# EME5625MD

## Wind Driven Rain Resistant Stationary Louver

Miami Dade NOA #23-1116.14 Florida Building Code FL#21829.12



#### **APPLICATION**

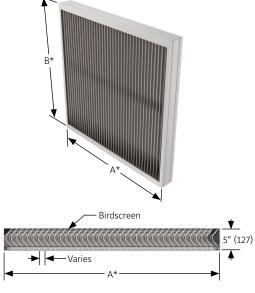
The EME5625MD is a Miami Dade approved 5" deep extruded aluminum, vertical, stationary louver designed to protect air intake and exhaust openings in exterior walls in hurricane conditions. This louver offers exceptional protection against wind-driven rain under the most severe conditions.

#### STANDARD CONSTRUCTION

Frame	5" (127) deep, 6063T6 extruded aluminum with .095" (2.4) nominal wall thickness.				
Blades	6063T6 extruded aluminum .0.08" (2.0) nominal wall thickness. Blades are mounted vertically and spaced approximately 1.2" (30) 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.				
Finish	Mill.				
Minimum Size	12"w x 12"h (305 x 305).				
Approximate Shipping Weight	10 lbs. per sq. ft. (49 kg/m²)				
Maximum Single Section	Shall be 48" x 120" (1219 x 3048). Lifting lugs provided on louvers 48" x 60" (1219 x 1524) and larger. Shall be 48"W X 96" H (1219 X 2438) for shapes.				
Size	Louvers larger than the maximum factory assembly size will require field assembly of smaller sections.				

#### **FEATURES**

- ▶ 38% Free Area
- ► TAS100A
- ▶ AMCA 550 and AMCA 540 (Enhanced) Listed Louver
- Closely spaced vertical blades prevent the penetration of wind-driven rain, reducing damage and additional operating expenses
- ▶ AMCA 500-L. Excellent pressure drop performance
- ▶ Approved for applications with design pressures of +/-160
- ▶ 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
- ▶ Shapes available
- ▶ Miami Dade NOA #23-1116.14
- ▶ 2023 Florida Product Approval FL#21829.12









#### **VARIATIONS**

- Extended Sills
- Universal Sleeve
- ▶ Front Flange Frame Cover
- A variety of bird and insect screens
- Optional finishes available at additional cost.
  Please see <u>Paint Finishes and Color Guide</u> and <u>Finish Type Model Chart</u> for more details.
  Contact louversales@ruskin.com with questions

Consult Ruskin for other special requirements.

#### NOTES

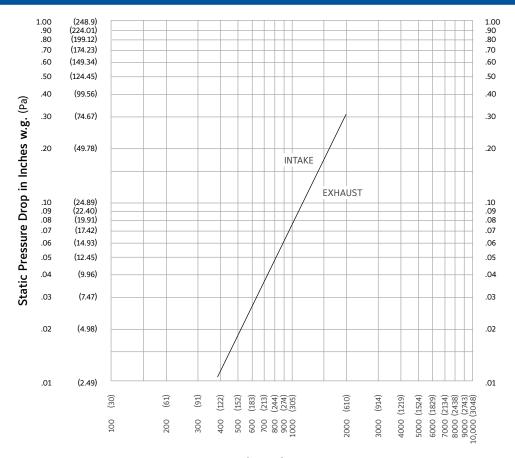
- Dimensions in inches, parenthesis ( ) indicate millimeters.
- Units can be furnished actual size or with size deducts.

Free Area Guide shows free area in ft<sup>2</sup> and m<sup>2</sup> for various sizes of EME5625MD.

Width - Inches and Meters

		<b>12</b> 0.30	<b>18</b> 0.45	<b>24</b> 0.60	<b>30</b> 0.75	<b>36</b> 0.90	<b>42</b> 1.05	<b>48</b> 1.20
	<b>12</b> 0.30	<b>0.08</b> 0.01	<b>0.14</b> 0.01	<b>0.20</b> 0.02	<b>0.25</b> 0.02	<b>0.31</b> 0.03	<b>0.37</b> 0.03	<b>0.43</b> 0.04
	<b>18</b> 0.45	<b>0.26</b> 0.02	<b>0.44</b> 0.04	<b>0.62</b> 0.06	<b>0.81</b> 0.07	<b>0.99</b> 0.09	<b>1.17</b> 0.11	<b>1.36</b> 0.13
	<b>24</b> 0.60	<b>0.43</b> 0.04	<b>0.74</b> 0.07	<b>1.05</b> 0.10	<b>1.36</b> 0.13	<b>1.67</b> 0.16	<b>1.98</b> 0.18	<b>2.29</b> 0.21
	<b>30</b> 0.75	<b>0.61</b> 0.10	<b>1.04</b> 0.16	<b>1.48</b> 0.22	<b>1.91</b> 0.27	<b>2.35</b> 0.33	<b>2.78</b> 0.39	<b>3.21</b> 0.45
	<b>36</b> 0.90	<b>0.78</b> 0.07	<b>1.34</b> 0.12	<b>1.90</b> 0.18	<b>2.46</b> 0.23	<b>3.02</b> 0.28	<b>3.58</b> 0.33	<b>4.14</b> 0.39
	<b>42</b> 1.05	<b>0.96</b> 0.09	<b>1.65</b> 0.15	<b>2.33</b> 0.22	<b>3.02</b> 0.28	<b>3.70</b> 0.34	<b>4.39</b> 0.41	<b>5.07</b> 0.47
	<b>48</b> 1.20	<b>1.14</b> 0.11	<b>1.95</b> 0.18	<b>2.76</b> 0.26	<b>3.57</b> 0.33	<b>4.38</b> 0.41	<b>5.19</b> 0.48	<b>6.00</b> 0.56
	<b>54</b> 1.35	<b>1.31</b> 0.12	<b>2.25</b> 0.21	<b>3.19</b> 0.30	<b>4.12</b> 0.38	<b>5.06</b> 0.47	<b>6.00</b> 0.56	<b>6.93</b> 0.64
	<b>60</b> 1.50	<b>1.49</b> 0.14	<b>2.55</b> 0.24	<b>3.61</b> 0.34	<b>4.68</b> 0.44	<b>5.74</b> 0.53	<b>6.80</b> 0.63	<b>7.86</b> 0.73
	<b>66</b> 1.65	<b>1.66</b> 0.15	<b>2.85</b> 0.27	<b>4.04</b> 0.38	<b>5.23</b> 0.49	<b>6.42</b> 0.60	<b>7.60</b> 0.71	<b>8.79</b> 0.82
)	<b>72</b> 1.80	<b>1.84</b> 0.17	<b>3.15</b> 0.29	<b>4.47</b> 0.42	<b>5.78</b> 0.54	<b>7.09</b> 0.66	<b>8.41</b> 0.78	<b>9.72</b> 0.90
	<b>78</b> 1.95	<b>2.02</b> 0.19	<b>3.45</b> 0.32	<b>4.89</b> 0.45	<b>6.33</b> 0.59	<b>7.77</b> 0.72	<b>9.21</b> 0.86	<b>10.65</b> 0.99
	<b>84</b> 2.10	<b>2.19</b> 0.20	<b>3.76</b> 0.35	<b>5.32</b> 0.49	<b>6.89</b> 0.64	<b>8.45</b> 0.79	<b>10.02</b> 0.93	<b>11.58</b> 1.08
	<b>90</b> 2.25	<b>2.37</b> 0.22	<b>4.06</b> 0.38	<b>5.75</b> 0.53	<b>7.44</b> 0.69	<b>9.13</b> 0.85	<b>10.82</b> 1.01	<b>12.51</b> 1.16
	<b>96</b> 2.40	<b>2.54</b> 0.24	<b>4.36</b> 0.41	<b>6.18</b> 0.57	<b>7.99</b> 0.74	<b>9.81</b> 0.91	<b>11.62</b> 1.08	<b>13.44</b> 1.25
	<b>102</b> 2.55	<b>2.72</b> 0.25	<b>4.66</b> 0.43	<b>6.60</b> 0.61	<b>8.54</b> 0.79	<b>10.49</b> 0.98	<b>12.43</b> 1.16	<b>14.37</b> 1.34
	<b>108</b> 2.70	<b>2.89</b> 0.27	<b>4.96</b> 0.46	<b>7.03</b> 0.65	<b>9.10</b> 0.85	<b>11.16</b> 1.04	<b>13.23</b> 1.23	<b>15.30</b> 1.42
	<b>114</b> 2.85	<b>3.07</b> 0.29	<b>5.26</b> 0.49	<b>7.46</b> 0.69	<b>9.65</b> 0.90	<b>11.84</b> 1.10	<b>14.04</b> 1.31	<b>16.23</b> 1.51
	<b>120</b> 3.00	<b>3.25</b> 0.30	<b>5.57</b> 0.52	<b>7.88</b> 0.73	<b>10.20</b> 0.95	<b>12.52</b> 1.16	<b>14.84</b> 1.38	<b>17.16</b> 1.60

(No Extended Sill provided with Flange Frame)



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

(Data corrected to standard air density and AMCA figure or figures tested to 5.5)

Options available at additional cost.

### PERFORMANCE DATA



Ruskin certifies that the EME5625MD 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 Wind Borne Debris Impact Resistant Louvers.

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

#### 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 (4 11/4" x 4 25/16") nominal. Free Area of test louver is 4.86 ft<sup>2</sup> (.45m<sup>2</sup>).

Wind Velocity mph (kph)	Rainfall Rate In./hr. (mm/hr.)	Core Velocity <sub>1</sub> FPM (m/s)	Airflow cfm (m³/min)	Free Area Velocity <sub>2</sub> fpm (m/sec.)	Effectiveness Ratio	Class <sub>3, 4</sub>	Discharge Loss Class <sub>s</sub> Intake
50 (80.5)	8 (203)	980 (5)	13,684 (388)	2,280 (12)	100%	Α	2

#### NOTE

- 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.
- 2. Free Area of test size is calculated per AMCA standard 500-L.
- 3. Wind Driven Rain Penetration Classes:

Class	Effectiveness
Α	1 to .99
В	0.989 to 0.95
C	0.949 to 0.80
D	Below 0.8

- The EME5625 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.

#### 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.)

6. 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.



Ruskin certifies that the EME5625MD 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.

#### 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 6" (152) 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. Louver design shall incorporate visible mullions on units larger than 48" x 96" (1219 x 2438). Louvers shall withstand a wind load of 60 lbs. per sq. ft. (1.4kPa) (specifier may substitute any loading required).

Louvers shall be Ruskin Model EME5625MD extruded 6063T6 aluminum alloy construction as follows:

Frame: .095" (2.4) wall thickness, caulking surfaces provided.

Blades: .080" (2.03) wall thickness, installed vertically on approximately 1 1/2" (38) 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: Select finish specification from Ruskin Finishes Brochure.

# **1** LINKS TO IMPORTANT DOCUMENTS





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