

ECV-545-MD

(standard)

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

Ratings

Free Area: [48" x 48" (1219 x 1219) unit]: 8.77 ft² (0.82 m²)
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 m³/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. 23-1215.14 (Expires 1/20/2027)

Approved to FBC TAS201-94, TAS202-94, TAS203-94 and TAS100(A)-95

Florida Building Code Approval (2023-FBC): No. FL40700

Texas Department of Insurance Listed (TDI)

Design Load: 130 psf (6.2 kPa)

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 #23-1215.14) 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 wind-borne debris regions as per the International Building Code.

Standard Construction

Material: Mill finish 6063-T6 extruded aluminum

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

Blades: 45° x 0.06" (1.5) thick vertical chevron style

Screen: 1/2" x 0.063" (12.7 x 1.6) expanded and flattened aluminum

Mullion: Visible

Installation Hardware: Continuous angles

Minimum Size: 12" x 12" (305 x 305)

Maximum Size:

Single section: 60" x 120" (1524 x 3048)

Multiple section: Unlimited width x 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

5 year warranty



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)

Height (Inches)	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:

Pottorff 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.

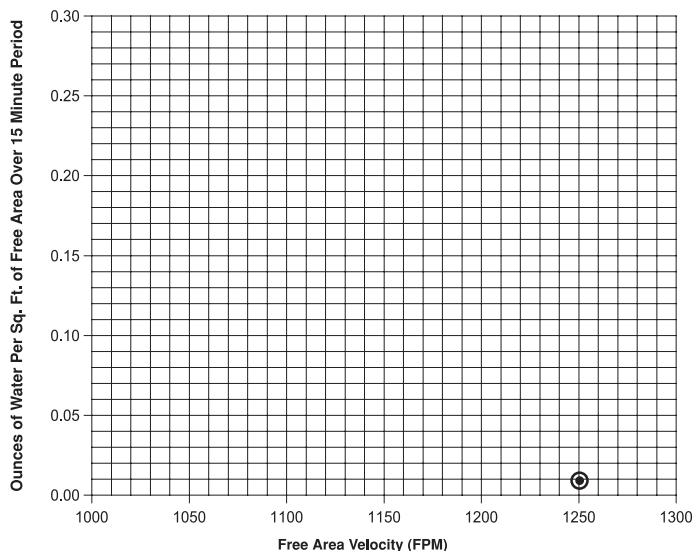
Certified Ratings:

Pottorff certifies that the model ECV-545-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 wind borne debris impact resistant louvers.

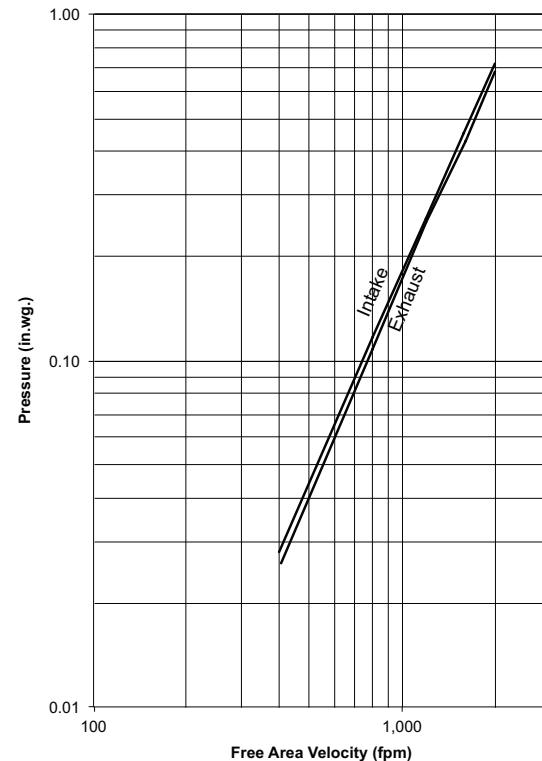
Water Penetration

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.

PERFORMANCE

ECV-545-MD

Extruded Aluminum Louver
5" deep • Vertical Blade

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

Wind Velocity	Rainfall	Airflow cfm (m ³ /s)	Core Velocity ¹ fpm (m/s)	Free Area Velocity ² 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%	A
50 mph	8 in/hr	10,605 (5.0)	985 (5.0)	1,632 (8.3)	99.7%	A

NOTE:

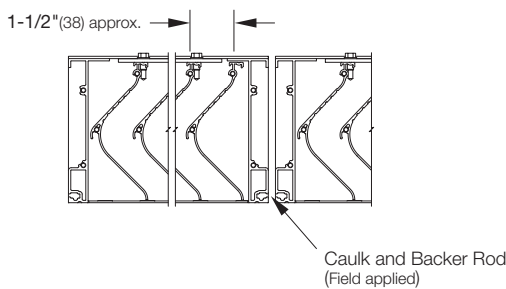
1. Core area is the open area of the louver face (face area less louver frame). Core velocity is the airflow divided by core area. Test louver core area is 10.77 ft² (1 m²).

2. Free area velocity is the airflow divided by free area. Test louver free area is 6.5 ft² (0.6 m²).

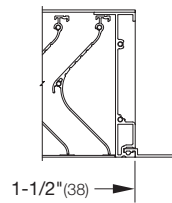
Wind Driven Rain

Class	Effectiveness
A	99% and above
B	95% to 98.9%
C	80% to 94.9%
D	below 80%

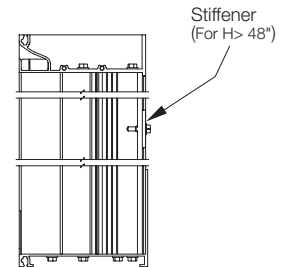
Attributes



Visible Vertical Mullion
(standard)

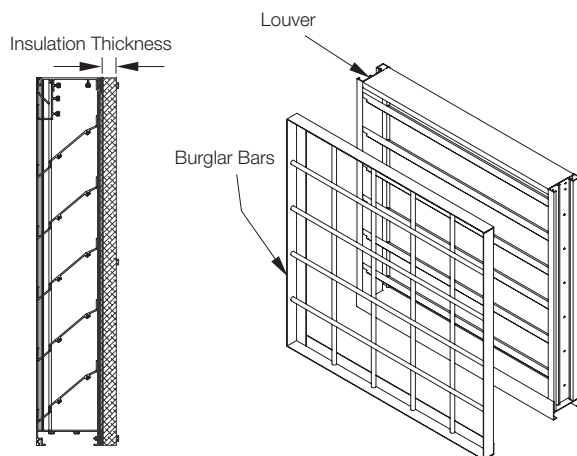


Flange Frame
(optional)

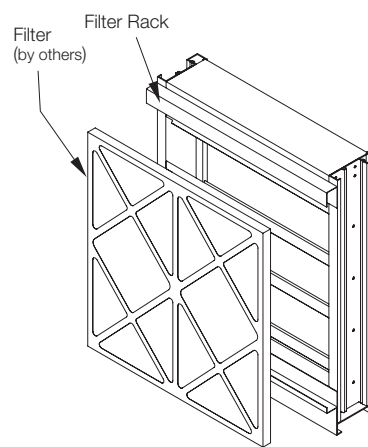


Vertical Section

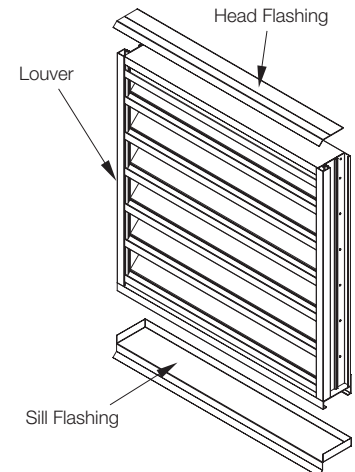
Supplemental Options



Blank-Off Options
Non-Insulated and Gasketed
1" Insulated (4.25 R-value)
2" Insulated (8.75 R-value)



Filter Rack



Flashing Options
Head and Sill Available