ALL-LITE

EAA-645

Acoustical Louver 6" deep • 45° Insulated Airfoil Blade

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 \times 0.081" thick (152 \times 2) channel

Blades: $45^{\circ} \times 0.081$ " (2) thick airfoil style with a 26 ga. (0.55)

thick perforated backing packed with noncombustible

insulating material.

Screen: $1/2" \times 0.063" (12.7 \times 1.6)$ expanded and

flattened aluminum

Minimum Size: $12" \times 16" (305 \times 406)$

Maximum Size:

Single section: $60" \times 120" (1524 \times 3048)$

Multiple section: Unlimited

Options

■ Factory finish:

High Performance Fluoropolymer

Baked EnamelPrime 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

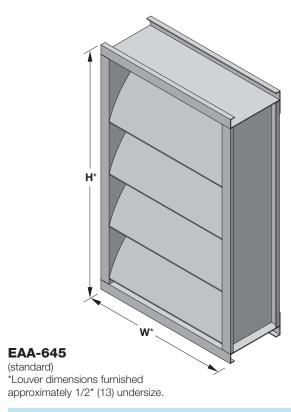
■ Subframe

■ Head and/or sill flashing

■ Burglar bars

■ Frame closure

■ Net OD (actual size)



Ratings

Free Area: $[48" \times 48" (1219 \times 1219) \text{ unit}]: 4.0 \text{ ft}^2 (0.37 \text{ m}^2)$

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 m³/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



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

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Free Area (ft²)

Height (Inches)

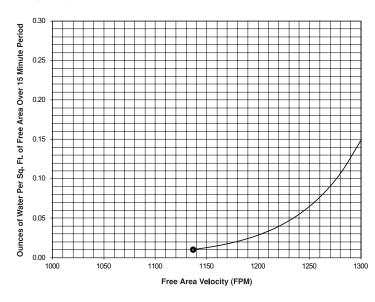
M/idth	(Inches)

	12	18	24	30	36	42	48	54	60
18	0.2	0.4	0.5	0.6	0.8	0.9	1.0	1.2	1.3
24	0.4	0.6	0.9	1.1	1.3	1.6	1.8	2.0	2.3
30	0.6	0.9	1.2	1.6	1.9	2.2	2.6	2.9	3.2
36	0.5	0.9	1.2	1.5	1.8	2.2	2.5	2.8	3.1
42	0.7	1.1	1.5	2.0	2.4	2.8	3.2	3.7	4.1
48	0.9	1.4	1.9	2.4	3.0	3.5	4.0	4.5	5.0
54	1.0	1.7	2.3	2.9	3.5	4.1	4.8	5.4	6.0
60	1.2	1.9	2.6	3.4	4.1	4.8	5.5	6.2	7.0
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

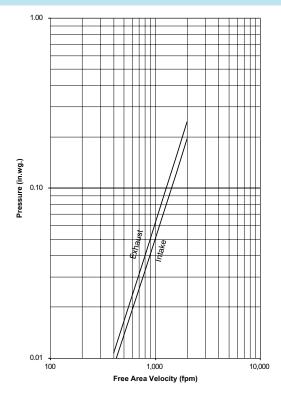
Water Penetration

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



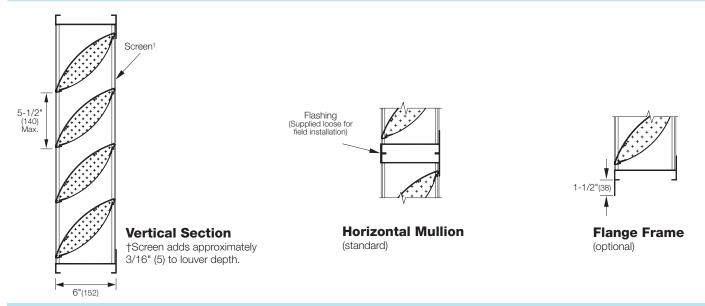
Louver Test Size = 48" x 48" (1219 x 1219)

Pressure loss tested in accordance with Figure 5.5 of AMCA

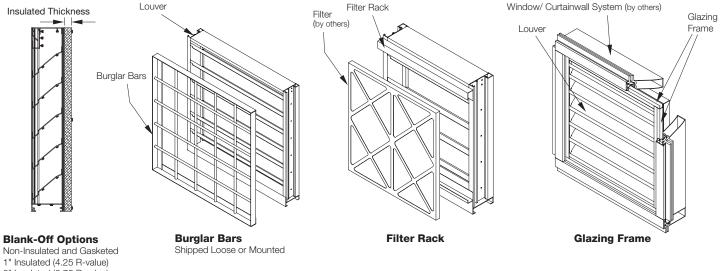
Standard 500-L. Data corrected to standard air density.

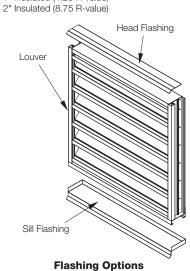
6" deep • 45° Insulated Airfoil Blade

Attributes

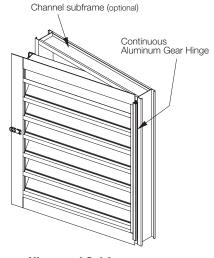


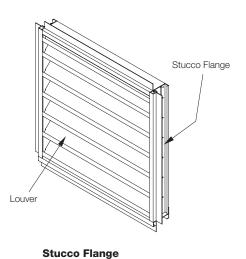
Supplemental Options





Head and Sill Available





Hinge and SubframeRight or Left Side Option Available

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