

# EME5625

## Wind Driven Rain Resistant Stationary Louver

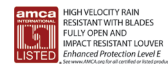
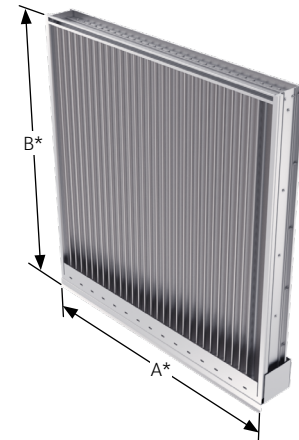


### APPLICATION

The EME5625 is a 5" deep mechanically fastened, extruded aluminum, vertical, stationary louver designed to protect air intake and exhaust openings in exterior walls in storm conditions. The EME5625 offers an exceptional water protection and meets enhanced protection building requirements.

### STANDARD CONSTRUCTION

<b>Frame</b>	5" (127) deep, 6063T6 extruded aluminum with .080 (2) nominal wall thickness.
<b>Blades</b>	6063T6 extruded aluminum .070" (1.8) nominal wall thickness. Blades are mounted vertically and spaced approximately 1 1/2" (38) center to center.
<b>Screen</b>	5/8" x 0.040" (16 x 1) expanded flattened aluminum bird screen in removable frame.
<b>Sill</b>	0.08" formed extended sill with end dampers.
<b>Finish</b>	Mill.
<b>Minimum Size</b>	12"w x 12"h (305 x 305).
<b>Approximate Shipping Weight</b>	10 lbs. per sq. ft. (49 kg/m <sup>2</sup> )
<b>Maximum Single Section Size</b>	Max Single section Size 72"x120", Unlimited Width x Unlimited Height. Louver assemblies over 120" tall may require additional vertical supports not provided by Ruskin. See engineer of record.



### INSTALLATION

The EME5625 must be installed per the appropriate installation detail. Reference the installation instruction page.

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

### FEATURES

- ▶ 55% Free Area
- ▶ AMCA550 Listed
- ▶ AMCA540 Enhanced (Missile E) Listed
- ▶ Approved for applications with design pressure of 100 PSF (4.8 kPa)
- ▶ Mechanically Fastened
- ▶ Published performance rating based on testing in accordance with AMCA500-L
- ▶ Aluminum construction for low maintenance and high resistance to corrosion
- ▶ Beginning point of water penetration at 0.01 oz./sq.ft. is above 1250fpm (381m/min)
- ▶ Class A Wind Driven Rain Performance

### VARIATIONS

- ▶ Variety of bird and insect screens
- ▶ Blank offs
- ▶ Extended Sills
- ▶ Front and rear flange
- ▶ Filter Racks
- ▶ Security Bars
- ▶ Lifting Lugs
- ▶ Optional finishes available at additional cost. Please see [Paint Finishes and Color Guide](#) and [Finish Type Model Chart](#) for more details. Contact [louversales@ruskin.com](mailto:louversales@ruskin.com) with questions

#### NOTES:

- Dimensions in inches, parenthesis ( ) indicate millimeters.
- Units can be furnished actual size or with size deducts.
- Ruskin takes no responsibility for fasteners into structure, refer to engineer of record.

# FREE AREA GUIDE

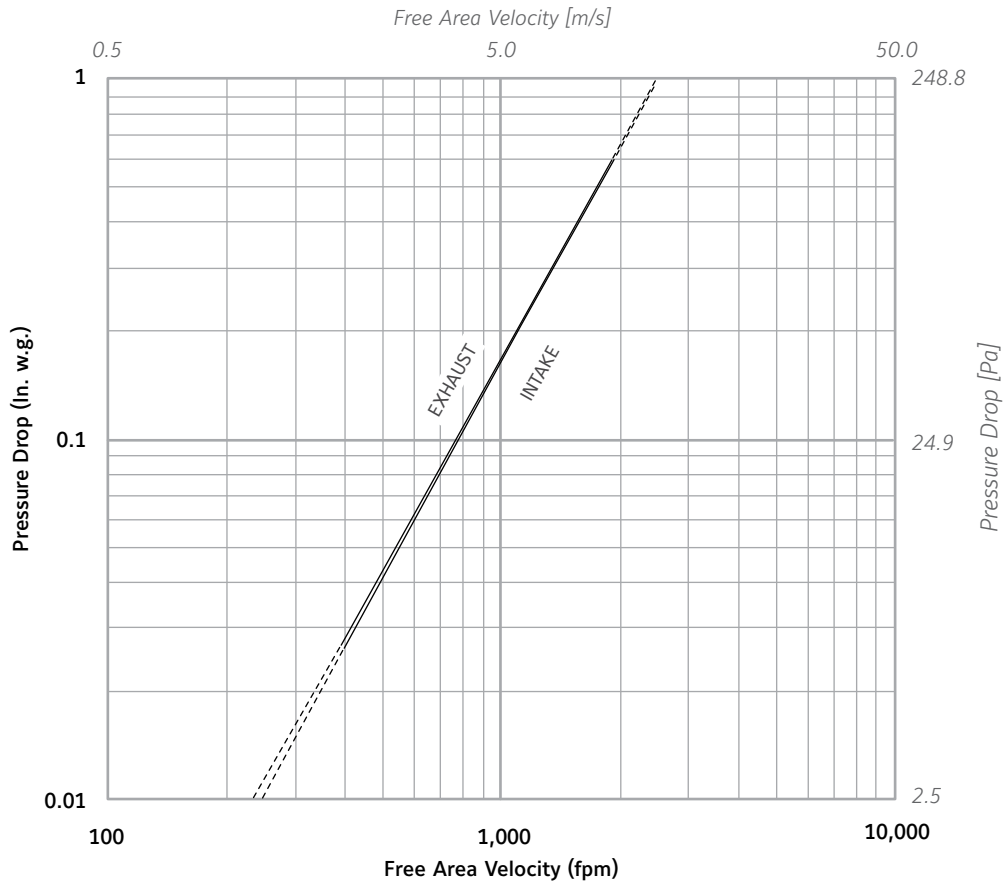
Free Area Guide shows free area in ft<sup>2</sup> and m<sup>2</sup> for various sizes of EME5625.

## Width – Inches and Meter

		12	18	24	30	36	42	48	54	60	66	72
		0.30	0.45	0.60	0.75	0.90	1.05	1.20	1.35	1.50	1.65	1.80
Height – Inches and Meter	12	<b>0.25</b>	<b>0.45</b>	<b>0.66</b>	<b>0.86</b>	<b>1.06</b>	<b>1.26</b>	<b>1.46</b>	<b>1.66</b>	<b>1.87</b>	<b>2.07</b>	<b>2.27</b>
	0.30	0.02	0.04	0.06	0.08	0.10	0.12	0.14	0.15	0.17	0.19	0.21
	18	<b>0.46</b>	<b>0.83</b>	<b>1.20</b>	<b>1.57</b>	<b>1.94</b>	<b>2.30</b>	<b>2.67</b>	<b>3.04</b>	<b>3.41</b>	<b>3.78</b>	<b>4.15</b>
	0.45	0.04	0.08	0.11	0.15	0.18	0.21	0.25	0.28	0.32	0.35	0.39
	24	<b>0.67</b>	<b>1.21</b>	<b>1.74</b>	<b>2.28</b>	<b>2.81</b>	<b>3.35</b>	<b>3.88</b>	<b>4.42</b>	<b>4.96</b>	<b>5.49</b>	<b>6.03</b>
	0.60	0.06	0.11	0.16	0.21	0.26	0.31	0.36	0.41	0.46	0.51	0.56
	30	<b>0.88</b>	<b>1.58</b>	<b>2.28</b>	<b>2.99</b>	<b>3.69</b>	<b>4.39</b>	<b>5.10</b>	<b>5.80</b>	<b>6.50</b>	<b>7.20</b>	<b>7.91</b>
	0.75	1.11	1.81	2.50	3.20	3.89	4.58	5.28	5.97	6.67	7.36	8.05
	36	<b>1.09</b>	<b>1.96</b>	<b>2.83</b>	<b>3.70</b>	<b>4.57</b>	<b>5.44</b>	<b>6.31</b>	<b>7.18</b>	<b>8.05</b>	<b>8.92</b>	<b>9.79</b>
	0.90	0.10	0.18	0.26	0.34	0.43	0.51	0.59	0.67	0.75	0.83	0.91
	42	<b>1.30</b>	<b>2.33</b>	<b>3.37</b>	<b>4.41</b>	<b>5.44</b>	<b>6.48</b>	<b>7.52</b>	<b>8.55</b>	<b>9.59</b>	<b>10.63</b>	<b>11.66</b>
	1.05	0.12	0.22	0.31	0.41	0.51	0.60	0.70	0.80	0.89	0.99	1.08
	48	<b>1.50</b>	<b>2.71</b>	<b>3.91</b>	<b>5.12</b>	<b>6.32</b>	<b>7.52</b>	<b>8.73</b>	<b>9.93</b>	<b>11.14</b>	<b>12.34</b>	<b>13.54</b>
	1.20	0.14	0.25	0.36	0.48	0.59	0.70	0.81	0.92	1.04	1.15	1.26
	54	<b>1.71</b>	<b>3.08</b>	<b>4.46</b>	<b>5.83</b>	<b>7.20</b>	<b>8.57</b>	<b>9.94</b>	<b>11.31</b>	<b>12.68</b>	<b>14.05</b>	<b>15.42</b>
	1.35	0.16	0.29	0.41	0.54	0.67	0.80	0.92	1.05	1.18	1.31	1.43
	60	<b>1.92</b>	<b>3.46</b>	<b>5.00</b>	<b>6.54</b>	<b>8.07</b>	<b>9.61</b>	<b>11.15</b>	<b>12.69</b>	<b>14.22</b>	<b>15.76</b>	<b>17.30</b>
	1.50	0.18	0.32	0.47	0.61	0.75	0.89	1.04	1.18	1.32	1.47	1.61
	66	<b>2.13</b>	<b>3.84</b>	<b>5.54</b>	<b>7.25</b>	<b>8.95</b>	<b>10.65</b>	<b>12.36</b>	<b>14.06</b>	<b>15.77</b>	<b>17.47</b>	<b>19.18</b>
	1.65	0.20	0.36	0.52	0.67	0.83	0.99	1.15	1.31	1.47	1.62	1.78
72	<b>2.34</b>	<b>4.21</b>	<b>6.08</b>	<b>7.96</b>	<b>9.83</b>	<b>11.70</b>	<b>13.57</b>	<b>15.44</b>	<b>17.31</b>	<b>19.19</b>	<b>21.06</b>	
1.80	0.22	0.39	0.57	0.74	0.91	1.09	1.26	1.44	1.61	1.78	1.96	
78	<b>2.55</b>	<b>4.59</b>	<b>6.63</b>	<b>8.66</b>	<b>10.70</b>	<b>12.74</b>	<b>14.78</b>	<b>16.82</b>	<b>18.86</b>	<b>20.90</b>	<b>22.94</b>	
1.95	0.24	0.43	0.62	0.81	1.00	1.18	1.37	1.56	1.75	1.94	2.13	
84	<b>2.76</b>	<b>4.96</b>	<b>7.17</b>	<b>9.37</b>	<b>11.58</b>	<b>13.79</b>	<b>15.99</b>	<b>18.20</b>	<b>20.40</b>	<b>22.61</b>	<b>24.82</b>	
2.10	0.26	0.46	0.67	0.87	1.08	1.28	1.49	1.69	1.90	2.10	2.31	
90	<b>2.97</b>	<b>5.34</b>	<b>7.71</b>	<b>10.08</b>	<b>12.46</b>	<b>14.83</b>	<b>17.20</b>	<b>19.58</b>	<b>21.95</b>	<b>24.32</b>	<b>26.69</b>	
2.25	0.28	0.50	0.72	0.94	1.16	1.38	1.60	1.82	2.04	2.26	2.48	
96	<b>3.17</b>	<b>5.71</b>	<b>8.25</b>	<b>10.79</b>	<b>13.33</b>	<b>15.87</b>	<b>18.41</b>	<b>20.95</b>	<b>23.49</b>	<b>26.03</b>	<b>28.57</b>	
2.40	0.29	0.53	0.77	1.00	1.24	1.48	1.71	1.95	2.18	2.42	2.66	
102	<b>3.38</b>	<b>6.09</b>	<b>8.80</b>	<b>11.50</b>	<b>14.21</b>	<b>16.92</b>	<b>19.62</b>	<b>22.33</b>	<b>25.04</b>	<b>27.74</b>	<b>30.45</b>	
2.55	0.31	0.57	0.82	1.07	1.32	1.57	1.82	2.08	2.33	2.58	2.83	
108	<b>3.59</b>	<b>6.47</b>	<b>9.34</b>	<b>12.21</b>	<b>15.09</b>	<b>17.96</b>	<b>20.83</b>	<b>23.71</b>	<b>26.58</b>	<b>29.46</b>	<b>32.33</b>	
2.70	0.33	0.60	0.87	1.14	1.40	1.67	1.94	2.21	2.47	2.74	3.01	
114	<b>3.80</b>	<b>6.84</b>	<b>9.88</b>	<b>12.92</b>	<b>15.96</b>	<b>19.00</b>	<b>22.05</b>	<b>25.09</b>	<b>28.13</b>	<b>31.17</b>	<b>34.21</b>	
2.85	0.35	0.64	0.92	1.20	1.48	1.77	2.05	2.33	2.62	2.90	3.18	
120	<b>4.01</b>	<b>7.22</b>	<b>10.43</b>	<b>13.63</b>	<b>16.84</b>	<b>20.05</b>	<b>23.26</b>	<b>26.46</b>	<b>29.67</b>	<b>32.88</b>	<b>36.09</b>	
3.00	0.37	0.67	0.97	1.27	1.57	1.86	2.16	2.46	2.76	3.06	3.36	

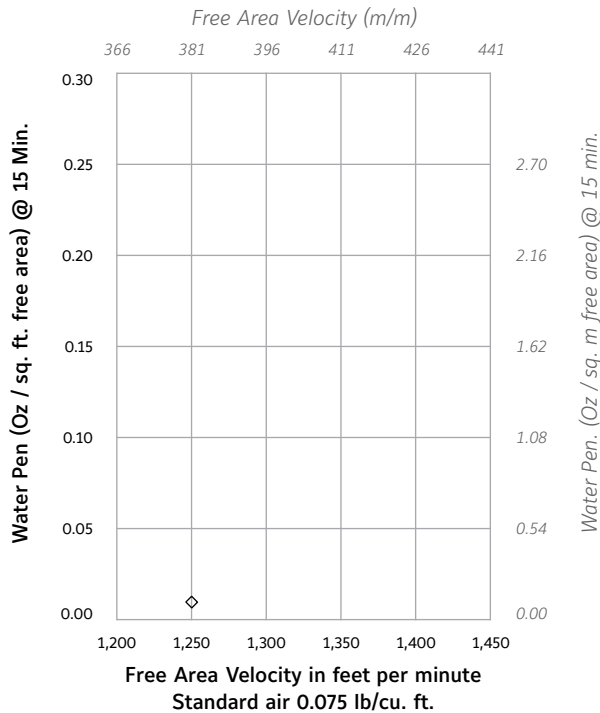
## PRESSURE DROP

Air Performance (Pressure Drop) per AMCA 511 - Test Size 48" x 48" (1,220 mm x 1,220 mm). Tested per AMCA 500L (Test figures 6.5 & 5.5) without any screens or sill pan options. Results corrected to standard air density 0.075 lbs./ft<sup>3</sup> (1.2 kg/m<sup>3</sup>)



## WATER PENETRATION GRAPH

Test size 48" wide x 48" high (1219 X 1219) Beginning point of water penetration at .01 oz. /sq. ft. is 1250 fpm (381 m/min).



Ruskin certifies that the EME5625 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, 40.875" x 44.125" nominal. Free Area of test louver is 6.575ft<sup>2</sup>

Wind Velocity MPH (kph)	Rainfall Rate In./hr. (mm/hr.)	Core Velocity FPM (m/s)	Airflow CFM (m <sup>3</sup> /min)	Free Area Velocity FPM (m/sec.)	Effectiveness Ratio	Class	Discharge Loss Class
29 (46)	3" (76)	988 (5)	10470 (296)	1592 (8)	99.9%	A	2
50 (80.5)	8" (203)	885 (4.5)	9426 (267)	1434 (7.3)	99.9%	A	2
50 (80.5)	8" (203)	984 (5)	10485 (297)	1594 (8)	99.8%	A	2

### 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). 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 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.)

- 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 EME5625 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, wind driven rain and water penetration ratings only.

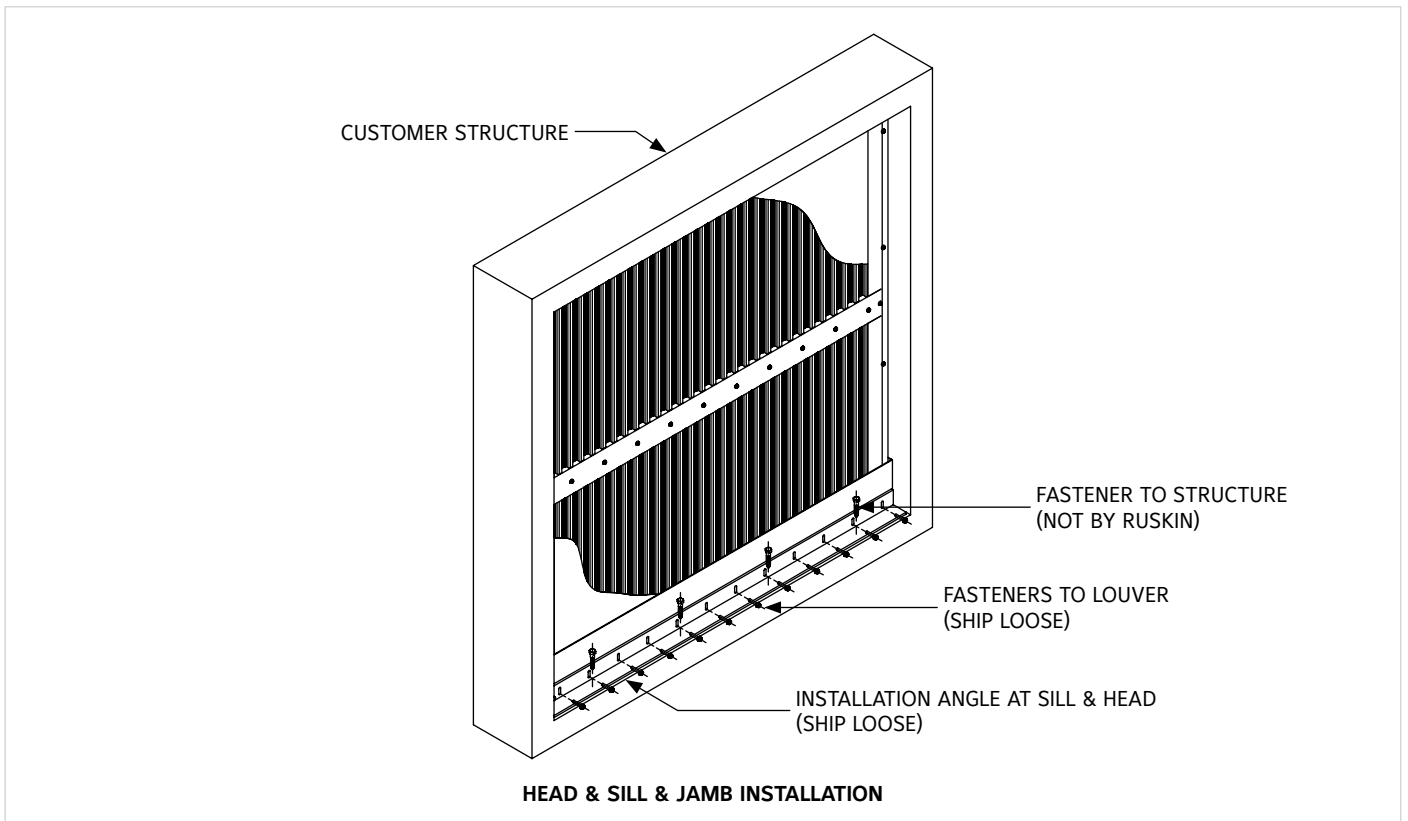
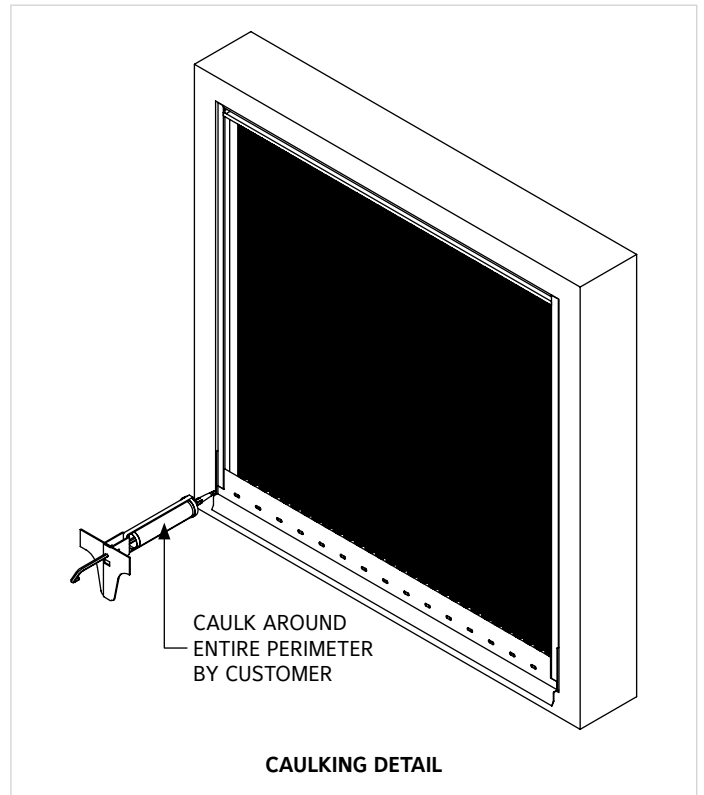
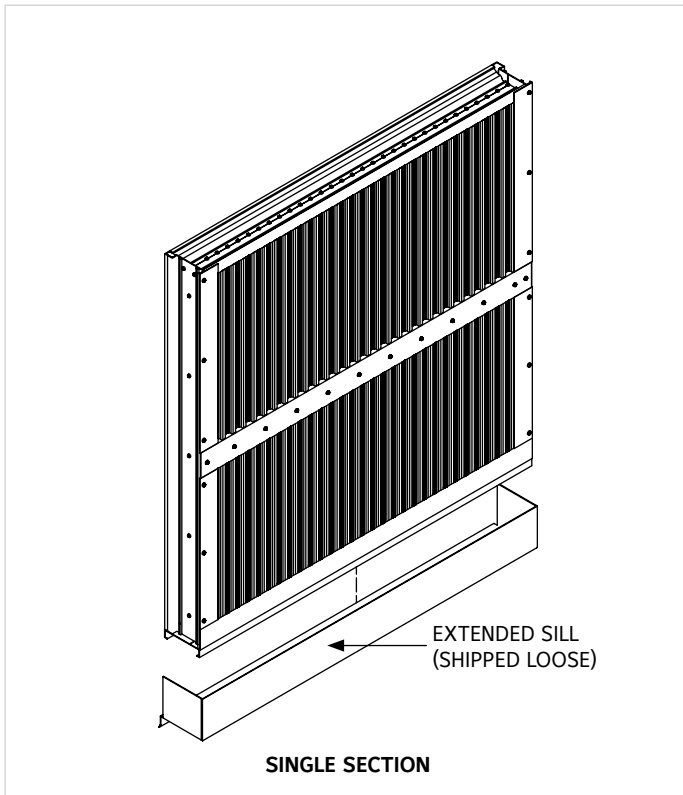
## SUGGESTED SPECIFICATION

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 water penetration and 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. Louver design shall incorporate visible mullions on units larger than 72" x 120" (1828 x 3048). Louvers shall withstand a wind load of 100 lbs per sq. ft. (4.8 kPa) (specifier may substitute any loading required).

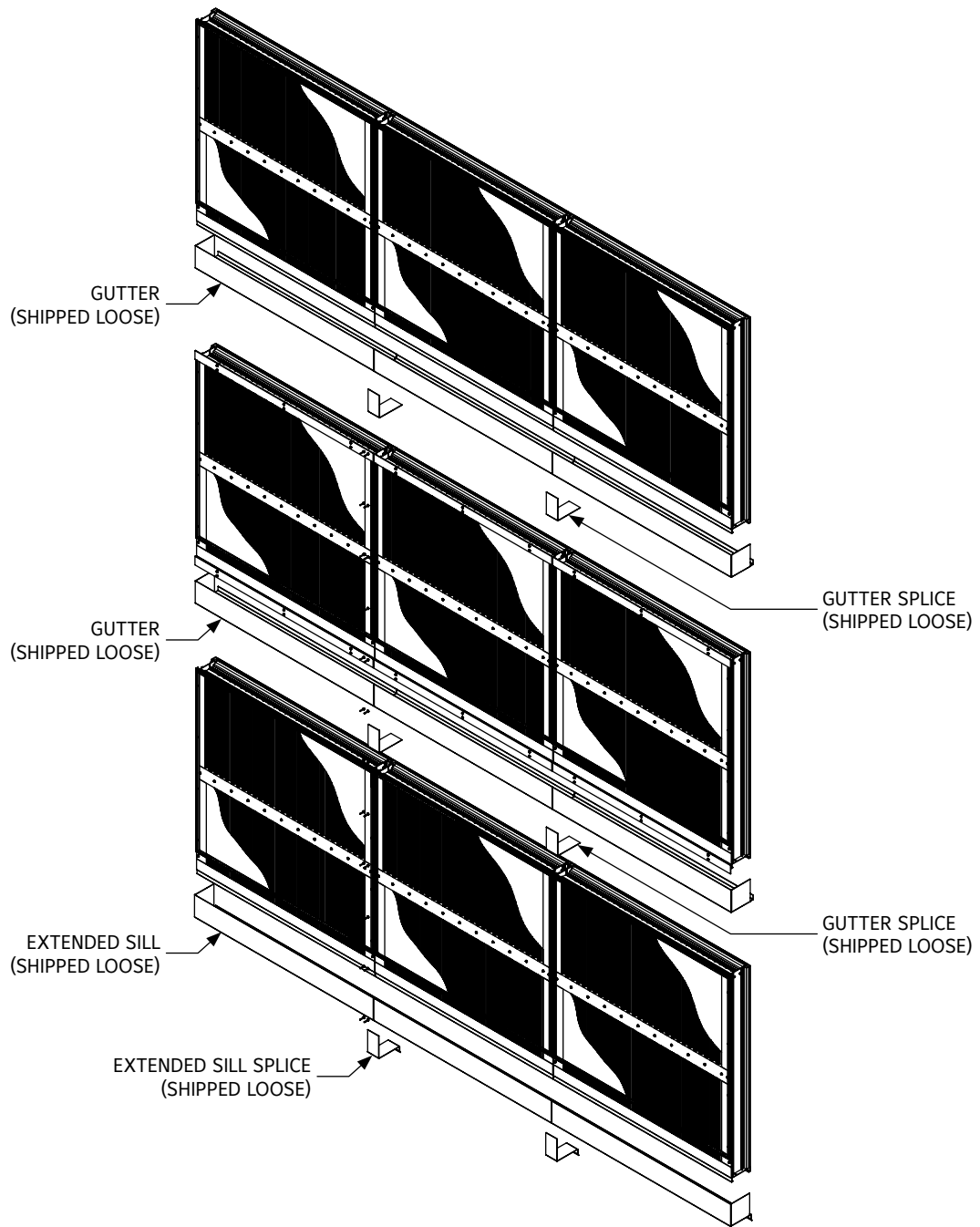
Louvers shall be Ruskin Model EME5625 extruded 6063T6 aluminum alloy construction as follows:

- Frame: 0.08" (2) wall thickness, caulking surfaces provided.
- Blades: .07"(1.8) wall thickness, installed vertically on approximately 1 1/2" (38) centers.
- Extended Sill: 0.08" (2) wall thickness, with upturned side panels to prevent water leakage.
- Screen: 5/8" x 0.040" (16 x 1) expanded flattened aluminum bird screen in removable frame.
- Finish: Select finish specification from Ruskin Finishes Brochure.

# INSTALLATION INSTRUCTIONS

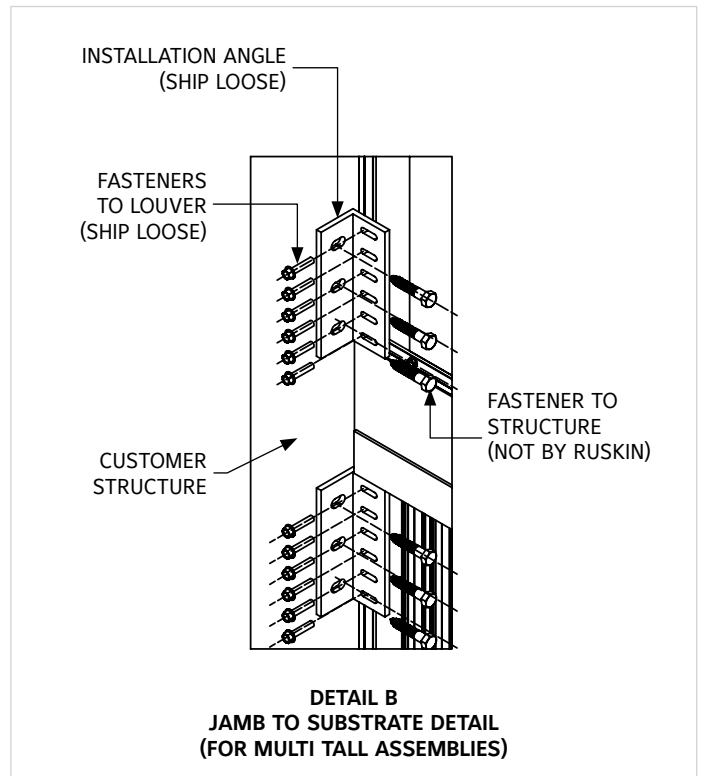
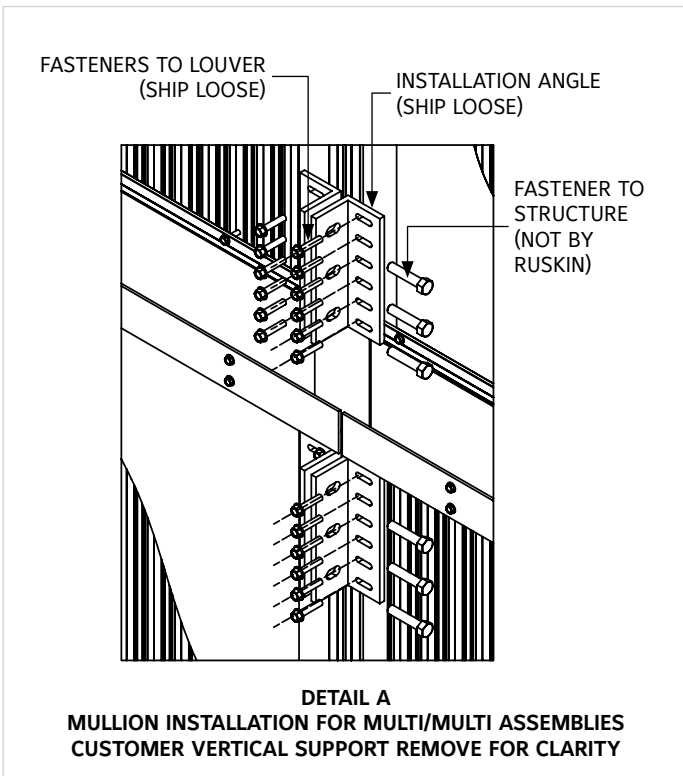
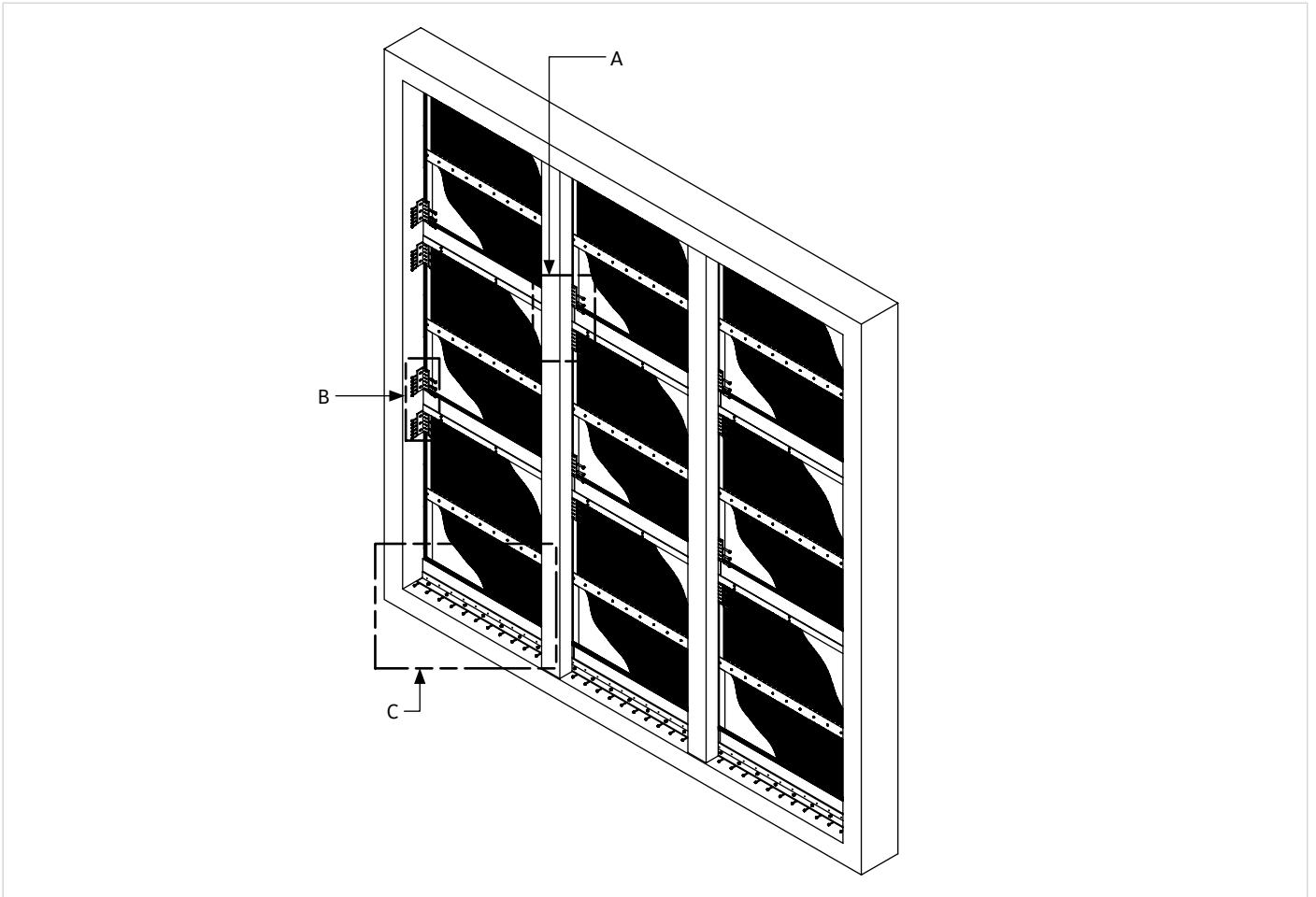


# INSTALLATION INSTRUCTIONS



**MULTI-SECTION INSTALL  
100 PSF**

# INSTALLATION INSTRUCTIONS

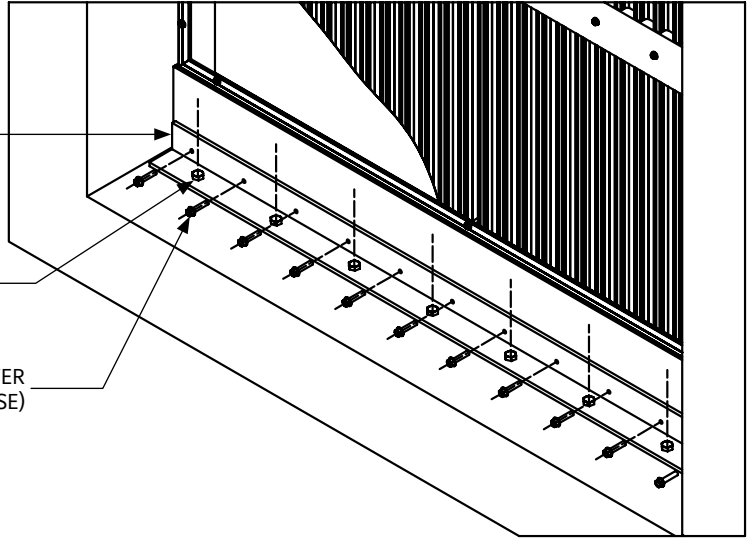


# INSTALLATION INSTRUCTIONS

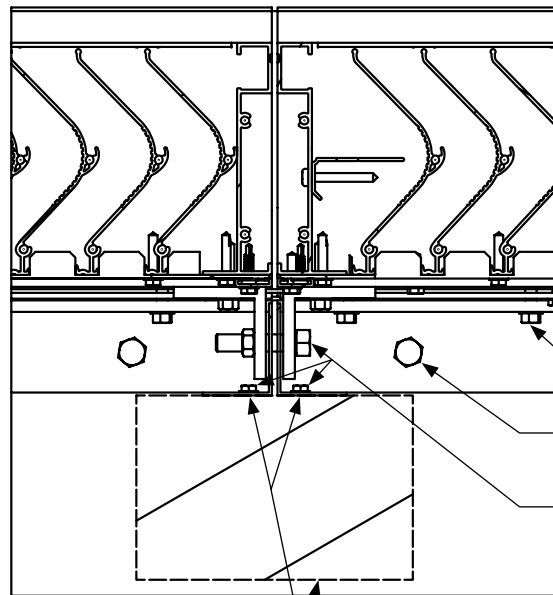
CONTINUOUS ANGLE (SHIPPED LOOSE)  
NOTCH AS REQUIRED TO FIT BETWEEN SUPPORTS

FASTENER TO STRUCTURE  
(NOT BY RUSKIN)

FASTENERS TO LOUVER  
(SHIP LOOSE)



**DETAIL C**  
SILL INSTALLATION HEAD CONDITION SIMILAR



FASTENERS TO LOUVER  
(SHIP LOOSE)

FASTENER TO STRUCTURE  
(NOT BY RUSKIN)

FASTENER TO STRUCTURE  
(NOT BY RUSKIN)

CUSTOMER SUPPORT REQUIRED FOR MULTI WIDE BY  
MULTI HIGH-SECTION (NOT BY RUSKIN)

**DETAIL HORIZONTAL SECTION - MULLION**

## LINKS TO IMPORTANT DOCUMENTS

Replaces EME5625-0224

### Document Title

Paint Finishes and Color Guide

Limited Warranty Document



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