## **ALL-LITE**

## **ECV-345-MD**

3" deep • 45° Vertical Blade

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 #25-0701.04). 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.

# H<sup>\*</sup> **ECV-345-MD** \*Louver dimensions furnished approximately 1/2" (13) undersize.

### **Ratings**

(standard)

**Free Area:**  $[48" \times 48" (1219 \times 1219) \text{ unit}]: 7.5 \text{ ft}^2 (0.70 \text{ m}^2)$ 

46.9%

**Performance @ Beginning Point of Water Penetration** 

Free Area Velocity: 1,250 fpm (6.35 m/s) Air Volume Delivered: 9,375 cfm (4.42 m<sup>3</sup>/s)

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

**Velocity @ 0.15 in.wg. Pressure Loss:** 1,106 fpm (5.62 m/s) AMCA 540 (impact resistant, basic protection, level D) listed AMCA 540 (high velocity rain resistant) listed

Miami Dade County: NOA No. 25-0701.04 (Expires 8/7/2030) Approved to FBC TAS201-94, TAS202-94 and TAS203-94 and TAS100(A)-95

Florida Building Code Approval (2023-FBC): No. FL47703

Design Load: 100 psf (4.8k Pa)

#### Standard Construction

Material: Mill finish 6063 extruded aluminum

Frame: 3" deep  $\times$  0.075" thick (84  $\times$  1.9) 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:**  $12" \times 12" (305 \times 305)$ 

**Maximum Size:** 

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

Shipping Weight (approximate): 6 lbs/ft² (26 kg/m²)

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



#### **Certified Ratings:**

All-Lite 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.





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

## **PERFORMANCE**

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Extruded Aluminum Louver 3" deep • 45° Vertical Blade

#### Free Area (ft²)

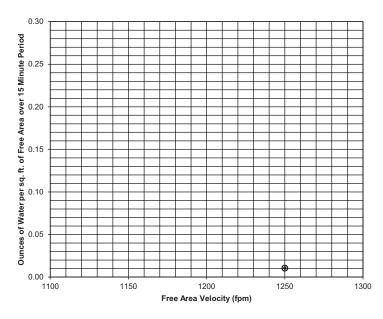
Width (Inches)

	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

#### **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"  $\times$  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:

All-Lite 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

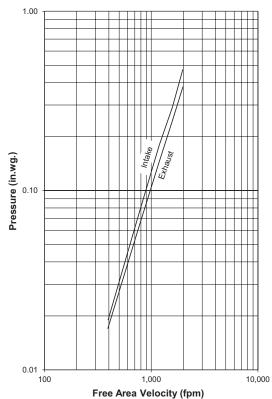
Basic Protection Level D
See www.AMCA.org for all certified or listed products

This label does not signify AMCA airflow performance certification.

#### Listings:

All-Lite certifies that the model ECV-345-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 'Basic Protection' and +/- 100 psf with a minimum blade span of 12" and a maximum unsupported blade span of 48", and to high velocity wind driven rain (HVWDR) resistant louvers tested in the fully open position that permits airflow through the louver.

#### **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.



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## 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:

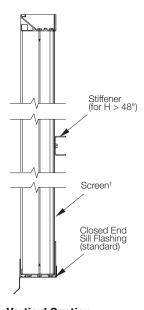
1. Core area is the open area of the louver face (face area less louver frame). Core velocity is the airflow divided by core area. Test louver core area is  $10.77~\rm{ft}^2~(1~m^2)$ .

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

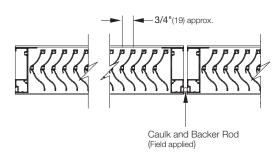
#### Wind Driven Rain

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

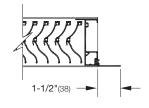
## **Attributes**



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



Visible Vertical Mullion (standard)



Flange Frame (optional)

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## **Supplemental Options**

