POTTORFF®

model **EAJ-1235-MD**
acoustical louver
12" deep • 35° insulated J-blade

Application

The EAJ-1235-MD acoustical louver is engineered and tested to withstand extreme loads, debris impact, and cyclic fatigue associated with the severe weather effects of hurricanes (Miami-Dade County NOA #16-0627.08). Constructed from formed 5052-H32 aluminum, the EAJ-1235-MD features horizontal J-blades and is designed for intake and exhaust applications where maximum noise reduction is required. The EAJ-1235-MD is available in a wide array of finishes including custom color matching.

Standard Construction

Material: Aluminum.

Frame: 12" deep × 0.125" thick (305 × 3.2) channel.

Blades: 35° × 0.125" (3.2) thick J-style with a 20 ga. (0.8) thick perforated backing packed with noncombustible insulating material.

Screen: ½" × 0.063" (12.7 × 1.6) expanded and flattened aluminum.

Mullion: Visible.

Minimum Size: 12" × 20⅜" (305 × 518)

Maximum Size: Single section: 60" × 120 (1524 × 3048)
Multiple section: Unlimited width × 120" (3048) height or 60" (1524) width × unlimited height

Installation Hardware: Continuous angles.

Options

☐ Factory finish:
- ☐ Baked Enamel
- ☐ Prime Coat
- ☐ High Performance Fluoropolymer - 100% Newlar/70% resin Kynar

☐ 1½" (38) flange frame.

☐ Alternate bird or insect screens.

☐ Insulated or non-insulated blank-off panels.

☐ Filter racks.

☐ 1/8" (3) aluminum sleeve for anchorless installation:
- ☐ Standard (accomodates walls up to 14" thick)
- ☐ Extended (accomodates walls up to 22" thick)

Ratings

Free Area: [48" × 48" (1219 × 1219) unit]: 4.9 ft² (0.45 m²)
30.6%

Performance @ Beginning Point of Water Penetration
- **Free Area Velocity:** 924 fpm (4.70 m/s)
- **Air Volume Delivered:** 4528 cfm (2.14 m³/s)
- **Pressure Loss:** 0.08 in.wg. (20 Pa)

Velocity @ 0.15 in.wg. Pressure Loss: 1230 fpm (6.25 m/s)

AMCA 540 (impact resistance) listed.

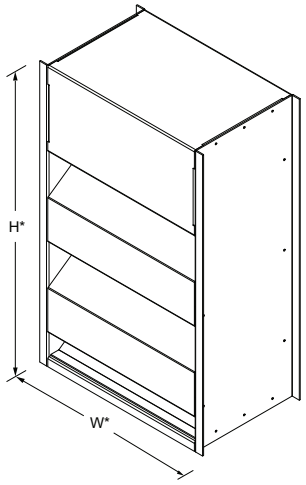
Miami Dade County: NOA No. 16-0627.08 (Expires 10/20/2021)
Approved to FBC TAS202-94, TAS201-94 and TAS203-94.

Florida Building Code Approval (2014-FBC): No. FL20766.1

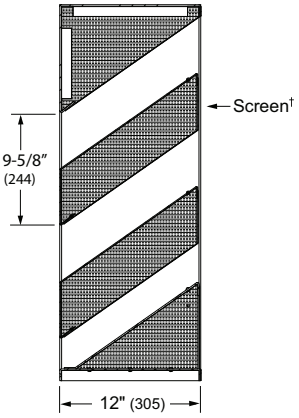
Design Load: 150 psf

Acoustical Performance:
Louver Test Size = 48" × 48" (1219 × 1219)

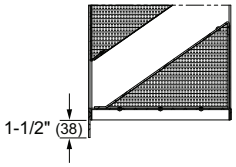
Octave Band	2	3	4	5	6	7
Center Freq. (hz)	125	250	500	1000	2000	4000
Transmission Loss	6	8	12	15	13	10
Noise Reduction	12	14	18	21	19	16



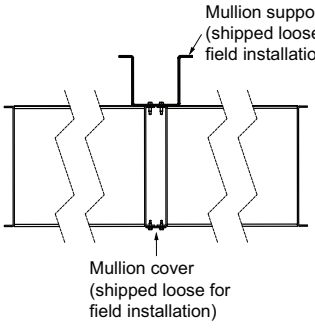
Model **EAJ-1235-MD**
(standard)
*Louver dimensions furnished approximately 1/2" (13) undersize.



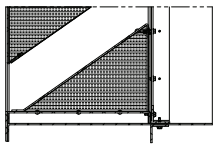
Vertical Section
†Screen adds approximately 3/16" (5) to louver depth.



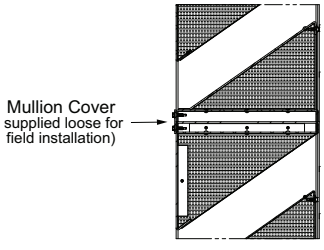
Flange Frame
(optional)



Vertical Mullion
(standard)



Sleeve
(optional)



Horizontal Mullion
(standard)

Certified Ratings:
Pottorff certifies that the model EAJ-1235-MD shown herein is licensed to bear the AMCA seal. The ratings shown are based on test and procedures performed in accordance with AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified Ratings seal applies to water penetration, sound, and air performance ratings.

IMPACT RESISTANT LOUVER
Basic Protection

See www.AMCA.org for all certified or listed products
This label does not signify AMCA airflow performance certification.

Certified Ratings:
Pottorff certifies that the model EAJ-1235-MD shown herein is approved to bear the AMCA Listing Label. The ratings shown are based on tests and procedures performed in accordance with AMCA publications and comply with the requirements of the AMCA Listing Label Program. The AMCA Listing Label applies to Wind Borne Debris Impact Resistant Louvers.

Information is subject to change without notice or obligation.

NOTE: Dimensions in parentheses ( ) are millimeters.

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Performance Data

Free Area (ft^2)

Width (Inches)

Height (Inches)	12	18	24	30	36	42	48	54	60
20	0.3	**0.5**	0.6	0.8	1.0	1.2	1.3	1.5	1.7
24	0.5	0.8	**1.1**	1.5	1.8	2.1	2.4	2.7	3.0
30	0.6	0.9	1.3	**1.7**	2.0	2.4	2.7	3.1	3.4
36	0.8	1.3	1.7	2.2	**2.7**	3.2	3.7	4.1	4.6
42	1.0	1.6	2.3	2.9	3.5	**4.1**	4.7	5.3	6.0
48	1.1	1.7	2.3	3.0	3.6	4.3	**4.9**	5.5	6.2
54	1.3	2.1	2.9	3.7	4.5	5.3	6.1	**7.0**	7.8
60	1.5	2.4	3.3	4.2	5.0	5.9	6.8	7.7	**8.6**
66	1.6	2.6	3.5	4.5	5.5	6.4	7.4	8.4	9.3
72	1.9	3.0	4.1	5.3	6.4	7.5	8.6	9.8	10.9
78	1.9	3.1	4.3	5.4	6.6	7.8	8.9	10.1	11.2
84	2.2	3.4	4.7	6.0	7.3	8.6	9.9	11.2	12.5
90	2.4	3.8	5.2	6.7	8.1	9.5	10.9	12.4	13.8
96	2.4	3.9	5.3	6.8	8.2	9.7	11.1	12.6	14.1
102	2.7	4.3	5.9	7.5	9.2	10.8	12.4	14.0	15.6
108	2.8	4.5	6.2	7.9	9.6	11.3	13.0	14.7	16.4
114	3.0	4.7	6.5	8.3	10.1	11.9	13.6	15.4	17.2
120	3.2	5.2	7.1	9.1	11.0	12.9	14.9	16.8	18.8

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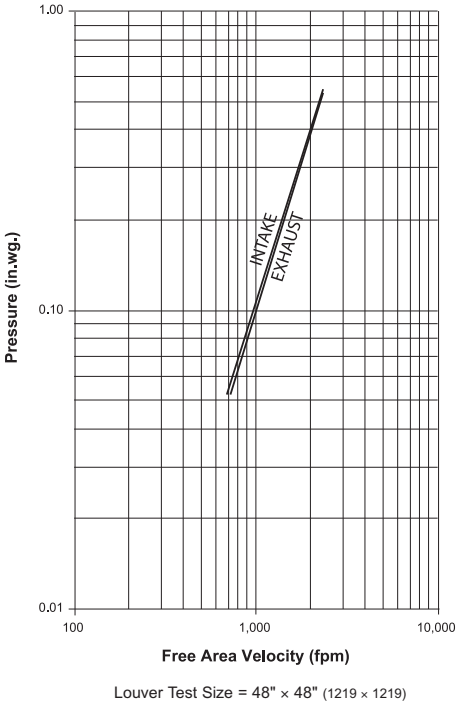
Pressure Loss

Data corrected to standard air density.



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

Pressure loss tested in accordance with Figure 5.5 of AMCA Standard 500-L.

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" × 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. Pottorff recommends 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.

Selection Criteria

Follow the steps listed below to calculate the louver size needed to satisfy the required air volume while minimizing the adverse effects of water penetration and pressure loss.

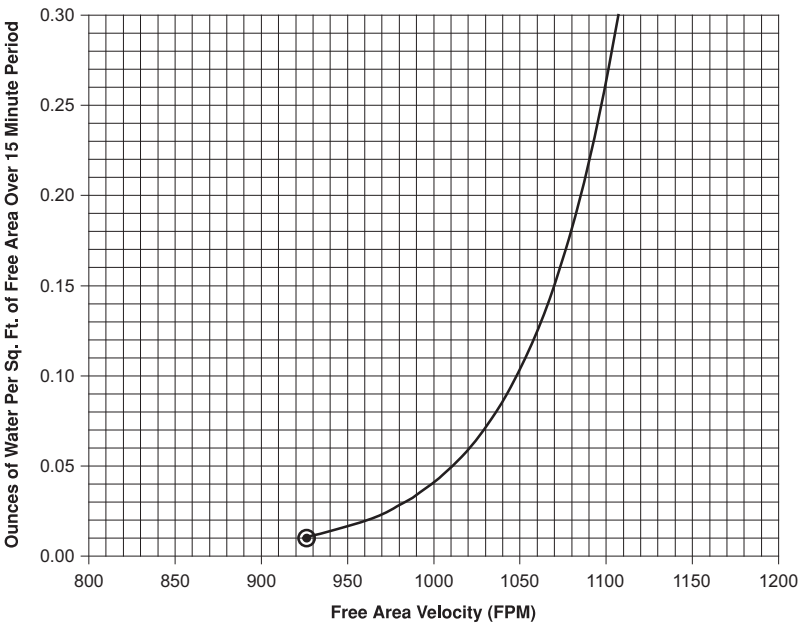
1. Determine the Free Area Velocity (FAV) at the maximum allowable pressure loss using the *Pressure Loss* chart to the left. While job conditions vary, typically, the maximum allowable pressure loss should not exceed 0.15 in.wg., and the FAV for 0.15 in.wg. pressure loss is listed on the front page of this sheet.
2. **Intake Applications** If the FAV at the Beginning Point of Water Penetration (shown below) is less than the FAV from step 1, then use the FAV at the Beginning Point of Water Penetration in step 3, otherwise use the FAV from step 1.

   Exhaust Applications Use the FAV from step 1 in step 3.
3. Calculate the total louver square footage required using the following equation.

   _____ cfm ÷ _____ fpm = _____ ft^2
   Required Air Volume | FAV | Required Louver (Free-Area) Size in ft^2
4. Using the *Free Area* chart above, select a louver width and height that yields a free area ft^2 greater than or equal to the required louver size calculated in step 3.

Water Penetration

Beginning Point of Water Penetration = 924 fpm



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