# **POTTORFF**<sup>®</sup>

9" deep • 37° J-blade with vertical blade rear section The EFJ-937 dual-module louver is engineered and tested to withstand extreme loads, debris impact, and cyclic fatigue associated with the severe weather effects of hurricanes. The front (exterior) side of the louver features horizontal J-style blades for a pleasing architectural appearance. The interior side features vertical chevron blades which provide superior resistance to wind-driven rain. Both installation options for the EFJ-937 feature minimal required hardware. The EFJ-937 is AMCA 540 and 550 listed, making it ideally suited for use in hurricane-prone and wind-borne debris regions per the International Building Code.

## **Standard Construction**

EFJ-937 Extruded Aluminum Louver

Material: Mill finish extruded aluminum					
Frame: 9" deep x 0.125" thick (232 x 3) channel					
	: 37° × 0.081" (2.1) thick horizontal J style : 0.060" (1.5) thick vertical chevron				
	Screen: 1/2" × 0.063" (12.7 × 1.6) expanded and flattened aluminum				
Mullion: Visib	le				
Minimum Size: 12" × 12" (305 × 305)					
Maximum Size:					
Single section: 60" × 120" (1524 × 3048) Multiple section: Unlimited width × 120" (3048)					

**Installation Hardware:** Standard continuous angles and associated fasteners (anchors to substrate by others - refer to installation instructions)

## Options

#### Factory finish:

- High Performance Fluoropolymer 
  Prime Coat
- Baked Enamel
  Clear Anodize
  Integral Color Anodize
- Frame Options:
  - 1-1/2" (38) flange frame
- Alternate bird or insect screens
- Insulated or non-insulated blank-off panels
- Filter racks
- Head and/or sill flashing
- Burglar bars
- Full sleeve and retaining angles (eliminates need for anchors to substrate; 1-1/2" (38) flange frame required
- Net OD (actual size)

EFJ-937 (standard) \*Louver dimensions furnished approximately 1/2" (13) undersize.

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## **Ratings**

**Free Area:** [48" × 48" (1219 × 1219) unit]: 8.6 ft<sup>2</sup> (0.80m<sup>2</sup>) 53.9%

#### Performance @ Beginning Point of Water Penetration

Free Area Velocity: Above 1,250 fpm (6.35 m/s)

Air Volume Delivered: 10,755 cfm (5.09 m<sup>3</sup>/s)

Pressure Loss: 0.48 in.wg. (121 Pa)

Velocity @ 0.15 in.wg. Pressure Loss: 705 fpm (3.58 m/s)

AMCA 540 (impact resistant,

Enhanced Protection - Level E) listed

AMCA 550 (high velocity rain resistant) listed

Design Load: 130 psf

### NOTE: Dimensions in parentheses () are millimeters. Information is subject to change without notice or obligation.

warranty



## PERFORMANCE

Extruded Aluminum Louver 9" deep • 37° J-blade with vertical blade rear section

EE.I\_93

Free Area (ft <sup>2</sup> )
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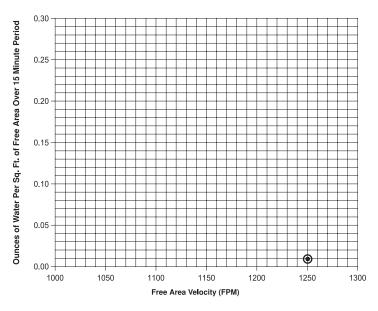
Width (Inches)

	Width (Inches)								
	12	18	24	30	36	42	48	54	60
12	0.2	0.3	0.5	0.6	0.8	0.9	1.1	1.2	1.4
18	0.4	0.7	1.1	1.4	1.7	2.0	2.3	2.6	3.0
24	0.7	1.1	1.6	2.1	2.6	3.1	3.6	4.1	4.6
30	0.9	1.6	2.2	2.9	3.5	4.2	4.8	5.5	6.2
36	1.1	2.0	2.8	3.6	4.4	5.3	6.1	6.9	7.8
42	1.4	2.4	3.4	4.4	5.4	6.4	7.4	8.4	9.4
48	1.6	2.8	3.9	5.1	6.3	7.4	8.6	9.8	11.0
54	1.8	3.2	4.5	5.8	7.2	8.5	9.9	11.2	12.6
60	2.1	3.6	5.1	6.6	8.1	9.6	11.1	12.6	14.2
66	2.3	4.0	5.7	7.3	9.0	10.7	12.4	14.1	15.8
72	2.5	4.4	6.2	8.1	9.9	11.8	13.7	15.5	17.4
78	2.7	4.8	6.8	8.8	10.9	12.9	14.9	16.9	19.0
84	3.0	5.2	7.4	9.6	11.8	14.0	16.2	18.4	20.6
90	3.2	5.6	8.0	10.3	12.7	15.1	17.4	19.8	22.2
96	3.4	6.0	8.5	11.1	13.6	16.1	18.7	21.2	23.7
102	3.7	6.4	9.1	11.8	14.5	17.2	19.9	22.6	25.4
108	3.9	6.8	9.7	12.6	15.4	18.3	21.2	24.1	26.9
114	4.1	7.2	10.2	13.3	16.3	19.4	22.5	25.5	28.6
120	4.4	7.6	10.8	14.0	17.3	20.5	23.7	26.9	30.1
	18 24 30 36 42 48 54 60 66 72 78 84 90 96 102 108 114	12    0.2      18    0.4      24    0.7      30    0.9      36    1.1      42    1.4      48    1.6      54    1.8      60    2.1      66    2.3      72    2.5      78    2.7      84    3.0      90    3.2      96    3.4      102    3.7      108    3.9      114    4.1	12  0.2  0.3    18  0.4  0.7    24  0.7  1.1    30  0.9  1.6    36  1.1  2.0    42  1.4  2.4    48  1.6  2.8    54  1.8  3.2    60  2.1  3.6    66  2.3  4.0    72  2.5  4.4    78  2.7  4.8    84  3.0  5.2    90  3.2  5.6    96  3.4  6.0    102  3.7  6.4    108  3.9  6.8    114  4.1  7.2	12      0.2      0.3      0.5        18      0.4      0.7      1.1        24      0.7      1.1      1.6        30      0.9      1.6      2.2        36      1.1      2.0      2.8        42      1.4      2.4      3.4        48      1.6      2.8      3.9        54      1.8      3.2      4.5        60      2.1      3.6      5.1        66      2.3      4.0      5.7        72      2.5      4.4      6.2        78      2.7      4.8      6.8        84      3.0      5.2      7.4        90      3.2      5.6      8.0        96      3.4      6.0      8.5        102      3.7      6.4      9.1        108      3.9      6.8      9.7        114      4.1      7.2      10.2	12      18      24      30        12      0.2      0.3      0.5      0.6        18      0.4      0.7      1.1      1.4        24      0.7      1.1      1.6      2.1        30      0.9      1.6      2.2      2.9        36      1.1      2.0      2.8      3.6        42      1.4      2.4      3.4      4.4        48      1.6      2.8      3.9      5.1        54      1.8      3.2      4.5      5.8        60      2.1      3.6      5.1      6.6        62.3      4.0      5.7      7.3        72      2.5      4.4      6.2      8.1        78      2.7      4.8      6.8      8.8        84      3.0      5.2      7.4      9.6        90      3.2      5.6      8.0      10.3        96      3.4      6.0      8.5      11.1        102      3.7      6.4      9.1      11.8	12      18      24      30      36        12      0.2      0.3      0.5      0.6      0.8        18      0.4      0.7      1.1      1.4      1.7        24      0.7      1.1      1.6      2.1      2.6        30      0.9      1.6      2.2      2.9      3.5        36      1.1      2.0      2.8      3.6      4.4        42      1.4      2.4      3.4      4.4      5.4        48      1.6      2.8      3.9      5.1      6.3        54      1.8      3.2      4.5      5.8      7.2        60      2.1      3.6      5.1      6.6      8.1        66      2.3      4.0      5.7      7.3      9.0        72      2.5      4.4      6.2      8.1      9.9        78      2.7      4.8      6.8      8.8      10.9        84      3.0      5.2      7.4      9.6      11.8        90      3.2	12      18      24      30      36      42        12      0.2      0.3      0.5      0.6      0.8      0.9        18      0.4      0.7      1.1      1.4      1.7      2.0        24      0.7      1.1      1.6      2.1      2.6      3.1        30      0.9      1.6      2.2      2.9      3.5      4.2        36      1.1      2.0      2.8      3.6      4.4      5.3        42      1.4      2.4      3.4      4.4      5.4      6.4        48      1.6      2.8      3.9      5.1      6.3      7.4        54      1.8      3.2      4.5      5.8      7.2      8.5        60      2.1      3.6      5.1      6.6      8.1      9.6        66      2.3      4.0      5.7      7.3      9.0      10.7        72      2.5      4.4      6.2      8.1      9.9      11.8        78      2.7      4.8      6.8 </th <th>12      18      24      30      36      42      48        12      0.2      0.3      0.5      0.6      0.8      0.9      1.1        18      0.4      0.7      1.1      1.4      1.7      2.0      2.3        24      0.7      1.1      1.6      2.1      2.6      3.1      3.6        30      0.9      1.6      2.2      2.9      3.5      4.2      4.8        36      1.1      2.0      2.8      3.6      4.4      5.3      6.1        42      1.4      2.4      3.4      4.4      5.4      6.4      7.4        48      1.6      2.8      3.9      5.1      6.3      7.4      8.6        54      1.8      3.2      4.5      5.8      7.2      8.5      9.9        60      2.1      3.6      5.1      6.6      8.1      9.6      11.1        66      2.3      4.0      5.7      7.3      9.0      10.7      12.4        7</th> <th>12      18      24      30      36      42      48      54        12      0.2      0.3      0.5      0.6      0.8      0.9      1.1      1.2        18      0.4      0.7      1.1      1.4      1.7      2.0      2.3      2.6        24      0.7      1.1      1.6      2.1      2.6      3.1      3.6      4.1        30      0.9      1.6      2.2      2.9      3.5      4.2      4.8      5.5        36      1.1      2.0      2.8      3.6      4.4      5.3      6.1      6.9        42      1.4      2.4      3.4      4.4      5.4      6.4      7.4      8.4        48      1.6      2.8      3.9      5.1      6.3      7.4      8.6      9.8        54      1.8      3.2      4.5      5.8      7.2      8.5      9.9      11.2        60      2.1      3.6      5.1      6.6      8.1      9.6      11.1      12.6</th>	12      18      24      30      36      42      48        12      0.2      0.3      0.5      0.6      0.8      0.9      1.1        18      0.4      0.7      1.1      1.4      1.7      2.0      2.3        24      0.7      1.1      1.6      2.1      2.6      3.1      3.6        30      0.9      1.6      2.2      2.9      3.5      4.2      4.8        36      1.1      2.0      2.8      3.6      4.4      5.3      6.1        42      1.4      2.4      3.4      4.4      5.4      6.4      7.4        48      1.6      2.8      3.9      5.1      6.3      7.4      8.6        54      1.8      3.2      4.5      5.8      7.2      8.5      9.9        60      2.1      3.6      5.1      6.6      8.1      9.6      11.1        66      2.3      4.0      5.7      7.3      9.0      10.7      12.4        7	12      18      24      30      36      42      48      54        12      0.2      0.3      0.5      0.6      0.8      0.9      1.1      1.2        18      0.4      0.7      1.1      1.4      1.7      2.0      2.3      2.6        24      0.7      1.1      1.6      2.1      2.6      3.1      3.6      4.1        30      0.9      1.6      2.2      2.9      3.5      4.2      4.8      5.5        36      1.1      2.0      2.8      3.6      4.4      5.3      6.1      6.9        42      1.4      2.4      3.4      4.4      5.4      6.4      7.4      8.4        48      1.6      2.8      3.9      5.1      6.3      7.4      8.6      9.8        54      1.8      3.2      4.5      5.8      7.2      8.5      9.9      11.2        60      2.1      3.6      5.1      6.6      8.1      9.6      11.1      12.6

## **Water Penetration**

AMCA defines the beginning point of water penetration as the free area velocity at the intersection of a simple linear regression of test data and the line of 0.01 ounces of water per square foot of free area measured through a 48" x 48" louver during a 15 minute period. The AMCA water penetration test provides a method for comparing louver models and designs as to their efficiency in resisting the penetration of rainfall under specific lab conditions. We recommend that intake louvers are selected with a reasonable margin of safety below the beginning point of water penetration in order to avoid unwanted penetration during severe storm conditions.

#### Beginning Point of Water Penetration = 1,250 fpm





#### **Certified Ratings:**

Pottorff certifies that the model EFJ-937 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, water penetration and wind-driven rain ratings.





This label does not signify AMCA airflow performance certification.

**Enhanced Protection Level E** See www. AMCA.org for all certified or listed products

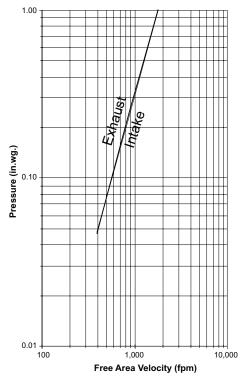
#### **Certified Ratings:**

Pottorff certifies that the model EFJ-937 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 and high velocity rain resistant louvers.



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### **Pressure Loss**



Louver Test Size = 48" x 48" (1219 x 1219) Pressure loss tested in accordance with Figure 5.5 of AMCA Standard 500-L. Data corrected to standard air density.

## PERFORMANCE

## Wind Driven Rain Performance - AMCA 500L Wind-Driven Rain Test

Wind Velocity	nd Velocity Rainfall Airflow C cfm (m <sup>3</sup> /s)		Core Velocity <sup>1</sup> fpm (m/s)	Free Area Velocity <sup>2</sup> fpm (m/s)	Effectiveness Ratio	Wind-Driven Rain Penetration Class
29 mph	3 in/hr	10,640 (5.0)	988 (5.0)	1,689 (8.6)	100%	А
50 mph	8 in/hr	9,599 (4.5)	892 (4.5)	1,524 (7.7)	99.0%	A

Wind Driven Rain

Effectiveness

99% and above

95% to 98.9%

80% to 94.9%

below 80%

Class

А

В

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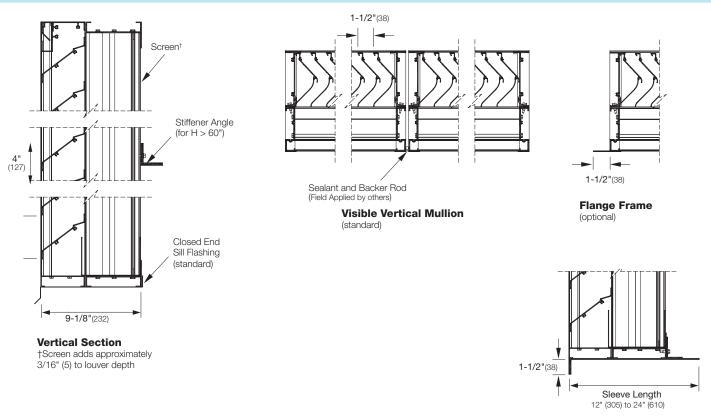
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#### NOTE:

1. Core area is the open area of the louver face (face area less louver frame). Core velocity is the airflow divided by core area. Test louver core area is 10.77 ft<sup>2</sup> (1 m<sup>2</sup>).

2. Free area velocity is the airflow divided by free area. Test louver free area is 6.3 ft² (0.59 m²).

## **Attributes**



**Sleeve** (optional)

## **Supplemental Options**

Extruded Aluminum Louver

E.I\_Q3

9" deep • 37° J-blade with vertical blade rear section

