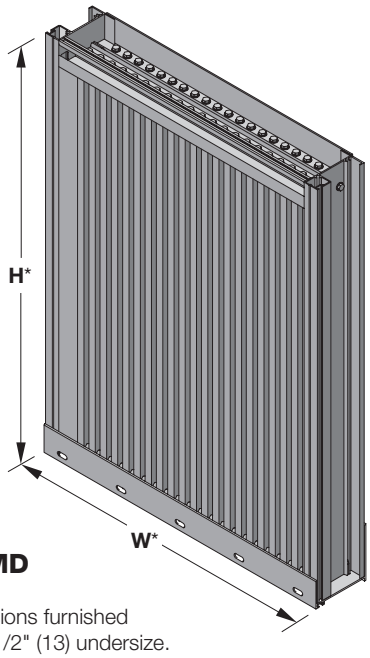
ALL-LITE

ECV-345-MD

Extruded Aluminum Louver
3" deep • 45° Vertical Blade



ECV-345-MD
(standard)
*Louver dimensions furnished approximately 1/2" (13) undersize.

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 #20-1222.04). 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.

Ratings

Free Area: [48" × 48" (1219 × 1219) unit]: 7.5 ft² (0.70 m²)
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 m³/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. 20-1222.04 (Expires 7/23/2025)
Approved to FBC TAS201-94, TAS202-94 and TAS203-94 and TAS100(A)-95

Florida Building Code Approval (2020-FBC): No. FL32626

Design Load: 100 psf (4.8k Pa)

Standard Construction

Material: Mill finish 6063 extruded aluminum

Frame: 3" deep × 0.075" thick (84 × 1.9) channel

Blades: 45° × 0.063" (1.6) thick vertical chevron style

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

Mullion: Visible

Sill Flashing: Closed end

Minimum Size: 12" × 12" (305 × 305)

Maximum Size:

Single section: 60" × 96" (1524 × 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**

5 year warranty

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

PERFORMANCE

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Free Area (ft²)

Width (Inches)

Height (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

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

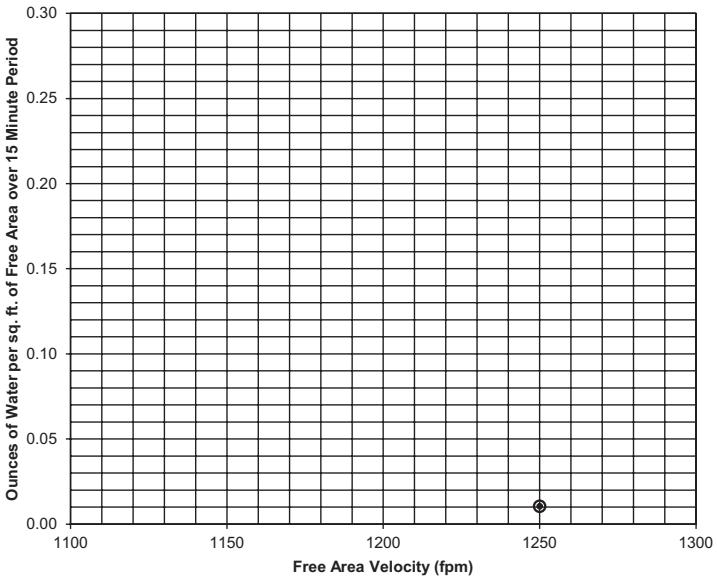
This label does not signify AMCA airflow performance certification.

Certified Ratings:
All-Lite 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.

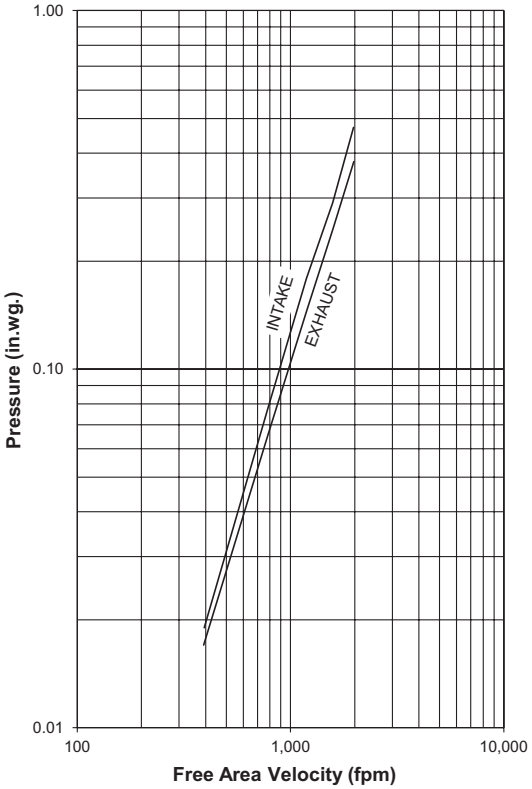
Water Penetration

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.

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

WInd Velocity	Rainfall	Airflow	Core Velocity[1]	Effectiveness Ratio	Wind-Driven Rain Penetration Class	Discharge Loss Class[2]
29 mph	3 in/hr	10,616 cfm	986 fpm	100%	A	2
50 mph	8 in/hr	10,594 cfm	984 fpm	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 ft² (1 m²).

2. Discharge Loss Coefficient is calculated by dividing the louver's actual airflow rate by the theoretical airflow rate for an unobstructed opening. The higher the coefficient, the lower the resistance to airflow.

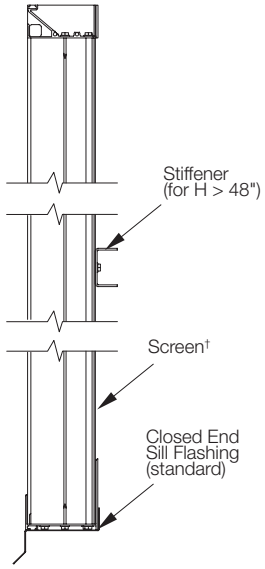
Wind Driven Rain

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

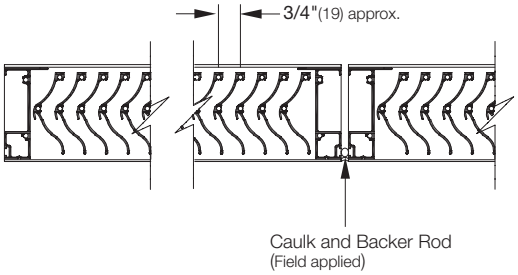
Discharge Loss

Class	Coefficient
1	0.4 and above
2	0.3 to 0.399
3	0.2 to 0.299
4	0.199 and below

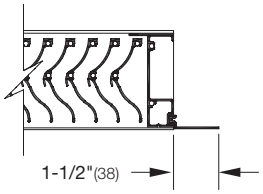
Attributes



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

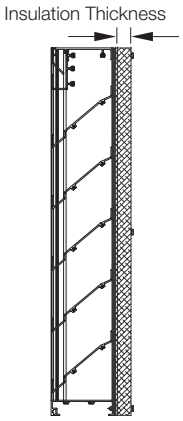


Visible Vertical Mullion
(standard)

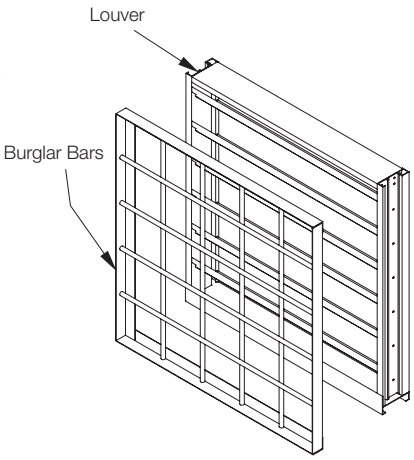


Flange Frame
(optional)

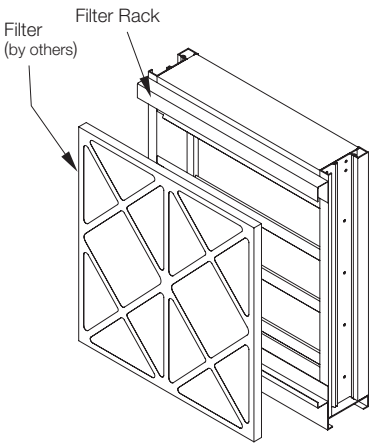
Supplemental Options



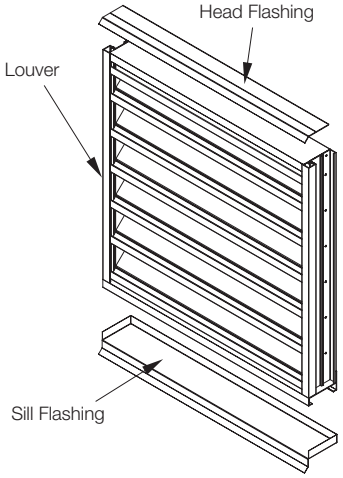
Blank-Off Options
Non-Insulated and Gasketed
1" Insulated (4.25 R-value)
2" Insulated (8.75 R-value)



Burglar Bars
Shipped Loose or Mounted



Filter Rack



Flashing Options
Head and Sill Available