
	0.91	0.07	0.11	0.15	0.19	0.23	0.27	0.31	0.35	0.39
and Meters	42	0.85	1.37	1.90	2.42	2.94	3.47	3.99	4.51	5.04
ete	1.07	0.08	0.13	0.18	0.22	0.27	0.32	0.37	0.42	0.47
\geq	48	0.99	1.61	2.22	2.83	3.44	4.05	4.72	5.28	5.89
р	1.22	0.09	0.15	0.21	0.26	0.32	0.38	0.44	0.49	0.55
a	54	1.14	1.84	2.54	3.24	3.94	4.64	5.34	6.04	6.74
es	1.37	0.11	0.17	0.24	0.30	0.37	0.43	0.50	0.56	0.63
Height in Inches	60	1.28	2.07	2.86	3.65	4.44	5.23	6.02	6.81	7.59
드	1.52	0.12	0.19	0.27	0.34	0.41	0.49	0.56	0.63	0.71
.⊑	66	1.43	2.30	3.18	4.06	4.94	5.81	6.69	7.57	8.45
Ħ	1.68	0.13	0.21	0.30	0.38	0.46	0.54	0.62	0.70	0.78
ij	72	1.57	2.54	3.50	4.47	5.43	6.40	7.36	8.33	9.30
垩	1.83	0.15	0.24	0.33	0.41	0.50	0.59	0.68	0.77	0.86
	78	1.71	2.77	3.82	4.88	5.93	6.98	8.04	9.09	10.15
	1.98	0.16	0.26	0.36	0.45	0.55	0.65	0.75	0.84	0.94
	84	1.86	3.00	4.14	5.28	6.43	7.57	8.71	9.85	11.00
	2.13	0.17	0.28	0.38	0.49	0.60	0.70	0.81	0.92	1.02
	90	2.14	3.46	4.78	6.10	7.42	8.74	10.06	11.38	12.70
	2.29	0.20	0.32	0.44	0.57	0.69	0.81	0.93	1.06	1.18
	96	2.29	3.70	5.10	6.51	7.92	9.33	10.73	12.14	13.55
	2.44	0.21	0.34	0.47	0.60	0.74	0.87	1.00	1.13	1.26



Nailor Industries Inc. 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

	Model	1612QS
	Free Area %	30%
	Free Area sq. ft. (sq. m.)	4.72 (0.44)
I N T A	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.)
K	Air Volume at Free Area Velocity shown	3899 cfm (1840 l/s)
E	Pressure Drop at Free Area Velocity shown	.10 in. w.g. (25 Pa)

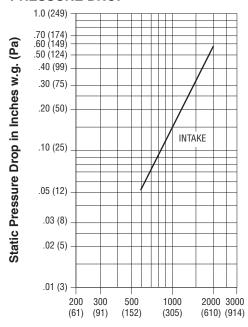
NOTE: To minimize water penetration when sizing intake louvers, select a Free Area Velocity that is **below** the point of beginning water penetration.

FREE FIELD NOISE REDUCTION

Octave Band (Frequency) (Hz)	Free Field Noise Reduction (db)	Transmission Loss (db)	Sound Transmission Class
2 (125)	11	5	
3 (250)	11	5	
4 (500)	16	10	13
5 (1000)	25	19	13
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 airbourne 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.

HOW TO SPECIFY OR TO ORDER

MODEL 1612QS

FORMED ALUMINUM (OR STEEL) ACOUSTICAL LOUVERS

SUGGESTED SPECIFICATION:

Provide and install, as shown on plans and/or schedules, formed aluminum louvers meeting or exceeding the following criteria: Frame shall be 12" (305) deep channel type (or specifier to select: flanged type), 1/4" (6.3) undersize (or specifier to select: exact size or 3/8" [9.5] undersize or 1/2" [12.7] undersize), with integral caulking slots (and specifier to select, if required: extended sill), constructed from formed aluminum of .080" (2.03) nominal wall thickness. Blades shall be sightproof J style, constructed from formed aluminum of .080" (2.03) nominal wall thickness with perforated interior and internal mineral wool insulation, fixed at 45 degrees on approximately 6 1/2" (165) centers. Factory assembled louver components to be mechanically fastened (or specifier to select: welded construction). Large louvers that require multiple sections for shipping and field assembly shall be constructed with visible type mullions when installed together on site. Louvers shall be equipped with removable 3/4" x .051 (19 x 1.3) expanded, flattened aluminum bird screen (or specifier to select: type 304 stainless steel bird screen and/or aluminum insect screen and/or type 304 stainless steel insect screen or no screen).

Finish shall be standard mill (or specifier to select: prime coat or 204-R1 clear anodized to a min. depth of 0.4 mil, with 1 year warranty or 215-R1 clear anodized to a min. depth of 0.7 mil, with 5 year warranty or color anodized; color to be selected from standard Nailor anodizing colors or AAMA 2603 thermosetting polyester powder coat, with 1 year warranty; color to be (specifier to select: selected from Nailor standard color chart or custom color) or AAMA 2604 high performance polyester powder coat, with 5 year warranty; color to be (specifier to select: selected from Nailor standard color chart or custom color) or AAMA 2605 FEVE fluoropolymer powder coat, with 10 year warranty; color to be (specifier to select: selected from Nailor standard color chart or custom color) or Kynar 500/Hylar 5000 70% PVDF coating, with 5 year warranty; color to be (specifier to select: selected from Nailor standard color chart or custom color) or Kynar 500/Hylar 5000 50% PVDF coating, with 10 year warranty; color to be (specifier to select: selected from Nailor standard color chart or custom color).

Performance data must be licensed by AMCA under the AMCA 511 Certified Ratings Program and shall bear the AMCA Certified Ratings seal for water penetration, sound and air performance. Free area, water penetration, free field noise reduction and pressure drop data submitted shall be equal to or better than specified model. Standard of acceptance: Nailor Industries, Inc. Model 1612QS.

MODEL: 1612QS

FORMED ALUMINUM (OR STEEL) ACOUSTICAL LOUVERS

EXAMPLE: 1612QS - 48x36 - U25 - CH - BSA - MI

١.	Models	

1612QS 12" (305) Deep, Sightproof

2. Nominal Width x Height inches (mm's)

3. Construction

ALM Aluminum (default) 18GA 18 ga. galvanized steel

4. Sizing

U00 Exact Size

U25 Undersize 1/4" (6.3) (default)

U38 Undersize 3/8" (9.5)

U50 Undersize 1/2" (12.7)

5. Frame

CH Channel (default)

FL Flanged

6. Bird Screen

BSA Aluminum (default)

BSG Galvanized Steel

BSSS Type 304 Stainless Steel

BSN None (default)

7. Insect Screen

None (default)

ISA Aluminum

ISSS Type 304 Stainless Steel

8. Finish

MI Mill Finish (default)

PC3S Powder Coat, Standard Color

PC3C Powder Coat, Custom Color

PC4S H. P. Powder Coat, Standard Color

PC4C H. P. Powder Coat, Custom Color

PC5S Fluoropolymer Powder Coat, Standard Color

PC5C Fluoropolymer Powder Coat,

Custom Color

PPC Prime Coat

AN04 Anodized, Clear 204-R1
AN15 Anodized, Clear 215-R1
ANLB Anodized, Light Bronze
ANMB Anodized, Medium Bronze

ANDB Anodized, Dark Bronze ANBK Anodized, Black

OPTIONS & ACCESSORIES:

10. Welded Construction

None (default)

WE Welded Construction

11. Extended Sill

None (default)

ESI Extended Sill

12. Filter Rack

None (default)

FR1 1" (25) Filter rack

FR2 2" (51) Filter rack

13a. Sleeve

None (default)

SGLV Galvanized Steel

SALU Aluminum

S304 Type 304 Stainless Steel

13b. Sleeve Length

SL = Specify

12" (305) standard (default)

8" - 28" (203 - 711)

13c. Sleeve Gauge

None (default)

20G 20 Ga.

18G 18 Ga.

16G 16 Ga.

14G 14 Ga.

10G 10 Ga.

Notes:

1. Standard color powder coat paint finishes require a color selection from the 21 color finishes on the "Nailor Louver Finishes and Color Guide".

Codes: LF00 Color to follow, LF01 Slate Blue, LF02 Medium Bronze, LF03 Sandstone, LF04 Light Gray, LF05 Charcoal, LF06 Bone White, LF07 Western Tan, LF08 Architectural Bronze, LF09 Regal Blue, LF10 Forest Green, LF11 Surrey Beige, LF12 Royal Brown, LF13 Barn Red, LF14 Burgandy, LF15 Clay, LF16 Almond, LF17 Coastal White, LF18 Vista Green, LF19 Black, LF20 Gloss Black, LF21 Campus Green.

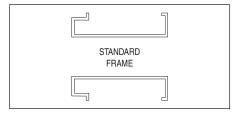
2. Custom color powder coat paint finishes require color matching. A suitable paint chip must be supplied and Nailor will select or mix and formulate a powder coat paint that matches as closely as possible. We will forward a sample for approval.

Codes: LF00 Color to follow. You may alternatively enter a unique code and description.

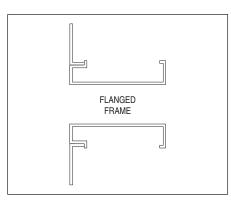
Nailor extruded aluminum and formed steel louvers are available with a variety of options and accessories to suit design specific applications. Selecting the proper accessories and options can save time and labor as well as enhance the visual aesthetics of a louver. Contact your Nailor representative for more information on Nailor custom louver manufacturing capabilities and additional features for your job specific requirements.

FRAME OPTIONS:

OPTION CODE **CH**STANDARD CHANNEL FRAME

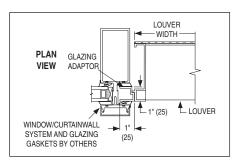


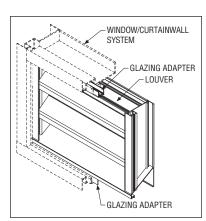
OPTION CODE **FL** FLANGED FRAME



All Nailor extruded aluminum and formed steel louver models come standard with channel type frames and are available with an optional flanged frame. Nailor 2", 4", 5" and 6" (51, 102, 127 and 152) deep extruded aluminum louvers are also available with an optional glazing adaptor frame for easy installation into windows or curtain wall systems. When ordered, the flanged and glazing adapter type frames are factory mounted using mechanical fasteners.

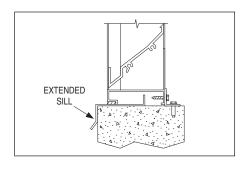
OPTION CODE **GA**GLAZING ADAPTER (SIDE VIEW)





EXTENDED SILL:

OPTION CODE **ESI** EXTENDED SILL

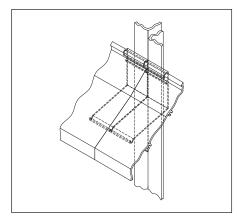


Sill extensions are available on all Nailor extruded aluminum and formed steel louver models and can provide additional deflection of water away from the louver opening. An extended sill option may also provide a transition between the louver and adjacent structures. The material and finish of the sill extension will match the frame and blades of the louver. When ordered, sill extensions are shipped loose for field installation.

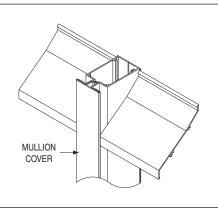
Note: All louver options are available at an additional cost.

MULLION TYPES:

ARCHITECTURAL CONCEALED MULLION DETAIL



VISIBLE MULLION DETAIL



Architectural Concealed Mullions are available on all Nailor stationary nondrainable aluminum louvers, providing a continuous blade appearance without size limitations. Mullions are constructed of the same material as the louver.

Nailor stationary and adjustable/ combination drainable blade louvers feature concealed mullions up to 120" (3048) wide, with larger assemblies requiring separate visible frames with downspouts. Visible Mullions are provided with a Mullion Cover to enhance the architectural appearance of the louver. Mullions are constructed of the same material as the louver and finished to match.

FALSE MULLIONS

False mullions, an architectural feature simulating a mullion, are also available where required visually. They may be shipped loose for mounting to the louver at the installation site, or can be an integral extension of the louver frame, factory mounted. Mullions are constructed of the same material as the louver and finished to match.

SCREEN TYPES:

OPTION CODE BSG BIRD SCREEN - GALV. STEEL (D) OPTION CODE BSA **BIRD SCREEN - ALUMINUM** OPTION CODE BSSS **BIRD SCREEN - TYPE 304** STAINLESS STEEL OPTION CODE BSN

BIRD SCREEN - NONE

OPTION CODE 00

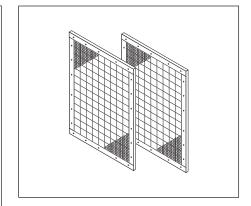
INSECT SCREEN - NONE (DEFAULT)

OPTION CODE ISA

INSECT SCREEN - ALUMINUM

OPTION CODE ISSS

BIRD SCREEN - TYPE 304 STAINLESS STEEL



Bird and Insect screens prevent the passage of undesirable elements through the louver while maintaining maximum airflow. All Nailor louvers come standard with a bird screen, either 3/4" x .051 (19 x 1.3) wire expanded and flattened aluminum or 1/2" mesh x 19 ga. (13 x 1.1) wire galvanized, dependent on louver construction, unless ordered otherwise. A variety of screen options are available to suit most applications: 1/2" mesh x 18 ga. (13 x 1.3) wire Type 304 stainless steel bird screens, 18 - 16 mesh, .011 (.30) wire aluminum insect screens and 18 - 16 mesh 0.11" (.30) wire Type 304 stainless steel insect screens may be ordered for all louver types.

WELDED CONSTRUCTION:

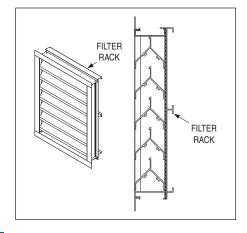
OPTION CODE WE

All Nailor louvers are mechanically fastened to provide a clean visual appearance when painted or anodized. Optional welded construction is available on all Nailor stationary louvers for applications that may be subject to vibration damage, i.e. when located in proximity to an air handler. Welded construction is not available when anodized finish is ordered.

FILTER RACK:

OPTION CODE **FR1** 1" (25) FILTER RACK

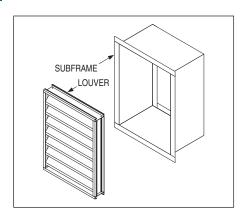
OPTION CODE **FR2** 2" (51) FILTER RACK



For applications where air filtration is required, Nailor offers 1" (25) or 2" (51) filter racks for standard filters, filters by others. Filters are easily accessible with a slide and lock in style design for quick service. Filter racks are constructed of the same material as the louver and factory installed with mechanical fasteners. All Nailor louvers are available with optional filter racks. Consult your Nailor representative for specific details and dimensional drawings for specific louver applications.

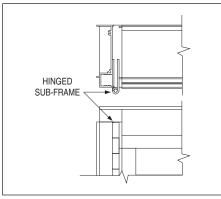
CHANNEL SUB-FRAME AND HINGES:

OPTION CODE **CSUB**CHANNEL SUB-FRAME



Sub-frames are used as an auxiliary frame around a louver and by adding additional hardware you can enable a louver to be removable, hinged, latched, and for certain applications, restrained. All Nailor extruded aluminum stationary louvers are available with optional channel sub-frames; contact your Nailor representative for sub-frame requirements for steel stationary louvers.

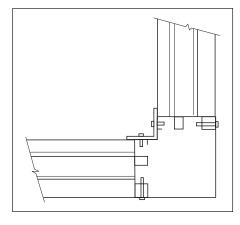
OPTION CODE HB
HINGED BOTTOM
OPTION CODE HL
HINGED LEFT
OPTION CODE HR
HINGED RIGHT
OPTION CODE HT
HINGED TOP



Some applications require access behind a louver for service and maintenance of other system components. When ordered with a channel sub-frame, hinges allow a louver to become an access door, providing easy access behind the louver. Hinges are available on top, bottom, and left or right orientations. Standard piano style hinges are factory mounted when ordered. All Nailor extruded aluminum stationary louvers are available with optional hinges; contact your Nailor representative for hinge requirements for steel stationary louvers.

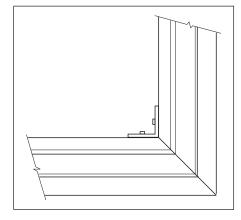
CORNER CONSTRUCTION:

OPTION CODE SBCC **BOX CORNER DETAIL**



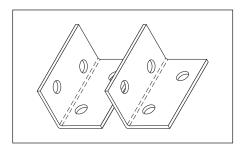
Louvers that follow the architectural line of a building's exterior around a corner may have either mitered or boxed corners, depending on the blade style of the louver selected. All Nailor extruded aluminum stationary J and K non-drainable louvers are available with optional mitered corners providing a desirable continuous look, and all Nailor extruded aluminum stationary drainable louvers are available with optional box corners only; contact your Nailor representative for corner requirements for steel stationary louvers.

OPTION CODE SMCC MITERED CORNER DETAIL



INSTALLATION ANGLES:

OPTION CODE PACA MOUNTING CLIPS



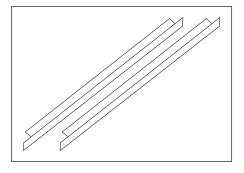
and speedy installation. When ordered, mounting clips and continuous angles are shipped loose for field assembly. All Nailor extruded aluminum stationary louvers are available with optional mounting clips and continuous angles; contact your Nailor representative for installation angle and mounting clip requirements

for steel stationary louvers.

Mounting clips and continuous angles

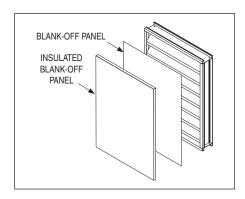
are utilized to anchor a louver to an opening and provide a clean, easy,

OPTION CODE PAAA **CONTINUOUS ANGLES**



BLANK-OFF PANELS:

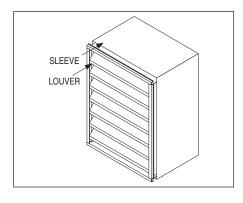
OPTION CODE **BA**.040" ALUMINUM
OPTION CODE **BAI1**.040" ALUMINUM W/1" (25) INSUL.
OPTION CODE **BAI2**.040" ALUMINUM W/2" (51) INSUL.
OPTION CODE **BG**20 GA. GALVANIZED STEEL
OPTION CODE **BGI1**20 GA. GALVANIZED STEEL WITH
1" (25) INSULATION
OPTION CODE **BGI2**20 GA. GALVANIZED STEEL WITH
2" (51) INSULATION



Certain louver applications may require that the airflow be controlled with a blank-off panel while still maintaining the louver's architectural appearance and aesthetic appeal. Blank-off panels can be a plain sheet of either galvanized steel or aluminum or a sandwich type panel in which 1" (25) or 2" (51) insulation attached. All Nailor extruded aluminum stationary louvers are available with blank-off contact your panels: Nailor representative Industries for blank-off panel requirements for steel stationary louvers.

SLEEVE TYPES:

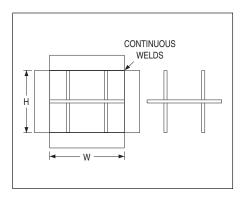
OPTION CODE **\$304**TYPE 304 STAINLESS STEEL
OPTION CODE **\$ALV**ALUMINUM
OPTION CODE **\$GLV**GALVANIZED STEEL



A factory installed louver sleeve allows the units to ship directly to jobsite ready for installation, saving time, money and costly field fabrication and mounting, as well as helping to ensure proper installation. Sleeves are available in a variety of construction and thickness: Galvanized steel sleeve (20 ga. [1.0], 18 ga. [1.3], 16 ga. [1.6], 14 ga. [2.0], 12 ga. [2.7] or 10 ga. [3.5]), Aluminum sleeve (16 ga. [1.6], 14 ga. [2.0], 10 ga. [3.5]) or Type 304 stainless steel sleeve (20 ga. [1.0], 18 ga. [1.3], 16 ga. [1.6], 14 ga. [2.0], 12 ga. [2.7] or 10 ga. [3.5]). All Nailor louvers are available with factory installed sleeves.

SECURITY BARS:

OPTION CODE **SECB** SECURITY BARS



When combined with a sleeve, security bars provide maximum protection for installations where penetration through a wall needs to be secure. Available in a 2" (51) flat steel frame welded continuously at the corners, a variety of bar designs, bar material, construction types and bar spacing is available. Contact your Nailor representative for security bar requirements for all Nailor louvers.



Available Louver Finishes

Nailor offers 21 standard paint colors 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. Nailor also offers 6 standard anodized finishes. Custom color matching is also available upon request. Contact your local Nailor representative.

See inside cover for available louver finishes color chart.

Note: Due to the printing process, colors shown approximate as closely as possible to the actual paint colors.

FINISH TYPE:

DESCRIPTION:

Fluoropolymer Powder Coat

AAMA 2605 - Superior Finish (AKA: Powdura® 5000, Coraflon® Powder, Interpon® D3000-Fluoromax) "Ultimate" - 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 new alternative to traditional 70% Kynar 500®/Hylar 5000® PVDF fluoropolymer liquid coatings.

High Performance Powder Coat

AAMA 2604 - High Performance Finish (AKA: Powdura® 4000, Envirocron® Ultra DurablePowder, Dynadure™ 400, Interpon® D2000)

"Better" - 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.

Durable Powder Coat

AAMA 2603 - Pigmented Organic Coatings (AKA: Powdura® 3000, Envirocron® Durable Powder, Dynadure™ 300, Interpon® D1000) "Good" - 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.

Clear Anodize 215-R1

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.

Clear Anodize 204-R1

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.

Color Anodize

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.

Prime Coat

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.

Contact your local representative for Color Guide and paint warranty information. Paint finish warranties are not applicable to steel products. Powdura® is a registered trademark of The Sherwin-Williams Company.

Coraflon® 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.



Louver Finishes & Color Guide

Slate Blue	LF01	Medium Bronze	LF02	Sandstone	LF03
Light Gray	LF04	Charcoal	LF05	Bone White	LF06
Western Tan	LF07	Architectural Bronze	LF08	Legal 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.

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