# **ALL-LITE**

6" deep • 371/2-45° Combination Blade

The EXA-645 combination louver features stationary drainable louver blades to protect against water penetration and an integral airfoil blade control damper to allow positive shutoff protection of air intake and exhaust openings. The EXA-645 has a leakage class rating of 1A and is available in a wide array of anodized and painted finishes including custom color matching. These units are also available with a variety of factory mounted electric or pneumatic actuators.

## Standard Construction

Material: Mill finish 6063-T5 extruded aluminum Frame: 6" deep  $\times$  0.081" thick (152  $\times$  2) channel **Blades:** Front: 37-1/2° × 0.081" (2) thick drainable

Back:  $45^{\circ} \times 0.125$ " (3) thick operable airfoil

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

flattened aluminum

Axles: 1/2" (13) diameter steel hex

Linkage: Concealed in frame

Low Leakage Seals: TPV blade edge and flexible metal jamb

Bearings: Synthetic

**Minimum Size:**  $12" \times 9" (305 \times 229)$ 

Maximum Size:

Single section:  $60" \times 120" (1524 \times 3048)$ Note: AMCA-certified Class 1A air leakage performance is limited to

section heights of 96" (2438) or less. Multiple section: Unlimited

Shipping Weight (approximate): 5.3 lb/ft² (26 kg/m²)

## **Options**

■ Factory finish:

High Performance Fluoropolymer
 Prime Coat

Baked Enamel
 Clear Anodize
 Integral Color Anodize

■ Flange options:

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

Stucco flange
 Glazing frame

■ Heavy-duty 0.125" (3) 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

■ Net OD (actual size)

■ Factory mounted electric or pneumatic actuator

■ Sleeve (galvanized steel): • 20-GA • 16-GA

**EXA-645** (standard) \*Louver dimensions furnished approximately 1/2" (13) undersize.

## **Ratings**

**Free Area:**  $[48" \times 48" (1219 \times 1219) \text{ unit}]: 8.1 \text{ ft}^2 (0.75 \text{ m}^2)$ 

Leakage: Class 1A (3 cfm/sq.ft. @ 1 in. wg.)

(15.2 L/s/m<sup>2</sup> @ 0.2 kPa)

[for section heights 96" (2438) or less]

Performance @ Beginning Point of Water Penetration

Free Area Velocity: 1,085 fpm (5.51 m/s)

Air Volume Delivered: 8,756 cfm (4.13 m<sup>3</sup>/s)

Pressure Loss: 0.11 in.wg. (27 Pa)

**Velocity @ 0.15 in.wg. Pressure Loss:** 1,272 fpm (6.46 m/s)

Design Load: 25 psf with standard 0.081" frame

35 psf with optional 0.125" frame

Operating Temperature Range: -20°F to +180°F

 $(-7^{\circ}C \text{ to } +82^{\circ}C)$ 







#### **Certified Ratings:**

All-lite certifies that the model EXA-645 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, water penetration and air leakage ratings.



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

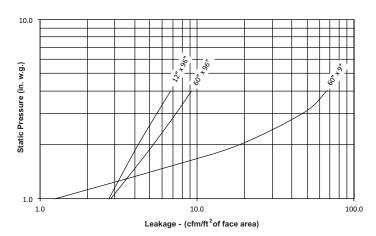
# **PERFORMANCE**

**EXA-645**Extruded Aluminum Louver 6" deep • 371/2-45° Combination Blade

### Free Area (ft²)

Width (Inches) 12 18 60 24 30 36 42 48 54 0.2 9 0.1 0.3 0.4 0.4 0.5 0.6 0.7 0.7 0.3 0.8 1.5 12 0.5 0.6 1.0 1.1 1.3 1.7 0.5 8.0 1.2 2.1 2.4 2.7 18 1.5 1.8 3.0 3.5 24 0.7 1.2 1.7 2.1 2.6 3.0 3.9 4.4 30 1.0 1.5 2.1 2.7 3.3 3.9 4.4 5.0 5.6 36 1.2 1.9 2.6 3.3 4.0 4.7 5.4 6.1 6.8 42 1.5 2.5 3.4 4.3 5.3 6.2 7.1 8.1 9.0 1.8 2.9 3.9 6.1 7.2 8.1 9.4 10.4 48 5.0 54 2.0 9.2 3.2 5.6 6.8 8.0 10.4 4.4 11.7 60 2.2 3.5 4.9 6.2 7.5 8.9 10.2 11.5 12.9 5.7 13.5 66 2.6 4.1 7.2 8.8 10.4 11.9 15.0 72 2.8 4.5 6.2 7.9 9.7 11.4 13.1 14.8 16.5 3.0 4.9 6.7 10.4 12.2 14.0 15.9 78 8.5 17.7 3.2 5.2 7.2 11.1 13.0 15.0 17.0 18.9 84 9.1 90 3.6 5.8 8.0 10.1 12.3 14.5 16.7 18.9 21.0 96 3.8 6.2 8.5 10.8 13.1 15.5 17.8 20.1 22.4 102 4.1 6.5 9.0 11.5 13.9 16.4 18.8 21.3 23.8 22.4 4.3 6.9 9.4 12.0 14.6 17.2 19.8 25.0 108 4.5 7.2 9.9 12.6 15.3 18.1 20.8 23.5 26.2 114 120 4.8 7.8 10.7 13.7 16.6 19.6 22.5 25.5 28.4

## Air Leakage



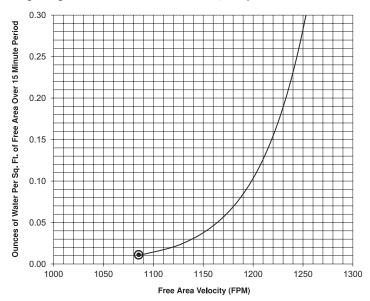
#### NOTES:

- 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 10.7 in lb/sq. ft. (13.0 N-m/sq. m) applied to the louver during the test.
- Air leakage is based on operation between 500°F 1040°F (100°C 400°C).

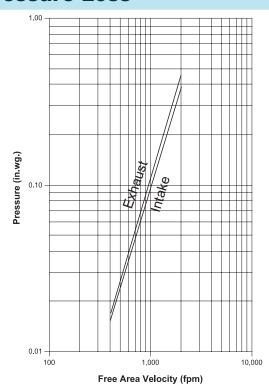
## **Water Penetration**

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 and is 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 = 1,085 fpm



## **Pressure Loss**

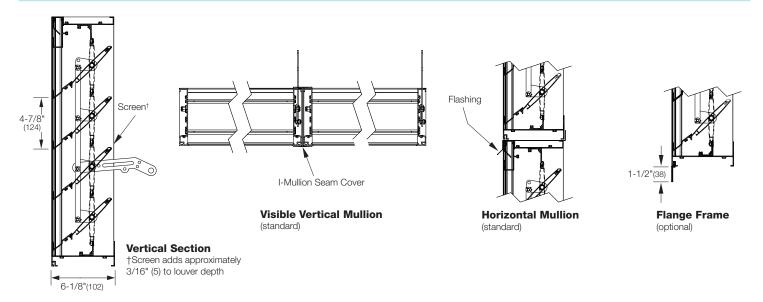


Louver Test Size = 48" x 48" (1219 x 1219)

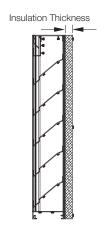
Pressure loss tested in accordance with Figure 5.5 of AMCA

Standard 500-L. Data corrected to standard air density.

## **Attributes**

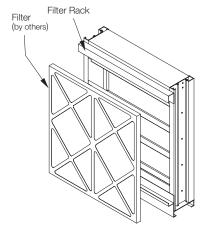


## **Supplemental Options**

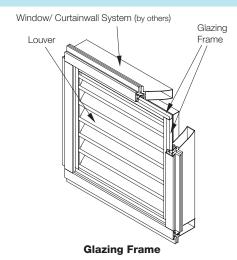


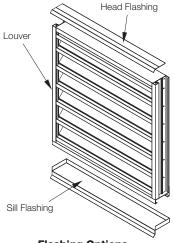
#### **Blank-Off Options**

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

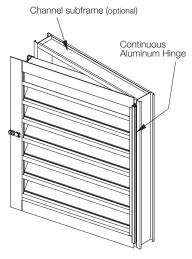


**Filter Rack** 

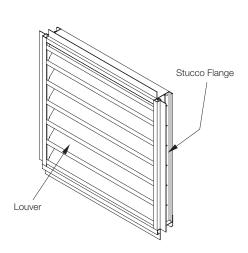




Flashing Options Head and Sill Available



**Hinge and Subframe**Right or Left Side Option Available



Stucco Flange