# **ALL-LITE**

## **ECV-545-N**

5" deep • Vertical Blade

The ECV-545-MD 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 #25.0514.04) while maintaining maximum water infiltration resistance at a minimum louver depth. For installation, the ECV-545-MD offers a standard continuous angle. The ECV-545-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**\* **Screen:**  $1/2" \times 0.063" (12.7 \times 1.6)$  expanded and

**Ratings** 

\*Louver dimensions furnished

approximately 1/2" (13) undersize.

**ECV-545-MD** (standard)

**Free Area:**  $[48" \times 48" (1219 \times 1219) \text{ unit}]: 8.77 \text{ ft}^2 (0.82 \text{ m}^2)$ 

54.8%

5-1/8"

(130)

**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, Basic Protection - Level D and

**Enhanced Protection - Level E) listed** 

AMCA 550 (high velocity rain resistant) listed

Miami Dade County: NOA No. 25.0514.04 (Expires 6/12/2030) Approved to FBC TAS201-94, TAS202-94, and TAS203-94

Florida Building Code Approval (2023-FBC): No. FL47589

Design Load: 130 psf (6.2 kPa)

#### Standard Construction

Material: Mill finish 6063-T6 extruded aluminum Frame: 5" deep  $\times$  0.081" thick (127  $\times$  2) channel **Blades:**  $45^{\circ} \times 0.06''$  (1.5) thick vertical chevron style

flattened aluminum

Mullion: Visible

Installation Hardware: Continuous angles **Minimum Size:**  $12" \times 12" (305 \times 305)$ 

**Maximum Size:** 

Single section:  $60" \times 120" (1524 \times 3048)$ Multiple section: Unlimited width × 120" (3048) Shipping Weight (approximate): 5.5 lbs/ft² (48 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
- Alternate bird or insect screens
- Insulated or non-insulated blank-off panels
- Filter racks
- Head and/or sill flashing
- Burglar bars



#### Certified Ratings:

All-Lite certifies that the model ECV-545-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.



amca INTERNATIONAL www.amca.org



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

# **PERFORMANCE**

## **ECV-545-MD**

Extruded Aluminum Louver 5" deep • Vertical Blade

#### Free Area (ft²)

Width (Inches)

	12	18	24	30	36	42	48	54	60
12	0.3	0.4	0.6	0.8	1.0	1.2	1.3	1.5	1.7
18	0.5	0.8	1.2	1.5	1.9	2.2	2.6	2.9	3.3
24	0.7	1.2	1.8	2.3	2.8	3.3	3.8	4.3	4.8
30	1.0	1.6	2.3	3.0	3.7	4.4	5.1	5.7	6.4
36	1.2	2.1	2.9	3.7	4.6	5.4	6.3	7.1	8.0
42	1.4	2.5	3.5	4.5	5.5	6.5	7.5	8.5	9.6
48	1.7	2.9	4.0	5.2	6.4	7.6	8.8	9.9	11.1
54	1.9	3.3	4.6	6.0	7.3	8.7	10.0	11.4	12.7
60	2.2	3.7	5.2	6.7	8.2	9.7	11.2	12.8	14.3
66	2.4	4.1	5.8	7.4	9.1	10.8	12.5	14.2	15.8
72	2.6	4.5	6.3	8.2	10.0	11.9	13.7	15.6	17.4
78	2.9	4.9	6.9	8.9	10.9	12.9	15.0	17.0	19.0
84	3.1	5.3	7.5	9.6	11.8	14.0	16.2	18.4	20.6
90	3.3	5.7	8.0	10.4	12.7	15.1	17.4	19.8	22.1
96	3.6	6.1	8.6	11.1	13.6	16.1	18.7	21.2	23.7
102	3.8	6.5	9.2	11.9	14.5	17.2	19.9	22.6	25.3
108	4.0	6.9	9.7	12.6	15.4	18.3	21.1	24.0	26.8
114	4.3	7.3	10.3	13.3	16.3	19.4	22.4	25.4	28.4
120	4.5	7.7	10.9	14.1	17.2	20.4	23.6	26.8	30.0



**Certified Ratings:** 

All-Lite certifies that the model ECV-545-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

Enhanced Protection

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

This label does not signify AMCA airflow performance certification.

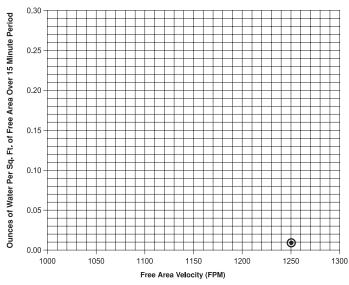
#### Listings:

All-Lite certifies that the model ECV-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 (HVWDR) resistant louvers tested in the fully open position that permits airflow through the louver.

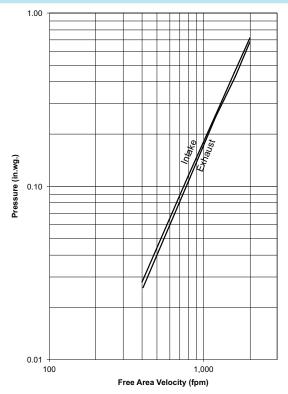
## **Water Penetration**

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**



## 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	10,601 (5.0)	985 (5.0)	1,631 (8.3)	100%	А
50 mph	8 in/hr	10,605 (5.0)	985 (5.0)	1,632 (8.3)	99.7%	A

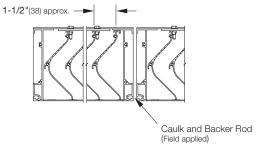
#### NOTE:

- 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  $10.77~{\rm ft^2}~(1~{\rm m^2})$ .
- 2. Free area velocity is the airflow divided by free area. Test louver free area is 6.5 ft² (0.6 m²).

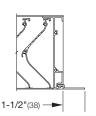
#### Wind Driven Rain

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

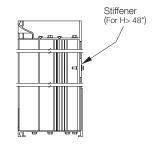
## **Attributes**



Visible Vertical Mullion (standard)



Flange Frame (optional)



**Vertical Section** 

# **Supplemental Options**

