

**ED-645**

(standard)

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

## Ratings

**Free Area:** [48" x 48" (1219 x 1219) unit]: 8.7 ft<sup>2</sup> (0.81 m<sup>2</sup>)  
54.6%

### Performance @ Beginning Point of Water Penetration

**Free Area Velocity:** 1,009 fpm (5.13 m/s)

**Air Volume Delivered:** 8,811 cfm (4.16 m<sup>3</sup>/s)

**Pressure Loss:** 0.13 in.wg. (32 Pa)

**Velocity @ 0.15 in.wg. Pressure Loss:** 1,092 fpm (5.55 m/s)

**Std. Design Load:** 30 psf

The ED-645 drainable blade louver is designed to prevent water penetration in non-wind-driven rain applications by collecting water in frame and blade gutters and channeling it into downspouts and away from airflow paths. The ED-645 is available in a wide array of anodized and painted finishes including custom color matching.

## Standard Construction

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

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

**Blades:** 45° x 0.081" thick (2) drainable style

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

**Mullion:** Visible

**Minimum Size:** 4.5" x 8" (114 x 203)

**Maximum Size:**

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

120" x 60" (3048 x 1524)

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
- Stucco flange
- Glazing frame

### ■ Installation Hardware

- Clip angles
- Continuous angles

### ■ Hidden Vertical Mullion

### ■ 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

**ED-645**

Extruded Aluminum Louver  
6" deep • 45° Drainable Blade

## Free Area ( $\text{ft}^2$ )

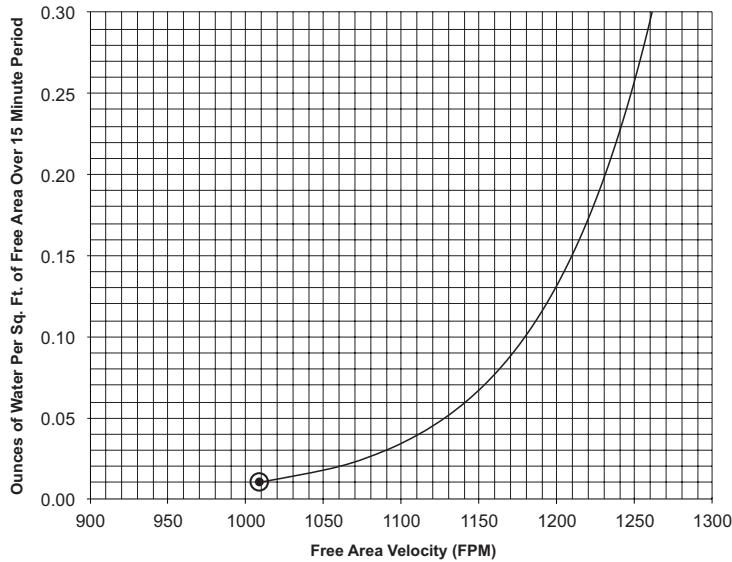
Width (Inches)

	4.5	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96	102	108	114	120
Height (Inches)	7	<b>0.0</b>	0.1	0.1	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.5	0.6	0.6	0.6	0.7	0.7
12	0.1	<b>0.2</b>	0.4	0.5	0.6	0.8	0.9	1.0	1.2	1.3	1.4	1.6	1.7	1.8	2.0	2.1	2.2	2.4	2.5	2.6
18	0.1	0.5	<b>0.7</b>	1.0	1.3	1.6	1.8	2.1	2.4	2.7	3.0	3.2	3.5	3.8	4.1	4.3	4.6	4.9	5.2	5.5
24	0.2	0.8	1.3	<b>1.7</b>	2.2	2.7	3.2	3.7	4.1	4.6	5.1	5.6	6.0	6.5	7.0	7.5	7.9	8.4	8.9	9.4
30	0.3	1.1	1.7	2.4	<b>3.0</b>	3.7	4.3	5.0	5.6	6.3	6.9	7.6	8.3	8.9	9.6	10.2	10.9	11.5	12.2	12.8
36	0.3	1.4	2.2	3.0	3.9	<b>4.7</b>	5.5	6.3	7.2	8.0	8.8	9.6	10.5	11.3	12.1	12.9	13.8	14.6	15.4	16.3
42	0.4	1.7	2.7	3.6	4.6	5.6	<b>6.6</b>	7.6	8.6	9.6	10.6	11.6	12.6	13.6	14.6	15.6	16.3	17.6	18.6	19.6
48	0.5	1.9	3.0	4.2	5.3	6.5	7.6	<b>8.7</b>	9.9	11.0	12.1	13.3	14.4	15.6	16.7	17.8	19.0	20.1	21.3	22.4
54	0.5	2.1	3.4	4.7	6.0	7.3	8.5	9.8	<b>11.1</b>	12.4	13.7	15.0	16.2	17.5	18.8	20.1	21.4	22.7	23.9	25.2
60	0.6	2.4	3.8	5.2	6.7	8.1	9.5	10.9	12.4	<b>13.8</b>	15.2	16.6	18.1	19.5	20.9	22.3	23.8	25.2	26.6	28.0
66	0.7	2.7	4.3	6.0	7.6	9.2	10.8	12.5	14.1	15.7	<b>17.3</b>	19.0	20.6	22.2	23.8	25.5	27.1	28.7	30.3	32.0
72	0.7	3.0	4.8	6.6	8.4	10.2	12.0	13.8	15.6	17.4	19.2	<b>21.0</b>	22.8	24.6	26.4	28.2	30.0	31.8	33.6	35.4
78	0.8	3.3	5.3	7.2	9.2	11.2	13.2	15.1	17.1	19.1	21.1	23.3	<b>25.0</b>	27.0	29.0	30.9	32.9	34.9	36.9	38.8
84	0.9	3.6	5.7	7.9	10.0	12.1	14.3	16.4	18.6	20.7	22.9	25.0	27.2	<b>29.3</b>	31.4	33.6	35.7	37.9	40.0	42.2
90	1.0	3.8	6.1	8.4	10.7	13.0	15.2	17.5	19.8	22.1	24.4	26.7	29.0	31.3	<b>33.5</b>	35.8	38.1	40.4	42.7	45.0
96	1.0	4.1	6.5	8.9	11.3	13.8	16.2	18.6	21.1	23.5	25.9	28.4	30.8	33.2	35.6	<b>38.1</b>	40.5	42.9	45.4	47.8
102	1.1	4.3	6.9	9.4	12.0	14.6	17.2	19.7	22.3	24.9	27.5	30.0	32.6	35.2	37.8	40.3	<b>42.9</b>	45.5	48.1	50.6
108	1.2	4.6	7.4	10.2	12.9	15.7	18.5	21.3	24.0	26.8	29.6	32.4	35.1	37.9	40.7	43.4	46.2	<b>49.0</b>	51.8	54.5
114	1.2	4.9	7.9	10.8	13.8	16.7	19.7	22.6	25.6	28.5	31.4	34.4	37.3	40.3	43.2	46.2	49.1	52.1	<b>55.0</b>	58.0
120	1.3	5.2	8.3	11.5	14.6	17.7	20.8	23.9	27.1	30.2	33.3	36.4	39.6	42.7	45.8	48.9	52.1	55.2	58.3	<b>61.4</b>

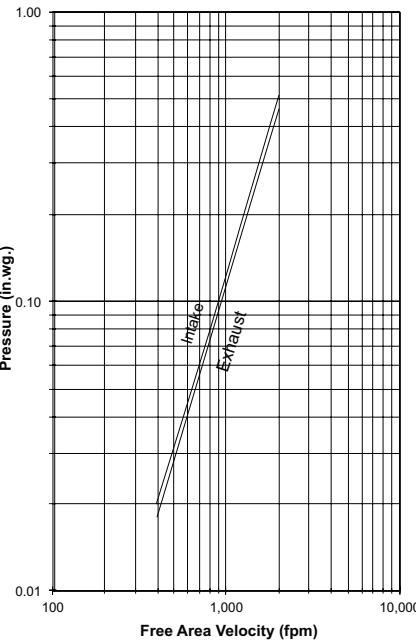
## Water Penetration

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 = 1,009 fpm

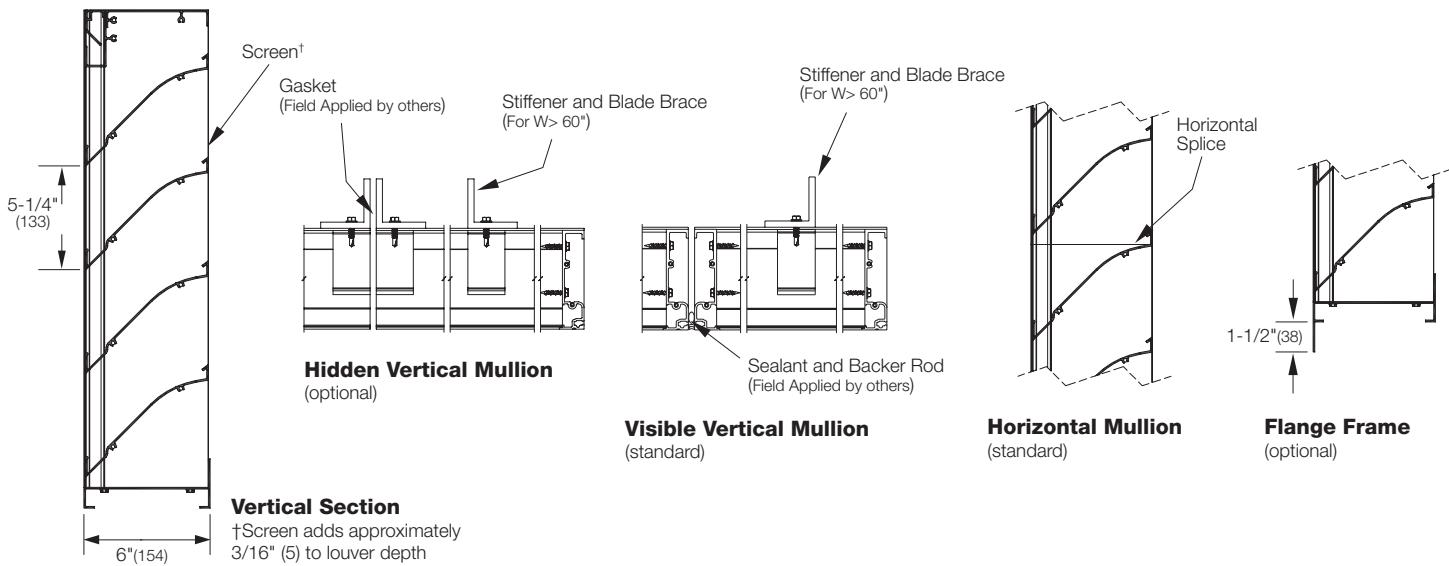


## Pressure Loss



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

## Attributes



## Supplemental Options

