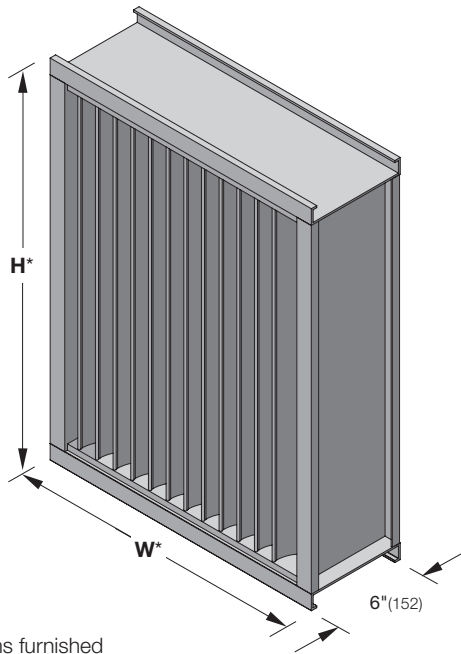


ALL-LITE

ECV-645

Extruded Aluminum Louver
6" deep • 45° Vertical Blade



ECV-645

(standard)

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

Ratings

Free Area: [48" x 48" (1219 x 1219) unit]: 7.4 ft² (0.68m²)
46.0%

Performance @ Beginning Point of Water Penetration

Free Area Velocity: 1,250 fpm (6.35 m/s)

Air Volume Delivered: 9,250 cfm (4.4 m³/s)

Pressure Loss: 0.15 in.wg. (37 Pa)

Velocity @ 0.15 in.wg. Pressure Loss: 1,270 fpm (6.4 m/s)

Tested in accordance with AMCA 540 (impact resistance) and AMCA 550 (high velocity wind-driven rain)

Std. Design Load: 30 psf

5 year
warranty



Certified Ratings:

All-Lite certifies that the model ECV-645 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.

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

The ECV-645 offers exceptional protection against wind-driven rain under the most severe conditions and is ideally suited for high wind areas or applications that are sensitive to wind-driven rain penetration. The ECV-645 incorporates vertical blades and is available in a wide array of anodized and painted finishes including custom color matching.

Standard Construction

Material: Mill finish 6063-T5 extruded aluminum

Frame: 6" deep x 0.081" thick (152 x 2) channel

Blades: 45° x 0.081" (2) thick vertical style

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

Mullion: Visible

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

Maximum Size:

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

120" x 60" (3048 x 1524)

Multiple section: Unlimited

Options

■ Factory finish:

- High Performance Fluoropolymer
- Prime Coat
- Baked Enamel
- Clear Anodize
- Integral Color Anodize

■ Frame Options:

- 1-1/2" (38) flange frame
- Custom-size flange
- Stucco flange
- Glazing frame

■ Installation Hardware

- Clip angles
- Continuous angles

■ Alternate bird or insect screens

■ Insulated or non-insulated blank-off panels

■ Filter racks

■ Hinged frame

■ Subframe

■ Head and/or sill flashing

■ Frame closure

■ Burglar Bars

■ Net OD (actual size)



**HIGH VELOCITY
RAIN RESISTANT
AND IMPACT RESISTANT
LOUVER**
Basic Protection

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

Certified Ratings:

All-Lite certifies that the model ECV-645 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.

This label does not signify AMCA airflow performance certification.

PERFORMANCE

ECV-645

Extruded Aluminum Louver
6" deep • 45° Vertical Blade

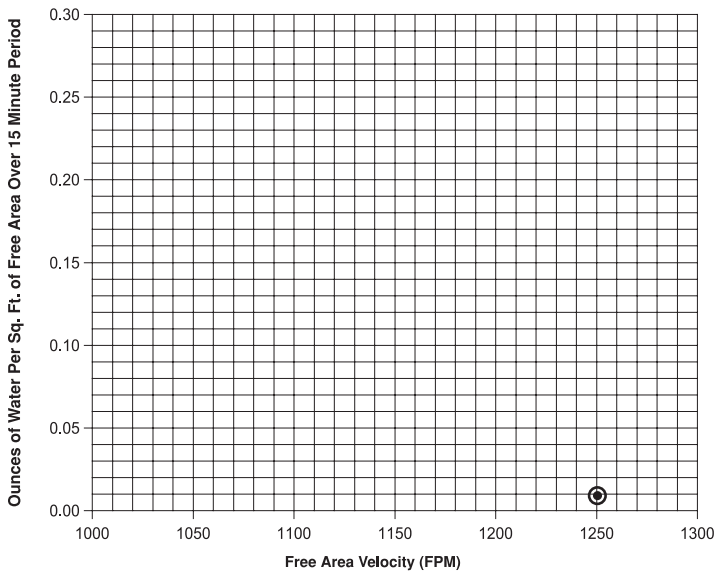
Free Area (ft²)

		Width (Inches)																		
		12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
Height (Inches)	12	0.2	0.4	0.5	0.7	0.9	1.1	1.3	1.5	1.6	1.8	2.0	2.2	2.4	2.6	2.7	2.9	3.1	3.3	3.5
	18	0.3	0.7	1.0	1.3	1.7	2.0	2.3	2.7	3.0	3.3	3.7	4.0	4.3	4.7	5.0	5.3	5.7	6.0	6.3
	24	0.5	0.9	1.4	1.9	2.4	2.9	3.4	3.9	4.3	4.8	5.3	5.8	6.3	6.8	7.2	7.7	8.2	8.7	9.2
	30	0.6	1.2	1.9	2.5	3.2	3.8	4.4	5.1	5.7	6.3	7.0	7.6	8.2	8.9	9.5	10.1	10.8	11.4	12.0
	36	0.8	1.5	2.3	3.1	3.9	4.7	5.5	6.3	7.0	7.8	8.6	9.4	10.2	11.0	11.8	12.5	13.3	14.1	14.9
	42	0.9	1.8	2.8	3.7	4.6	5.6	6.5	7.5	8.4	9.3	10.3	11.2	12.1	13.1	14.0	15.0	15.9	16.8	17.8
	48	1.0	2.1	3.1	4.2	5.2	6.3	7.4	8.4	9.5	10.5	11.6	12.6	13.7	14.8	15.8	16.9	17.9	19.0	20.1
	54	1.2	2.4	3.7	4.9	6.1	7.4	8.6	9.9	11.1	12.3	13.6	14.8	16.1	17.3	18.5	19.8	21.0	22.2	23.5
	60	1.3	2.7	4.0	5.4	6.7	8.1	9.5	10.8	12.2	13.5	14.9	16.3	17.6	19.0	20.3	21.7	23.1	24.4	25.8
	66	1.4	3.0	4.5	6.0	7.5	9.0	10.5	12.0	13.5	15.0	16.6	18.1	19.6	21.1	22.6	24.1	25.6	27.1	28.6
	72	1.6	3.3	4.9	6.6	8.2	9.9	11.6	13.2	14.9	16.5	18.2	19.9	21.5	23.2	24.8	26.5	28.2	29.8	31.5
	78	1.7	3.5	5.4	7.2	9.0	10.8	12.6	14.4	16.2	18.0	19.9	21.7	23.5	25.3	27.1	28.9	30.7	32.5	34.4
84	1.9	3.8	5.7	7.6	9.6	11.5	13.4	15.4	17.3	19.2	21.2	23.1	25.0	27.0	28.9	30.8	32.8	34.7	36.6	
90	2.0	4.1	6.2	8.2	10.3	12.4	14.5	16.6	18.7	20.7	22.8	24.9	27.0	29.1	31.2	33.2	35.3	37.4	39.5	
96	2.1	4.4	6.6	8.8	11.1	13.3	15.5	17.8	20.0	22.2	24.5	26.7	29.0	31.2	33.4	35.7	37.9	40.1	42.4	
102	2.3	4.6	7.0	9.3	11.7	14.0	16.4	18.7	21.1	23.5	25.8	28.2	30.5	32.9	35.2	37.6	39.9	42.3	44.6	
108	2.4	4.9	7.4	9.9	12.4	14.9	17.4	19.9	22.4	25.0	27.5	30.0	32.5	35.0	37.5	40.0	42.5	45.0	47.5	
114	2.5	5.2	7.9	10.5	13.2	15.8	18.5	21.1	23.8	26.5	29.1	31.8	34.4	37.1	39.7	42.4	45.1	47.7	50.4	
120	2.7	5.5	8.3	11.1	13.9	16.7	19.5	22.3	25.2	28.0	30.8	33.6	36.4	39.2	42.0	44.8	47.6	50.4	53.2	

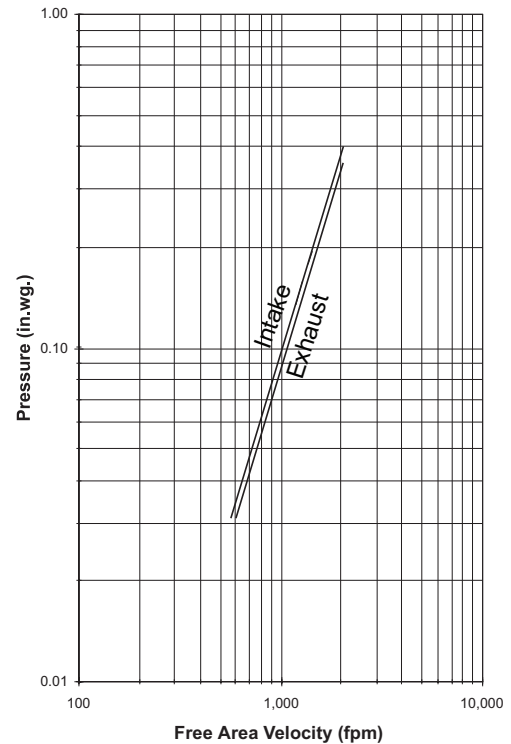
Water Penetration

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-645

Extruded Aluminum Louver
6" deep • 45° Vertical Blade

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
50 mph	8 in/hr	10,390 cfm	965 fpm	100%	A	1

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.

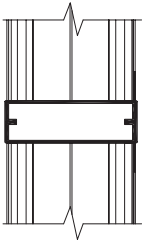
Wind Driven Rain

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

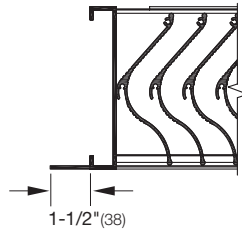
Discharge Loss

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



Horizontal Mullion
(standard)

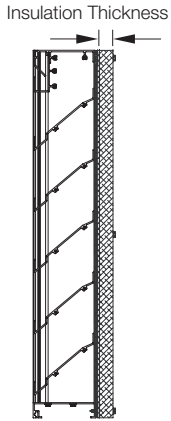


Flange Frame
(optional)

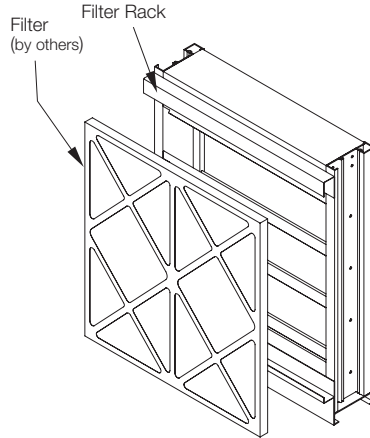
Supplemental Options

ECV-645

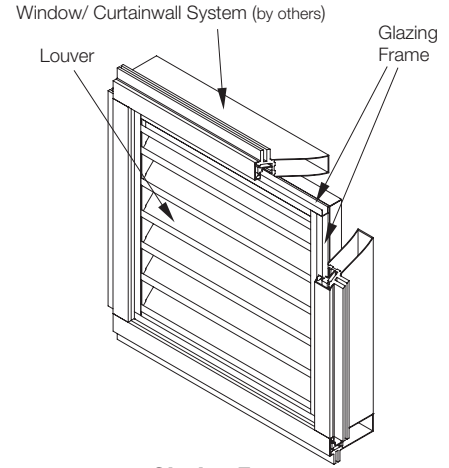
Extruded Aluminum Louver
6" deep • 45° Vertical Blade



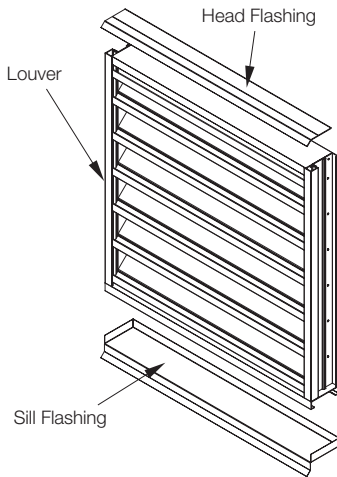
Blank-Off Options
Non-Insulated and Gasketed
1" Insulated (4.25 R-value)
2" Insulated (8.75 R-value)



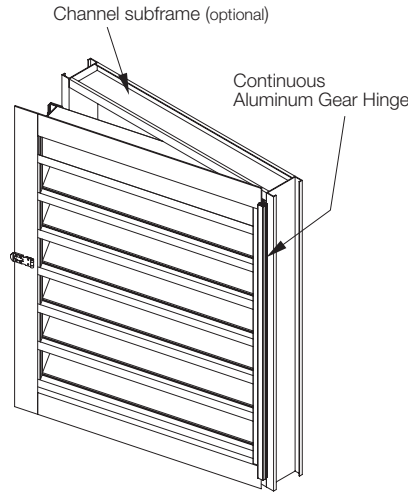
Filter Rack



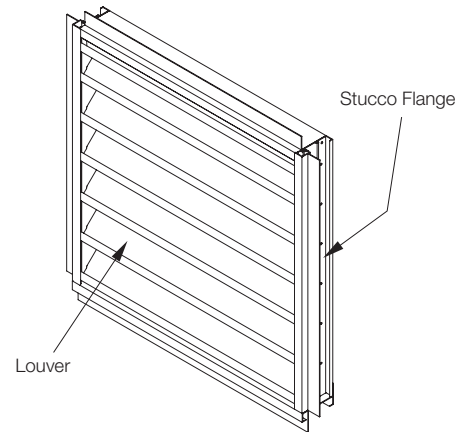
Glazing Frame



Flashing Options
Head and Sill Available



Hinge and Subframe
Right or Left Side Option Available



Stucco Flange
3/4" (19) Standard Stucco Depth