



**EME737 WIND-DRIVEN RAIN RESISTANT STATIONARY LOUVER**  
EXTRUDED ALUMINUM

**STANDARD CONSTRUCTION**

**FRAME**

Single frame design produced from 6063T6 extruded aluminum with .080" (2.1) nominal wall thickness. Frame depth is 7" (178).

**BLADES**

Sight-proof double blade design produced from 6063T6 extruded aluminum with .080" (2.1) nominal wall thickness. Blades are 7" (178) deep, positioned at 37 1/2" angle and spaced at approximately 4 3/4" (121) center to center. Interior blades are 3" (76) deep and positioned at approximately 2 3/8" (60) center to center alternating with full depth blades.

**SCREEN**

5/8" x .040" (16 x 1) expanded flattened aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

**EXTENDED SILL**

.081" (2.1) formed aluminum with end dams. Not provided with front flange frame.

**FINISH**

Mill.

**MINIMUM SIZE**

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

**APPROXIMATE SHIPPING WEIGHT**

8 lbs. per sq. ft. (39 kg/m<sup>2</sup>)

**MAXIMUM FACTORY ASSEMBLY SIZE**

Shall be 60 sq. ft. (3.5m<sup>2</sup>) per section, not to exceed 120" x 72"h (3048 x 1829) or 72"w x 120"h (1829 x 3048).

Louvers larger than the maximum single factory assembly size will require field assembly of smaller sections.

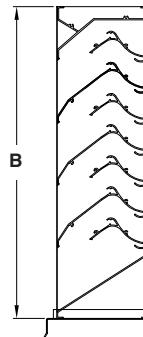
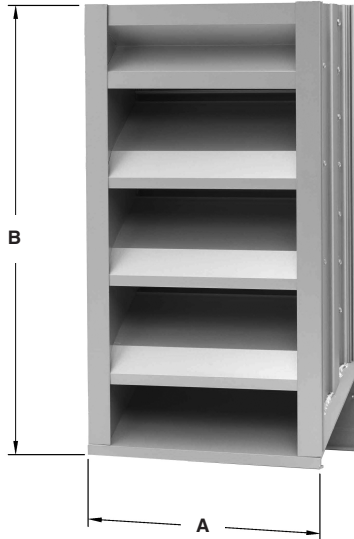
**SUPPORTS**

Louvers may be provided with rear mounted blade supports that increase overall louver depth depending on louver size, assembly configuration or windload.

Consult Ruskin for additional information.

**NOTES:**

1. Dimensions in inches, parenthesis ( ) indicate millimeters.
2. Units furnished 1/4" (6) smaller than given opening dimensions.



**FEATURES**

- Two-piece horizontal alternating blade design. Provides protection from wind-driven rain penetration, reducing damage and additional operating expenses.
- 7" (102) deep exterior blades are continuous style without visible mullions.
- May be ordered without interior blades and frames at areas that are inactive or do not need wind-driven rain protection.
- Tested in the AMCA 500-L Wind-Driven Rain Penetration Test.
- Published performance ratings based on testing in accordance with AMCA Publication 500L.
- 45% Free Area.
- Aluminum construction for low maintenance and high resistance to corrosion.

**VARIATIONS**

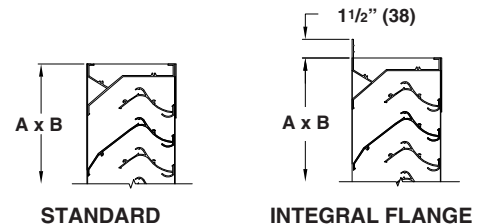
- Insulated or sheet blank-off panels
- Front or rear security bars.
- Filter racks.
- Installation angles.
- A variety of bird and insect screens.

**Finishes:**

- Prime coat.
- Baked enamel (modified fluoropolymer).
- Epoxy
- Pearlized 50 & 70.
- Kynar.
- Clear and color anodize.

Consult Ruskin for other special requirements.

**FRAME CONSTRUCTION OPTIONS**



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

# WIND-DRIVEN RAIN PERFORMANCE

Test size is 1m x 1m (39" x 39") core area, 1.04m x 1.12m (41" x 44") nominal. Free Area of test louver is 5.48 ft<sup>2</sup> (.51m<sup>2</sup>).

## 29 mph (47 kph) wind & 3" (76) per hour rain conditions

Core Velocity: fpm (m/s)	Airflow cfm (m <sup>3</sup> /min)	Free Area Velocity: fpm (m/sec.)	Effectiveness Ratio	Class <sub>s</sub>	Discharge Loss Class <sub>s</sub> Intake
0 (0)	0 (0)	0 (0)	99.7%	A	3
107 (0.5)	1156 (32.7)	211 (1.1)	99.7%	A	3
196 (1.0)	2106 (59.6)	384 (2.0)	98.8%	B	3
279 (1.5)	3003 (85.0)	548 (2.8)	98.3%	B	3
397 (2.0)	4276 (121.1)	780 (4.0)	97.6%	B	3
500 (2.5)	5381 (152.4)	982 (5.0)	96.1%	B	3
587 (3.0)	6315 (178.8)	1152 (5.9)	94.3%	C	3
701 (3.5)	7549 (213.8)	1378 (7.0)	89.0%	C	3

## 50 mph (80 kph) wind & 8" (203) per hour rain conditions

Core Velocity: fpm (m/s)	Airflow cfm (m <sup>3</sup> /min)	Free Area Velocity: fpm (m/sec.)	Effectiveness Ratio	Class <sub>s</sub>	Discharge Loss Class <sub>s</sub> Intake
0 (0)	0 (0)	0 (0)	96.7%	B	3
88 (0.5)	947 (26.8)	173 (0.9)	96.2%	B	3
200 (1.0)	2152 (60.9)	393 (2.0)	94.5%	C	3
297 (1.5)	3203 (90.7)	584 (3.0)	92.8%	C	3
406 (2.0)	4375 (123.9)	798 (4.1)	90.2%	C	3
483 (2.5)	5199 (147.2)	949 (4.8)	86.7%	C	3
587 (3.0)	6315 (178.8)	1152 (5.9)	81.1%	C	3
684 (3.5)	7369 (208.7)	1345 (6.8)	75.1%	D	3

Ratings include the effect of an extended sill

### NOTES

- Core area is the open area of the louver face (face area less louver frames). Core Velocity is the airflow velocity through the Core Area of the louver (1m x 1m).
- Free Area of test size is calculated per AMCA standard 500-L.
- Wind Driven Rain Penetration Classes:

Class	Effectiveness
A	1 to .99
B	0.989 to 0.95
C	0.949 to 0.80
D	Below 0.8

- Intake Discharge Loss Class 3

Discharge Loss Coefficient is calculated by dividing a louvers' actual airflow rate vs. a theoretical airflow for the opening. It provides an indication of the louvers' airflow characteristics.

### Discharge Loss Classes:

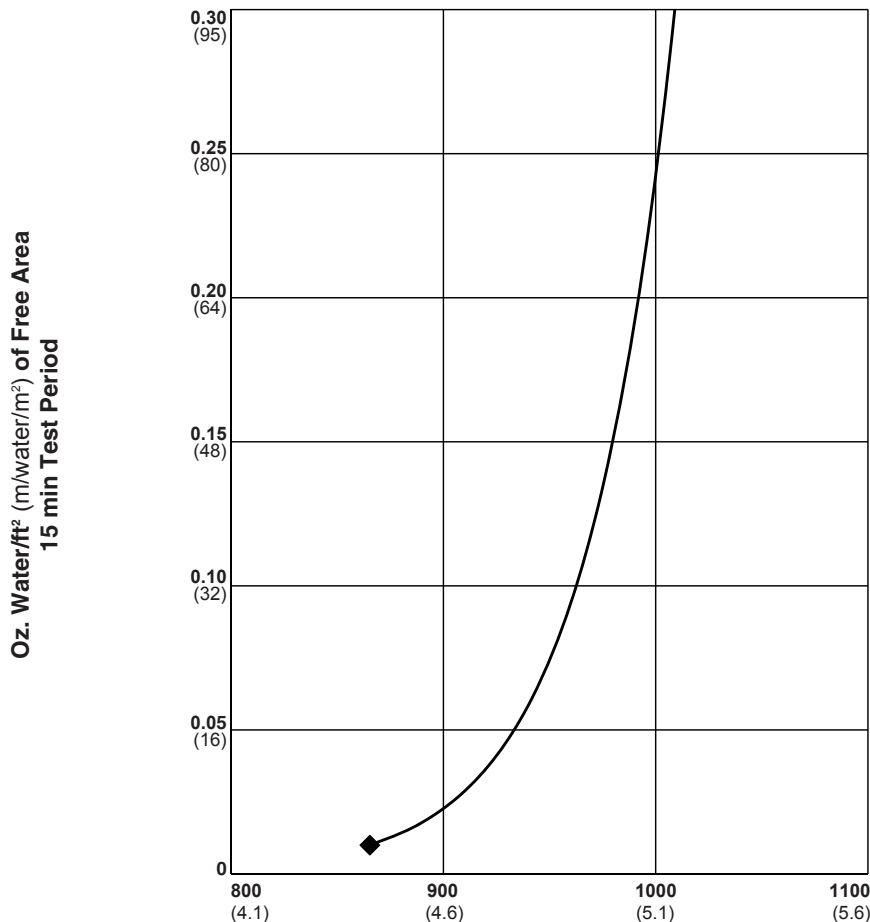
#### Class Discharge Loss Coefficient

- 0.4 and above
- 0.3 to 0.399
- 0.2 to 0.299
- 0.199 and below

(The higher the coefficient, the less resistance to airflow.)

- The AMCA Wind Driven Rain Test is performed in a laboratory environment and incorporates controlled wind, water and system airflow effects. In actual field installations, storms may create conditions not considered by the AMCA test. Penthouse and similar applications where wind can pass through multiple louvers in an enclosure is another condition that is not simulated by AMCA tests. These applications can create elevated water penetration rates through any louver. Because of these uncontrolled situations, it is recommended that provisions to manage water penetration through louvers be included in the building design.

Test size 48" x 48" (1219 x 1219)  
Beginning point of water penetration at .01 oz./sq. ft. is 865 fpm (248 m/min.)



Ruskin® Company 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 Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings Seal applies to air performance ratings and wind driven rain ratings only.

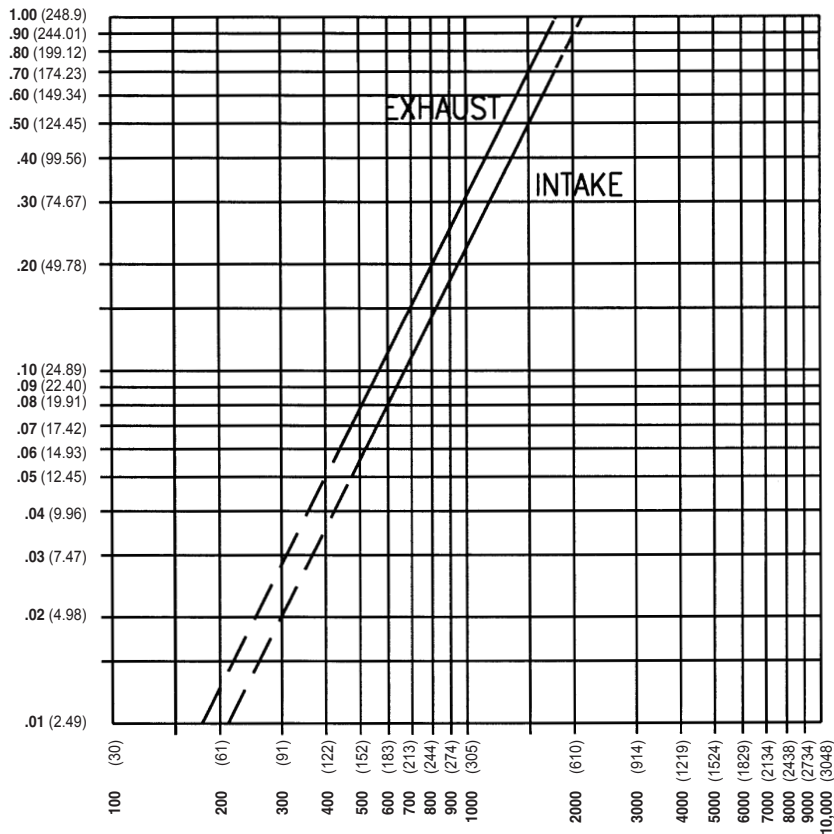
# FREE AREA GUIDE

Free Area Guide shows free area in ft<sup>2</sup> and m<sup>2</sup> for various sizes of EME737.  
Height in Inches and Meters

	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
12	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
0.30	0.06	0.10	0.14	0.18	0.22	0.26	0.30	0.34	0.38	0.42	0.46	0.50	0.54	0.58	0.62	0.66	0.70	0.74	0.77
18	0.46	0.70	0.91	1.12	1.33	1.54	1.75	1.96	2.17	2.38	2.59	2.80	3.01	3.22	3.43	3.64	3.85	4.06	4.27
0.46	0.03	0.05	0.07	0.09	0.11	0.13	0.15	0.17	0.19	0.21	0.23	0.25	0.27	0.29	0.31	0.33	0.35	0.37	0.39
24	0.61	0.91	1.21	1.51	1.81	2.11	2.41	2.71	3.01	3.31	3.61	3.91	4.21	4.51	4.81	5.11	5.41	5.71	6.01
0.61	0.05	0.08	0.11	0.15	0.18	0.21	0.24	0.27	0.30	0.34	0.37	0.40	0.43	0.46	0.49	0.53	0.56	0.59	0.62
30	0.76	1.12	1.48	1.84	2.20	2.56	2.92	3.28	3.64	4.00	4.36	4.72	5.08	5.44	5.80	6.16	6.52	6.88	7.24
0.76	0.08	0.12	0.17	0.22	0.27	0.32	0.36	0.41	0.46	0.51	0.56	0.60	0.65	0.70	0.75	0.80	0.84	0.89	0.94
36	0.91	1.37	1.83	2.29	2.75	3.21	3.67	4.13	4.59	5.05	5.51	5.97	6.43	6.89	7.35	7.81	8.27	8.73	9.19
0.91	0.10	0.16	0.22	0.28	0.33	0.39	0.45	0.51	0.57	0.63	0.69	0.75	0.81	0.87	0.93	0.99	1.05	1.11	1.17
42	1.07	1.61	2.15	2.69	3.23	3.77	4.31	4.85	5.39	5.93	6.47	7.01	7.55	8.09	8.63	9.17	9.71	10.25	10.79
1.07	0.12	0.20	0.27	0.35	0.43	0.50	0.58	0.65	0.73	0.81	0.88	0.96	1.03	1.11	1.19	1.26	1.34	1.41	1.49
48	1.22	1.81	2.40	2.99	3.58	4.17	4.76	5.35	5.94	6.53	7.12	7.71	8.30	8.89	9.48	10.07	10.66	11.25	11.84
1.22	0.14	0.23	0.32	0.40	0.49	0.58	0.67	0.76	0.84	0.93	1.02	1.11	1.19	1.28	1.37	1.46	1.55	1.63	1.72
54	1.37	2.00	2.63	3.26	3.89	4.52	5.15	5.78	6.41	7.04	7.67	8.30	8.93	9.56	10.19	10.82	11.45	12.08	12.71
1.37	0.17	0.27	0.37	0.48	0.58	0.69	0.79	0.89	1.00	1.10	1.21	1.31	1.41	1.52	1.62	1.73	1.83	1.93	2.04
60	1.52	2.20	2.88	3.56	4.24	4.92	5.60	6.28	6.96	7.64	8.32	9.00	9.68	10.36	11.04	11.72	12.40	13.08	13.76
1.52	0.19	0.30	0.42	0.53	0.65	0.76	0.88	1.00	1.11	1.23	1.34	1.46	1.58	1.69	1.81	1.92	2.04	2.15	2.27
66	1.68	2.42	3.16	3.90	4.64	5.38	6.12	6.86	7.60	8.34	9.08	9.82	10.56	11.30	12.04	12.78	13.52	14.26	15.00
1.68	0.21	0.34	0.48	0.61	0.74	0.87	1.00	1.14	1.27	1.40	1.53	1.66	1.80	1.93	2.06	2.19	2.32	2.46	2.59
72	1.83	2.64	3.45	4.26	5.07	5.88	6.69	7.50	8.31	9.12	9.93	10.74	11.55	12.36	13.17	13.98	14.79	15.60	16.41
1.83	0.23	0.37	0.52	0.66	0.81	0.95	1.09	1.24	1.38	1.53	1.67	1.81	1.96	2.10	2.24	2.39	2.53	2.68	2.82
78	1.98	2.85	3.72	4.59	5.46	6.33	7.20	8.07	8.94	9.81	10.68	11.55	12.42	13.29	14.16	15.03	15.90	16.77	17.64
1.98	0.26	0.42	0.58	0.74	0.90	1.06	1.22	1.38	1.54	1.70	1.86	2.02	2.18	2.34	2.50	2.66	2.82	2.98	3.14
84	2.13	3.06	3.99	4.92	5.85	6.78	7.71	8.64	9.57	10.50	11.43	12.36	13.29	14.22	15.15	16.08	17.01	17.94	18.87
2.13	0.28	0.45	0.62	0.79	0.96	1.13	1.31	1.48	1.65	1.82	1.99	2.16	2.33	2.50	2.67	2.84	3.01	3.18	3.35
90	2.29	3.28	4.27	5.26	6.25	7.24	8.23	9.22	10.21	11.20	12.19	13.18	14.17	15.16	16.15	17.14	18.13	19.12	20.11
2.29	0.30	0.49	0.68	0.87	1.05	1.24	1.43	1.62	1.81	1.99	2.18	2.37	2.56	2.75	2.94	3.13	3.32	3.51	3.70
96	2.44	3.49	4.54	5.59	6.64	7.69	8.74	9.79	10.84	11.89	12.94	13.99	15.04	16.09	17.14	18.19	19.24	20.29	21.34
2.44	0.32	0.52	0.72	0.92	1.12	1.32	1.52	1.72	1.92	2.12	2.32	2.52	2.72	2.92	3.12	3.32	3.52	3.72	3.92
102	2.59	3.70	4.81	5.92	7.03	8.14	9.25	10.36	11.47	12.58	13.69	14.80	15.91	17.02	18.13	19.24	20.35	21.46	22.57
2.59	0.35	0.56	0.78	1.00	1.21	1.43	1.64	1.86	2.08	2.29	2.51	2.73	2.95	3.17	3.39	3.61	3.83	4.05	4.27
108	2.74	3.91	5.08	6.25	7.42	8.59	9.76	10.93	12.10	13.27	14.44	15.61	16.78	17.95	19.12	20.29	21.46	22.63	23.80
2.74	0.37	0.59	0.82	1.05	1.28	1.51	1.73	1.96	2.19	2.42	2.64	2.87	3.10	3.33	3.56	3.79	4.02	4.25	4.48
114	2.90	4.13	5.36	6.59	7.82	9.05	10.28	11.51	12.74	13.97	15.20	16.43	17.66	18.89	20.12	21.35	22.58	23.81	25.04
2.90	0.39	0.64	0.88	1.12	1.37	1.61	1.86	2.10	2.34	2.59	2.83	3.07	3.31	3.55	3.79	4.03	4.27	4.51	4.75
120	3.05	4.31	5.57	6.83	8.09	9.35	10.61	11.87	13.13	14.39	15.65	16.91	18.17	19.43	20.69	21.95	23.21	24.47	25.73
3.05	0.41	0.67	0.92	1.18	1.43	1.69	1.95	2.20	2.46	2.71	2.97	3.23	3.49	3.75	4.01	4.27	4.53	4.79	5.05

## PRESSURE DROP

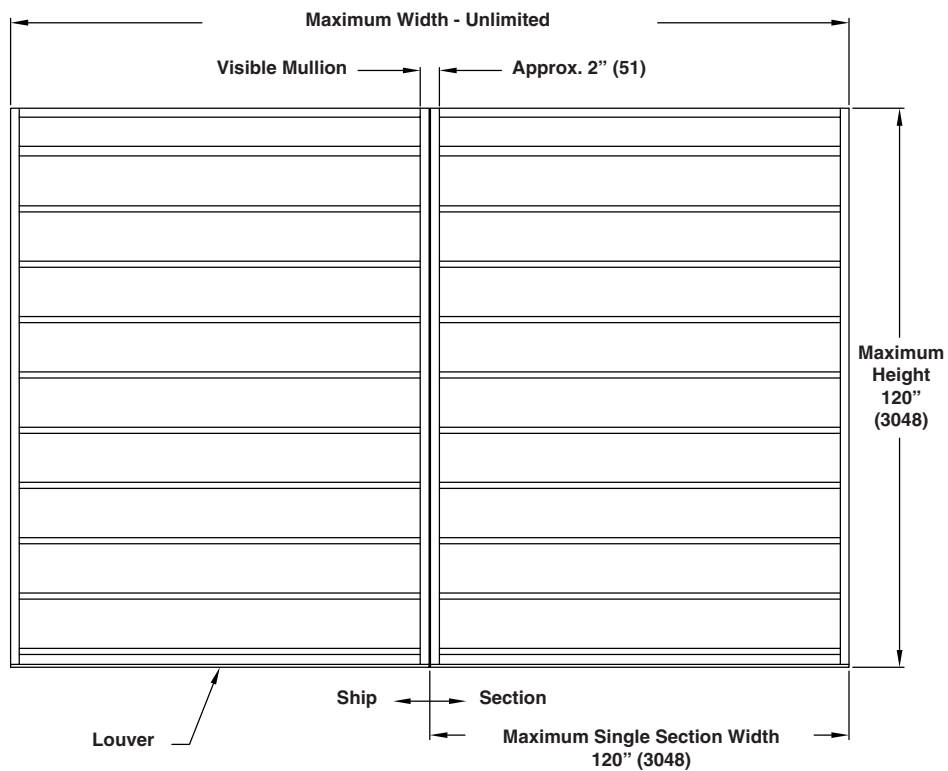
Test size 48" wide x 48" high (1219 x 1219)



Ratings do not include the effect of a bird screen.

Air Velocity in feet and (meters) per minute through Free Area  
(Data corrected to standard air density and AMCA figure or figures tested to 5.5)

## TYPICAL INSTALLATION DETAILS



1. Reference separate installation instruction sheets for installation details. It is the responsibility of the installing contractor to properly install the louvers per the appropriate detail.
2. Louvers wider than the maximum single section width will be shipped in multiple sections and will require field assembly. Field assembly is not by Ruskin.

**RUSKIN**<sup>®</sup>

3900 Dr. Greaves Rd.  
Kansas City, MO 64030  
(816) 761-7476  
FAX (816) 765-8955  
www.ruskin.com

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