



# LAS-12 STATIONARY ACOUSTICAL LOUVER FORMED STEEL

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### STANDARD CONSTRUCTION

#### FRAME

12" (305) deep, 16 gage (1.6) galvanized steel channel.

#### BLADES

18 gage (1.3) galvanized steel exterior surface, with 22 gage (.9) perforated steel interior surface that covers insulation. Blades positioned at 45° angle and spaced approximately 12" (305) center to center.

#### ACOUSTICAL INSULATION

Mineral glass fiber, 4 pcf.

Mineral Glass Fiber fire ratings when tested in accordance with ASTM E84, NFPA 255 or UL-723 test methods:

Flame Spread.....15  
Fuel Contributed..... 0  
Smoke Developed..... 0

#### SCREEN

1/2" mesh x 19 gage (13 x 1.1) galvanized bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

#### FINISH

Mill.

#### MINIMUM SIZE

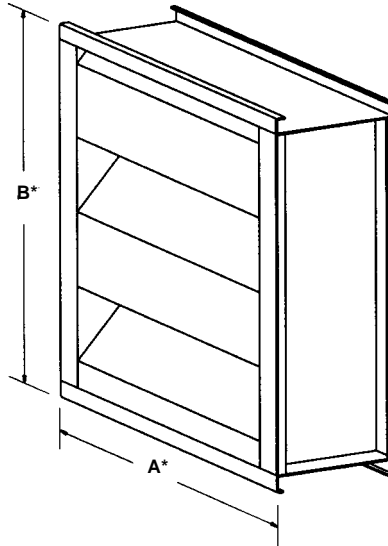
12"w x 24"h (305 x 610).

#### APPROXIMATE SHIPPING WEIGHT

11 lbs. per sq. ft. (53.7 kg/m<sup>2</sup>)

#### MAXIMUM FACTORY ASSEMBLY SIZE

Shall be 32 sq. ft. (3m<sup>2</sup>). Maximum single section size shall be 48" x 96" (1219 x 2438). Louvers larger than the maximum single section size will require field assembly of smaller sections.



### FEATURES

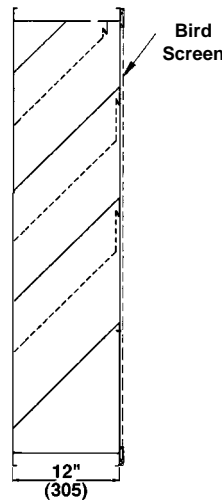
The LAS-12 offers:

- 22% Free Area.
- Insulated blades which provide effective sound attenuation and weather protection.
- Published performance ratings based on testing in accordance with AMCA Publication 511.
- Architecturally pleasing appearance.

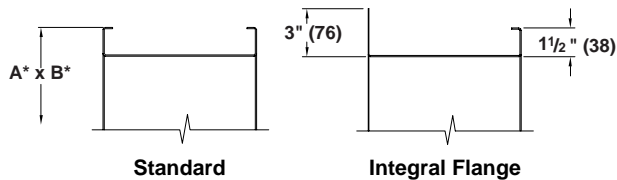
### VARIATIONS

Variations to the basic design of this louver are available at additional cost. They include:

- Extended sill.
- Front or rear security bars.
- Filter racks.
- Installation angles.
- A variety of bird and insect screens.
- Selection of finishes: prime coat, baked enamel (modified fluoropolymer), epoxy, Pearledize, Kynar, clear and color anodize. (Anodize finish available only on aluminum construction. Some variation in anodize color consistency is possible.)
- Formed aluminum frame with .100" (2.5) nominal wall thickness and .080" (2) blade with .040" (1) perforated aluminum interior surface



### FRAME CONSTRUCTION



Octave Band Frequency (Hz)	Free Field Noise Reduction (db) Ruskatherm Blanket
2/125	15
3/250	14
4/500	18
5/1000	22
6/2000	21
7/4000	21
8/8000	23

To calculate Transmission Loss (db), subtract 6 db from Free Field Noise Reduction (db).

Dimensions in parenthesis ( ) indicate millimeters.

Units furnished 1/4" (6) smaller than given opening dimensions.

TAG	QTY.	SIZE		FRAME	VARIATIONS
		A*-WIDE	B*-HIGH		
PROJECT ARCH./ENGR. REPRESENTATIVE			LOCATION CONTRACTOR DATE		

## SUGGESTED SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall be stationary acoustical type contained within a 12" (305) frame. Louver components (heads, jambs, sills, blades, and mullions) shall be factory assembled by the louver manufacturer. Louver sizes too large for shipping shall be built up by the contractor from factory assembled louver sections to provide overall sizes required. Louver design shall incorporate structural supports required to withstand a wind-load of 20 lbs. per sq. ft. (.96kPa) (equivalent of a 90 mph wind [145 KPH] - specifier may substitute any loading required).

Louvers shall be Ruskin Sound Control Model LAS-12 construction as follows:

- Frame: 16 gage (1.6) galvanized steel channel.
- Blades: 20 gage (1.0) galvanized steel exterior surface, 22 gage (.9) perforated steel interior surface that covers insulation. Blades are positioned at 45° angle and spaced approximately 12" (305) center to center.
- Screen: 1/2" mesh x 19 gage (13 x 1.1) galvanized steel in removable frame.
- Finish: Select finish specification from Ruskin Finishes Brochure.

Published louver performance data bearing the AMCA Certified Ratings Seal for Air Performance and Water Penetration must be submitted for approval prior to fabrication and must demonstrate pressure drop equal to or less than the Ruskin Sound Control model specified.

## PERFORMANCE DATA

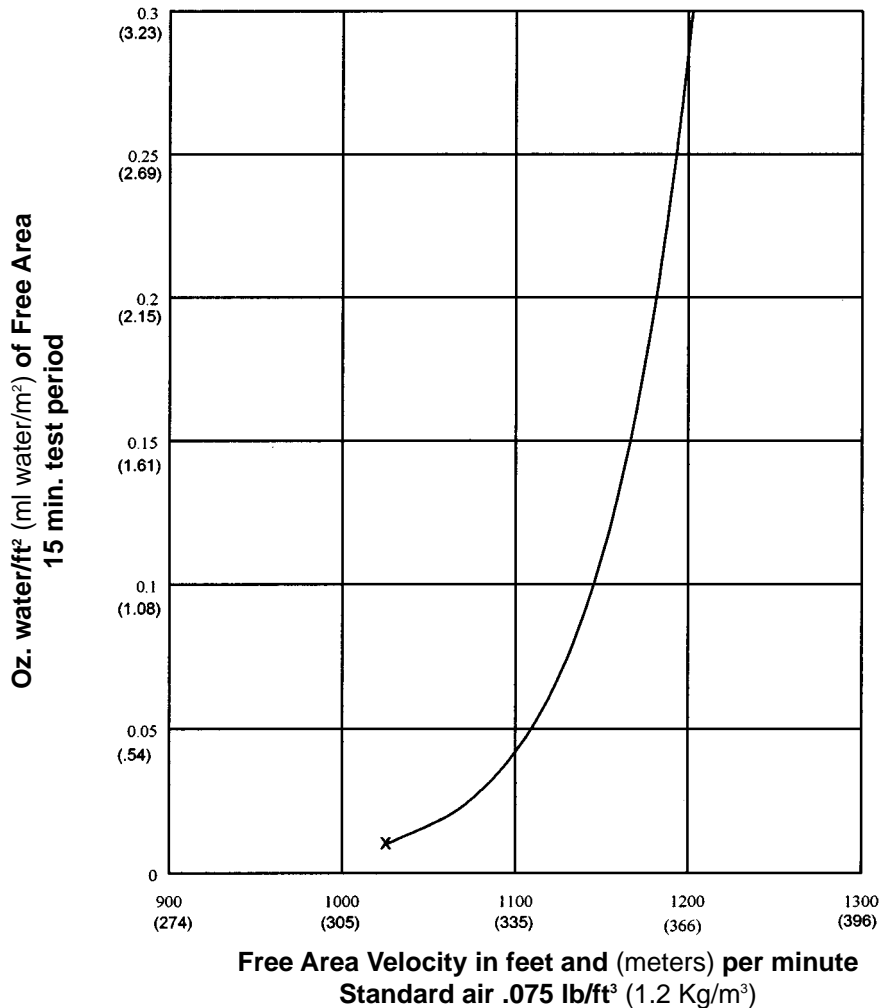
AMCA Standard 500 provides a reasonable basis for testing and rating louvers. Testing to AMCA 500 is performed under a certain set of laboratory conditions. This does not guarantee that other conditions will not occur in the actual environment where louvers must operate.

The louvers system should be designed with a reasonable safety factor for louver performance. To ensure protection from water carryover, design with a performance level somewhat below maximum desired pressure drop and .01 oz./sq. ft. of water penetration.

### WATER PENETRATION

Test size 48" wide x 48" high (1219 x 1219)

Beginning point of water penetration at .01 oz./sq. ft. is 1025 fpm (312 m/min).



Ruskin Sound Control certifies that the louver shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Standard 511 and comply with the requirements of the AMCA Certified Ratings Program. AMCA Certified Ratings Seal applies to air performance ratings and water penetration ratings only.

# FREE AREA GUIDE

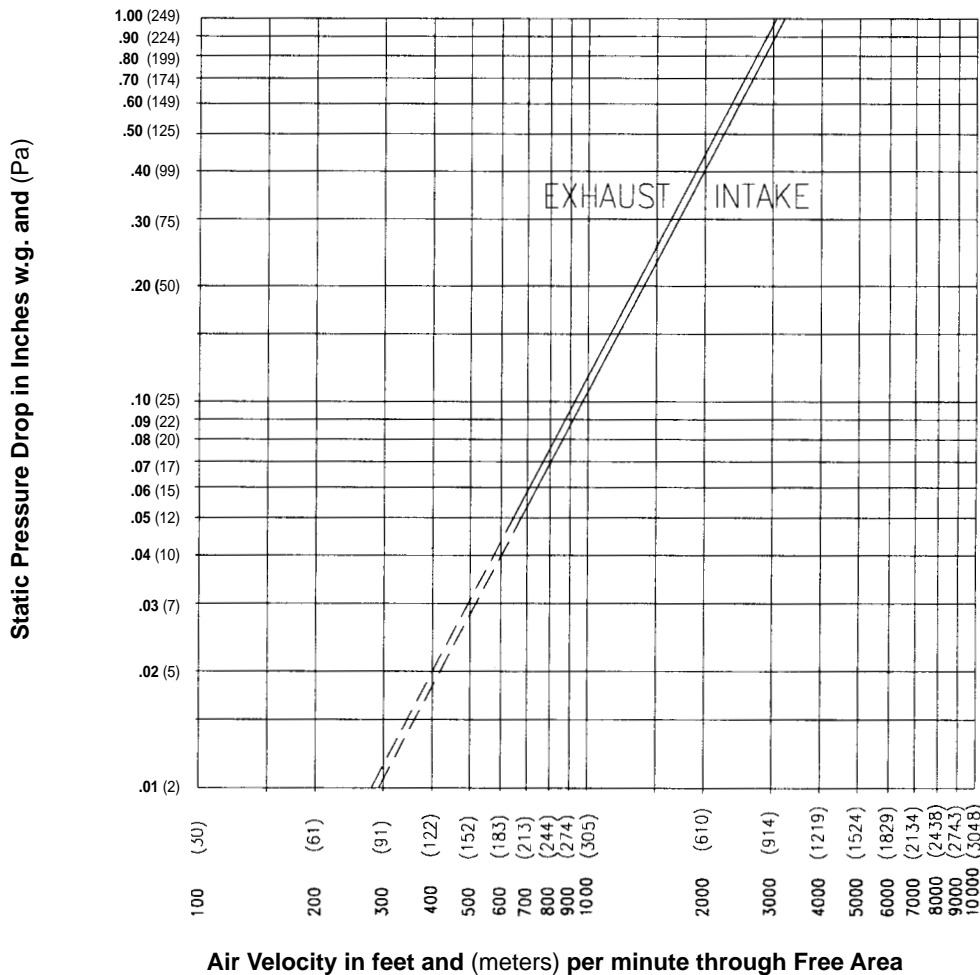
Free Area Guide shows free area in ft<sup>2</sup> and m<sup>2</sup> for various sizes of LAS-12.

Height – Inches and Millimeters

	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
	0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44	2.59	2.74	2.90	3.05
18	0.07	0.11	0.15	0.20	0.24	0.28	0.33	0.37	0.41	0.46	0.50	0.55	0.59	0.63	0.68	0.72	0.76	0.81	0.85
0.46	0.01	0.01	0.01	0.02	0.02	0.03	0.03	0.03	0.04	0.04	0.05	0.05	0.05	0.06	0.06	0.07	0.07	0.08	0.08
24	0.19	0.32	0.45	0.57	0.70	0.83	0.96	1.08	1.21	1.34	1.46	1.59	1.72	1.85	1.97	2.10	2.23	2.36	2.48
0.61	0.02	0.03	0.04	0.05	0.07	0.08	0.09	0.10	0.11	0.12	0.14	0.15	0.16	0.17	0.18	0.20	0.21	0.22	0.23
30	0.34	0.57	0.80	1.03	1.26	1.48	1.71	1.94	2.17	2.40	2.62	2.85	3.08	3.31	3.54	3.77	3.99	4.22	4.45
0.76	0.03	0.05	0.07	0.10	0.12	0.14	0.16	0.18	0.20	0.22	0.24	0.27	0.29	0.31	0.33	0.35	0.37	0.39	0.41
36	0.47	0.78	1.09	1.40	1.72	2.03	2.34	2.65	2.96	3.28	3.59	3.90	4.21	4.52	4.84	5.15	5.46	5.77	6.08
0.91	0.04	0.07	0.10	0.13	0.16	0.19	0.22	0.25	0.28	0.30	0.33	0.36	0.39	0.42	0.45	0.48	0.51	0.54	0.57
42	0.57	0.95	1.34	1.72	2.10	2.48	2.86	3.24	3.62	4.01	4.39	4.77	5.15	5.53	5.91	6.30	6.68	7.06	7.44
1.07	0.05	0.09	0.12	0.16	0.20	0.23	0.27	0.30	0.34	0.37	0.41	0.44	0.48	0.51	0.55	0.59	0.62	0.66	0.69
48	0.70	1.16	1.63	2.09	2.56	3.02	3.49	3.95	4.42	4.89	5.35	5.82	6.28	6.75	7.21	7.68	8.14	8.61	9.07
1.22	0.06	0.11	0.15	0.19	0.24	0.28	0.32	0.37	0.41	0.45	0.50	0.54	0.58	0.63	0.67	0.71	0.76	0.80	0.84
54	0.80	1.34	1.87	2.41	2.94	3.48	4.01	4.55	5.08	5.62	6.15	6.69	7.22	7.76	8.29	8.83	9.36	9.90	10.43
1.37	0.07	0.12	0.17	0.22	0.27	0.32	0.37	0.42	0.47	0.52	0.57	0.62	0.67	0.72	0.77	0.82	0.87	0.92	0.97
60	0.93	1.55	2.17	2.78	3.40	4.02	4.64	5.26	5.88	6.50	7.11	7.73	8.35	8.97	9.59	10.21	10.83	11.44	12.06
1.52	0.09	0.14	0.20	0.26	0.32	0.37	0.43	0.49	0.55	0.60	0.66	0.72	0.78	0.83	0.89	0.95	1.01	1.06	1.12
66	1.03	1.72	2.41	3.10	3.79	4.47	5.16	5.85	6.54	7.23	7.91	8.60	9.29	9.98	10.67	11.36	12.04	12.73	13.42
1.68	0.10	0.16	0.22	0.29	0.35	0.42	0.48	0.54	0.61	0.67	0.74	0.80	0.86	0.93	0.99	1.06	1.12	1.18	1.25
72	1.16	1.93	2.70	3.47	4.25	5.02	5.79	6.56	7.33	8.11	8.88	9.65	10.42	11.19	11.97	12.74	13.51	14.28	15.05
1.83	0.11	0.18	0.25	0.32	0.39	0.47	0.54	0.61	0.68	0.75	0.83	0.90	0.97	1.04	1.11	1.18	1.26	1.33	1.40
78	1.26	2.10	2.95	3.79	4.63	5.47	6.31	7.15	7.99	8.84	9.68	10.52	11.36	12.20	13.04	13.89	14.73	15.57	16.41
1.98	0.12	0.20	0.27	0.35	0.43	0.51	0.59	0.67	0.74	0.82	0.90	0.98	1.06	1.13	1.21	1.29	1.37	1.45	1.53
84	1.39	2.31	3.24	4.16	5.09	6.01	6.94	7.86	8.79	9.72	10.64	11.57	12.49	13.42	14.34	15.27	16.19	17.12	18.04
2.13	0.13	0.22	0.30	0.39	0.47	0.56	0.65	0.73	0.82	0.90	0.99	1.08	1.16	1.25	1.33	1.42	1.51	1.59	1.68
90	1.49	2.49	3.48	4.48	5.47	6.47	7.46	8.46	9.45	10.45	11.44	12.44	13.43	14.43	15.42	16.42	17.41	18.41	19.40
2.29	0.14	0.23	0.32	0.42	0.51	0.60	0.69	0.79	0.88	0.97	1.06	1.16	1.25	1.34	1.43	1.53	1.62	1.71	1.80

Width – Inches and Millimeters

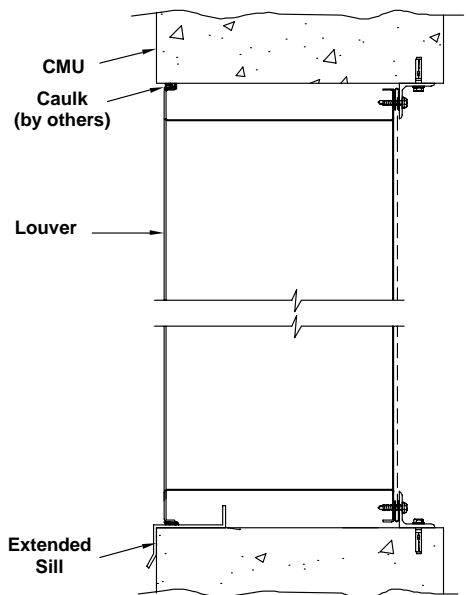
## PRESSURE DROP



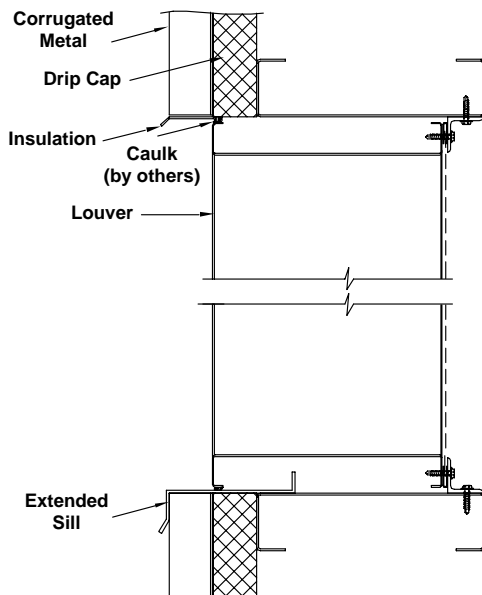
Ratings do not include the effect of a bird screen.

# TYPICAL INSTALLATION DETAILS

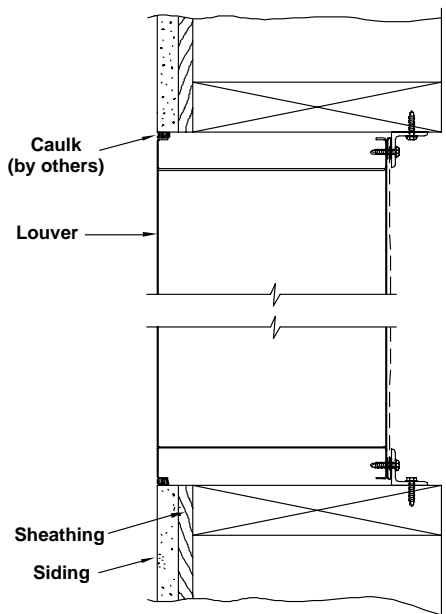
## Masonry Wall



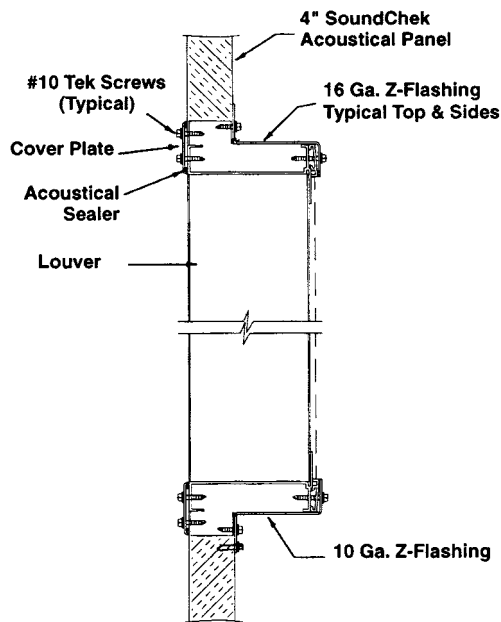
## Metal Panel Wall



## Wood Installation



## SoundChek Panel Wall



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for a Noisy World!**

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