# **POTTORFF**°

**EDV-545** 

5-3/8" deep • J-blade w/ Vertical Blade rear section



## **Ratings**

Free Area:  $[48" \times 48" (1219 \times 1219) \text{ unit}]: 8.03 \text{ ft}^2 (0.75 \text{ m}^2)$ 

50.2%

**Performance @ Beginning Point of Water Penetration** 

**Free Area Velocity:** 1,250 fpm (6.35 m/s) **Air Volume Delivered:** 10,038 cfm (4.74 m³/s)

Pressure Loss: 0.55 in.wg. (136 Pa)

Velocity @ 0.15 in.wg. Pressure Loss: 666 fpm (3.38 m/s)
AMCA 540 (impact resistant, Enhanced protection) listed
AMCA 550 (high velocity rain resistant) listed

Design Load: 100 psf

The EDV-545 dual-module louver is engineered and tested to withstand extreme loads, debris impact, and cyclic fatigue associated with the severe weather effects of hurricanes while maintaining maximum water infiltration resistance at a minimum louver depth. The front (exterior) side of the louver features horizontal J-style blades for a pleasant architectural appearance. The (interior) side features vertical chevron blades which provide superior resistance to wind-driven rain. For installation, the EDV-545 offers a continuous angle option. The EDV-545 is AMCA 540 and 550 listed, making it ideally suited for use in hurricane-prone and wind-borne debris regions as per the International Building Code.

#### **Standard Construction**

**Material:** Mill finish 6005A-T6 extruded aluminum **Frame:** 5-3/8" deep  $\times$  0.081" thick (137  $\times$  2) channel **Blades(Rear):**  $45^{\circ} \times 0.05$ " (1.3) thick vertical chevron style

**Blades(Front):**  $45^{\circ} \times 0.08''$  (2) thick horizontal J style **Screen:**  $1/2'' \times 0.063''$  (12.7 × 1.6) expanded and

flattened aluminum

Mullion: Visible

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

**Maximum Size:** 

Single section:  $60" \times 96" (1524 \times 2438)$ 

Multiple section: Unlimited

Shipping Weight (approximate): 8 lbs/ft² (39 kg/m²)

## **Options**

- 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**

**EDV-545** 

5-3/8" deep • J-blade w/ Vertical Blade rear section

#### Free Area (ft²)

				Widtl	h (Inches)				
	12	18	24	30	36	42	48	54	60
12	0.22	0.36	0.49	0.63	0.76	0.90	1.03	1.17	1.30
18	0.48	0.76	1.05	1.33	1.62	1.90	2.19	2.47	2.76
24	0.73	1.17	1.61	2.05	2.49	2.93	3.37	3.81	4.25
30	0.99	1.59	2.18	2.78	3.37	3.97	4.56	5.16	5.75
36	1.25	2.00	2.75	3.50	4.25	5.00	5.75	6.50	7.25
42	1.50	2.41	3.31	4.21	5.11	6.02	6.92	7.82	8.72
48	1.75	2.79	3.84	4.89	5.93	6.98	8.03	9.08	10.12
54	1.99	3.19	4.38	5.58	6.78	7.97	9.17	10.36	11.56
60	2.23	3.58	4.92	6.26	7.60	8.94	10.28	11.62	12.96
66	2.49	3.98	5.48	6.97	8.47	9.96	11.45	12.95	14.44
72	2.75	4.40	6.05	7.69	9.34	10.99	12.64	14.29	15.94
78	3.01	4.81	6.61	8.42	10.22	12.02	13.83	15.63	17.43
84	3.26	5.22	7.18	9.14	11.10	13.06	15.02	16.97	18.93
90	3.51	5.62	7.73	9.84	11.95	14.05	16.16	18.27	20.38
96	3.76	6.02	8.27	10.53	12.79	15.04	17.30	19.56	21.81



#### **Certified Ratings:**

Pottorff certifies that the model EDV-545 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, water penetration and wind-driven rain ratings.



HIGH VELOCITY RAIN RESISTANT WITH BLADES FULLY OPEN AND IMPACT RESISTANT LOUVER

Enhanced Protection Level E

See www.AMCA.org for all certified or listed products

This label does not signify AMCA airflow performance certification.

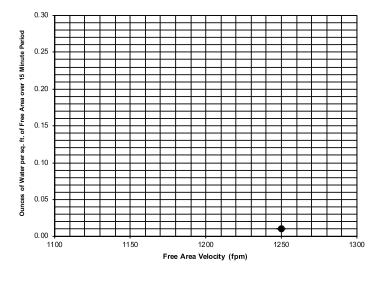
#### **Certified Ratings:**

Pottorff certifies that the model EDV-545 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 high velocity rain and wind borne debris impact resistant louvers.

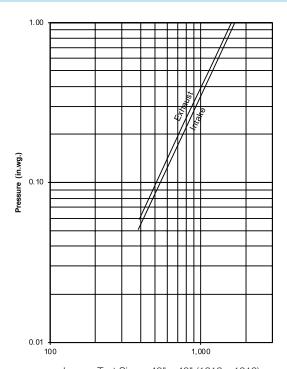
#### **Water Penetration**

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



## **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.

Extruded Aluminum Louver 5-3/8" deep • J-blade w/ Vertical Blade rear section

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

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 Ratio	Wind-Driven Rain Penetration Class
29 mph	3 in/hr	10,591 (5.0)	984 (5.0)	1,789 (9.1)	100%	А
50 mph	8 in/hr	10,600 (5.0)	985 (5.0)	1,791 (9.1)	99.8%	А

#### NOTE:

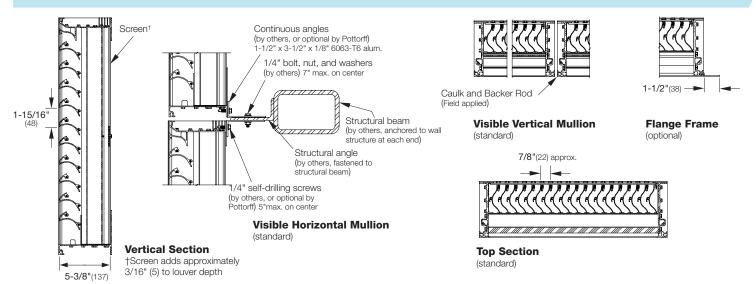
1. Core area is the open area of the louver face (face area less louver frame). Core velocity is the airflow divided by core area. Test louver core area is  $10.77~\rm{ft}^2~(1~m^2)$ .

2. Free area velocity is the airflow divided by free area. Test louver free area is 5.9 ft² (0.55 m²).

#### Wind Driven Rain

Class	Effectiveness
Α	99% and above
В	95% to 98.9%
С	80% to 94.9%
D	below 80%

## **Attributes**



## **Supplemental Options**

