MODEL EA-731-D

Severe Weather Louver • 7″ Deep • Combination Stationary • Drainable and Chevron Blades • Sightproof • Extruded Aluminum

Standard Materials and Construction

FRAME: .081" thk. (nominal) extruded aluminum, 6063-T52/T6 alloy.
BLADE: .081" thk. (nominal) extruded aluminum, 6063-T52/T6 alloy. Horizontal drain blades approximately 3" on center, vertical blades approximately 13⁄16" on center.
LOUVER FACE: Head and blades are contained within jambs, sill contains jambs.
SCREENS: (When indicated, in a removable frame.)
½" flattened aluminum (.051" thick),
-or- ½" sq. mesh, intermediate double-crimped aluminum wire, .063" dia.,
-or- 18/16 mesh, .011" dia. aluminum wire, insect screen.
DRAIN PAN: .060" thk. (nominal) formed aluminum with welded and caulked end dams.
FINISH: Mill

Options

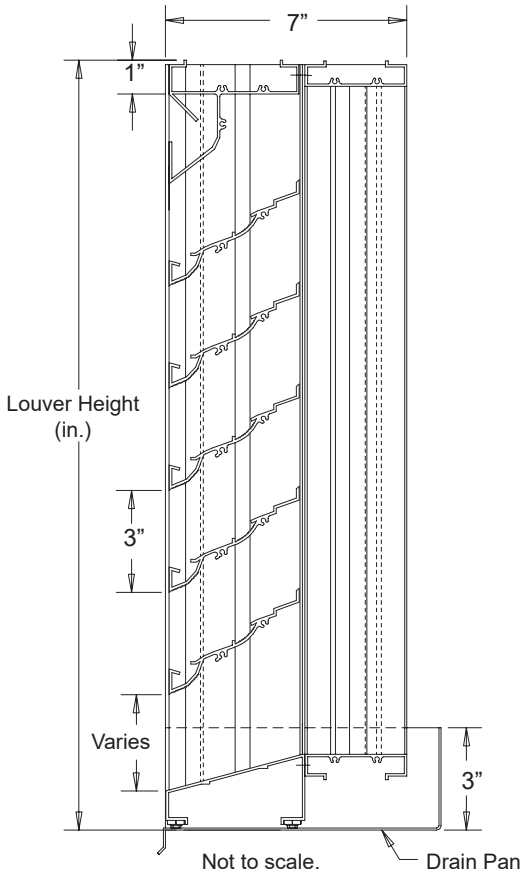
Finish - Baked Enamel, Kynar, Anodized

Notes

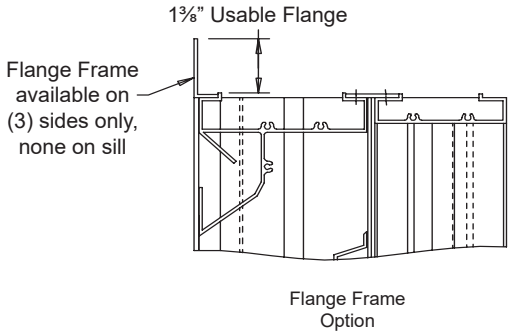
1. ½" nominal deduction will be made to the opening size given.
2. Louvers larger than the maximum factory assembled size will require field assembly of smaller louver sections.
3. Approximate shipping weight is 10.5 lbs./sq.ft.
4. Maximum single panel width is 60", maximum single panel height is 96". Total single panel size cannot exceed 30 sq. ft.

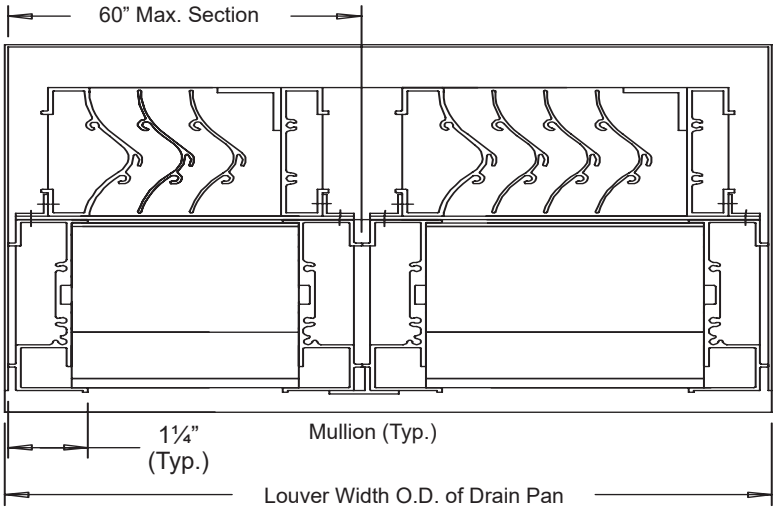
Louver Sizes

Min Panel	Max Single Panel
12"W x 12"H	60"W x 96"H or 30 sq. ft. (See Note 4)



This louver has been tested to **AMCA Standard 540 for Wind Borne Debris Impact Resistance** and **AMCA Standard 550 for High Velocity Wind Driven Rain.**
See Page 2 for seal and listing information.





Item #	**Qty**	Width	Height	Width	Height	**Mullion**	Type	Location		
		Opening Size		**Louver Size**			**Screens**			**Union Made**
Arch. / Eng.:						**EDR:**		**ECN:**		**Job:**
Contractor:										
Project:						**Date:**		**DWN:**		**DWG:**

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Performance Data

Pressure Drop: .022 in. wg at 398 fpm

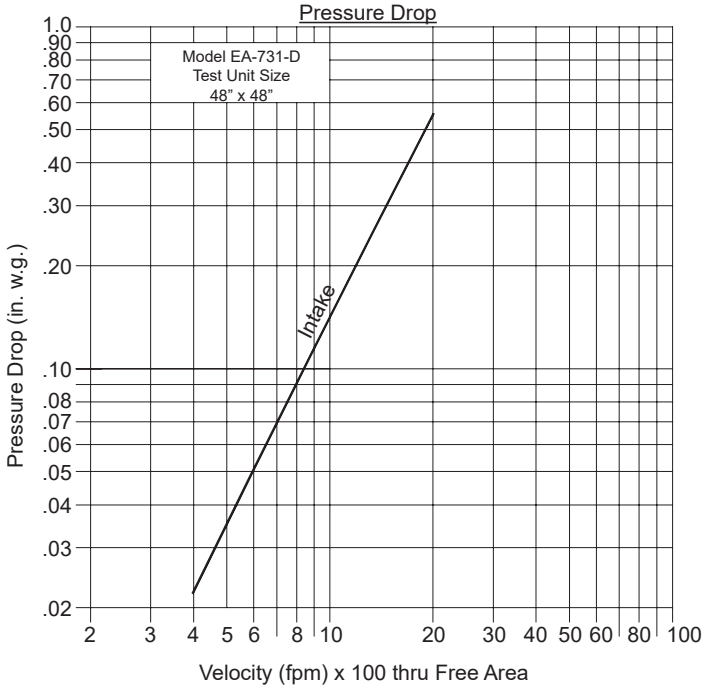
Free Area: 6.78 sq.ft.(42.4%) for 48"W x 48"H sample tested in accordance with AMCA Standard 500-L.

Beginning Point of Water Penetration: Greater than 1250 fpm

Class "A" Rating with 100% efficiency at 3 in. rain fall at intake velocity of 1559 fpm (10,571 cfm) at wind speed of 29 mph.
Class "A" Rating with 100% efficiency at 8 in. rain fall at intake velocity of 1568 fpm (10,634 cfm) at wind speed of 50 mph.
Testing based on 48" x 48" based on AMCA Standard 500-L.

Ratings do not include effects of a screen.

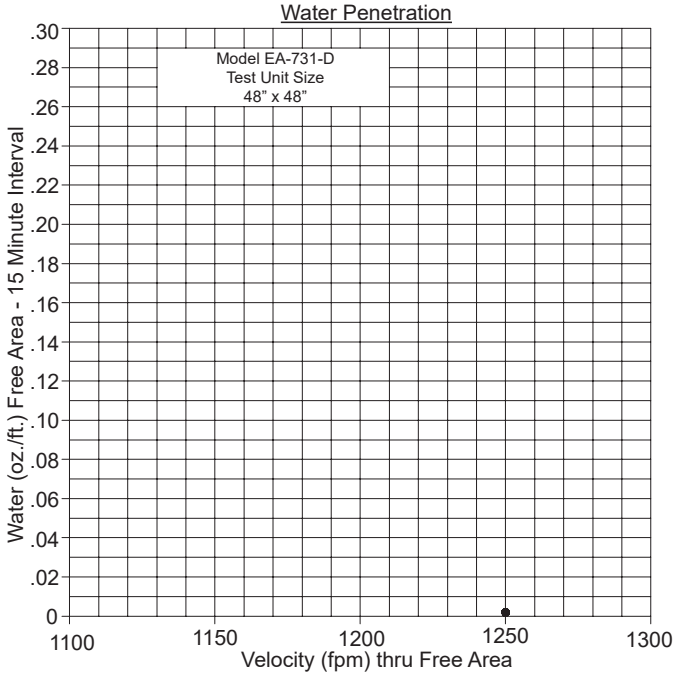
Pressure Drop



Velocity (fpm) x 100 thru Free Area

Intake air converted to standard air density.
Tested to AMCA Standard 500-L, Figure 5.5.

Water Penetration



Velocity (fpm) thru Free Area

Beginning Point of Water Penetration is above 1250 fpm

Free Area (sq.ft.)

Height (in.) \ Width (in.)	12"	18"	24"	30"	36"	42"	48"	54"	60"
12"	.26	.44	.62	.79	.97	1.15	1.32	1.50	1.68
24"	.62	1.03	1.45	1.86	2.27	2.69	3.10	3.51	3.93
36"	.99	1.64	2.30	2.96	3.61	4.27	4.93	5.59	6.24
48"	1.36	2.26	3.17	4.07	4.98	5.88	6.78	7.69	8.59
60"	1.71	2.85	3.99	5.14	6.28	7.42	8.56	9.70	10.84
72"	2.07	3.45	4.82	6.20	7.58	8.96	10.34	11.71	13.09
84"	2.42	4.04	5.65	7.27	8.88	10.50	12.11	13.73	15.34
96"	2.80	4.67	6.54	8.41	10.28	12.15	14.02	15.89	17.76

* For sizes highlighted, see Note 4 on Page 1.

amca INTERNATIONAL LISTED

HIGH VELOCITY RAIN RESISTANT WITH BLADES FULLY OPEN AND IMPACT RESISTANT LOUVER
Basic Protection Level D
See www.AMCA.org for all certified or listed products

This label does not signify AMCA airflow performance certification.

Arrow United Industries certifies that the Model EA-731-D 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 High Velocity Rain Resistant and Wind Borne Debris Impact Resistant Louvers.

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Wind Driven Rainwater Penetration Test
Conducted to AMCA Standard 500-L.

Test size 1m x 1m (39.7” x 39.7”) core area, 43.25” x 45.375” nominal.
Louver Free Area 6.78 square feet.

Core Ventilation (m/s)	0.0	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	Rain Fall / MPH
FPM	-	-	-	-	-	-	-	-	-	-	982	3 in. / hr. rain fall and 29 mph Velocity
Free Area Ventilation (cfm)	-	-	-	-	-	-	-	-	-	-	10,571	
Free Area Velocity (fpm)	-	-	-	-	-	-	-	-	-	-	1,559	
Effective Rating Class	A	A	A	A	A	A	A	A	A	A	A	
Effectiveness Ratio (%)	-	-	-	-	-	-	-	-	-	-	100	
FPM	-	-	-	-	-	-	-	-	-	-	988	8 in. / hr. rain fall and 50 mph Velocity
Free Area Ventilation (cfm)	-	-	-	-	-	-	-	-	-	-	10,634	
Free Area Velocity (fpm)	-	-	-	-	-	-	-	-	-	-	1,568	
Effective Rating Class	A	A	A	A	A	A	A	A	A	A	A	
Effectiveness Ratio (%)	-	-	-	-	-	-	-	-	-	-	100	

Wind Driven Rain Penetration Classifications

Class	Effectiveness %
A	100 to 99%
B	98.9% to 95%
C	94.9% to 80%
D	Below 80%

Discharge Loss Coefficient Classifications

Class	Discharge Loss Coefficient
1	0.4 and above
2	0.3 to 0.399
3	0.2 to 0.299
4	0.199 and below

Discharge Coefficient

Intake Cd= .33 (CLASS 2)

Class 1 Loss Coefficient has the least resistance to airflow.

1. Core area is the front opening of a louver assembly with the blades removed.
2. Core area velocity is the airflow rate through the louver divided by the core area (39.37" x 39.37").
3. Free area is the minimum area through which air can pass. It is determined by multiplying the sum of the minimum distance between intermediate blades, top blade and head, bottom blade and sill, by the minimum distance between jambs.
4. Discharge loss coefficient is calculated by dividing a louver actual airflow rate vs. a theoretical airflow for the opening, providing an indication of the louver air flow characteristics.

Arrow United Industries certifies that the Model EA-731-D shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests 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 Air Performance, Water Penetration, and Wind Driven Rain only.

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