Severe Weather Louver • 7" Deep • Drainable Chevron Blades • Rain Resistant • Sightproof • Extruded Aluminum

Standard Materials and Construction

FRAME: .081" thick (nominal) extruded aluminum, 6063-T52/T6 alloy. **BLADE:** .081" thick (nominal) extruded aluminum, 6063-T52/T6 alloy.

Blades approximately 21/4" on centers.

LOUVER FACE: Head and blades are contained within jambs, sill contains

jambs.

EXTENDED SILL: .060" thick (nominal) formed aluminum.

SCREEN: (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.

FINISH: Mill

Options

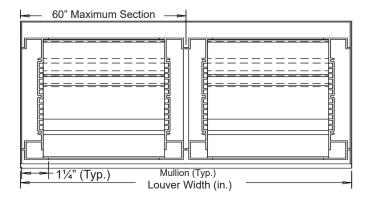
Finish - Baked Enamel, Kynar, Anodize

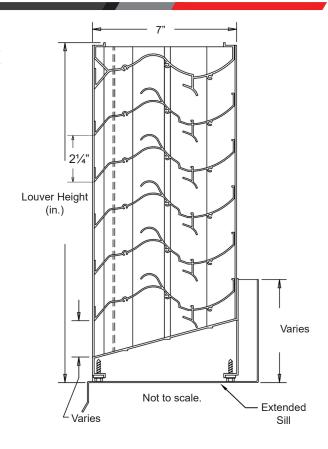
Notes

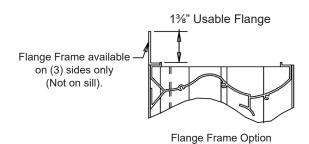
- 1. Nominal deductions will be made to opening sizes given.
- Louvers larger than the maximum factory assembled size will require field assembly of smaller louver sections.
- 3. Approximate shipping weight is 9.0 lbs./sq.ft.

Louver Sizes

Min Panel	Max Single Panel
12"W x 12"H	30 sq.ft.







Home #	Oh.	Width	Height	Width	Height	Mullion	Туре	Location			
iiem #	Item # Qty C		Opening Size Louver Size		Mullion	Screens				<u>Union Made</u>	
Arch.	/ Eng.:					EDR:		ECN:		Job:	
Contr	ontractor:								·		
Project:				Date:		DWN:		DWG:			



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Performance Data

Pressure Drop: .34 in. w.g. at 1000 fpm (intake)

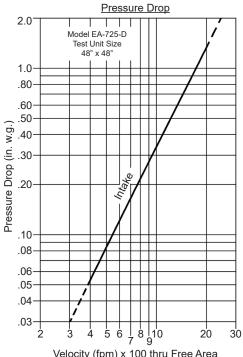
Free Area: 7.22 sq.ft. = 45.1% for 48"W x 48"H sample tested in accordance with AMCA Standard 500-L.

Beginning Point of Water Penetration: 1187 fpm (8570 cfm)

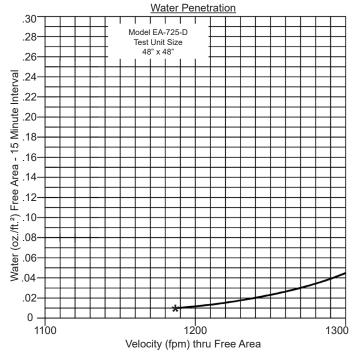
Class "A" Rating with 99.3% efficiency at 3 in. rain fall at intake velocity of 1338 fpm (7,076 cfm) at wind speed of 29 mph. Class "A" Rating with 99.0% efficiency at 8 in. rain fall at intake velocity of 1177 fpm (6,227 cfm) at wind speed of 50 mph.

Testing based on 48" x 48" based on AMCA Standard 500-L.

Ratings do not include effects of a screen.



Velocity (fpm) x 100 thru Free Area Intake air converted to standard air density. Tested to AMCA Standard 500-L, Figure 5.5.



1187 (FPM) Beginning Point of Water Penetration

		Free Area (sq.ft.)											
			Width (in.)										
		12" 24" 36" 48" 60" 72" 84" 96" 108" 120"											
	12"	.24	.55	.86	1.17	1.48	1.79	2.10	2.41	2.72	3.03		
	24"	.63	1.44	2.25	3.06	3.87	4.68	5.49	6.30	7.11	7.92		
	36"	1.02	2.33	3.65	4.96	6.27	7.58	8.89	10.20	11.51	12.82		
	48"	1.49	3.40	5.32	7.22	9.14	11.05	12.96	14.87	16.78	18.69		
t (in	60"	1.89	4.30	6.71	9.12	11.53	13.94	16.35	18.77	21.18	23.59		
Height (in.)	72"	2.28	5.19	8.10	11.01	13.92	16.84	19.75	22.66	25.57	28.49		
=	84"	2.75	6.26	9.77	13.28	16.80	20.31	23.82	27.33	30.85	34.36		
	96"	3.14	7.15	11.16	15.18	19.19	23.20	27.22	31.23	35.24	39.26		
	108"	3.53	8.04	12.56	17.07	21.58	26.10	30.61	35.12	39.64	44.15		
	120"	4.00	9.11	14.23	19.34	24.46	29.57	34.68	39.80	44.91	50.03		

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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, 41.87" x 42.86" HG nominal. Louver Free Area 5.29 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	0	0	0	0	0	492	591	689	787	886	984		
Free Area Ventilation (cfm)	-	-	-	-	-	5,195	6,126	7,076	8,086	9,306	10,519	3 in. / hr. rain fall and	
Free Area Velocity (fpm)	-	-	-	-	-	982	1,158	1,338	1,529	1,759	1,988		
Effective Rating Class	Α	Α	Α	Α	Α	Α	Α	Α	С	С	С	29 mph Velocity	
Effective Ratio %	-	-	-	-	-	100	99.9	97.6	94.6	92.0	87.8	velocity	
FPM	0	0	0	0	0	492	591	689	787	886	984	<u> </u>	
Free Area Ventilation (cfm)	-	-	-	-	-	5,189	6,227	7,096	8,210	9,115	10,483	8 in. / hr. rain fall	
Free Area Velocity (fpm)	-	-	-	-	-	981	1,177	1,341	1,552	1,723	1,982	and	
Effective Rating Class	Α	Α	Α	Α	Α	А	Α	В	С	С	С	50 mph Velocity	
Effective Ratio %	-	-	-	-	-	99.1	98.5	96.7	92.2	89.3	82.2	volodity	

Wind Driven Rain Penetration Classifications

Class	Effectiveness %
Α	100 to 99%
В	98.9% to 95%
С	94.9% to 80%
D	Below 80%

<u>Discharge Loss Coefficient Classifications</u>

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= 0.22 (Class 3) Page 3

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-725-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 Water Penetration, Air Performance, and Wind Driven Rain Ratings only.

