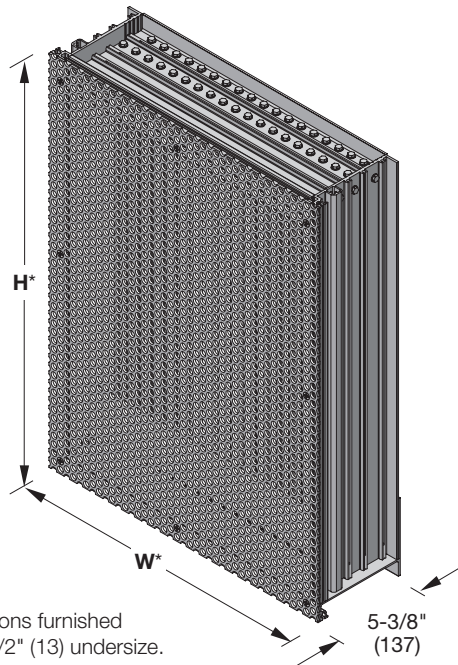




EPV-545

(standard)

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

Ratings

Free Area: [48" × 48" (1219 × 1219) unit]:

For 3/8" Perforated Plate: 7.4 ft² (0.69 m²)
46.2%

For 1" Perforated Plate: 8.5 ft² (0.78 m²)
52.5%

Performance @ Beginning Point of Water Penetration

3/8" Perforated Plate:

Free Area Velocity: 1087 fpm (5.52 m/s)

Air Volume Delivered: 8,044 cfm (3.80 m³/s)

Pressure Loss: 0.29 in.wg. (71 Pa)

1" Perforated Plate:

Free Area Velocity: 690 fpm (3.50 m/s)

Air Volume Delivered: 5,795 cfm (2.73 m³/s)

Pressure Loss: 0.15 in.wg. (37 Pa)

Velocity @ 0.15 in.wg. Pressure Loss: 693 fpm (3.52 m/s)

Tested in accordance to AMCA 550 (high velocity rain resistant)

Design Load: 30 psf

The EPV-545 vertical blade louver is designed to prevent water penetration in wind-driven rain applications while providing a perforated face plate for visual blending with surrounding architecture. The perforated face is available in 3/8" or 1" diameter holes, staggered. The EPV-545 is available in a wide array of anodized and painted finishes including custom color matching with separate finishing options for the perforated face plate.

Standard Construction

Material: Mill finish 6005A-T6 extruded aluminum

Frame: 5-3/8" deep × 0.081" thick (137 × 2) channel

Blades: 45° × 0.05" (1.3) thick vertical chevron style

Perforated Face Plate: 0.125" thick 3003 H-14 aluminum

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

Mullion: Visible

Minimum Size: 4-1/2" × 10" (114 × 254)

Maximum Size:

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

Multiple section: Unlimited

Shipping Weight (approximate): 5.2 lbs/ft² (25.4 kg/m²)

Options

■ Split factory finish:

- High Performance Fluoropolymer ■ Prime Coat
- Baked Enamel ■ Clear Anodize ■ Integral Color Anodize

■ Frame Options:

- 1-1/2" (38) flange frame

■ Installation Hardware

- Continuous angles

■ Alternate bird or insect screens

■ Insulated or non-insulated blank-off panels

■ Filter racks

■ Head and/or sill flashing

■ Burglar bars



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

PERFORMANCE

EPV-545

Extruded Aluminum Louver
5-3/8" deep • Vertical Blade with Perforated Face Plate

Free Area (ft²)

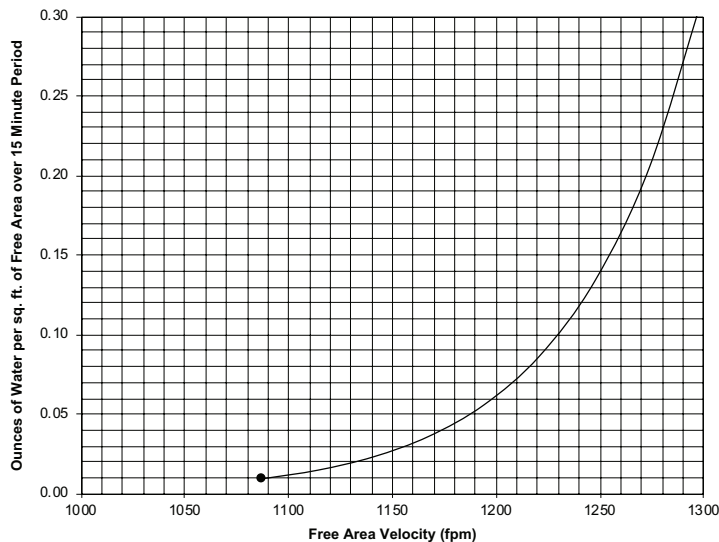
3/8" Perforated Plate

	Width (Inches)																			
	4.5	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
Height (Inches)																				
12	0.1	0.3	0.6	0.8	1.0	1.2	1.4	1.6	1.8	2.0	2.2	2.4	2.6	2.8	3.0	3.2	3.4	3.6	3.8	4.0
18	0.2	0.6	0.9	1.2	1.6	1.9	2.2	2.5	2.9	3.2	3.5	3.9	4.2	4.5	4.9	5.2	5.5	5.8	6.2	6.5
24	0.3	0.8	1.2	1.7	2.1	2.6	3.1	3.5	4.0	4.4	4.9	5.3	5.8	6.2	6.7	7.2	7.6	8.1	8.5	9.0
30	0.4	1.0	1.6	2.2	2.7	3.3	3.9	4.5	5.1	5.6	6.2	6.8	7.4	8.0	8.6	9.1	9.7	10.3	10.9	11.5
36	0.5	1.2	1.9	2.6	3.3	4.0	4.7	5.5	6.2	6.9	7.6	8.3	9.0	9.7	10.4	11.1	11.8	12.5	13.2	14.0
42	0.6	1.4	2.3	3.1	3.9	4.8	5.6	6.4	7.3	8.1	8.9	9.8	10.6	11.4	12.3	13.1	13.9	14.8	15.6	16.4
48	0.7	1.6	2.6	3.6	4.5	5.5	6.4	7.4	8.4	9.3	10.3	11.2	12.2	13.2	14.1	15.1	16.0	17.0	18.0	18.9
54	0.8	1.9	2.9	4.0	5.1	6.2	7.3	8.4	9.5	10.5	11.6	12.7	13.8	14.9	16.0	17.1	18.1	19.2	20.3	21.4
60	0.9	2.1	3.3	4.5	5.7	6.9	8.1	9.3	10.6	11.8	13.0	14.2	15.4	16.6	17.8	19.0	20.3	21.5	22.7	23.9
66	0.9	2.3	3.6	5.0	6.3	7.6	9.0	10.3	11.7	13.0										
72	1.0	2.5	4.0	5.4	6.9	8.4	9.8	11.3	12.7	14.2										
78	1.1	2.7	4.3	5.9	7.5	9.1	10.7	12.3	13.8	15.4										
84	1.2	2.9	4.6	6.4	8.1	9.8	11.5	13.2	14.9	16.7										
90	1.3	3.1	5.0	6.8	8.7	10.5	12.4	14.2	16.0	17.9										
96	1.4	3.4	5.3	7.3	9.3	11.2	13.2	15.2	17.1	19.1										
102	1.5	3.6	5.7	7.8	9.9	12.0	14.0	16.1	18.2	20.3										
108	1.6	3.8	6.0	8.2	10.5	12.7	14.9	17.1	19.3	21.6										
114	1.7	4.0	6.4	8.7	11.0	13.4	15.7	18.1	20.4	22.8										
120	1.8	4.2	6.7	9.2	11.6	14.1	16.6	19.1	21.5	24.0										

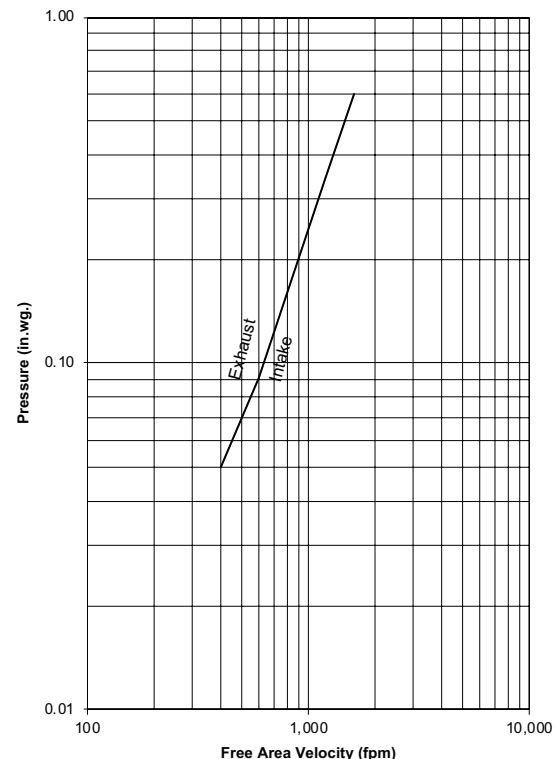
Water Penetration

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 = 690 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. Data corrected to standard air density.

PERFORMANCE

EPV-545

Extruded Aluminum Louver
5-3/8" deep • Vertical Blade with Perforated Face Plate

Free Area (ft²)

1" Perforated Plate

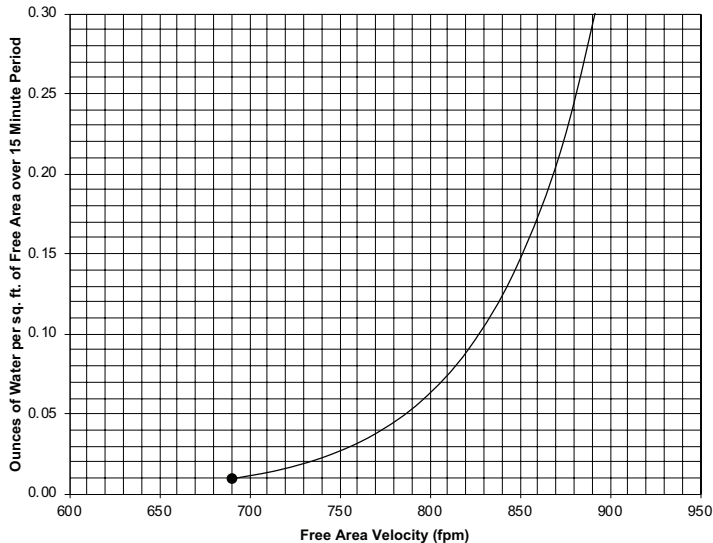
Width (Inches)

	4.5	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
Height (Inches)																				
12	0.2	0.4	0.6	0.9	1.1	1.3	1.6	1.8	2.0	2.2	2.5	2.7	2.9	3.2	3.4	3.6	3.9	4.1	4.3	4.6
18	0.3	0.6	1.0	1.4	1.8	2.1	2.5	2.9	3.3	3.6	4.0	4.4	4.8	5.1	5.5	5.9	6.3	6.6	7.0	7.4
24	0.4	0.9	1.4	1.9	2.4	3.0	3.5	4.0	4.5	5.0	5.5	6.1	6.6	7.1	7.6	8.1	8.6	9.2	9.7	10.2
30	0.5	1.1	1.8	2.4	3.1	3.8	4.4	5.1	5.8	6.4	7.1	7.7	8.4	9.1	9.7	10.4	11.0	11.7	12.4	13.0
36	0.6	1.4	2.2	3.0	3.8	4.6	5.4	6.2	7.0	7.8	8.6	9.4	10.2	11.0	11.8	12.6	13.4	14.2	15.0	15.8
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48	0.8	1.9	3.0	4.0	5.1	6.2	7.3	8.4	9.5	10.6	11.7	12.8	13.8	14.9	16.0	17.1	18.2	19.3	20.4	21.5
54	0.9	2.1	3.3	4.6	5.8	7.0	8.3	9.5	10.7	12.0	13.2	14.4	15.7	16.9	18.1	19.4	20.6	21.8	23.1	24.3
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114	1.9	4.5	7.2	9.9	12.5	15.2	17.9	20.5	23.2	25.9										
120	2.0	4.8	7.6	10.4	13.2	16.0	18.8	21.6	24.4	27.2										

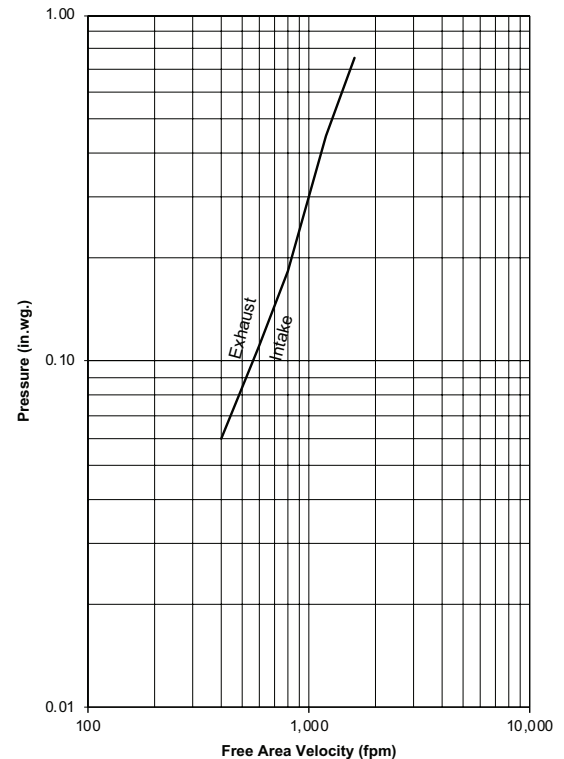
Water Penetration

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 = 690 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. Data corrected to standard air density.

PERFORMANCE

EPV-545

Extruded Aluminum Louver

5-3/8" deep • Vertical Blade with Perforated Face Plate

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

Wind Velocity	Rainfall	Airflow cfm (m ³ /s)	Core Velocity ¹ fpm (m/s)	Free Area Velocity ² fpm (m/s)	Effectiveness Ratio	Wind-Driven Rain Penetration Class
3/8" Perforated - 50 mph	8 in/hr	10,585 (5.0)	982 (5.0)	1,696 (8.6)	99%	A
1" Perforated - 50 mph	8 in/hr	10,585 (5.0)	983 (5.0)	1,696 (8.6)	99.6%	A

NOTE:

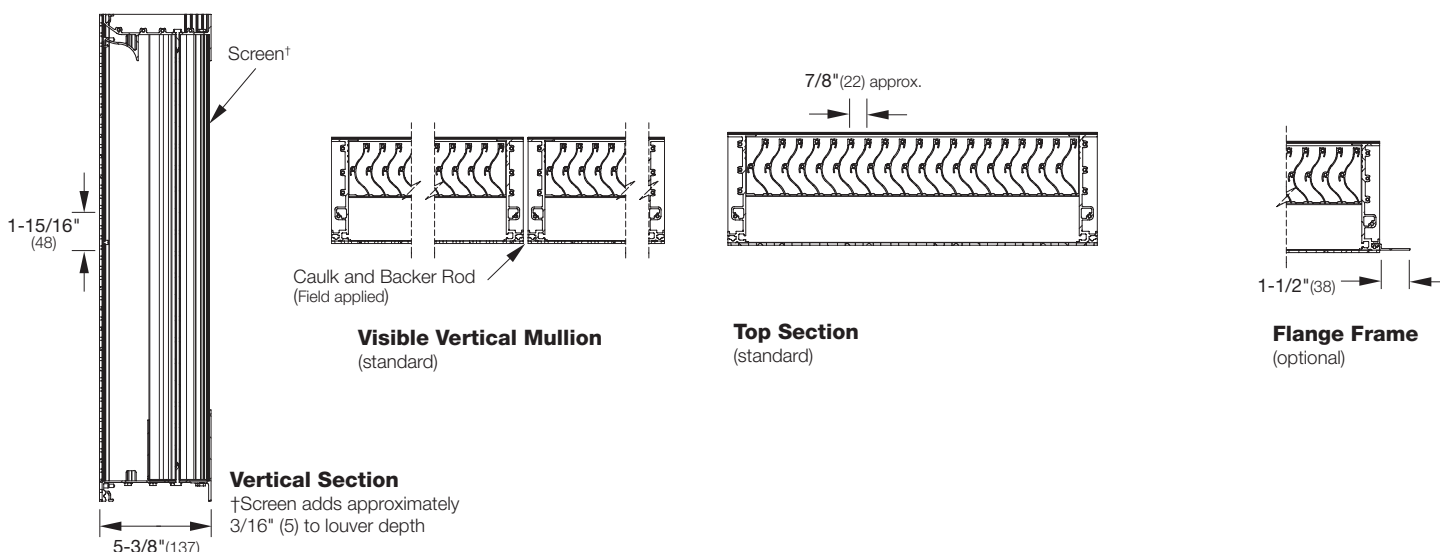
1. Core area is the open area of the louver face (face area less louver frame). Core velocity is the airflow divided by core area. Test louver core area is 10.77 ft² (1 m²).

2. Free area velocity is the airflow divided by free area. Test louver free area is 5.5 ft² (0.51 m²) / 6.2 ft² (0.58 m²).

Wind Driven Rain

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

Attributes



Supplemental Options

