# **POTTORFF**<sup>®</sup>

W\*

Free Area: [48" × 48" (1219 × 1219) unit]: 7.5 ft<sup>2</sup> (0.70 m<sup>2</sup>)

Performance @ Beginning Point of Water Penetration

Pressure Loss: 0.19 in.wg. (47 Pa)

AMCA 550 (high velocity rain resistant) listed

TAS203-94 and TAS100(A)-95

Design Load: 100 psf

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

Air Volume Delivered: 9,375 cfm (4.42 m<sup>3</sup>/s)

Velocity @ 0.15 in.wg. Pressure Loss: 1,106 fpm (5.62 m/s)

AMCA 540 (impact resistant, basic protection, level D) listed

Miami Dade County: NOA No. 23-1215.12 (Expires 7/23/2025)

Approved to FBC TAS201-94, TAS202-94 and

Florida Building Code Approval (2023-FBC): No. FL32625.1

46.9%

H'

**ECV-345-MD** 

Ratings

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

(standard)

The ECV-345-MD louver is engineered and tested to withstand extreme loads, debris impact, and cyclic fatigue associated with the severe weather effects of hurricanes (Miami-Dade County approval #23-1215.12). The design uses closely-spaced blades and a frame with built-in gutter and downspouts to achieve maximum water infiltration resistance for minimal louver depth. The ECV-345-MD is AMCA 540 and 550 listed, making it ideally suited for use in hurricane-prone and windborne debris regions as per the International Building Code.

ECV-345-N

Extruded Aluminum Louver 3" deep • 45° Vertical Blade

## **Standard Construction**

Material:	Mill finish 6063 extruded aluminu	um

**Frame:**  $3" \text{ deep} \times 0.075" \text{ thick } (84 \times 1.9) \text{ channel}$ 

- **Blades:**  $45^{\circ} \times 0.063^{"}$  (1.6) thick vertical chevron style
- **Screen:**  $1/2" \times 0.063" (12.7 \times 1.6)$  expanded and flattened aluminum

Mullion: Visible

- Sill Flashing: Closed end
- Minimum Size: 12" × 12" (305 × 305)

#### Maximum Size:

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

Shipping Weight (approximate): 6 lbs/ft<sup>2</sup> (26 kg/m<sup>2</sup>)

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

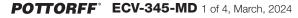
## **Options**

#### 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 flashing
- Burglar bars



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



# PERFORMANCE

ECV-345-MD Extruded Aluminum Louver 3" deep • 45° Vertical Blade

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

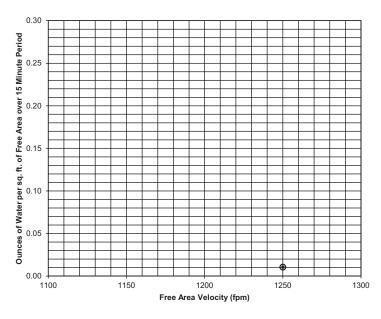
	Width (Inches)								
	12	18	24	30	36	42	48	54	60
12	0.2	0.4	0.6	0.8	0.9	1.1	1.3	1.4	1.6
18	0.5	0.8	1.1	1.4	1.7	2.0	2.3	2.6	2.9
24	0.7	1.1	1.6	2.0	2.4	2.9	3.3	3.8	4.2
30	0.9	1.5	2.0	2.6	3.2	3.8	4.4	5.0	5.5
36	1.1	1.8	2.5	3.2	4.0	4.7	5.4	6.1	6.9
42	1.3	2.1	3.0	3.9	4.7	5.6	6.5	7.3	8.2
48	1.5	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.5
54	1.7	2.8	4.0	5.1	6.3	7.4	8.5	9.7	10.8
60	1.9	3.2	4.5	5.7	7.0	8.3	9.6	10.9	12.1
66	2.1	3.5	4.9	6.4	7.8	9.2	10.6	12.0	13.5
72	2.3	3.9	5.4	7.0	8.5	10.1	11.7	13.2	14.8
78	2.5	4.2	5.9	7.6	9.3	11.0	12.7	14.4	16.1
84	2.7	4.6	6.4	8.2	10.1	11.9	13.7	15.6	17.4
90	2.9	4.9	6.9	8.9	10.8	12.8	14.8	16.8	18.7
96	3.1	5.3	7.4	9.5	11.6	13.7	15.8	17.9	20.1

# Height (Inches)

## **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 ECV-345-MD 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.

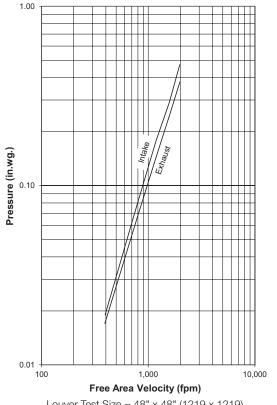


#### HIGH VELOCITY RAIN RESISTANT WITH BLADES FULLY OPEN AND IMPACT RESISTANT LOUVER Basic Protection Level D • See www.AMCA.org for all certified or listed products

#### **Certified Ratings:**

Pottorff certifies that the model ECV-345-MD 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 impact resistance.

## **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

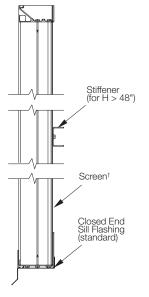
Wind Velocity	Rainfall	Airflow cfm (m³/s)	Core Velocity <sup>1</sup> fpm (m/s)	Free Area Velocity <sup>2</sup> fpm (m/s)	Effectiveness Ratio	Wind-Driven Rain Penetration Class
29 mph	3 in/hr	10,616 (5.0)	986 (5.0)	1,916 (9.7)	100%	А
50 mph	8 in/hr	10,594 (5.0)	984 (5.0)	1,912 (9.7)	100%	A

#### NOTE:

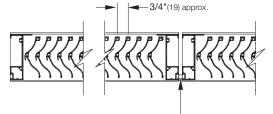
1. Core area is the open area of the louver face (face area less louver frame). Core velocity is the airflow divided by core area. Test louver core area is 10.77 ft<sup>2</sup> (1 m<sup>2</sup>).

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

## **Attributes**

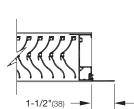


Vertical Section <sup>†</sup>Screen adds approximately 3/16" (5) to louver depth



Caulk and Backer Rod (Field applied)

Visible Vertical Mullion (standard)



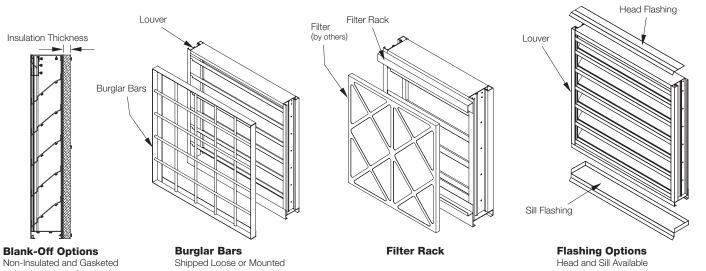
Flange Frame (optional)

## Wind Driven Rain

Effectiveness
99% and above
95% to 98.9%
80% to 94.9%
below 80%

## **Supplemental Options**

ECV-345-MD Extruded Aluminum Louver 3" deep • 45° Vertical Blade



1" Insulated (4.25 R-value)

2" Insulated (8.75 R-value)