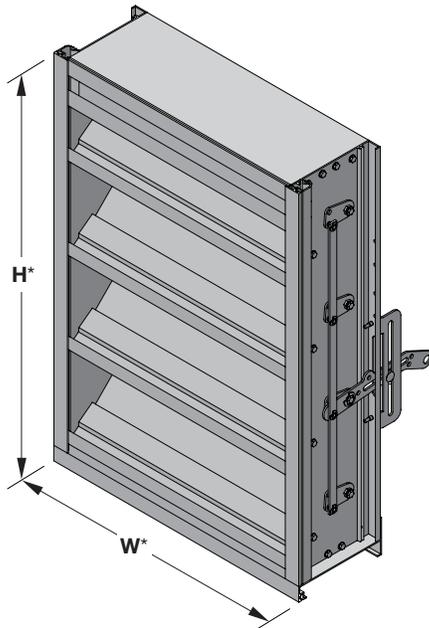


# ALL-LITE

## EXD-645

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



### EXD-645

(standard)

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

## Ratings

**Free Area:** [48" × 48" (1219 × 1219) unit]: 7.1 ft<sup>2</sup> (0.66 m<sup>2</sup>)  
44.4%

### Performance @ Beginning Point of Water Penetration

**Free Area Velocity:** 1,050 fpm (5.33 m/s)

**Air Volume Delivered:** 7,455 cfm (3.52 m<sup>3</sup>/s)

**Pressure Loss:** 0.19 in.wg. (48 Pa)

**Velocity @ 0.15 in.wg. Pressure Loss:** 950 fpm (4.82 m/s)

**Std. Design Load:** 30 psf

The EXD-645 combination louver features stationary drainable louver blades to protect against water penetration and an integral control damper to allow positive shutoff protection of air intake and exhaust openings. The EXD-645 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" (152 × 2) thick channel

**Blades:** 37-1/2 and 45° × 0.081" (2) thick combination style

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

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

**Linkage:** Concealed in frame

**Low Leakage Seals:** TPV blade edge and flexible metal jamb

**Bearings:** Synthetic

**Minimum Size:** 12" × 12" (305 × 305)

**Maximum Size:**

Single section: 48" × 96" (1219 × 2436) with low leakage seals  
60" × 96" (1524 × 2436) without low leakage seals

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

### ■ Net OD (actual size)

### ■ Factory-mounted electric or pneumatic actuator

### ■ Pull-chain operator

### ■ Sleeve (galvanized steel):

- 20-GA
- 16-GA

**5** year warranty

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

# PERFORMANCE

## EXD-645

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

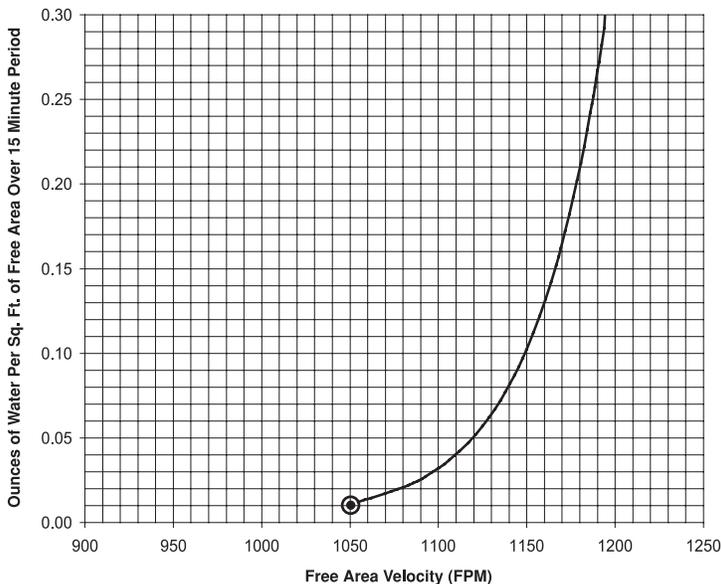
### Free Area (ft<sup>2</sup>)

		Width (Inches)								
		12	18	24	30	36	42	48	54	60
Height (Inches)	12	0.4	0.7	0.9	1.2	1.4	1.6	1.9	2.1	2.4
	18	0.4	<b>0.7</b>	0.9	1.2	1.4	1.6	1.9	2.1	2.4
	24	0.7	1.0	<b>1.4</b>	1.8	2.2	2.6	2.9	3.3	3.7
	30	0.9	1.4	1.9	<b>2.4</b>	2.9	3.5	4.0	4.5	5.0
	36	1.1	1.8	2.4	3.1	<b>3.7</b>	4.4	5.0	5.7	6.3
	42	1.3	2.1	2.9	3.7	4.5	<b>5.3</b>	6.1	6.9	7.6
	48	1.6	2.5	3.4	4.3	5.3	6.2	<b>7.1</b>	8.0	9.0
	54	1.8	2.9	3.9	5.0	6.0	7.1	8.2	<b>9.2</b>	10.3
	60	2.0	3.2	4.4	5.6	6.8	8.0	9.2	10.4	<b>11.6</b>
	66	2.3	3.6	4.9	6.3	7.6	8.9	10.2	11.6	12.9
72	2.5	4.0	5.4	6.9	8.4	9.8	11.3	12.7	14.2	
78	2.7	4.3	5.9	7.5	9.1	10.7	12.3	13.9	15.5	
84	3.0	4.7	6.4	8.2	9.9	11.6	13.4	15.1	16.8	
90	3.2	5.1	6.9	8.8	10.7	12.5	14.4	16.3	18.2	
96	3.4	5.4	7.4	9.4	11.4	13.5	15.5	17.5	19.5	

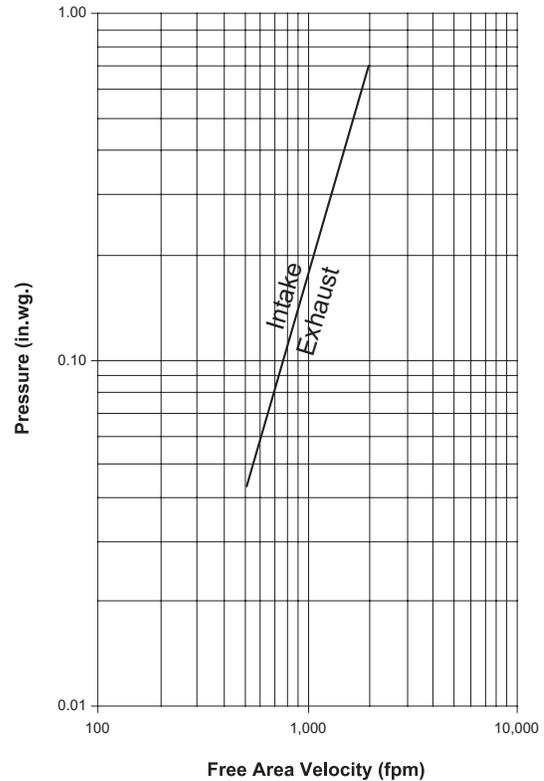
### Water Penetration

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 = 1,050 fpm



### Pressure Loss



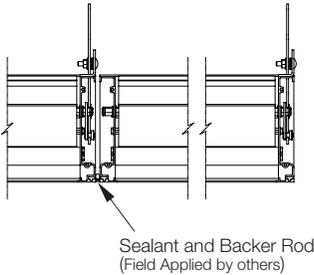
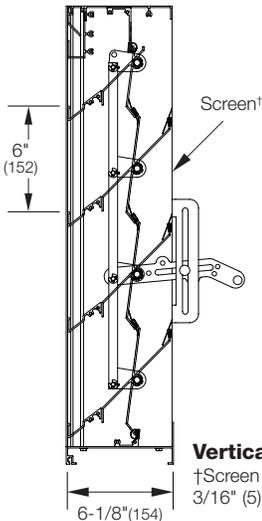
Louver Test Size = 48" x 48" (1219 x 1219)  
Pressure loss tested in accordance with Figure 5.5 of AMCA Standard 500-L. Data corrected to standard air density.

# EXD-645

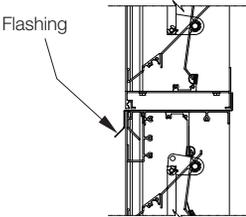
Extruded Aluminum Louver

6" deep • 37-1/2" – 45° Combination Blade

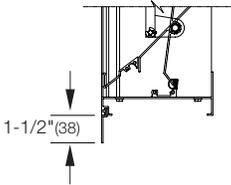
## Attributes



**Visible Vertical Mullion**  
(standard)

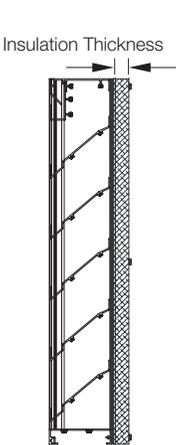


**Horizontal Mullion**  
(standard)

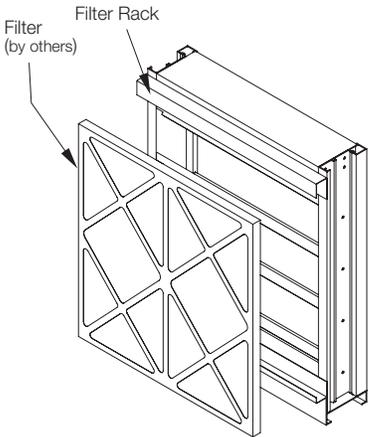


**Flange Frame**  
(optional)

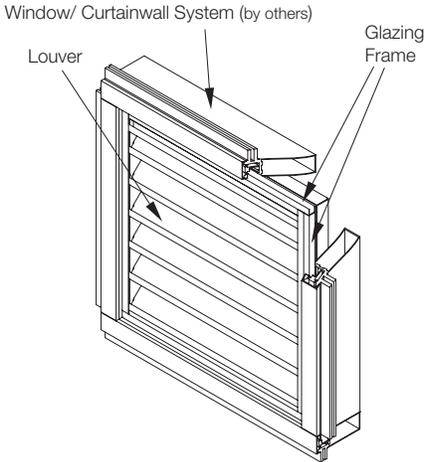
## Supplemental Options



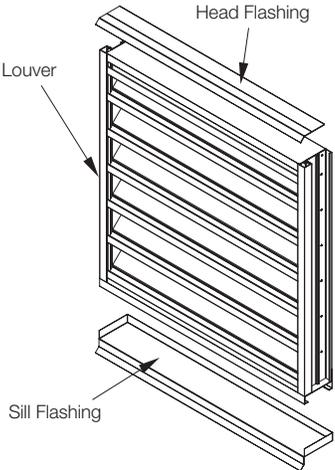
**Blank-Off Options**  
Non-Insulated and Gasketed  
1" Insulated (4.25 R-value)  
2" Insulated (8.75 R-value)



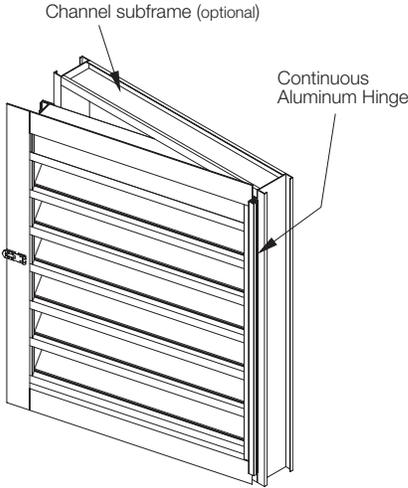
**Filter Rack**



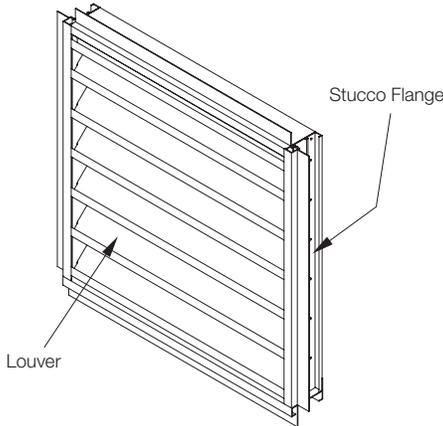
**Glazing Frame**



**Flashing Options**  
Head and Sill Available



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



**Stucco Flange**