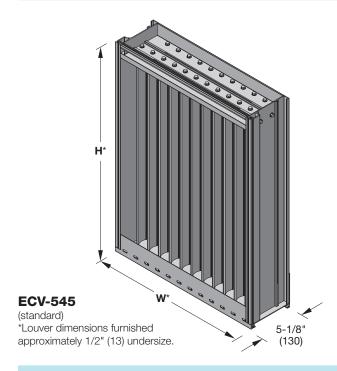
ALL-LITE

Extruded Aluminum Louver 5" deep • Vertical Blade



Ratings

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

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, Enhanced protection) listed

AMCA 550 (high velocity rain resistant) listed

Design Load: 130 psf

The ECV-545 is engineered and tested to withstand extreme loads, debris impact, and cyclic fatigue associated with the severe weather effects of hurricanes while maintaining maximum water infiltration resistance at a minimum louver depth. For installation, the ECV-545 offers a continuous angle option. The ECV-545 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 \times 0.081" thick (127 \times 2) channel

Blades: $45^{\circ} \times 0.06''$ (1.5) thick vertical chevron style.

Right-facing blade orientation

Screen: $1/2" \times 0.063" (12.7 \times 1.6)$ expanded and

flattened aluminum

Mullion: Visible

Minimum Size: $12" \times 12" (305 \times 305)$

Maximum Size:

Single section: $60" \times 120" (1524 \times 3048)$

Multiple section: Unlimited

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
- Installation Hardware
 - Continuous angles
- Alternate bird or insect screens
- Insulated or non-insulated blank-off panels
- Filter racks
- Head and/or sill flashing
- Burglar bars
- Left-facing blade orientation



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

PERFORMANCE

ECV-545
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 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 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.

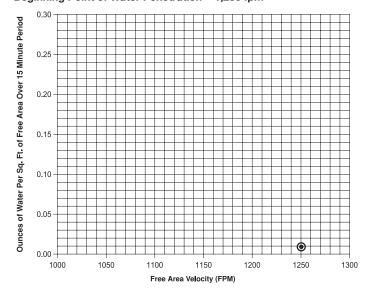
Certified Ratings:

All-Lite certifies that the model ECV-545 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.

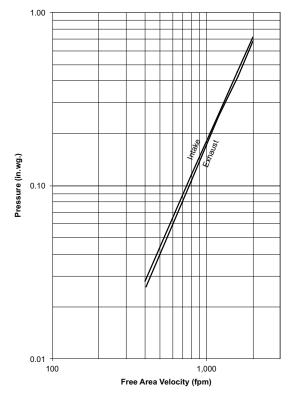
Water Penetration

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.

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 | 10,601 (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% | А |

NOTF:

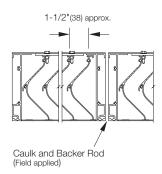
1. Core area is the open area of the louver face (face area less louver frame). Core velocity is the airflow divided by core area. Test louver core area is $10.77~{\rm ft}^2~(1~{\rm m}^2)$.

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

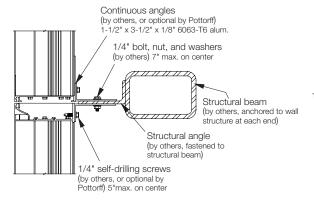
Wind Driven Rain

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

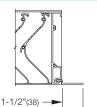
Attributes



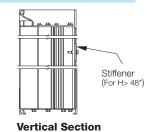
Visible Vertical Mullion (standard)

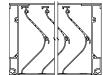


Visible Horizontal Mullion (standard)



Flange Frame (optional)





Left-Facing Blade Orientation (optional)

Supplemental Options

