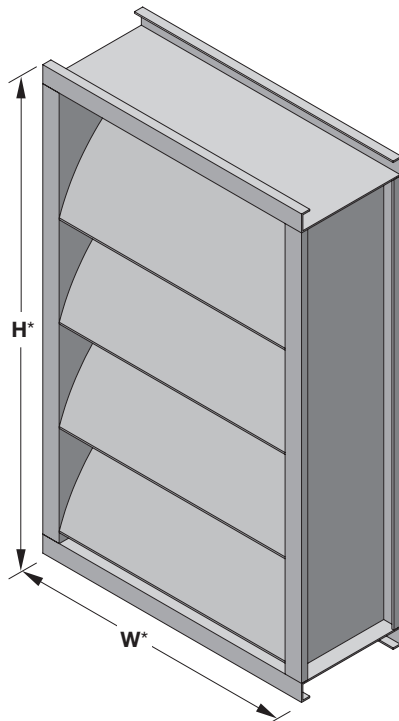




### EAA-645

(standard)

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

## Ratings

**Free Area:** [48" × 48" (1219 × 1219) unit]: 4.0 ft<sup>2</sup> (0.37 m<sup>2</sup>)  
25.0%

### Performance @ Beginning Point of Water Penetration

**Free Area Velocity:** 1,137 fpm (5.78m/s)

**Air Volume Delivered:** 4,541 cfm (2.14 m<sup>3</sup>/s)

**Pressure Loss:** 0.06 in.wg. (16 Pa)

**Velocity @ 0.15 in.wg. Pressure Loss:** 1,750 fpm (8.89 m/s)

**Design Load:** 30 psf

### Acoustical Performance:

| Octave Band       | 2   | 3   | 4   | 5    | 6    | 7    |
|-------------------|-----|-----|-----|------|------|------|
| Center Freq. (hz) | 125 | 250 | 500 | 1000 | 2000 | 4000 |
| Transmission Loss | 5   | 5   | 7   | 10   | 12   | 11   |
| Noise Reduction   | 11  | 11  | 13  | 16   | 18   | 17   |

The EAA-645 airfoil blade acoustical louver provides low static pressure loss and reliable noise reduction over a wide range of frequencies. The EAA-645 is available in a wide array of finishes including custom color matching and is ideally suited for intake or exhaust application on standby generator enclosures.

## Standard Construction

**Material:** Mill finish 6063-T5 extruded aluminum

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

**Blades:** 45° × 0.081" (2) thick airfoil style with a 26 ga. (0.55) thick perforated backing packed with noncombustible insulating material.

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

**Minimum Size:** 12" × 16" (305 × 406)

### Maximum Size:

Single section: 60" × 120" (1524 × 3048)  
Multiple section: Unlimited

## Options

### ■ Factory finish:

- High Performance Fluoropolymer
- Baked Enamel   ■ Prime Coat
- 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

### ■ Burglar bars

### ■ Frame closure

### ■ Net OD (actual size)



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

# PERFORMANCE

## EAA-645

Acoustical Louver  
6" deep • 45° Insulated Airfoil Blade

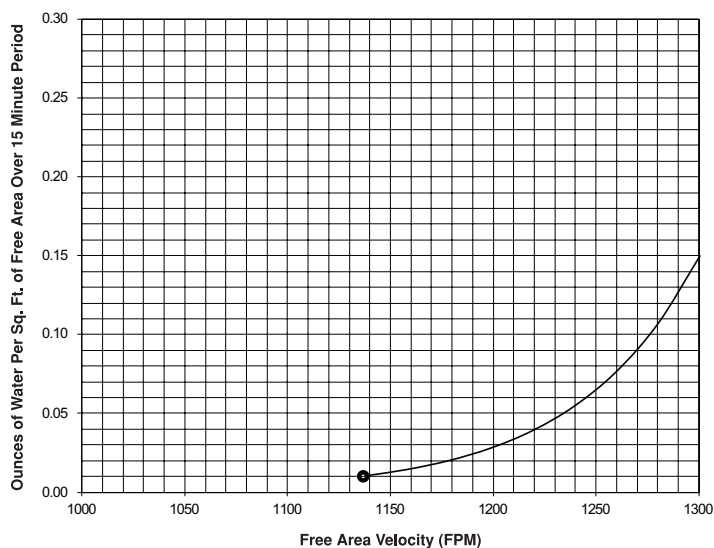
### Free Area (ft<sup>2</sup>)

|                 |     | Width (Inches) |            |            |            |            |            |            |            |            |
|-----------------|-----|----------------|------------|------------|------------|------------|------------|------------|------------|------------|
|                 |     | 12             | 18         | 24         | 30         | 36         | 42         | 48         | 54         | 60         |
| Height (Inches) | 18  | 0.2            | <b>0.4</b> | 0.5        | 0.6        | 0.8        | 0.9        | 1.0        | 1.2        | 1.3        |
|                 | 24  | 0.4            | 0.6        | <b>0.9</b> | 1.1        | 1.3        | 1.6        | 1.8        | 2.0        | 2.3        |
|                 | 30  | 0.6            | 0.9        | 1.2        | <b>1.6</b> | 1.9        | 2.2        | 2.6        | 2.9        | 3.2        |
|                 | 36  | 0.5            | 0.9        | 1.2        | 1.5        | <b>1.8</b> | 2.2        | 2.5        | 2.8        | 3.1        |
|                 | 42  | 0.7            | 1.1        | 1.5        | 2.0        | 2.4        | <b>2.8</b> | 3.2        | 3.7        | 4.1        |
|                 | 48  | 0.9            | 1.4        | 1.9        | 2.4        | 3.0        | 3.5        | <b>4.0</b> | 4.5        | 5.0        |
|                 | 54  | 1.0            | 1.7        | 2.3        | 2.9        | 3.5        | 4.1        | 4.8        | <b>5.4</b> | 6.0        |
|                 | 60  | 1.2            | 1.9        | 2.6        | 3.4        | 4.1        | 4.8        | 5.5        | 6.2        | <b>7.0</b> |
|                 | 66  | 1.4            | 2.2        | 3.0        | 3.8        | 4.6        | 5.5        | 6.3        | 7.1        | 7.9        |
|                 | 72  | 1.5            | 2.4        | 3.4        | 4.3        | 5.2        | 6.1        | 7.0        | 8.0        | 8.9        |
|                 | 78  | 1.7            | 2.7        | 3.7        | 4.7        | 5.8        | 6.8        | 7.8        | 8.8        | 9.8        |
|                 | 84  | 1.9            | 3.0        | 4.1        | 5.2        | 6.3        | 7.4        | 8.6        | 9.7        | 10.8       |
|                 | 90  | 2.0            | 3.2        | 4.5        | 5.7        | 6.9        | 8.1        | 9.3        | 10.5       | 11.8       |
|                 | 96  | 2.2            | 3.5        | 4.8        | 6.1        | 7.5        | 8.8        | 10.1       | 11.4       | 12.7       |
|                 | 102 | 2.2            | 3.5        | 4.8        | 6.1        | 7.4        | 8.7        | 10.0       | 11.3       | 12.6       |
|                 | 108 | 2.3            | 3.7        | 5.1        | 6.5        | 7.9        | 9.4        | 10.8       | 12.2       | 13.6       |
|                 | 114 | 2.5            | 4.0        | 5.5        | 7.0        | 8.5        | 10.0       | 11.5       | 13.0       | 14.5       |
|                 | 120 | 2.7            | 4.3        | 5.9        | 7.5        | 9.1        | 10.7       | 12.3       | 13.9       | 15.5       |

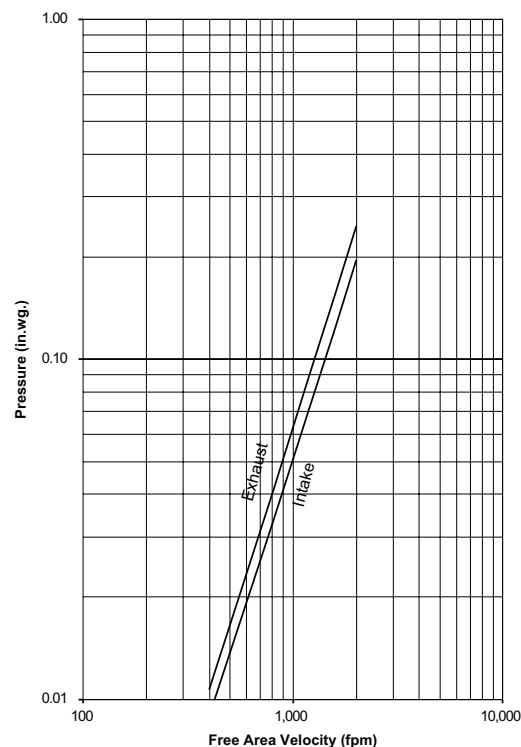
### Water Penetration

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 = 1,137 fpm**

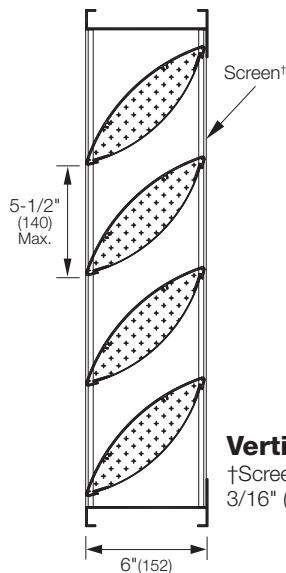


### Pressure Loss



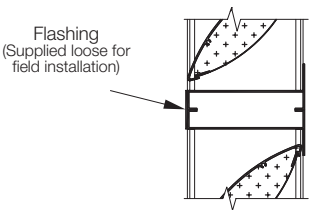
Louver Test Size = 48" x 48" (1219 x 1219)  
Pressure loss tested in accordance with Figure 5.5 of AMCA Standard 500-L. Data corrected to standard air density.

## Attributes

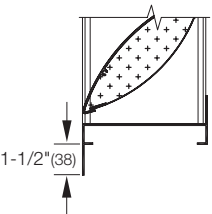


**Vertical Section**

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

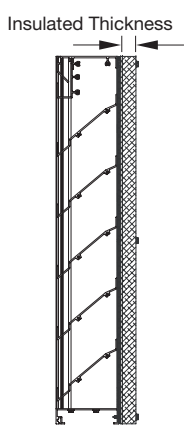


**Horizontal Mullion**  
(standard)



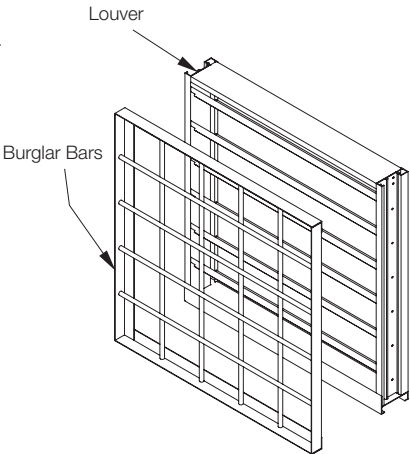
**Flange Frame**  
(optional)

## Supplemental Options



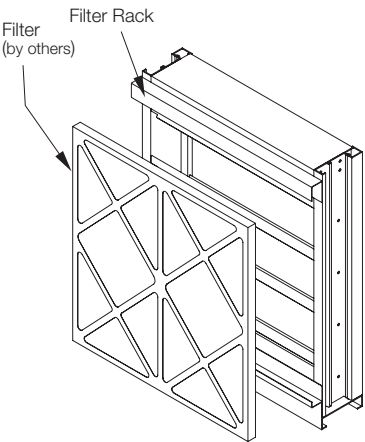
**Blank-Off Options**

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

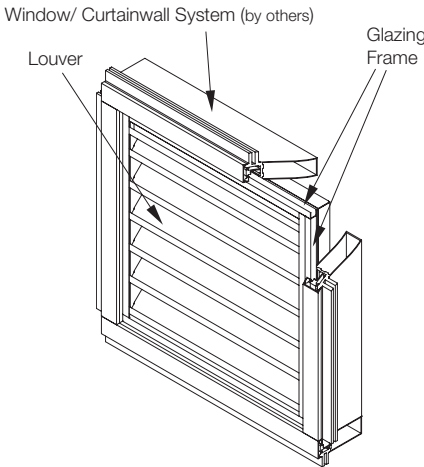


**Burglar Bars**

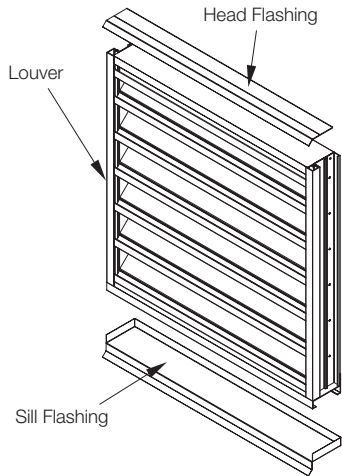
Shipped Loose or Mounted



**Filter Rack**

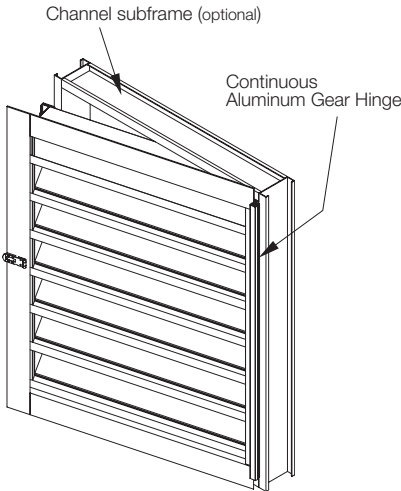


**Glazing Frame**



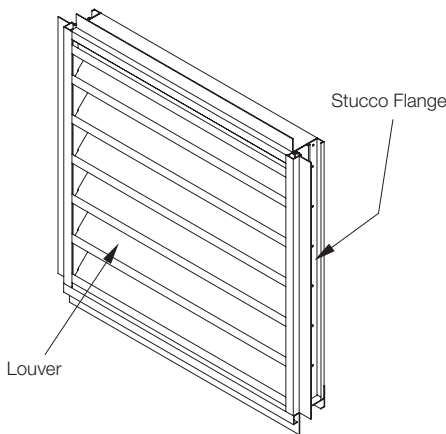
**Flashing Options**

Head and Sill Available



**Hinge and Subframe**

Right or Left Side Option Available



**Stucco Flange**