ALL-LITE

The ECV-345 louver is engineered and tested to withstand extreme loads, debris impact, and cyclic fatigue associated with the severe weather effects of hurricanes. 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 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*

W*

3-5/16"
(84)

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

Ratings

Free Area: [48" × 48" (1219 × 1219) unit]: 7.5 ft² (0.70m²)
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 550 (high velocity rain resistant) listed

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° × 0.06" (1.5) 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**
■ **Net OD (actual size)**

5 year warranty

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

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

AMCA WORLDWIDE CERTIFIED RATINGS
WATER PENETRATION
AIR PERFORMANCE
WIND DRIVEN RAIN
AIR MOVEMENT AND CONTROL ASSOCIATION INTERNATIONAL, INC.®
www.amca.org

Certified Ratings:
All-Lite certifies that the model ECV-345 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 LISTED

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 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
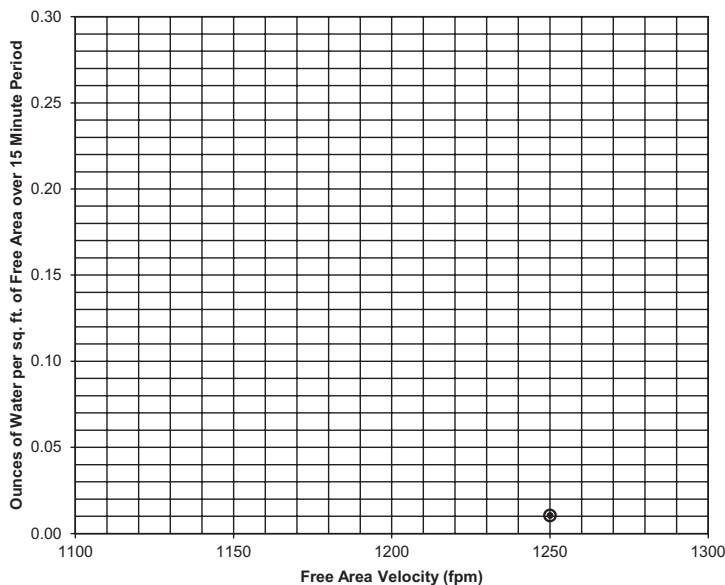
Pressure Loss
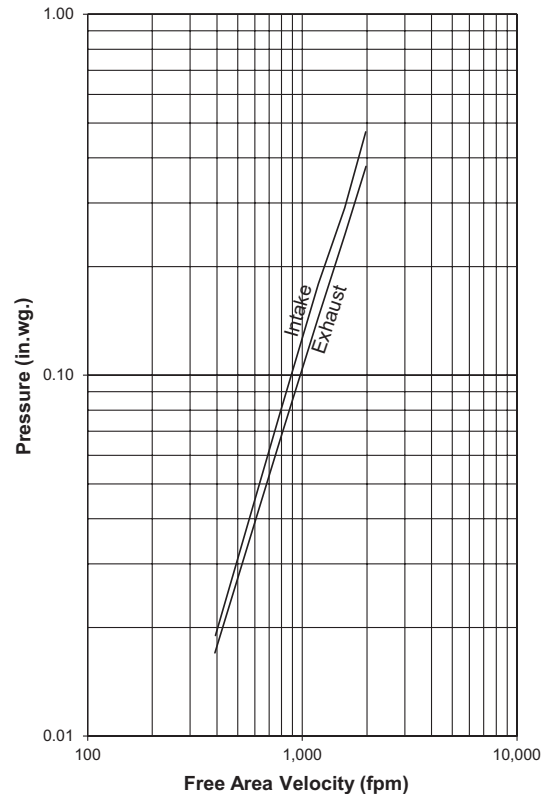
Louver Test Size = 48" x 48" (1219 x 1219)
Pressure loss tested in accordance with Figure 5.5 of AMCA Standard 500-L. Data corrected to standard air density.

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

Wind Velocity	Rainfall	Airflow cfm (m³/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	10,616 (5.0)	986 (5.0)	1,916 (9.7)	100%	A
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 ft² (1 m²).

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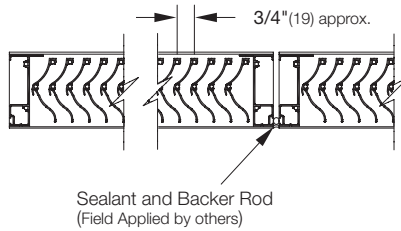
Wind Driven Rain

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

Attributes

Screen†

Stiffener
(for H > 48")

Closed End
Sill Flashing
(standard)
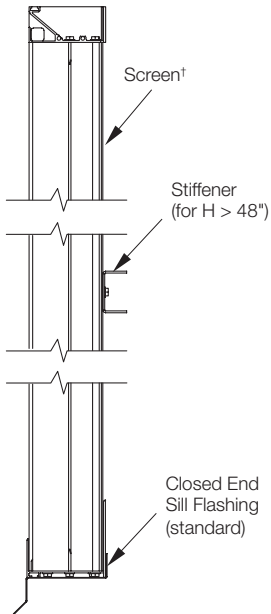
Vertical Section
†Screen adds approximately
3/16" (5) to louver depth

3/4"(19) approx.

Sealant and Backer Rod
(Field Applied by others)

Visible Vertical Mullion
(standard)

1-1/2"(38)
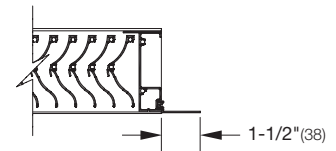
Flange Frame
(optional)

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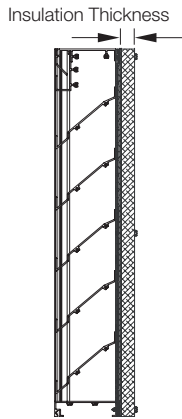
Blank-Off Options
Non-Insulated and Gasketed
1" Insulated (4.25 R-value)
2" Insulated (8.75 R-value)

Filter
(by others)

Filter Rack

Filter Rack

Head Flashing

Louver
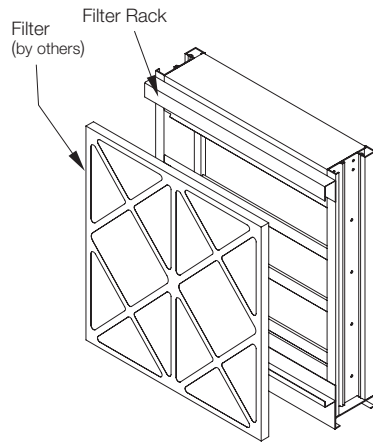
Sill Flashing
(standard)
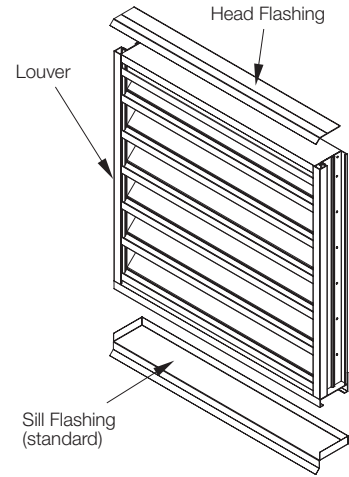
Flashing Options
Head and Sill Available