

### ECV-545

(standard)

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

## Ratings

**Free Area:** [48" × 48" (1219 × 1219) unit]: 8.77 ft<sup>2</sup> (0.82 m<sup>2</sup>)  
54.8%

### Performance @ Beginning Point of Water Penetration

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

**Air Volume Delivered:** 10,963 cfm (5.17 m<sup>3</sup>/s)

**Pressure Loss:** 0.28 in.wg. (70 Pa)

**Velocity @ 0.15 in.wg. Pressure Loss:** 912 fpm (4.63 m/s)

**AMCA 540 (impact resistant, Enhanced protection) listed**

**AMCA 550 (high velocity rain resistant) listed**

**Design Load:** 130 psf with standard continuous angles  
80 psf with low-profile continuous angles

The ECV-545 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. For installation, the ECV-545 offers multiple continuous angle options. The ECV-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 6063-T6 extruded aluminum

**Frame:** 5" deep × 0.081" thick (127 × 2) channel

**Blades:** 45° × 0.06" (1.5) thick vertical chevron style.  
Right-facing blade orientation

**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: 72" × 120" (1829 × 3048)  
120" × 72" (3048 × 1829)

Multiple section: Unlimited

**Shipping Weight (approximate):** 5.5 lbs/ft<sup>2</sup> (48 kg/m<sup>2</sup>)

## 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

- Standard continuous angles (3-1/2" deep)
- Low-profile continuous angles (2" deep)

### ■ Alternate bird or insect screens

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

### ■ Filter racks

### ■ Head and/or sill flashing

### ■ Burglar bars

### ■ Left-facing blade orientation



### Certified Ratings:

Pottorff certifies that the model ECV-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.



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**5** year  
warranty

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

# PERFORMANCE

## ECV-545

Extruded Aluminum Louver  
5" 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  |
| Height (Inches) | 12  | 0.3            | 0.4  | 0.6  | 0.8  | 1.0  | 1.2  | 1.3  | 1.5  | 1.7  | 1.9  | 2.1  | 2.2  | 2.4  | 2.6  | 2.8  | 3.0  | 3.1  | 3.3  | 3.5  |
|                 | 18  | 0.5            | 0.8  | 1.2  | 1.5  | 1.9  | 2.2  | 2.6  | 2.9  | 3.3  | 3.6  | 4.0  | 4.3  | 4.7  | 5.0  | 5.4  | 5.7  | 6.1  | 6.4  | 6.7  |
|                 | 24  | 0.7            | 1.2  | 1.8  | 2.3  | 2.8  | 3.3  | 3.8  | 4.3  | 4.8  | 5.4  | 5.9  | 6.4  | 6.9  | 7.4  | 7.9  | 8.4  | 9.0  | 9.5  | 10.0 |
|                 | 30  | 1.0            | 1.6  | 2.3  | 3.0  | 3.7  | 4.4  | 5.1  | 5.7  | 6.4  | 7.1  | 7.8  | 8.5  | 9.1  | 9.8  | 10.5 | 11.2 | 11.9 | 12.5 | 13.2 |
|                 | 36  | 1.2            | 2.1  | 2.9  | 3.7  | 4.6  | 5.4  | 6.3  | 7.1  | 8.0  | 8.8  | 9.7  | 10.5 | 11.4 | 12.2 | 13.1 | 13.9 | 14.8 | 15.6 | 16.5 |
|                 | 42  | 1.4            | 2.5  | 3.5  | 4.5  | 5.5  | 6.5  | 7.5  | 8.5  | 9.6  | 10.6 | 11.6 | 12.6 | 13.6 | 14.6 | 15.6 | 16.7 | 17.7 | 18.7 | 19.7 |
|                 | 48  | 1.7            | 2.9  | 4.0  | 5.2  | 6.4  | 7.6  | 8.8  | 9.9  | 11.1 | 12.3 | 13.5 | 14.7 | 15.9 | 17.0 | 18.2 | 19.4 | 20.6 | 21.8 | 22.9 |
|                 | 54  | 1.9            | 3.3  | 4.6  | 6.0  | 7.3  | 8.7  | 10.0 | 11.4 | 12.7 | 14.0 | 15.4 | 16.7 | 18.1 | 19.4 | 20.8 | 22.1 | 23.5 | 24.8 | 26.2 |
|                 | 60  | 2.2            | 3.7  | 5.2  | 6.7  | 8.2  | 9.7  | 11.2 | 12.8 | 14.3 | 15.8 | 17.3 | 18.8 | 20.3 | 21.8 | 23.4 | 24.9 | 26.4 | 27.9 | 29.4 |
|                 | 66  | 2.4            | 4.1  | 5.8  | 7.4  | 9.1  | 10.8 | 12.5 | 14.2 | 15.8 | 17.5 | 19.2 | 20.9 | 22.6 | 24.2 | 25.9 | 27.6 | 29.3 | 31.0 | 32.7 |
|                 | 72  | 2.6            | 4.5  | 6.3  | 8.2  | 10.0 | 11.9 | 13.7 | 15.6 | 17.4 | 19.3 | 21.1 | 23.0 | 24.8 | 26.7 | 28.5 | 30.4 | 32.2 | 34.0 | 35.9 |
|                 | 78  | 2.9            | 4.9  | 6.9  | 8.9  | 10.9 | 12.9 | 15.0 | 17.0 | 19.0 | 21.0 | 23.0 |      |      |      |      |      |      |      |      |
|                 | 84  | 3.1            | 5.3  | 7.5  | 9.6  | 11.8 | 14.0 | 16.2 | 18.4 | 20.6 | 22.7 | 24.9 |      |      |      |      |      |      |      |      |
| 90              | 3.3 | 5.7            | 8.0  | 10.4 | 12.7 | 15.1 | 17.4 | 19.8 | 22.1 | 24.5 | 26.8 |      |      |      |      |      |      |      |      |      |
| 96              | 3.6 | 6.1            | 8.6  | 11.1 | 13.6 | 16.1 | 18.7 | 21.2 | 23.7 | 26.2 | 28.7 |      |      |      |      |      |      |      |      |      |
| 102             | 3.8 | 6.5            | 9.2  | 11.9 | 14.5 | 17.2 | 19.9 | 22.6 | 25.3 | 27.9 | 30.6 |      |      |      |      |      |      |      |      |      |
| 108             | 4.0 | 6.9            | 9.7  | 12.6 | 15.4 | 18.3 | 21.1 | 24.0 | 26.8 | 29.7 | 32.5 |      |      |      |      |      |      |      |      |      |
| 114             | 4.3 | 7.3            | 10.3 | 13.3 | 16.3 | 19.4 | 22.4 | 25.4 | 28.4 | 31.4 | 34.4 |      |      |      |      |      |      |      |      |      |
| 120             | 4.5 | 7.7            | 10.9 | 14.1 | 17.2 | 20.4 | 23.6 | 26.8 | 30.0 | 33.2 | 36.3 |      |      |      |      |      |      |      |      |      |



**HIGH VELOCITY  
RAIN RESISTANT  
WITH BLADES FULLY OPEN  
AND IMPACT RESISTANT  
LOUVER**  
*Enhanced Protection*  
See [www.AMCA.org](http://www.AMCA.org) for all certified or listed products

This label does not signify  
AMCA airflow performance  
certification.

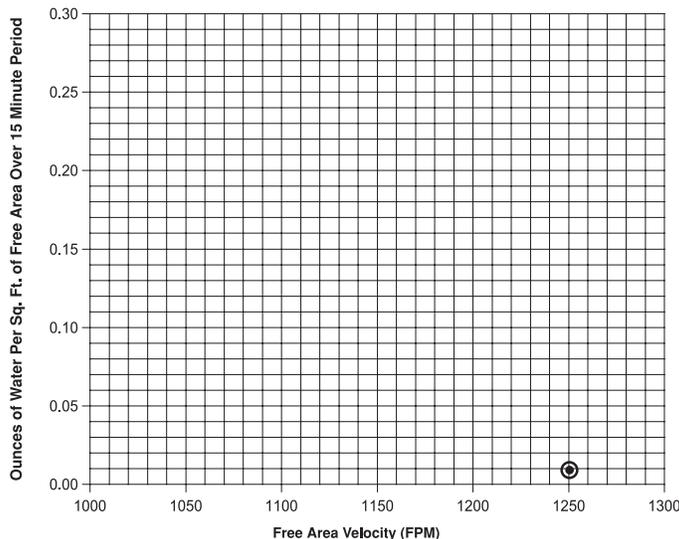
#### Listings:

Pottorff certifies that the model ECV-545-MD shown herein is approved to bear the AMCA International 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 International Listing Label program. The AMCA International Listing Label applies to pressure cycle tested windborne debris impact resistant louvers rated for 'Enhanced Protection' and +/- 130 psf with a minimum blade span of 12" and a maximum unsupported blade span of 60", and to high velocity wind driven rain (HVVDR) resistant louvers tested in the fully open position that permits airflow through the louver.

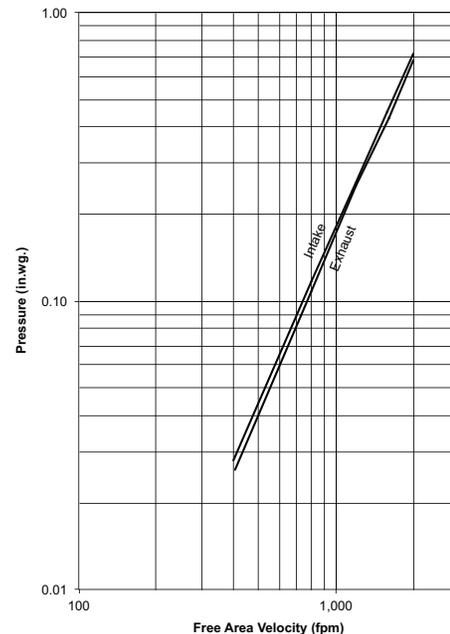
### Water Penetration

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.

# PERFORMANCE

## ECV-545

Extruded Aluminum Louver  
5" deep • Vertical Blade

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

| Wind Velocity | Rainfall | Airflow<br>cfm (m <sup>3</sup> /s) | Core Velocity <sup>1</sup><br>fpm (m/s) | Free Area Velocity <sup>2</sup><br>fpm (m/s) | Effectiveness<br>Ratio | Wind-Driven Rain<br>Penetration Class |
|---------------|----------|------------------------------------|---|--|------------------------|---------------------------------------|
| 29 mph        | 3 in/hr  | 10,601 (5.0)                       | 985 (5.0)                               | 1,631 (8.3)                                  | 100%                   | A                                     |
| 50 mph        | 8 in/hr  | 10,605 (5.0)                       | 985 (5.0)                               | 1,632 (8.3)                                  | 99.7%                  | A                                     |

**NOTE:**

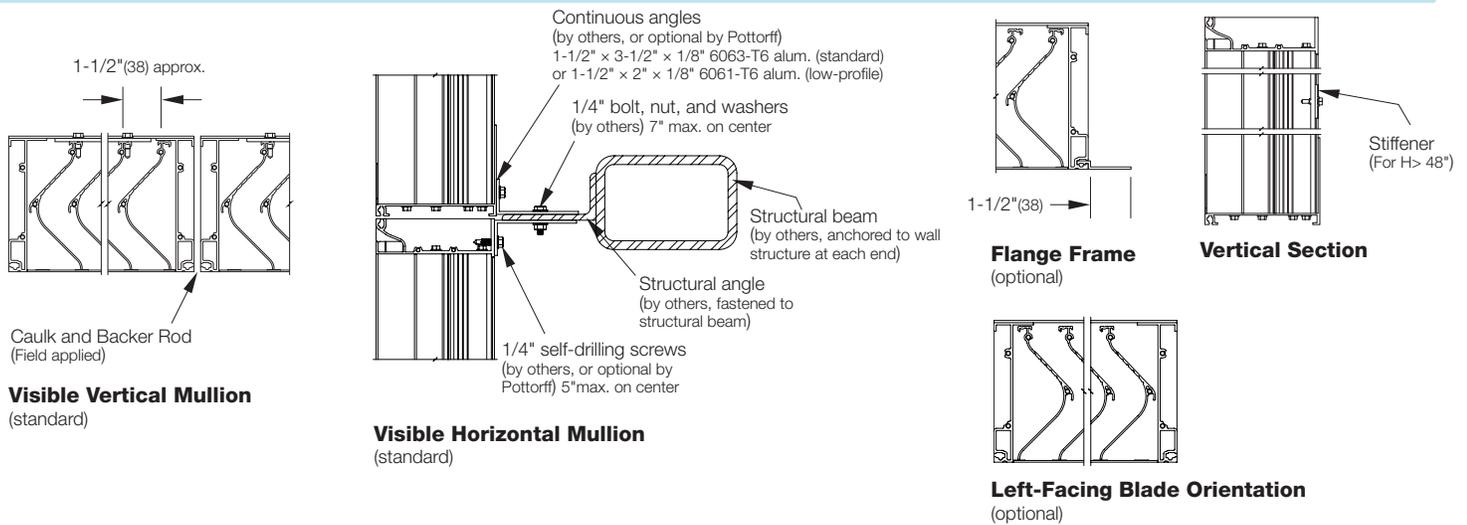
1. Core area is the open area of the louver face (face area less louver frame). Core velocity is the airflow divided by core area. Test louver core area is 10.77 ft<sup>2</sup> (1 m<sup>2</sup>).

2. Free area velocity is the airflow divided by free area. Test louver free area is 6.5 ft<sup>2</sup> (0.6 m<sup>2</sup>).

**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

