Extruded Aluminum Louver

IL64

6" Deep • Vertical Blade • Rain Resistant Stationary Louver

STANDARD CONSTRUCTION

EXTERIOR FRAME: .080" thick; 6063-T6/T52 extruded aluminum alloy
BLADES: .080" thick; 6063-T6/T52 extruded aluminum alloy
BLADE SPACING: 1.6"
ASSEMBLY: Mechanically fastened
EXTENDED SILL: .060" thick formed aluminum
SCREEN: ½" x .051" flattened aluminum birdscreen
FINISH: Mill

OPTIONS

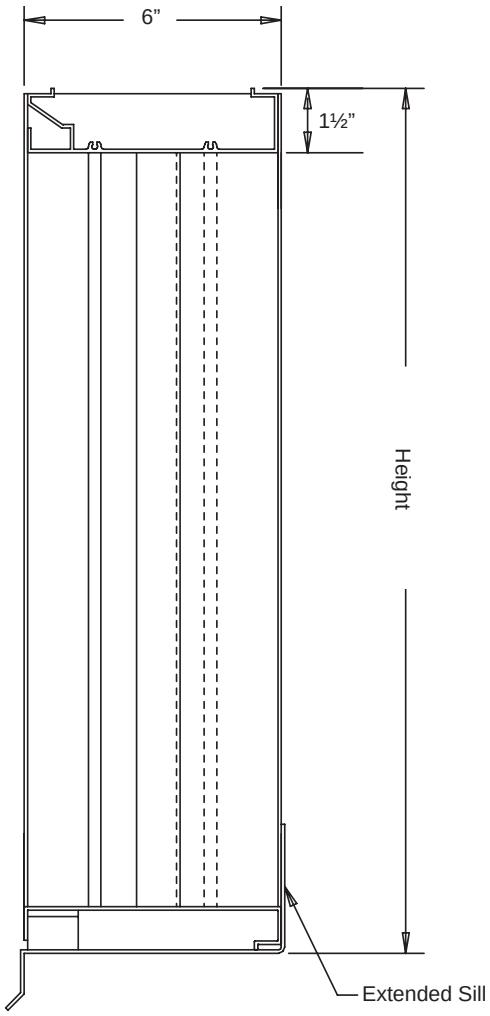
Finish - Baked Powder Polyester, Kynar, or Anodize
Variety of Bird and Insect Screen
Blank-off Panels

NOTES

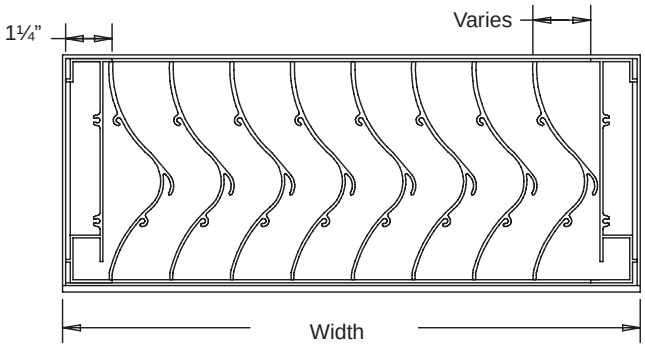
1. "A" width and "B" height are opening dimensions. Louvers are provided approximately ½" undercut.
2. Shipping weight approximately 7 lbs./sq.ft.

LOUVER SIZE

Panels	Min Panel	Max Single Panel
IL64	12"W x 12"H	30 sq.ft 120"W 120"H



Section View



Louvers & Dampers
A Nortek Company

SD-IL64-09.08

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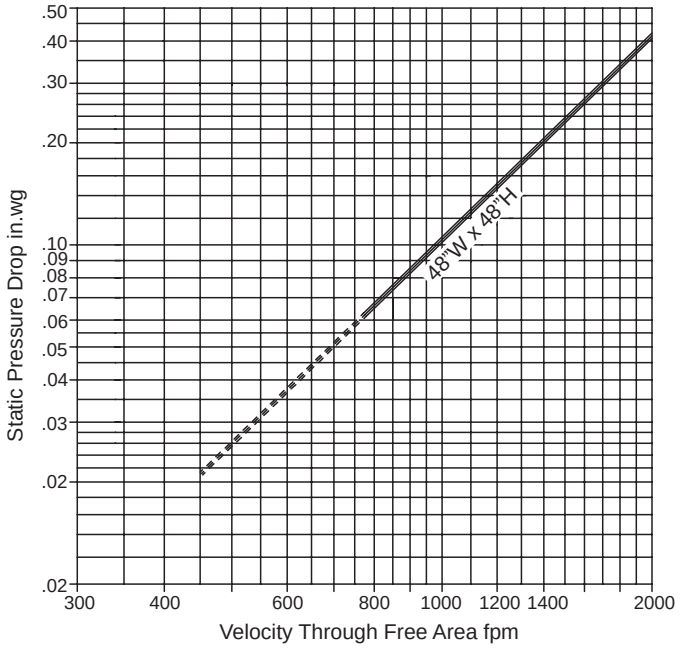
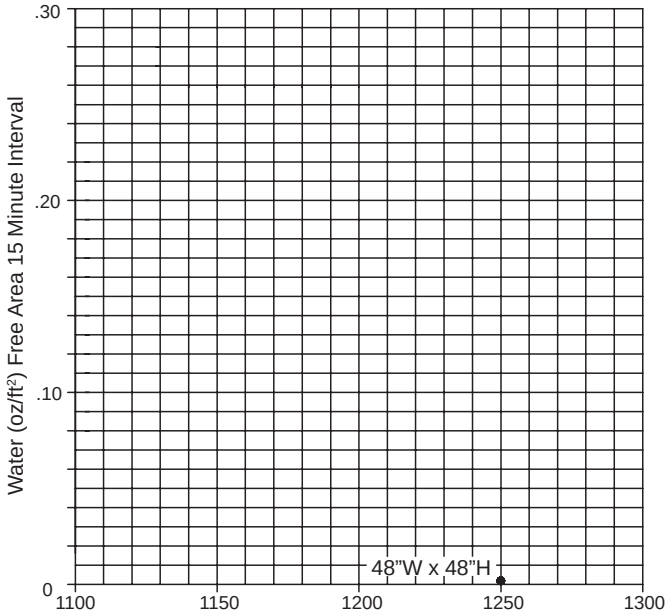
Pressure Drop: 0.16 in.wg at 1250 fpm and 10,638 scfm
Free Area: 8.51 sq.ft. = 53% for 48”W x 48”H test size

Ratings do not include the effects of birdscreen.

Intake Pressure Drop



Water Penetration



The beginning point of water penetration is above 1250 fpm through the free area of the louver.

*AMCA Standard 500-L Limits Testing of Water Penetration to either a maximum velocity of 1250 fpm or 2.5 ounces of water per sq.ft of louver free area.

Free Area sq.ft.

Height \ Width	12”	24”	36”	48”	60”	72”	84”	96”	108”	120”
12”	0.25	0.76	1.20	1.71	2.15	2.60	3.10	3.55	3.99	4.50
24”	0.58	1.73	2.73	3.88	4.89	5.90	7.05	8.05	9.06	10.21
36”	0.90	2.69	4.26	6.06	7.63	9.20	10.99	12.56	14.13	15.93
48”	1.22	3.66	5.79	8.51	10.36	12.50	14.94	17.07	19.20	21.64
60”	1.54	4.62	7.32	10.40	13.10	15.80	18.88	21.58	24.28	27.36
72”	1.86	5.59	8.85	12.58	15.84	19.10	22.83	26.09	29.35	33.07
84”	2.19	6.56	10.38	14.75	18.58	22.40	26.77	30.59	34.42	38.79
96”	2.51	7.52	11.91	16.92	21.31	25.70	30.71	35.10	39.49	44.50
108’	2.83	8.49	13.44	19.10	24.05	29.00	34.66	39.61	44.56	50.22
120”	3.15	9.45	14.97	21.27	26.79	32.30	38.60	44.12	49.63	55.94

amca CERTIFIED RATINGS — WATER PENETRATION — AIR PERFORMANCE — WIND DRIVEN RAIN — AIR MOVEMENT AND CONTROL ASSOCIATION INTERNATIONAL, INC.

Louvers & Dampers certifies that the Model IL64 shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with the AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified ratings seal applies to Air Performance, Water Penetration, and Wind Driven Rain Ratings only.

Louvers & Dampers — A Metalek Company

In the interest of product development, Louvers & Dampers reserves the right to make changes without notice.

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Wind Driven Rainwater Penetration Test Conducted to AMCA Standard 500-L
Test Size 1m x 1m (39.37"W x 39.37"H) Core Area, 41.88" x 41.75" Nominal. Louver Free Area 6.0 sq.ft.

Core Ventilation (m/s)	0.0	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	Rainfall/mph
fpm	0	98	197	295	394	492	591	689	787	886	985	3"/hr Rainfall and 29 mph Velocity
Free Area Ventilation cfm											10,710	
Free Area Velocity fpm											1785	
Effective Rating Class	A	A	A	A	A	A	A	A	A	A	A	
Effectiveness Ratio %											100	
fpm											952	8"/hr Rainfall and 50 mph Velocity
Free Area Ventilation cfm											10,248	
Free Area Velocity fpm											1709	
Effective Rating Class	A	A	A	A	A	A	A	A	A	A	A	
Effectiveness Ratio %											100	

Discharge Coefficient
Intake Cd = 0.46 (Class I)

Wind Driven Rain Penetration Classifications

Class	Effectiveness %
A	1% - 0.99%
B	0.989% - 0.95%
C	0.949% - 0.80%
D	Below 0.80%

Discharge Loss Coefficient Classifications

Class	Effectiveness %
1	0.4 and Above
2	3.3 - 0.399
3	0.2 - 0.299
4	0.199 and Below

Class I Loss Coefficient has the least resistance to airflow.

1. Core Area is the front opening of a louver assembly with the blades removed.
2. Core Area Velocity is the airflow rate through the louver divided by the Core Area (39.37"W x 39.37"H)
3. Free Area is the minimum area through which air can pass. It is determined by multiplying the sum of the minimum distances between intermediate blades, top blade and head, bottom blade and sill, by the minimum distance between jambs.
4. Discharge Loss Coefficient is calculated by dividing a louver actual airflow rate vs. a theoretical airflow for the opening. Providing an indication of the louver air flow characteristics.

This is to certify that the "Building Services Research and Information Association" (BSRIA) have type tested the product described below to the requirements contained in the 5th edition of the HEVAC Technical Specifications "Laboratory testing and ratings of weather louvers when subjected to simulated wind driven rain".

Test Results
Based on Calibration Plate and Louver Core SIze 10.76 sq.ft. ($1m^2$)

	cfm (m^3/s)						
Ventilation Rate Air Flow (cfm)	0	1059 (0.5)	2119 (1.0)	3178 (1.5)	4238 (2.0)	5297 (2.5)	7416 (3.5)
Rating Achieved	A	A	A	A	A	A	A

Coefficient of Discharge or Entry: 0.419, Class I
WInd Speed: 30.2 mph (13.5 m/s) Rainfall: 2.95 in/hr (75 mm/hr)

Example: $\frac{\text{7416 cfm (3.5 } m^3/s)}{\text{10.76 sq.ft. (1 } m^2)}$ = 689 fpm Face Velocity / (Sample Louver Free Area 48%) = 1435 fpm Free Area Velocity

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Classifications of Weather Louvers
Extract taken from the HEVAC Technical Specification for reference purposes only.

Classification for Rain Penetration

Class	Effectiveness %	Maximum Allowed Penetration of Simulated Rain oz/ft²/hr (l/m²/hr)
A	1 - 0.99%	2.4 (0.75)
B	0.989 - 0.95%	11.8 (3.75)
C	0.949 - 0.80%	47.1 (15.0)
D	Below 0.8	Greater Than 47.1 (15.0)

Classification for Coefficient of Discharge or Entry

Class	Effectiveness %
1	0.4 and Above
2	0.3 - 0.399
3	0.2 - 0.299
4	0.199 and below

This test, HEVAC, result with the louver obtaining the highest performance classifications for this test method.

HEVAC Testing at Other Windspeeds and Rainfall Rates:
30 mph at 4.72” Rainfall at 1517 fpm (12,910 cfm) Ventilation Rate thru Free Area is 100% Effective
55 mph at 2.95” Rainfall at 1517 fpm (12,910 cfm) Ventilation Rate thru Free Area is 100% Effective
55 mph at 4.72” Rainfall at 1600 fpm (13,616 cfm) Ventilation Rate thru Free Area is 99.99% Effective

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