MODEL SP537DC

STANDARD CONSTRUCTION

- Material: Extruded Aluminum 6063-T6
- Frame: 5" (127 mm) deep, .081" (2.1 mm) nominal wall thickness
- Blades: 5" (127 mm) deep, .063" (1.6 mm) nominal wall thickness
- Blade Spacing: 1.875" (47.6 mm) on center
- Finish: Mill

OPTIONAL ACCESSORIES

- Screen: 1/2" x .063" flattened expanded bird screen and/or 18 x 14 ÷ mesh charcoal insect screen.
- **Extended Sill Flashing** .
- Insulated and Non-insulated Blank-off Panels
- Flanged & Glazing Frames of various sizes
- **Visible Mullions**
- Invisible Mullions for continuous blade appearance

FINISHES

- 2 coat Fluropolymer: Kynar[®] 500 / custom colors available in 70% PVDF (AAMA 2605). Living Building Challenge (LBC) Red List Free.
- 3 coat Fluropolymer: Kynar 500 / Hylar 5000 custom colors available in 70% PVDF (AAMA 2605). LBC Red List Free.
- Anodic finishes: Class I and Class II in Clear, Light/Medium/Dark Bronze, Champagne, and Black.
- Prime coat



LISTED

IMPACT RESISTANT amca LOUVER

abel does not s \ airflow perfor certification. Enhanced Protection This L ww.AMCA.ora for all certified or listed pro

Industrial Louvers, Inc. certifies that the Model SP537DC shown hereon is licensed to bear the AMCA Seal and 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 requirement of the AMCA Certified Ratings Program and the AMCA Listing Label Program. The AMCA Certified Ratings Seal applies to air performance ratings, water benefation ratings, and wind driven rain. The AMCA Listing Label applies to Wind Borne Debris Impact Resistant Louvers. Hylar® and Kynar® are registered trademark of Solvay Solexix, Inc. © 2015 Industrial Louvers. All rights reserved.

Plan View

Invisible Vertical Mullion



Qty.	Size: Actual 🗆 M.O. 🗆		Mullion	No. of	Notes
	Width	Height	Туре	Sections	
	Sill flashing:	Project:			
	Screen:	Location:			
	Finish:	Architect:			
	Color:	Representative:			
	Other:	Date:		Job #:	

Industrial Louvers, Inc









Vertical Section

MODEL SP537DC



SUGGESTED SPECIFICATIONS

<u>General:</u> Furnish and install where indicated on drawings 5" (127mm) Storm Performance Louver Model SP537DC as manufactured by Industrial Louvers, Inc., Delano, MN.

<u>Material:</u> Extruded aluminum frames and blades shall be one piece 6063-T6 alloy, designed to collect and drain water to the exterior at the sill by means of integral gutters in the blades and jamb frames. Frame shall have a material thickness of .081" (2.1mm). Fixed blades shall have a material thickness of .063" (1.6mm). Frames and blades shall be joined by stainless steel mechanical fastener, and frame will be caulked to prevent water penetration to interior wall construction.

Performance

- Free area (4' x 4' louver) = 7.65 sq. ft. 47.8%)
- Free area velocity at point of beginning water penetration (.01 oz/sq. ft.) >1250 fpm
- Pressure drop @786 FPM velocity = .15" water
- Air volume @ 786 FPM free area velocity = 6012 CFM

Structural Performance Testing: The model SP537DC has been tested in accordance with and passes the following test protocols:

AMCA 540: Missile Impact Test: Enhanced Protection Missile Level E

TAS-201: Large Missile Impact Test: Louver must prevent penetration of large missile simulating airborne debris during a hurricane.

TAS-202: Uniform Static Air Pressure Test: The louver is tested to withstand a constant windload.

TAS-203: Cycle Wind Pressure Test: Tests the louvers ability to withstand both positive and negative windloads as experienced during hurricane winds.

Free Area

	S	quare Fe	et (Square	e Meters)		
Free Area AMCA Licensed for openings up to 72" x 120"							
For free area data for larger openings, contact factory.							
3048.0	0.43	0.92	1.41	1.90	2.40	2.89	
120	4.62	9.91	15.19	20.47	25.76	31.04	
2743.2	0.39	0.83	1.27	1.72	2.16	2.6	
108	4.17	8.93	13.70	18.46	23.23	27.99	
2438.4	.034	0.73	1.12	1.51	1.89	2.28	
96	3.66	7.84	12.01	16.19	20.37	24.55	
2133.6	0.29	0.63	0.96	1.29	1.63	1.96	
84	3.14	6.74	10.33	13.92	17.52	21.11	
1828.8	0.25	0.54	0.82	1.11	1.39	1.68	
72	2.69	5.77	8.84	11.91	14.99	18.06	
1524	0.20	0.43	0.67	0.90	1.13	1.36	
60	2.18	4.67	7.15	9.64	12.13	14.62	
1219.2	0.16	0.34	0.53	0.71	0.89	1.08	
48	1.72	3.69	5.66	7.65	9.60	11.57	
914.4	0.11	0.24	0.37	0.50	0.63	0.76	
36	1.21	2.60	3.98	5.36	6.75	8.13	
609.6	0.07	0.15	0.23	0.31	0.39	0.47	
24	0.75	1.61	2.47	3.33	4.19	5.05	
304.8	0.02	0.05	0.08	0.11	0.14	0.17	
12	0.27	0.57	0.87	1.18	1.48	1.79	
нлм	304.8	609.6	914.4	1219	1524	1829	
F7/ V V	12	24	36	48	60	72	

Air Performance Chart





Discharge Coefficient

Intake CD=0.28 (Class 3) AMCA certifies the coefficient class only

Water Penetration Chart



Wind Driven Rain Chart

	Rainfall rate of 3" per hour (76 mm) and a wind velocity of 29 mph (47 kph).			Rainfall rate of 8" per hour (76 mm) and a wind velocity of 50 mph (47 kph).			
<u>Ventilation</u> <u>Air Velocity</u> (m/s)	<u>Core</u> Velocity (fpm)	<u>Rating</u> Effectiveness	<u>Class</u>	<u>Core</u> Velocity (fpm)	<u>Rating</u> Effectiveness	<u>Class</u>	
0.0		100.0%	A		100.0%	А	
0.5		100.0%	A		100.0%	А	
1.0		100.0%	A		100.0%	А	
1.5		100.0%	A	299	99.7%	А	
2.0		100.0%	A	400	99.6%	А	
2.5	499	99.9	A	492	99.5%	А	
3.0	590	99.6	A	597	98.9%	В	
3.5	702	99.5	A	687	97.8%	В	
Effectiveness Rating	A = 1 to 0.	99 B = 0.989	to 0.95	C = 0.949	to 0.080 $\mathbf{D} = 0$.80 to 0	



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