EME3625 Wind-Driven Rain Resistant Stationary Louver Extruded Aluminum



APPLICATION

The EME3625 is a 3" deep extruded aluminum louver with closely spaced vertical blades that prevent the penetration of wind-driven rain. This louver is designed with exceptional protection against wind-driven rain under severe conditions.

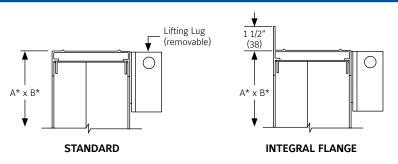
STANDARD CONSTRUCTION

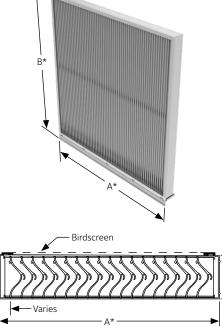
Frame	$3^{\prime\prime}$ (76) deep, 6063T6 extruded aluminum with .073" (1.9) nominal wall thickness.
Blades	6063T6 extruded aluminum .040" (1) nominal wall thickness. Blades are mounted vertically and spaced approximately $3/4$ " (19) center to center.
Screen	$1/2'' \times .063''$ (13 x 1.6) square mesh aluminum bird screen in removable frame. Screen adds approximately $1/2''$ (13) to louver depth.
Extended Sill	.080" (2.0) formed aluminum with end dams.
Finish	Mill.
Minimum Size	12"w x 12"h (305 x 305).
Approximate Shipping Weight	5 lbs. per sq. ft. (24 kg/m²)
Maximum Single Section Size	Shall be 48" x 96" (1219 x 2438). 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

- 46% Free Area.
- AMCA 550 Listed Louver.
- 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.
- Excellent pressure drop performance.
- > Aluminum construction for low maintenance and high resistance to corrosion.
- All welded construction.
- Visible mullion construction. Hidden mullions and continuous blade construction are not available.

FRAME CONSTRUCTION







(76)

VARIATIONS

- Filter racks.
- A variety of bird and insect screens.
- Extended sill.
- Blank off panel.
- Selection of finishes: baked enamel (modified fluoropolymer), epoxy, PVDF, Pearledize 50 & 70, prime coat, 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.

NOTE:

- Dimensions in inches, parenthesis () indicate millimeters.

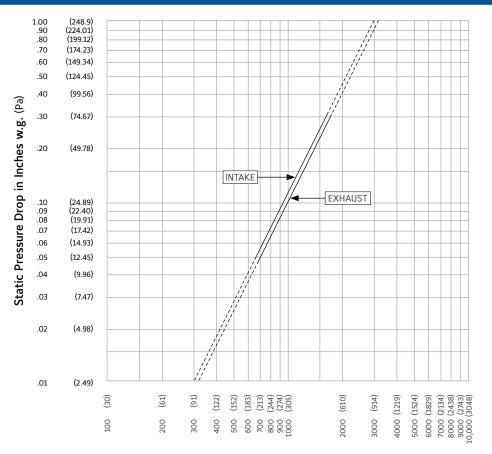
- *Units furnished 1/4" (6) smaller than given opening dimensions.

FREE AREA GUIDE

Free Area Guide shows free area in ft² and m² for various sizes of EME3625.

	width – Inches and Meters									
		12 0.30	18 0.45	24 0.60	30 0.75	36 0.90	42 1.05	48 1.20		
	12 0.30	0.22 0.02	0.37 0.03	0.52 0.05	0.67 0.06	0.82 0.08	0.97 0.09	1.12 0.10		
Height – Inches and Meters	18 0.45	0.43 0.04	0.72 0.07	1.00 0.09	1.29 0.12	1.57 0.15	1.86 0.17	2.15 0.20		
	24 0.60	0.64 0.06	1.06 0.10	1.48 0.14	1.91 0.18	2.33 0.22	2.75 0.26	3.18 0.30		
	30 0.75	0.84 0.08	1.40 0.13	1.96 0.18	2.52 0.23	3.08 0.29	3.64 0.34	4.20 0.39		
	36 0.90	1.05 0.10	1.74 0.16	2.44 0.23	3.14 0.29	3.84 0.36	4.54 0.42	5.23 0.49		
	42 1.05	1.25 0.12	2.09 0.19	2.92 0.27	3.76 0.35	4.59 0.43	5.43 0.50	6.26 0.58		
	48 1.20	1.46 0.14	2.43 0.23	3.40 0.32	4.38 0.41	5.35 0.50	6.32 0.59	7.29 0.68		
	54 1.35	1.66 0.15	2.77 0.26	3.88 0.36	4.99 0.46	6.10 0.57	7.21 067	8.32 0.77		
	60 1.50	1.87 0.17	3.12 0.29	4.36 0.41	5.61 0.52	6.86 0.64	8.11 0.75	9.35 0.87		
	66 1.65	2.08 0.19	3.46 0.32	4.85 0.45	6.23 0.58	7.61 0.71	9.00 0.84	10.38 0.97		
	72 1.00	2.28 0.21	3.80 0.35	5.33 0.50	6.85 0.64	8.37 0.70	9.89 0.92	11.41 1.06		
	78 1.95	2.49 0.23	4.15 0.39	5.81 0.54	7.47 0.69	9.12 0.85	10.78 1.00	12.44 1.16		
	84 2.10	2.69 0.25	4.49 0.42	6.29 0.58	8.08 0.75	9.88 0.92	11.68 1.09	13.47 1.25		
	90 2.25	2.90 0.27	4.83 0.45	6.77 0.63	8.70 0.81	10.64 0.99	12.57 1.17	14.50 1.35		
	96 2.40	3.11 0.29	5.18 0.48	7.25 0.67	9.32 0.87	11.39 1.06	13.46 1.25	15.53 1.44		
	1.00 78 1.95 84 2.10 90 2.25 96	0.21 2.49 0.23 2.69 0.25 2.90 0.27 3.11	0.35 4.15 0.39 4.49 0.42 4.83 0.45 5.18	0.50 5.81 0.54 6.29 0.58 6.77 0.63 7.25	0.64 7.47 0.69 8.08 0.75 8.70 0.81 9.32	0.70 9.12 0.85 9.88 0.92 10.64 0.99 11.39	0.92 10.78 1.00 11.68 1.09 12.57 1.17 13.46	1.0 12. 1.1 13. 1.1 14. 1.1 15.		

Width – Inches and Meters



Air Velocity in feet (meters) per minute through Free Area

Pressure Drop testing performed on 48" x 48" (1219 x 1219) unit. Ratings do not include the effect of a bird screen.

PERFORMANCE DATA



Ruskin Company certifies that the EME3625D shown herein is approved to bear the AMCA Listing Label. The ratings shown are based on tests and procedures performed in accordance with AMCA Publications and comply with the requirements of the AMCA Listing Label Program.

The AMCA Listing Label applies to High Velocity Rain Resistant Louvers.

WIND-DRIVEN RAIN PERFORMANCE

Test size is: 39" x 39" (.99 x .99) core area, 41" x 41" (1.04 x 1.04) nominal. Free Area of test louver is 5.18 ft.² (.48m²).

Wind Velocity mph (kph)	Rainfall Rate In./hr. (mm/hr.)	Core Velocity FPM (m/s¹)	Airflow cfm (m³/min)	Free Area Velocity ₂ fpm (m/sec.)	Effectiveness Ratio	Class _{3, 4}	Discharge Loss Class _s Intake
29 (46.4)	3 (76)	967 (5)	10,412 (294)	2,010 (10.0)	100%	А	1
50 (80.5)	8 (203)	974 (5)	10,484 (296)	2,024 (10.1)	100%	А	1

NOTE:

- 1. 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. 5 m/s is the maximum core velocity utilized in this test.
- 2. Free Area of test size is calculated per AMCA standard 500-L.
- 3. 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
- 4. The EME3625 provides class A performance at all velocities up to and including 5 m/s core velocity.
- 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

- 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.)

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 3" (76) frame. 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. Louver design shall limit single section sizes to 48" x 96" (1219 x 2438) and shall withstand a wind load of 30 lbs. per sq. ft. (1.44 kPa) (equivalent of a 110 mph wind [177 kph] – specifier may substitute any loading required).

Louvers shall be Ruskin Model EME3625 extruded 6063T6 aluminum alloy construction as follows:

- Frame: .073" (1.9) wall thickness, caulking surfaces provided.
- Blades: .040" (1) wall thickness, installed vertically on approximately .75" (19) centers.

Screen: .050" x .063" (13 x 1.6) square mesh aluminum bird screen in removable frame.

Finish: Select finish specification from Ruskin Finishes Brochure.

1 LINKS TO IMPORTANT DOCUMENTS

Document Title

Paint Finishes and Color Guide

Limited Warranty Document

EME3625-1220/Replaces EME3625-1219

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AUTHORITY IN AIR CONTROL



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.