

MODEL A491

4" Deep • Drainable Vertical Blade • Rain Resistant Extruded Aluminum Louver

STANDARD MATERIALS AND CONSTRUCTION

- FRAME:** .080" thick; 6063-T6/T52 extruded aluminum alloy
- BLADES:** .080" thick; 6063-T6/T52 extruded aluminum alloy
- DRAIN SILL PAN:** .060" thick; formed aluminum
- ASSEMBLY:** Mechanically fastened
- SCREEN:** ½" x .051" flattened aluminum birdscreen
- FINISH:** Mill

OPTIONS

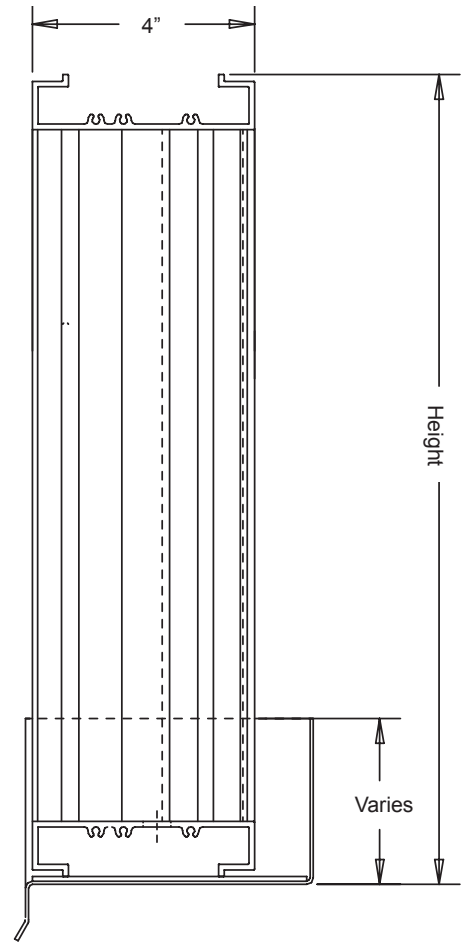
- Finish - Baked Enamel, Kynar, or Anodize
- Variety of Bird and Insect Screen
- 1⅝" Usable Flange Frame (Front Face Only)
- Welded Construction
- Blank-off Panels

NOTES

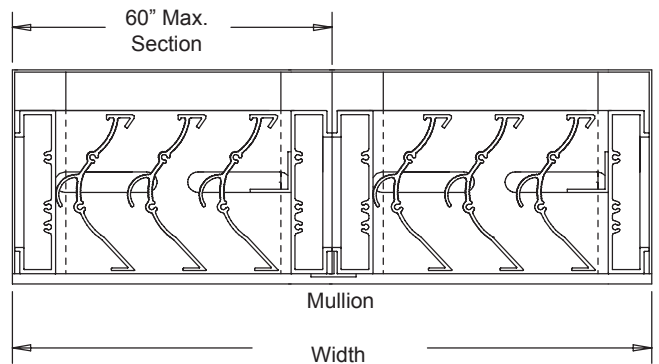
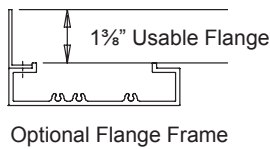
1. "A" width and "B" height are opening dimensions. Louvers are provided approximately ½" undercut.
2. Shipping weight approximately 5.5 lbs./sq.ft.

LOUVER SIZES

Panels	Min Panel	Max Single Panel
A491	12"W x 12"H	60"W x 96"H



Section View



air balance

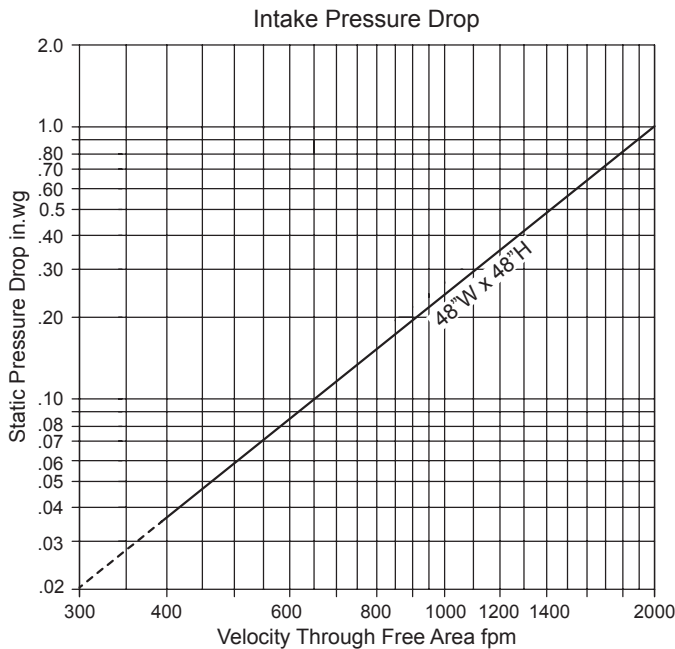
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Pressure Drop: 0.26 in.wg at 1000 fpm
Free Area: 7.58 sq.ft. = 47% for 48"W x 48"H test size

Ratings do not include the effect of birdscreen.



		Free Area sq.ft								
		Width								
Height		12"	18"	24"	30"	36"	42"	48"	54"	60"
	12"	0.33	0.56	0.78	0.99	1.25	1.48	1.69	1.94	2.17
	24"	0.74	1.24	1.73	2.21	2.77	3.27	3.75	4.31	4.82
	36"	1.15	1.91	2.68	3.42	4.29	5.07	5.81	6.67	7.46
	48"	1.55	2.59	3.63	4.63	5.81	6.87	7.58	9.04	10.11
	60"	1.96	3.27	4.58	5.84	7.33	8.67	9.93	11.40	12.75
	72"	2.36	3.95	5.53	7.05	8.85	10.47	11.99	13.76	15.40
	84"	2.77	4.63	6.48	8.26	10.37	12.26	14.05	16.13	18.04
	96"	3.18	5.30	7.44	9.47	11.89	14.06	16.11	18.49	20.69

Discharge Coefficient
Intake Cd = 0.26 (Class 3)

Wind Driven Rainwater Penetration Test Conducted to AMCA Standard 500-L-99

Test Size 39.37"W x 39.37"H (1m x 1m) Core Area, Nominal Louver Free Area is 5.24ft²

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	Ranfall/mph
fpm	0	98	197	295	394	492	591	689	787	886	985	3 in/hr Rainfall and 29 mph Velocity
Free Area Ventilation (cfm)											10603	
Free Area Velocity (fpm)											1844	
Effective Rating Class	A	A	A	A	A	A	A	A	A	A	A	
fpm									797	883	982	8 in/hr Rainfall and 50 mph Velocity
Free Area Ventilation (cfm)									8572	9503	10563	
Free Area Velocity (fpm)									1491	1653	1837	
Effective Rating Class	A	A	A	A	A	A	A	A	A	A	A	

Wind Driven Rain Penetration Classifications

Class	Effectiveness %
A	1 - 0.99%
B	0.989 - 0.95%
C	0.949 - 0.80%
D	Below 0.80%

Discharge Loss Coefficient Classifications

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

Class I 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 distances 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.



Air Balance certifies that the Model A491 shown herein is licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with the AMCA Publication 511 and comply with the requirements of the AMCA Certified Ratings Program. The AMCA Certified ratings seal applies to Air Performance Ratings and Wind Driven Rain Penetration Ratings.



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