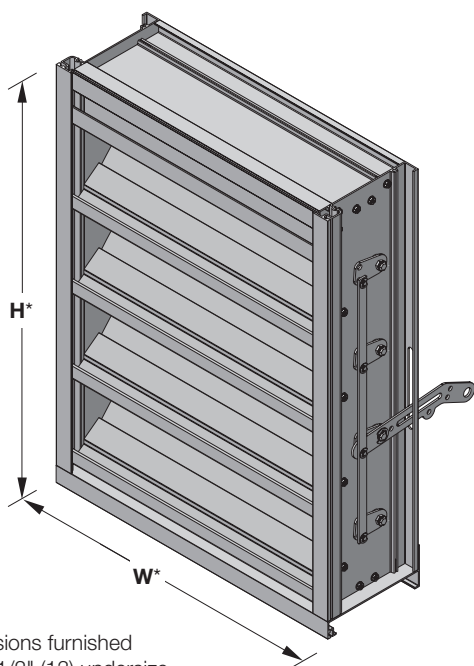




EXA-645

(standard)

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

Ratings

Free Area: [48" × 48" (1219 × 1219) unit]: 8.1 ft² (0.75 m²)
50.4%

Leakage: Class 1A (3 cfm/sq.ft. @ 1 in. wg.)
(15.2 L/s/m² @ 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 m³/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°C to +82°C)

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
Back: 45° × 0.125" (3) thick operable airfoil

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" × 120" (1524 × 3048)

Note: 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



PERFORMANCE

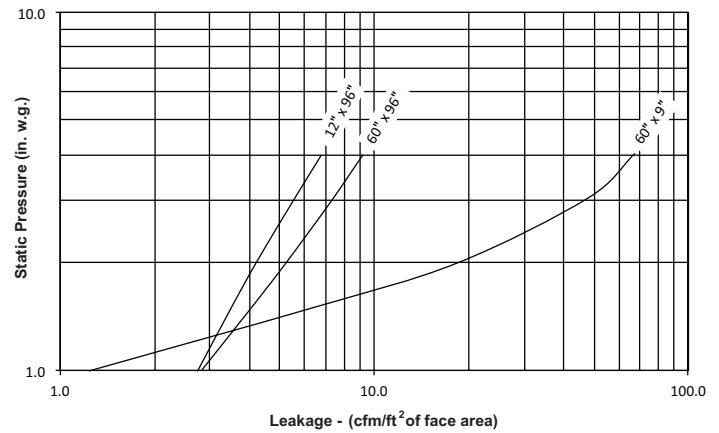
EXA-645

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

Free Area (ft²)

		Width (Inches)									
		12	18	24	30	36	42	48	54	60	
Height (Inches)	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	
	102	4.1	6.5	9.0	11.5	13.9	16.4	18.8	21.3	23.8	
	108	4.3	6.9	9.4	12.0	14.6	17.2	19.8	22.4	25.0	
	114	4.5	7.2	9.9	12.6	15.3	18.1	20.8	23.5	26.2	
	120	4.8	7.8	10.7	13.7	16.6	19.6	22.5	25.5	28.4	

Air Leakage



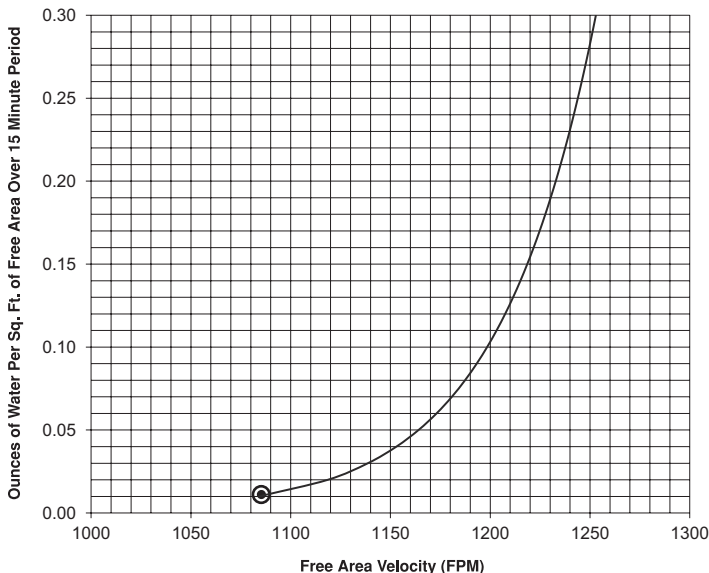
NOTES:

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 500°F - 1040°F (100°C - 400°C).

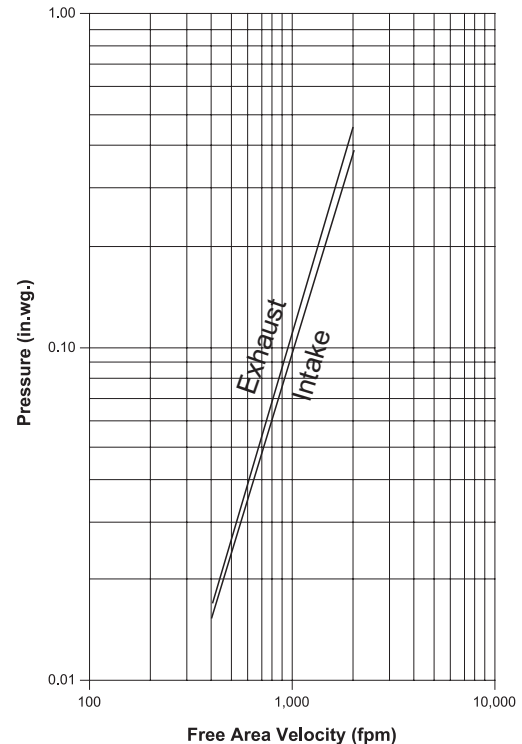
Water Penetration

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

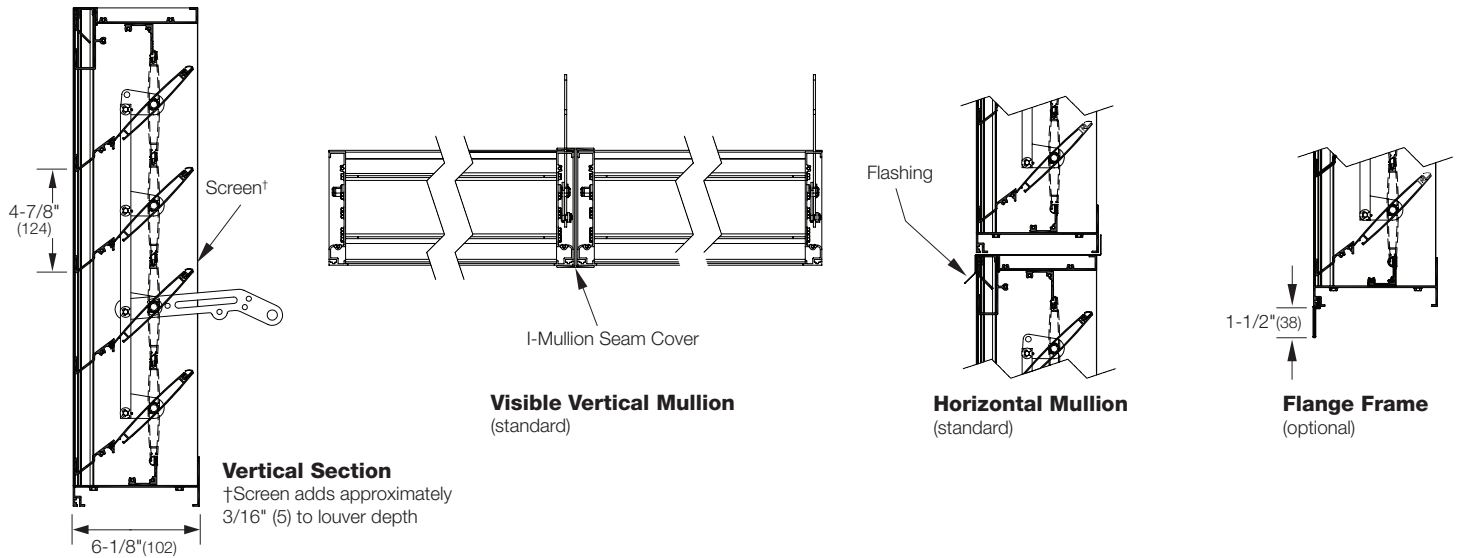


Louver Test Size = 48" x 48" (1219 x 1219)
Pressure loss tested in accordance with Figure 5.5 of AMCA Standard 500-L. Data corrected to standard air density.

EXA-645

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

Attributes



Supplemental Options

