

EXA-645-MD

(standard)

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

Ratings

Free Area: [48" x 48" (1219 x 1219) unit]: 7.7 ft² (0.72 m²)
48.1%

Leakage: Class 2 (10 cfm/sq.ft. @ 1 in. wg.)
(50.8 L/s/m² @ 0.2 kPa)
Air Leakage is not AMCA certified

Performance @ Beginning Point of Water Penetration

Free Area Velocity: 1,076 fpm (5.46 m/s)

Air Volume Delivered: 8,281 cfm (3.91 m³/s)

Pressure Loss: 0.12 in.wg. (31 Pa)

Velocity @ 0.15 in.wg. Pressure Loss: 1,184 fpm (6.02 m/s)

Operating Temperature Range: -20°F to +180°F
(-7°C to +82°C)

AMCA 540 (impact resistance) listed

AMCA 550 (high velocity rain resistant) listed

Miami Dade County: NOA No. 23-1215.19 (Expires 10/20/2026) Approved to FBC TAS201-94, TAS202-94 and TAS203-94

Florida Building Code Approval (2023-FBC): No. FL21051

Design Load: 120 psf

The EXA-645-MD is engineered and tested to withstand extreme loads, debris impact, and cyclic fatigue failure associated with the severe weather effects of hurricanes (Miami-Dade County approval #23-1215.19). When closed, the EXA-645-MD also protects against high-velocity wind-driven rain per AMCA 550. The design features stationary drainable louver blades to protect against water penetration and an integral airfoil blade control damper to allow positive shut-off of air intake and exhaust openings. The EXA-645-MD is available in a wide array of painted finishes including custom color matching, and may be ordered with a variety of factory-mounted electric or pneumatic actuators.

Standard Construction

Material: Mill finish extruded aluminum

Frame: 6" deep x 0.125" thick (152 x 3) channel

Blades: Front: 37-1/2° x 0.081" (2) thick drainable style
Back: 45° x 0.162" (4) thick operable airfoil style

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

Axles: 1/2" (12.7) diameter steel hex

Linkage: Concealed in frame

Low Leakage Seals: TPV blade edge and flexible metal jamb

Bearings: Synthetic

Mullion: Visible

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

Maximum Size:

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

Multiple section: Unlimited width x 120" height

Shipping Weight (approximate): 7.6 lbs/ft² (37 kg/m²)

Options

■ Factory finish:

- High Performance Fluoropolymer
- Prime Coat
- Baked Enamel

■ Frame Options:

- 1-1/2" (38) flange frame

■ Alternate bird or insect screens

■ Filter racks

■ Head and/or sill flashing

■ Net OD (actual size)

■ Factory mounted electric or pneumatic actuator



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

PERFORMANCE

EXA-645-MD

Extruded Aluminum Louver
6" deep • 37-1/2-45° Combination Blade

Free Area (ft²)

Width (Inches)

Height (Inches)	Width (Inches)									
	12	18	24	30	36	42	48	54	60	60
12	0.1	0.2	0.3	0.4	0.4	0.5	0.6	0.7	0.7	0.7
18	0.5	0.8	1.0	1.3	1.6	1.9	2.2	2.5	2.8	2.8
24	0.7	1.1	1.6	2.0	2.4	2.8	3.3	3.7	4.1	4.1
30	0.9	1.4	2.0	2.5	3.1	3.6	4.1	4.7	5.2	5.2
36	1.1	1.7	2.4	3.1	3.7	4.4	5.0	5.7	6.3	6.3
42	1.4	2.3	3.2	4.0	4.9	5.7	6.6	7.5	8.3	8.3
48	1.7	2.7	3.7	4.7	5.7	6.7	7.7	8.7	9.7	9.7
54	1.9	3.0	4.1	5.2	6.3	7.5	8.6	9.7	10.8	10.8
60	2.1	3.3	4.5	5.8	7.0	8.2	9.5	10.7	12.0	12.0
66	2.4	3.8	5.3	6.7	8.2	9.6	11.1	12.5	13.9	13.9
72	2.6	4.2	5.8	7.4	8.9	10.5	12.1	13.7	15.3	15.3
78	2.8	4.5	6.2	7.9	9.6	11.3	13.0	14.7	16.4	16.4
84	3.0	4.8	6.6	8.5	10.3	12.1	13.9	15.7	17.6	17.6
90	3.2	5.1	7.1	9.0	10.9	12.9	14.8	16.7	18.7	18.7
96	3.6	5.7	7.8	10.0	12.1	14.3	16.4	18.6	20.7	20.7
102	3.8	6.1	8.3	10.6	12.9	15.2	17.5	19.8	22.0	22.0
108	4.0	6.4	8.8	11.2	13.6	16.0	18.4	20.8	23.2	23.2
114	4.2	6.7	9.2	11.7	14.2	16.7	19.3	21.8	24.3	24.3
120	4.5	7.2	9.9	12.7	15.4	18.1	20.8	23.6	26.3	26.3



Certified Ratings:

All-Lite certifies that the model EXA-645-MD shown herein is licensed to bear the AMCA seal. The ratings shown are based on tests 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 and water penetration ratings.



**HIGH VELOCITY
RAIN RESISTANT
WITH BLADES FULLY CLOSED
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.

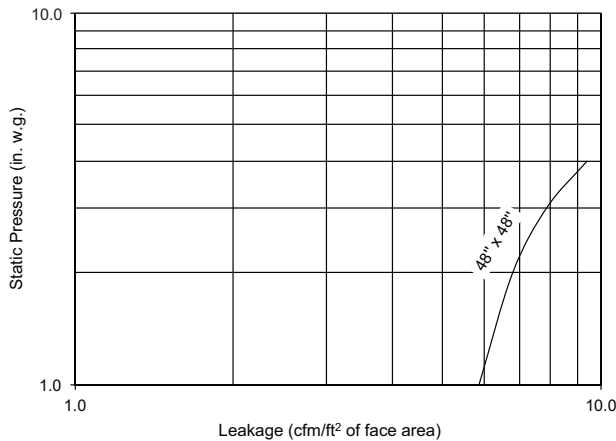
This label does not signify AMCA airflow performance certification.

Certified Ratings:

All-Lite certifies that the model EXA-645-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 Wind Borne Debris Impact Resistant Louvers and High Velocity Rain Resistant Louvers.



Air Leakage

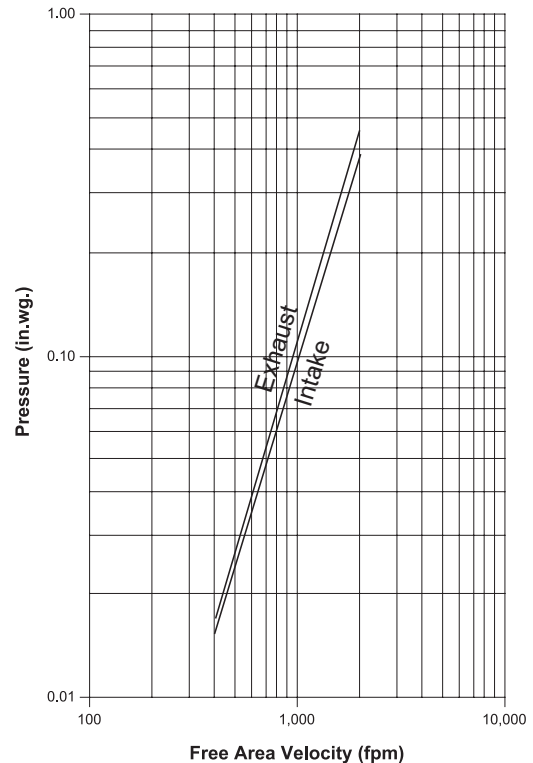


Data corrected to standard air density.
Air Leakage is not AMCA certified.

NOTES:

1. Leakage testing in accordance with Figure 5.4, 5.5 and 6.6A of AMCA Standard 500-L.
2. Data are based on the maximum torque of 2.8 in lb/sq. ft. (3.5 N-m/sq. m) applied to the louver during the test.
3. Air leakage is based on operation between 50°F - 104°F (10°C - 40°C).

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.

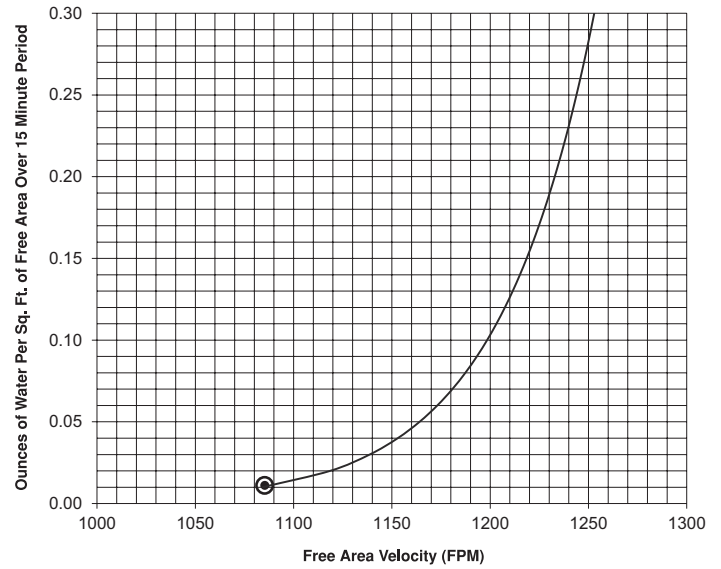
EXA-645-MD

Extruded Aluminum Louver
6" deep • 37-1/2-45° Combination Blade

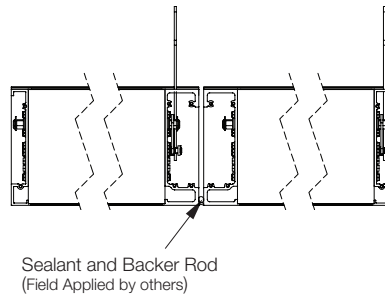
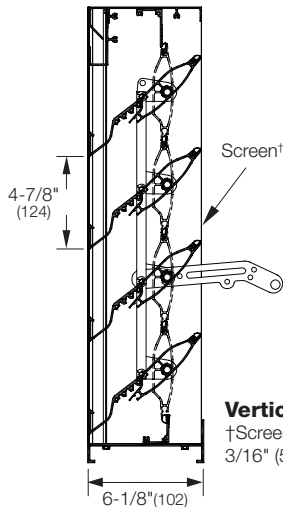
Water Penetration

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.

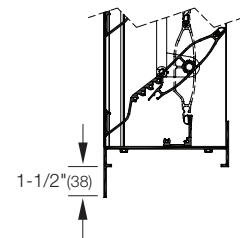
Beginning Point of Water Penetration = 1,076 fpm



Attributes

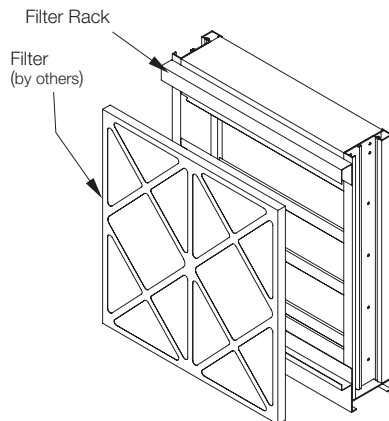


Visible Vertical Mullion
(standard)

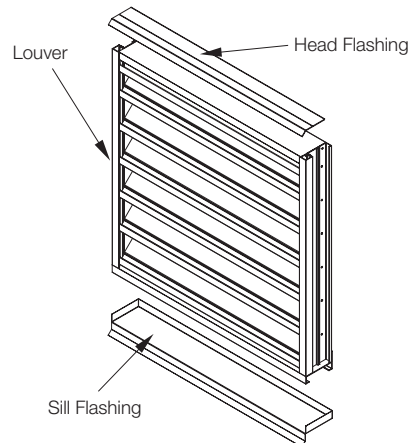


Flange Frame
(optional)

Supplemental Options



Filter Rack



Flashing Options
Head and Sill Available