

### EVS-745

\*Louver dimensions furnished approximately 1/2" (13) undersize.

## Ratings

**Free Area:** [48" × 48" (1219 × 1219) unit]: 7.1 ft<sup>2</sup> (0.66 m<sup>2</sup>)  
44.1%

### Performance @ Beginning Point of Water Penetration

**Free Area Velocity:** 822 fpm (4.18 m/s)

**Air Volume Delivered:** 5,807 cfm (2.74 m<sup>3</sup>/s)

**Pressure Loss:** 0.20 in.wg. (51 Pa)

(Water penetration performance is not AMCA certified.)

**Velocity @ 0.15 in.wg. Pressure Loss:** 706 fpm (3.59 m/s)

**Design Load:** 30 psf



### Certified Ratings:

Pottorff certifies that the model EVS-745 shown herein is licensed to bear the AMCA seal. The ratings shown are based on test 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 and wind driven sand ratings.

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

The EVS-745 is designed and tested for protection against both wind-driven sand and wind-driven rain. The EVS-745 offers greater free area and lower pressure loss than most other sand-trap louvers, making it well suited for situations requiring high rates of airflow through the louver. The EVS-745 incorporates vertical blades and is available in a wide array of anodized or painted finishes including custom color matching.

## Standard Construction

**Material:** Mill finish 6063 extruded aluminum

**Frame:** 7" deep × 0.081" thick (178 × 2) channel

**Blades:** 0.081" (2) thick vertical chevron style

**Screen:** 1/2" × 0.063" (12.7 × 1.6) expanded and flattened aluminum

**Mullion:** Visible

**Minimum Size:** 12" × 12" (305 × 305)

**Maximum Size:**

Single section: 60" × 120" (1524 × 3048)  
120" × 60" (3048 × 1524)

Multiple section: Unlimited

**Shipping Weight (approximate):** 8.5 lbs/ft<sup>2</sup> (42 kg/m<sup>2</sup>)

## Options

### ■ Factory finish:

- High Performance Fluoropolymer
- Baked Enamel ■ Prime Coat

### ■ Frame options:

- 1-1/2" (38) flange frame ■ Custom-size flange

### ■ Installation hardware

- Clip angles ■ Continuous angles

### ■ Alternate bird or insect screens

### ■ Insulated or non-insulated blank-off panels

### ■ Filter racks

### ■ Head and/or sill flashing

### ■ Burglar bars

### ■ Frame closure

### ■ Net OD (actual size)



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# PERFORMANCE

## EVS-745

Extruded Aluminum Louver  
7" deep • Vertical Blade

### Free Area (ft<sup>2</sup>)

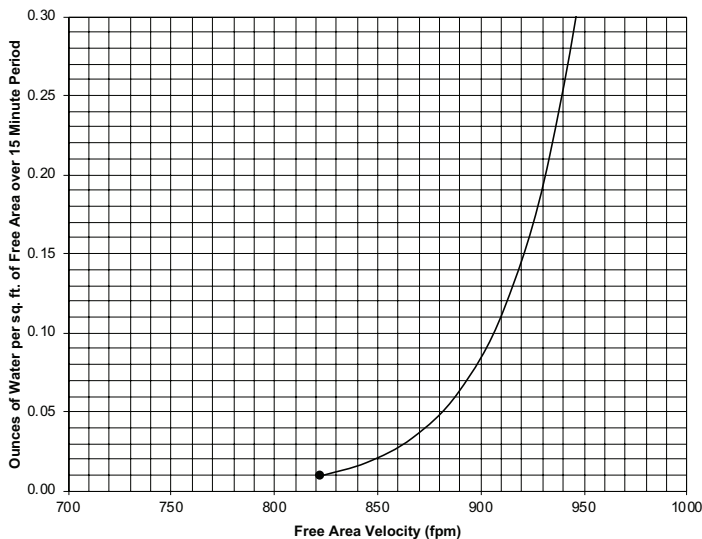
Width (Inches)

	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
12	0.1	0.2	0.3	0.4	0.5	0.6	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.5	1.6	1.7
18	0.3	0.5	0.8	1.0	1.2	1.5	1.7	2.0	2.2	2.4	2.7	2.9	3.1	3.4	3.6	3.8	4.1	4.3	4.5
24	0.5	0.9	1.3	1.6	2.0	2.4	2.8	3.2	3.6	3.9	4.3	4.7	5.1	5.5	5.8	6.2	6.6	7.0	7.4
30	0.7	1.2	1.7	2.3	2.8	3.3	3.9	4.4	4.9	5.4	6.0	6.5	7.0	7.6	8.1	8.6	9.1	9.7	10.2
36	0.9	1.5	2.2	2.9	3.6	4.2	4.9	5.6	6.3	7.0	7.6	8.3	9.0	9.7	10.3	11.0	11.7	12.4	13.0
42	1.1	1.9	2.7	3.5	4.3	5.2	6.0	6.8	7.6	8.5	9.3	10.1	10.9	11.8	12.6	13.4	14.2	15.0	15.9
48	1.2	2.2	3.2	4.2	5.1	6.1	7.1	8.0	9.0	10.0	10.9	11.9	12.9	13.8	14.8	15.8	16.8	17.7	18.7
54	1.4	2.5	3.7	4.8	5.9	7.0	8.1	9.2	10.4	11.5	12.6	13.7	14.8	15.9	17.1	18.2	19.3	20.4	21.5
60	1.6	2.9	4.1	5.4	6.7	7.9	9.2	10.5	11.7	13.0	14.3	15.5	16.8	18.0	19.3	20.6	21.8	23.1	24.4
66	1.8	3.2	4.6	6.0	7.4	8.9	10.3	11.7	13.1										
72	2.0	3.5	5.1	6.7	8.2	9.8	11.3	12.9	14.4										
78	2.2	3.9	5.6	7.3	9.0	10.7	12.4	14.1	15.8										
84	2.4	4.2	6.1	7.9	9.8	11.6	13.5	15.3	17.2										
90	2.6	4.6	6.6	8.5	10.5	12.5	14.5	16.5	18.5										
96	2.7	4.9	7.0	9.2	11.3	13.5	15.6	17.8	19.9										
102	2.9	5.2	7.5	9.8	12.1	14.4	16.7	19.0	21.3										
108	3.1	5.6	8.0	10.4	12.9	15.3	17.7	20.2	22.6										
114	3.3	5.9	8.5	11.1	13.6	16.2	18.8	21.4	24.0										
120	3.5	6.2	9.0	11.7	14.4	17.2	19.9	22.6	25.3										

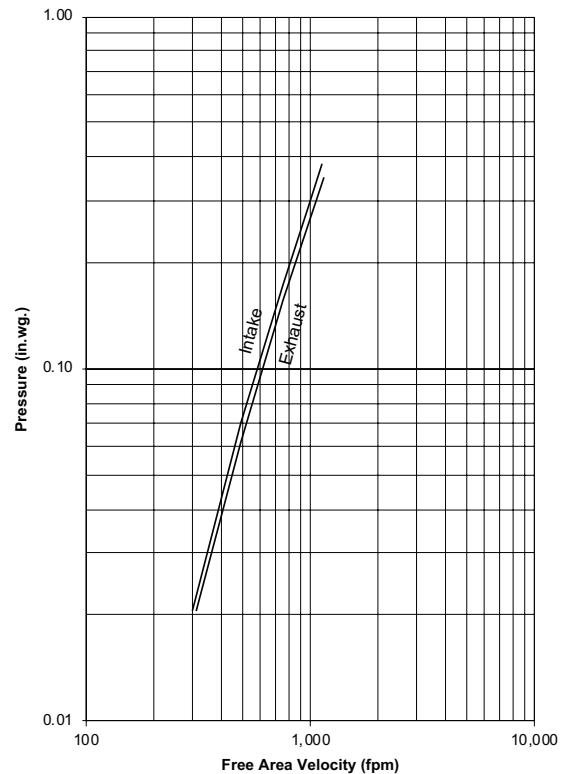
## Water Penetration

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 and is 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 = 822 fpm**



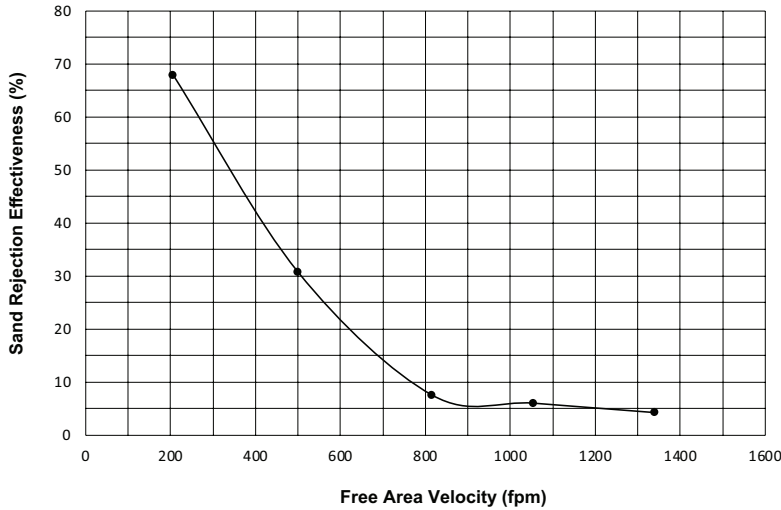
## Pressure Loss



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

## Wind Driven Sand Performance

Test No.	Airflow Rate		Free Area Velocity		Total Mass Injected		Total Mass Rejected		Sand Rejection Effectiveness
	cfm	(m³/s)	fpm	(m/s)	lb	(g)	lb	(g)	%
1	1,462	(0.69)	207	(1.05)	2.20	(1,000)	1.50	(679)	67.9
2	3,539	(1.67)	501	(2.55)	2.21	(1,001)	0.68	(307)	30.7
3	5,763	(2.72)	816	(4.15)	4.41	(2,001)	0.33	(151)	7.6
4	7,458	(3.52)	1,056	(5.37)	4.41	(2,001)	0.27	(121)	6.0
5	9,471	(4.47)	1,342	(6.82)	4.41	(2,001)	0.19	(85)	4.3



## Wind Driven Rain Performance

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

(Wind-Driven Rain performance is not AMCA certified.)

Wind Velocity	Rainfall	Airflow cfm (m³/s)	Core Velocity <sup>1</sup> fpm (m/s)	Free Area Velocity <sup>2</sup> fpm (m/s)	Effectiveness %	Wind-Driven Rain Penetration Class
50 mph	8 in/hr	6,341 (3.0)	589 (3.0)	1,304 (6.6)	99.5	A
		7,430 (3.5)	690 (3.5)	1,528 (7.8)	99.5	A
		8,486 (4.0)	788 (4.0)	1,745 (8.9)	99.1	A
		9,526 (4.5)	885 (4.5)	1,959 (10.0)	97.3	B
		10,600 (5.0)	985 (5.0)	2,180 (11.1)	95.6	B

**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 ft² (1 m²).

2. Free area velocity is the airflow divided by free area. Test louver free area is 4.9 ft² (0.45 m²).

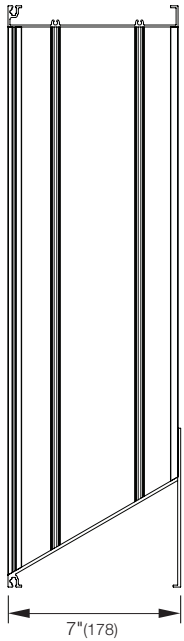
**Wind Driven Rain**

Class	Effectiveness
A	99% and above
B	95% to 98.9%
C	80% to 94.9%
D	below 80%

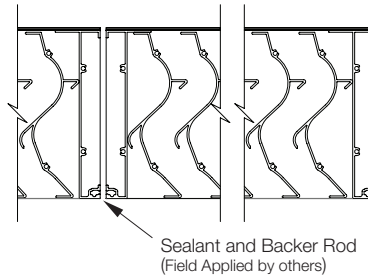
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7" deep • Vertical Blade

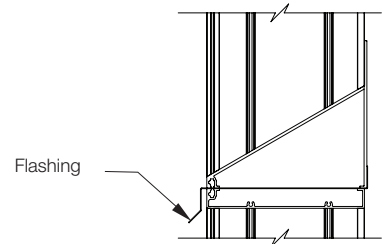
## Attributes



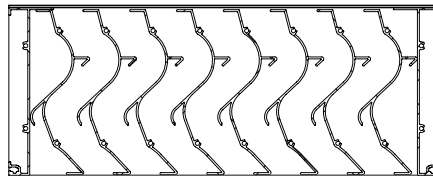
**Vertical Section**  
†Screen adds approximately  
3/16" (5) to louver depth



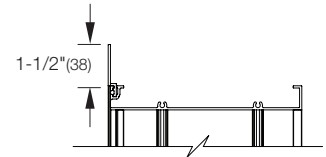
**Visible Vertical Mullion**  
(standard)



**Horizontal Mullion**  
(standard)

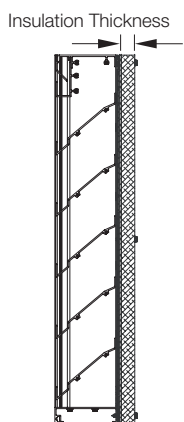


**Top View**

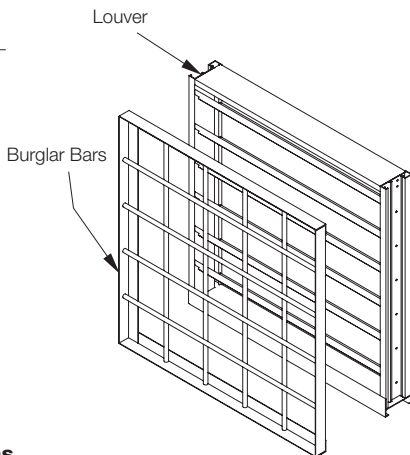


**Flange Frame**  
(optional)

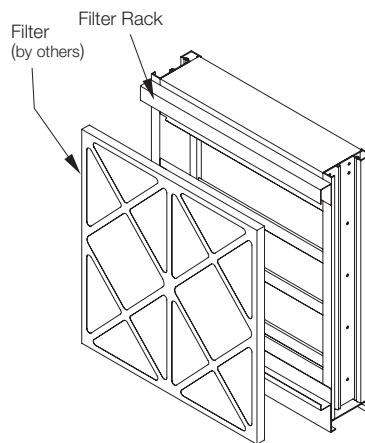
## Supplemental Options



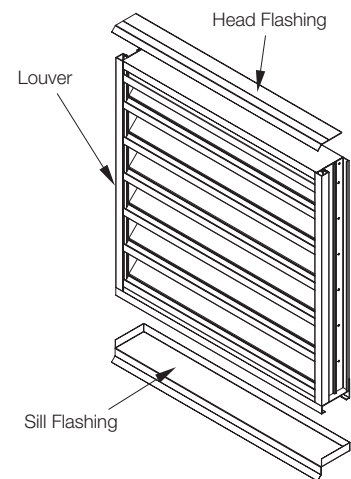
**Blank-Off Options**  
Non-Insulated and Gasketed  
1" Insulated (4.25 R-value)  
2" Insulated (8.75 R-value)



**Burglar Bars**  
Shipped Loose or Mounted



**Filter Rack**



**Flashing Options**  
Head and Sill Available