

### EXA-645

(standard)

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

## Ratings

**Free Area:** [48" × 48" (1219 × 1219) unit]: 8.1 ft<sup>2</sup> (0.75 m<sup>2</sup>)  
50.4%

**Leakage:** Class 1A (3 cfm/sq.ft. @ 1 in. wg.)  
(15.2 L/s/m<sup>2</sup> @ 0.2 kPa)

### 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

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



5 year warranty

### Certified Ratings:

Pottorff 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.

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 × 0.081" thick (152 × 2) channel

**Blades:** Front: 37-1/2° × 0.081" (2) thick drainable style  
Back: 45° × 0.125" (3) thick operable airfoil style

**Screen:** 1/2" × 0.063" (12.7 × 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" × 9" (305 × 229)

**Maximum Size:**

Single section: 60" × 96" (1524 × 2438)

Multiple section: Unlimited

## Options

### ■ Factory finish:

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

### ■ Frame Options:

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

### ■ Net OD (actual size)

### ■ Factory mounted electric or pneumatic actuator

### ■ Sleeve (galvanized steel):

- 20-GA
- 16-GA

# PERFORMANCE

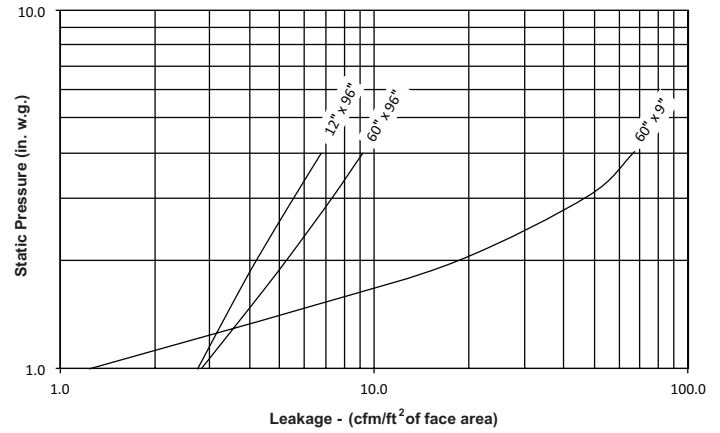
## EXA-645

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

### Free Area (ft<sup>2</sup>)

Height (Inches)	Width (Inches)								
	12	18	24	30	36	42	48	54	60
9	0.1	0.2	0.3	0.4	0.4	0.5	0.6	0.7	0.7
12	0.3	0.5	0.6	0.8	1.0	1.1	1.3	1.5	1.7
18	0.5	0.8	1.2	1.5	1.8	2.1	2.4	2.7	3.0
24	0.7	1.2	1.7	2.1	2.6	3.0	3.5	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
48	1.8	2.9	3.9	5.0	6.1	7.2	8.1	9.4	10.4
54	2.0	3.2	4.4	5.6	6.8	8.0	9.2	10.4	11.7
60	2.2	3.5	4.9	6.2	7.5	8.9	10.2	11.5	12.9
66	2.6	4.1	5.7	7.2	8.8	10.4	11.9	13.5	15.0
72	2.8	4.5	6.2	7.9	9.7	11.4	13.1	14.8	16.5
78	3.0	4.9	6.7	8.5	10.4	12.2	14.0	15.9	17.7
84	3.2	5.2	7.2	9.1	11.1	13.0	15.0	17.0	18.9
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

### Air Leakage



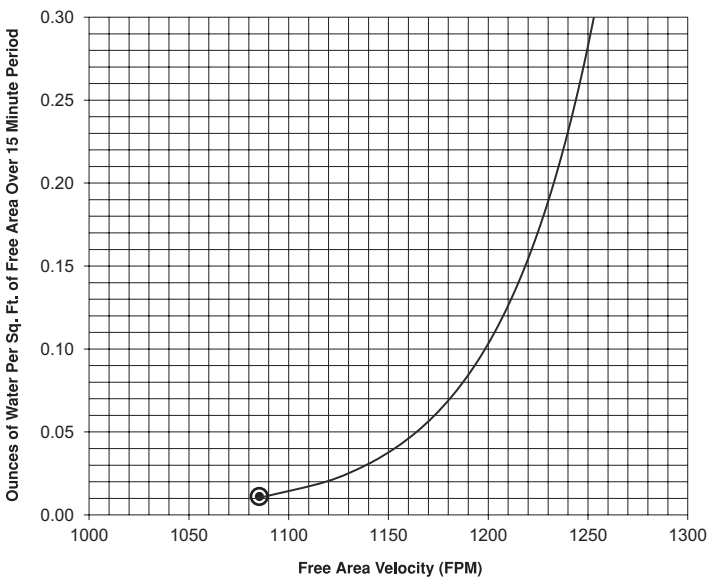
**NOTES:**

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

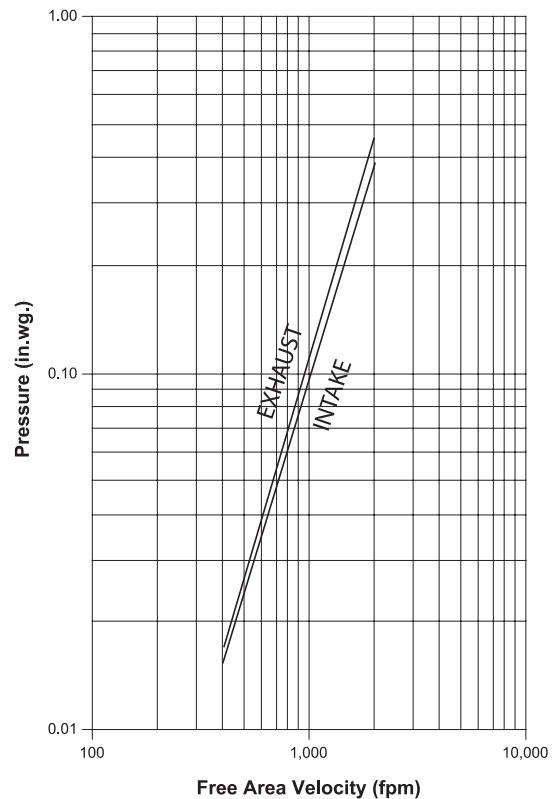
### Water Penetration

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. Pottorff recommends 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

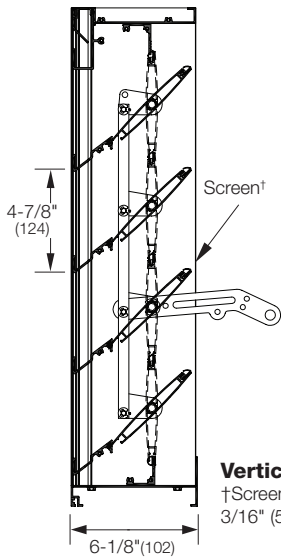


Louver Test Size = 48" x 48" (1219 x 1219)  
Pressure loss tested in accordance with Figure 5.5 of AMCA Standard 500-L.

# EXA-645

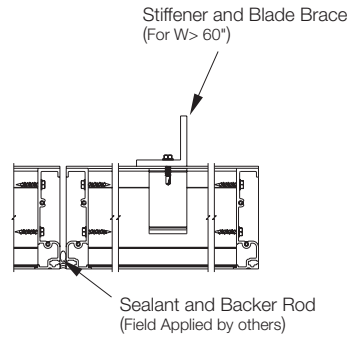
Extruded Aluminum Louver  
6" deep • 37 1/2-45° Combination Blade

## Attributes

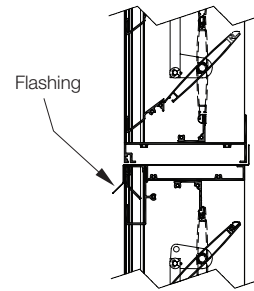


### Vertical Section

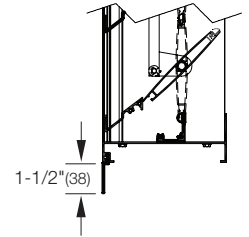
† Screen adds approximately 3/16" (5) to louver depth



### Visible Vertical Mullion (standard)

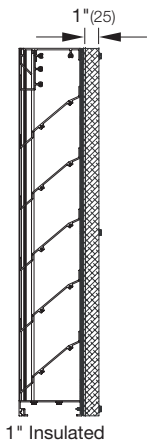


### Horizontal Mullion (standard)



### Flange Frame (optional)

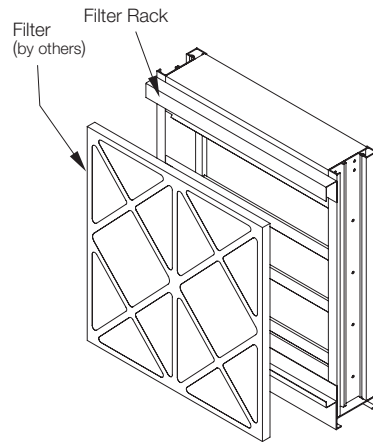
## Supplemental Options



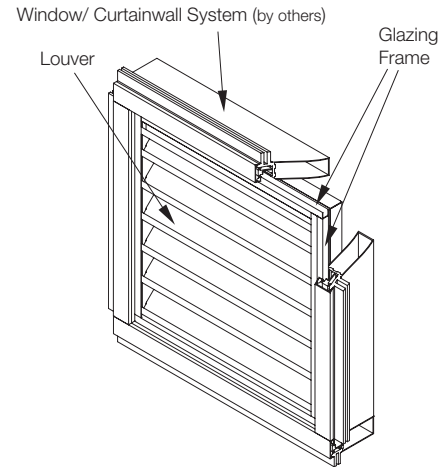
1" Insulated

### Blank-Off Options

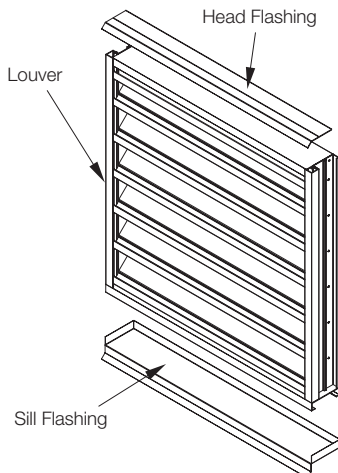
Non-Insulated and Gasketed  
1" Insulated (4.4 R-value) As Shown  
2" Insulated (8.7 R-value)



### Filter Rack

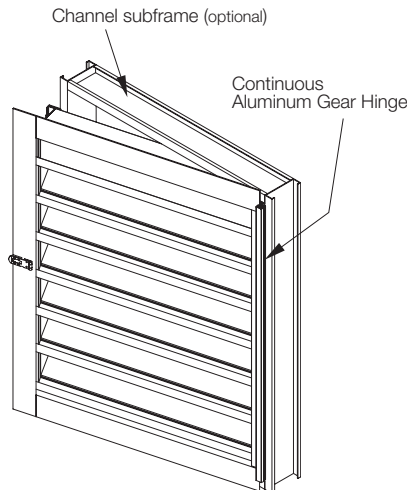


### Glazing Frame



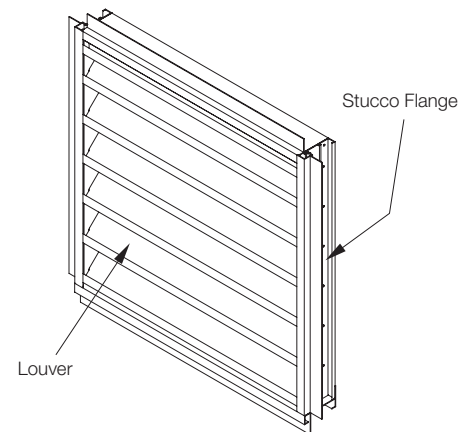
### Flashing Options

Head and Sill Available



### Hinge and Subframe

Right or Left Side Option Available



### Stucco Flange

3/4" (19) Standard Stucco Depth