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## EME520V WIND DRIVEN RAIN RESISTANT STATIONARY LOUVER EXTRUDED ALUMINUM

### STANDARD CONSTRUCTION

#### FRAME

5" (127) deep, 6063T6 extruded aluminum with .081" (2.1) nominal wall thickness.

#### BLADES

6063T6 extruded aluminum .063" (1.6) nominal wall thickness. Blades are mounted vertically, sightproof and spaced approximately 2" (51) center to center.

#### SCREEN

1/2" x .063" (13 x 1.6) square mesh aluminum bird screen in removable frame. Screen adds approximately 1/2" (13) to louver depth.

#### EXTENDED SILL

.081" (2.1) formed aluminum.

#### FINISH

Mill.

#### MINIMUM SIZE

12"w x 12"h (305 x 203).

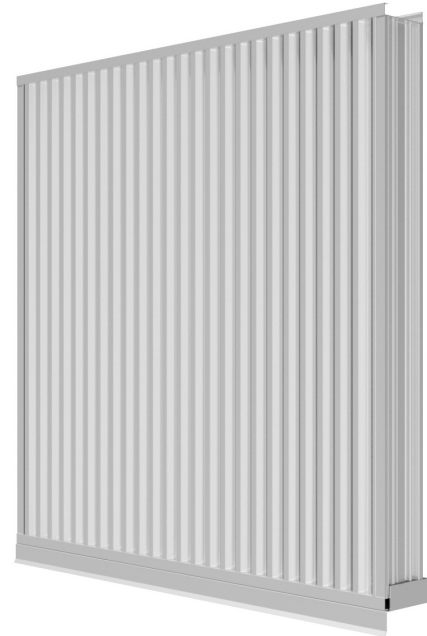
#### APPROXIMATE SHIPPING WEIGHT

7 lbs. per sq. ft. (34.2 kg/m<sup>2</sup>)

#### MAXIMUM SINGLE SECTION SIZE

Single sections shall not exceed 120"w x 90"h (3048 x 2286) or 90"w x 120"h (2286 x 3048). Lifting lugs provided on louvers 48" x 72" (1219 x 1829) and larger.

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



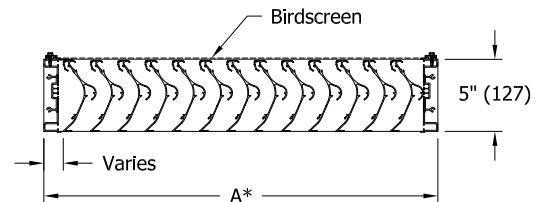
### FEATURES

- 43% free area.
- Closely spaced vertical blades prevent the penetration of wind-driven rain, reducing damage and additional operating expenses.
- Published performance ratings based on testing in accordance with AMCA Publication 511.
- Pressure drop of .18" w.g. (44.8 Pa) at 989 FPM Free Area Velocity
- Withstands 40 psf (1.9 kPa) windload.
- Aluminum construction for low maintenance and high resistance to corrosion.
- Mechanically Fastened Construction.
- Extended Sill with End Dams.

### OPTIONS

- Extended sill.
- Hinged frame.
- 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 50 & 70, Kynar, clear and color anodize. (Some variation in anodize color consistency is possible).

All variations are available at additional cost.



Consult Ruskin for other special requirements.

Please reference our website  
[www.ruskin.com](http://www.ruskin.com) for up to date  
LEED® information.

Dimensions in inches, parenthesis ( ) indicate millimeters.

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

# WIND-DRIVEN RAIN PERFORMANCE – AMCA 500-L WIND-DRIVEN RAIN TEST

Test size is 1m x 1m (39" x 39") core area, 1.05m x 1.08m (41 1/4" x 42 5/16") nominal. Free Area of test louver is 4.71 ft<sup>2</sup> (.44m<sup>2</sup>).

Wind Velocity mph (kph)	Rain Fall Rate In./hr. (mm/hr.)	Core Velocity <sub>1</sub> fpm (m/s)	Airflow cfm (m <sup>3</sup> /min)	Free Area Velocity <sub>2</sub> fpm (m/sec.)	Effectiveness Ratio	Class <sub>3,4</sub>	Discharge Loss Class Intake <sub>5</sub>
29 (46.4)	3 (76)	979 (5)	10,537 (298)	2,237 (11.4)	100%	A	3
50 (80.5)	8 (203)	989 (5)	10,650 (302)	2,261 (11.5)	100%	A	3

## NOTES

Ratings include the effect of an extended sill

- 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). 5 m/s is the maximum core velocity utilized in this test.
- 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
- The EME520V provides class A performance at all velocities up to and including 5 m/s core velocity.
- Discharge Loss Coefficient is calculated by dividing a louver's A/C as follows:  $A/C = \frac{A}{C}$

- 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.

## Class Discharge Loss Coefficient

- |   |                 |
|---|-----------------|
| 1 | 0.4 and above   |
| 2 | 0.3 to 0.399    |
| 3 | 0.2 to 0.299    |
| 4 | 0.199 and below |

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



Ruskin® Company certifies that the EME520V 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.

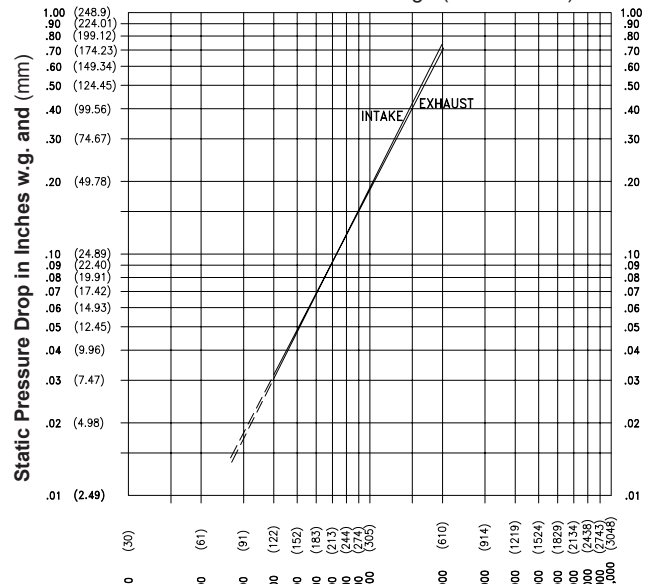
## FREE AREA GUIDE

Free Area Guide shows free area in ft<sup>2</sup> and m<sup>2</sup> for various sizes of EME520V. Width – Inches and Meters

Height – Inches and Meters	12		18		24		30		36		42		48		54		60		66		72		78		84		90		96		102		108		114		120	
	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m	ft	m		
12	0.30	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	3.21	3.37	3.53	3.69	3.85	4.01	4.17	4.33	4.49	4.65	4.81	4.97	5.13	5.29	5.45	5.61	5.77	5.93
18	0.46	0.46	0.62	0.84	1.06	1.28	1.50	1.72	1.94	2.16	2.38	2.60	2.82	3.04	3.26	3.48	3.70	3.92	4.14	4.36	4.58	4.80	5.02	5.24	5.46	5.68	5.90	6.12	6.34	6.56	6.78	7.00	7.22	7.44	7.66	7.88	8.10	8.32
24	0.61	0.61	0.81	1.08	1.35	1.62	1.89	2.16	2.43	2.70	2.97	3.24	3.51	3.78	4.05	4.32	4.59	4.86	5.13	5.40	5.67	5.94	6.21	6.48	6.75	7.02	7.29	7.56	7.83	8.10	8.37	8.64	8.91	9.18	9.45	9.72	9.99	10.26
30	0.76	0.76	1.01	1.34	1.67	2.00	2.33	2.66	2.99	3.32	3.65	3.98	4.31	4.64	4.97	5.30	5.63	5.96	6.29	6.62	6.95	7.28	7.61	7.94	8.27	8.60	8.93	9.26	9.59	9.92	10.25	10.58	10.91	11.24	11.57	11.90	12.23	12.56
36	0.91	0.91	1.21	1.58	1.95	2.32	2.69	3.06	3.43	3.80	4.17	4.54	4.91	5.28	5.65	6.02	6.39	6.76	7.13	7.50	7.87	8.24	8.61	8.98	9.35	9.72	10.09	10.46	10.83	11.20	11.57	11.94	12.31	12.68	13.05	13.42	13.79	14.16
42	1.07	1.07	1.42	1.84	2.26	2.68	3.10	3.52	3.94	4.36	4.78	5.20	5.62	6.04	6.46	6.88	7.30	7.72	8.14	8.56	8.98	9.40	9.82	10.24	10.66	11.08	11.50	11.92	12.34	12.76	13.18	13.60	14.02	14.44	14.86	15.28	15.70	16.12
48	1.22	1.22	1.62	2.08	2.54	3.00	3.46	3.92	4.38	4.84	5.30	5.76	6.22	6.68	7.14	7.60	8.06	8.52	8.98	9.44	9.90	10.36	10.82	11.28	11.74	12.20	12.66	13.12	13.58	14.04	14.50	14.96	15.42	15.88	16.34	16.80	17.26	17.72
54	1.37	1.37	1.81	2.32	2.83	3.34	3.85	4.36	4.87	5.38	5.89	6.40	6.91	7.42	7.93	8.44	8.95	9.46	9.97	10.48	10.99	11.50	12.01	12.52	13.03	13.54	14.05	14.56	15.07	15.58	16.09	16.60	17.11	17.62	18.13	18.64	19.15	19.66
60	1.52	1.52	1.99	2.54	3.09	3.64	4.19	4.74	5.29	5.84	6.39	6.94	7.49	8.04	8.59	9.14	9.69	10.24	10.79	11.34	11.89	12.44	12.99	13.54	14.09	14.64	15.19	15.74	16.29	16.84	17.39	17.94	18.49	19.04	19.59	20.14	20.69	
66	1.68	1.68	2.19	2.76	3.33	3.90	4.47	5.04	5.61	6.18	6.75	7.32	7.89	8.46	9.03	9.60	10.17	10.74	11.31	11.88	12.45	13.02	13.59	14.16	14.73	15.30	15.87	16.44	17.01	17.58	18.15	18.72	19.29	19.86	20.43	21.00	21.57	22.14
72	1.83	1.83	2.38	2.98	3.57	4.16	4.75	5.34	5.93	6.52	7.11	7.70	8.29	8.88	9.47	10.06	10.65	11.24	11.83	12.42	13.01	13.60	14.19	14.78	15.37	15.96	16.55	17.14	17.73	18.32	18.91	19.50	20.09	20.68	21.27	21.86	22.45	
78	1.98	1.98	2.57	3.19	3.81	4.43	5.05	5.67	6.29	6.91	7.53	8.15	8.77	9.39	10.01	10.63	11.25	11.87	12.49	13.11	13.73	14.35	14.97	15.59	16.21	16.83	17.45	18.07	18.69	19.31	19.93	20.55	21.17	21.79	22.41	23.03	23.65	
84	2.13	2.13	2.74	3.38	4.01	4.64	5.27	5.90	6.53	7.16	7.79	8.42	9.05	9.68	10.31	10.94	11.57	12.20	12.83	13.46	14.09	14.72	15.35	15.98	16.61	17.24	17.87	18.50	19.13	19.76	20.39	21.02	21.65	22.28	22.91	23.54	24.17	
90	2.29	2.29	2.92	3.58	4.23	4.88	5.53	6.18	6.83	7.48	8.13	8.78	9.43	10.08	10.73	11.38	12.03	12.68	13.33	13.98	14.63	15.28	15.93	16.58	17.23	17.88	18.53	19.18	19.83	20.48	21.13	21.78	22.43	23.08	23.73	24.38		
96	2.44	2.44	3.09	3.76	4.43	5.10	5.77	6.44	7.11	7.78	8.45	9.12	9.79	10.46	11.13	11.80	12.47	13.14	13.81	14.48	15.15	15.82	16.49	17.16	17.83	18.50	19.17	19.84	20.51	21.18	21.85	22.52	23.19	23.86	24.53	25.20		
102	2.59	2.59	3.26	3.94	4.61	5.28	5.95	6.62	7.29	7.96	8.63	9.30	9.97	10.64	11.31	11.98	12.65	13.32	13.99	14.66	15.33	16.00	16.67	17.34	18.01	18.68	19.35	20.02	20.69	21.36	22.03	22.70	23.37	24.04	24.71			
108	2.74	2.74	3.42	4.11	4.80	5.49	6.18	6.87	7.56	8.25	8.94	9.63	10.32	11.01	11.70	12.39	13.08	13.77	14.46	15.15	15.84	16.53	17.22	17.91	18.60	19.29	19.98	20.67	21.36	22.05	22.74	23.43	24.12	24.81				
114	2.90	2.90	3.59	4.29	4.99	5.69	6.39	7.09	7.79	8.49	9.19	9.89	10.59	11.29	11.99	12.69	13.39	14.09	14.79	15.49	16.19	16.89	17.59	18.29	18.99	19.69	20.39	21.09	21.79	22.49	23.19	23.89	24.59	25.29				
120	3.05	3.05	3.75	4.46	5.17	5.88	6.59	7.30	8.01	8.72	9.43	10.14	10.85	11.56	12.27	12.98	13.69	14.40	15.11	15.82	16.53	17.24	17.95	18.66	19.37	20.08	20.79	21.50	22.21	22.92	23.63	24.34	25.05	25.76				

## PRESSURE DROP

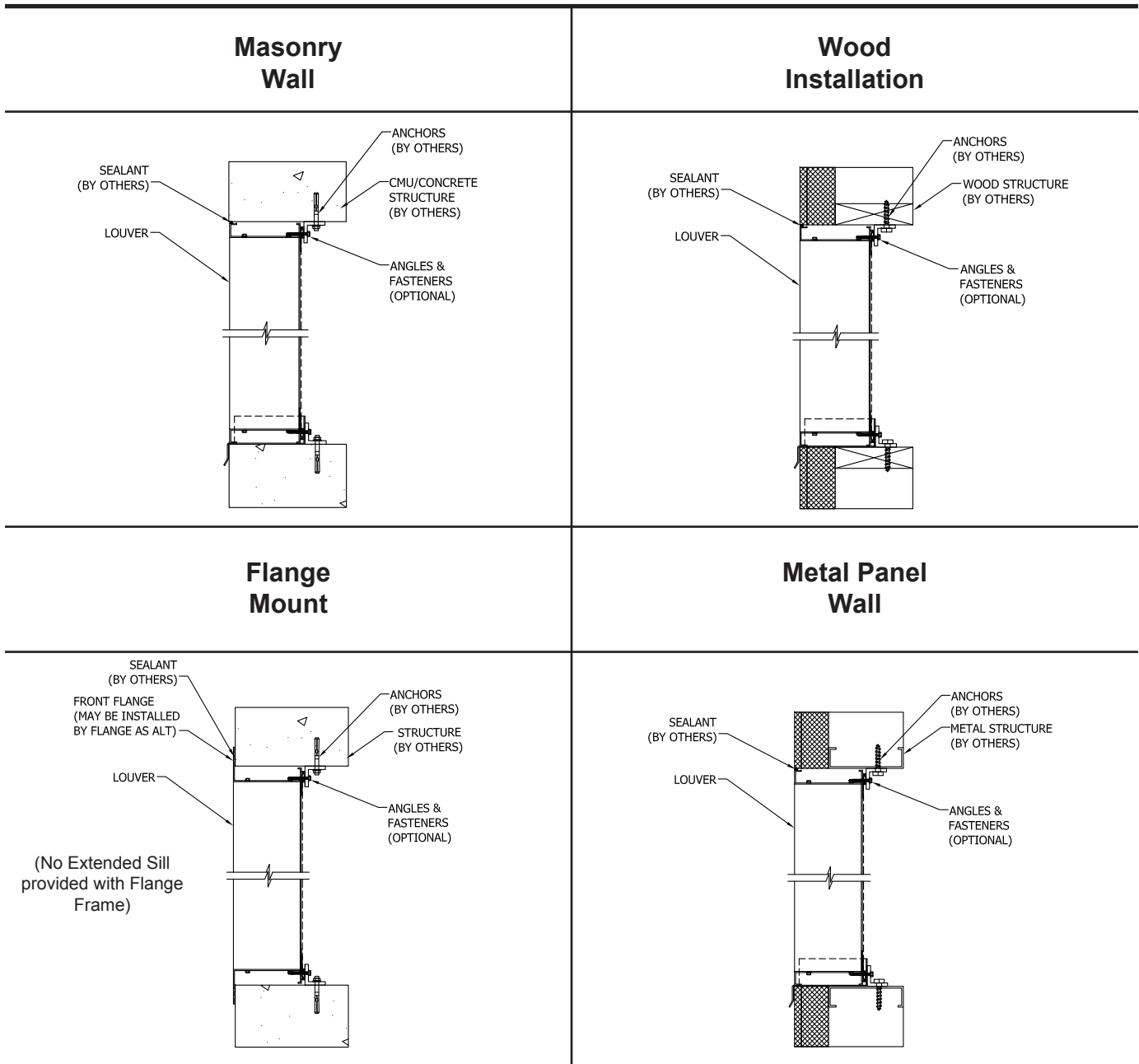
Test size 48" wide x 48" high (1219 x 1219)



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)

Ratings do not include the effect of a bird screen.

## TYPICAL INSTALLATION DETAILS



Options available at additional cost.

## SUGGESTED SPECIFICATION

Furnish and install louvers as hereinafter specified where shown on plans or as described in schedules. Louvers shall possess stationary vertical blades designed to prevent the penetration of wind driven rain. Louver blades shall be contained within a 5" (127) frame. Extended sill shall be provided to capture and drain water to exterior of building. Louver components (heads, jambs, sill and blades) 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. Louvers shall withstand a wind load of 40 lbs. per sq. ft. (1.9 kPa) (specifier may substitute any loading required).

Louvers shall be *Ruskin*<sup>®</sup> Model EME520V extruded 6063T6 aluminum alloy construction as follows:

- Frame: 5" (127) deep, 6063T6 extruded aluminum with .081" (2.1) nominal wall thickness.
- Blades: .063" (1.6) wall thickness, installed vertically on approximately 2" (51) centers
- Extended Sill: .081" (2.1) wall thickness, with upturned side panels to prevent water leakage.
- Screen: 1/2" x .063" (13 x 1.6) square mesh aluminum bird screen in removable frame.
- Finish: 70% PVDF



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