

Model BL-6809
6" (152.4 mm) Blast Resistant Vertical Storm Resistant Louver

Material:

Material:	6063-T6 Alloy
Nominal Thickness:	Heads & Sills: 0.080" (2.03 mm) Jamb & Mullions: 0.075" (1.90 mm)
Nominal Blade Thickness:	0.085" (2.16 mm)
Furnished With:	Birdscreen: ½" intercrimp aluminum mesh, 0.063" diameter wire removeable aluminum bird screen in an aluminum frame
Additional Options (at additional cost):	Insect screen (in lieu of bird screen), Continuous clip angles for attachment Sheet blank off, Insulated blank off Sill pans, Flange frames Integrated glazing frames

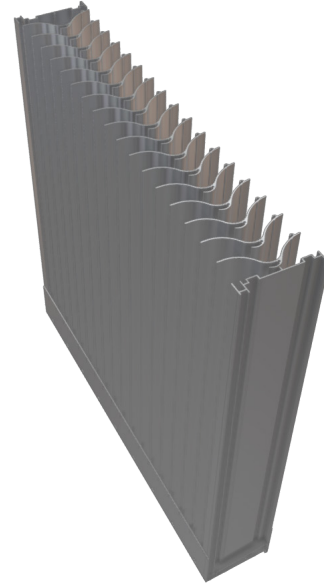
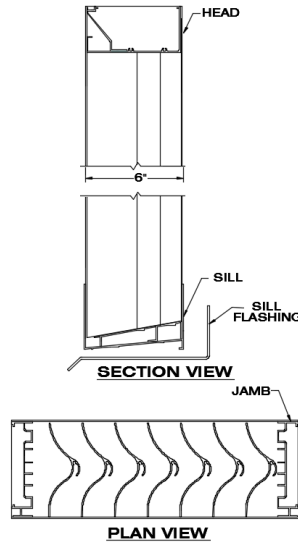
Test Summary:
For a 4 Foot by 4 Foot Unit.

Tested with mill finish and no screen

- Free area = 6.14 ft² (0.570 m²)
- Percent free area = 38.3%
- Free area velocity at the point of beginning water penetration (@ 0.01 oz. / ft² of free area based on a 15 minute interval test) = 1,250 FPM (6.35 m/s)
- To maintain a CLASS A (99%) effectiveness rating* with:
 - a 29.1 mph wind speed and rainfall rate of 3 in/hr
 - Max. intake core velocity 5.0 m/s (1000 FPM)
 - Max. intake free area velocity 10.2 m/s (2,008 FPM)
- To maintain a CLASS A (99%) effectiveness rating* with:
 - a 50 mph wind speed and rainfall rate of 8 in/hr
 - Max. intake core velocity 5.0 m/s (978 FPM)
 - Max. intake free area velocity 10.0 m/s (1,964 FPM)

*Tested with 1m² core area, mill finish and no screen**

Construction Specialties Inc. certifies that the louver model BL-6809 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 Wind Driven Rain ratings, Water Penetration Ratings and Air Performance ratings.



Discharge Coefficient
 Intake Cd = 0.35 (Class 2)
 AMCA certifies the coefficient class only

Blast Data:

Model BL-6809 is designed to withstand up to an 12.6 psi blast pressure at an impulse of 77.8 psi-msec.

Typical Blast Requirements:

Pressure	4.0 psi	6.0 psi	8.0 psi	12.6 psi
Impulse	28.0 psi-msec	42.0 psi-msec	59.0 psi-msec	77.8 psi-msec

Application and Design

BL-6809 is tested in accordance with AMCA 500-L Air Performance, Water Penetration and Wind Driven Rain. BL-6809 is tested in accordance with AMCA 550 Test Method for High Velocity Wind Driven Rain Resistant Louvers. BL-6809 is tested in accordance with AMCA 540 Test Method for Louvers Impacted by Wind Borne Debris (Basic Protection, Missile Level D and Enhanced Protection, Missile Level E). Minimum section size to be 16"x16".

Construction Specialties Inc. certifies that the louver model BL-6809 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 Wind Driven Rain Resistant Louvers. The AMCA Listing Label applies to Wind Borne Debris Impact Louvers.

Model BL-6809

6" (152.4 mm) Blast Resistant Vertical Storm Resistant Louver

Wind Driven Rain Performance: *Tested with 1m² core area, mill finish and no screen*

29.1 mph (13 m/s) & 3" (75 mm) rain per hour

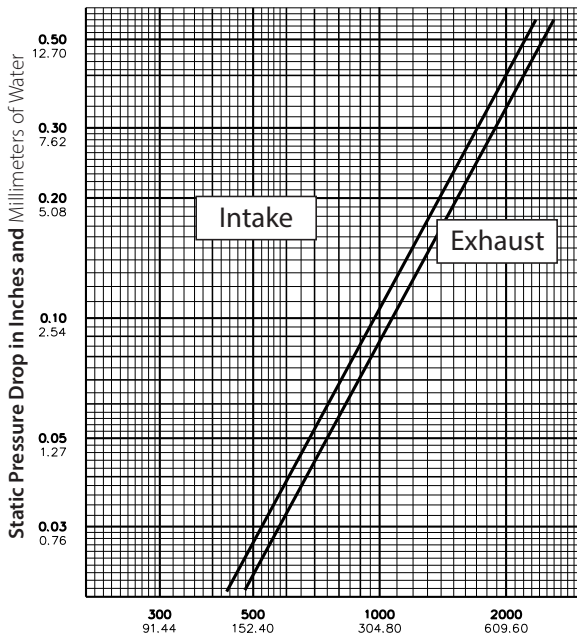
Core Velocity Through Cal. Plate (m/s):	0.0	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0
Core Velocity Through Louver (ft/min):	0	132	197	287	380	472	587	680	767	868	1000
Free Area Velocity (ft/min):	0	265	395	576	763	947	1178	1365	1540	1743	2008
Rating Effectiveness:	A	A	A	A	A	A	A	A	A	A	A
Effectiveness Ratio (%):									99.9	99.9	99.9

50 mph (22.3 m/s) & 8" (203 mm) rain per hour

Core Velocity Through Cal. Plate (m/s):	0.0	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	
Core Velocity Through Louver (ft/min):	0	96	194	284	400	496	571	679	779	865	978	
Free Area Velocity (ft/min):	0	192	389	570	803	996	1146	1364	1564	1737	1964	
Rating Effectiveness:	A	A	A	A	A	A	A	A	A	A	A	
Effectiveness Ratio (%):									99.3	99.3	99.2	
Effectiveness Rating:	A = 1 to 0.99			B = 0.989 to 0.95			C = 0.949 to 0.80			D = Below 0.80		

Water Penetration Statement

AMCA defines the point of beginning water penetration as the free area velocity at which the AMCA water test has yielded 0.01 or less ounces of water per square foot of louver free area during a 15-minute test period.



Air Velocity in Feet and Meters per Minute Through Free Area

Data corrected to standard air density.
48" x 48" louver tested to figure 5.5.

Free Area Table (Free area in sq. feet and sq. meters)

For additional sizes, please visit:

<https://www.c-sgroup.com/architectural-louvers/louvers-airflow-tool>

Height in Inches and Meters	Width in Inches and Meters										
	16	18	24	30	36	42	48	54	60	66	72
	0.41	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	1.68	1.83
16	0.36	0.42	0.59	0.77	1.01	1.19	1.37	1.55	1.72	1.96	2.14
0.41	0.03	0.04	0.06	0.07	0.09	0.11	0.13	0.14	0.16	0.18	0.20
18	0.43	0.51	0.72	0.94	1.23	1.45	1.67	1.88	2.10	2.39	2.61
0.46	0.04	0.05	0.07	0.09	0.11	0.13	0.15	0.17	0.20	0.22	0.24
24	0.67	0.78	1.11	1.45	1.89	2.23	2.56	2.90	3.23	3.68	4.01
0.61	0.06	0.07	0.10	0.13	0.18	0.21	0.24	0.27	0.30	0.34	0.37
30	0.90	1.05	1.50	1.95	2.55	3.01	3.46	3.91	4.36	4.96	5.41
0.76	0.08	0.10	0.14	0.18	0.24	0.28	0.32	0.36	0.40	0.46	0.50
36	1.14	1.32	1.89	2.46	3.22	3.78	4.35	4.92	5.49	6.24	6.81
0.91	0.11	0.12	0.18	0.23	0.30	0.35	0.40	0.46	0.51	0.58	0.63
42	1.37	1.60	2.28	2.97	3.88	4.56	5.25	5.93	6.62	7.53	8.21
1.07	0.13	0.15	0.21	0.28	0.36	0.42	0.49	0.55	0.61	0.70	0.76
48	1.60	1.87	2.67	3.47	4.54	5.34	6.14	6.94	7.74	8.81	9.61
1.22	0.15	0.17	0.25	0.32	0.42	0.50	0.57	0.65	0.72	0.82	0.89
54	1.84	2.14	3.06	3.98	5.20	6.12	7.04	7.96	8.87	10.10	11.02
1.37	0.17	0.20	0.28	0.37	0.48	0.57	0.65	0.74	0.82	0.94	1.02
60	2.07	2.41	3.45	4.48	5.86	6.90	7.93	8.97	10.00	11.38	12.42
1.52	0.19	0.22	0.32	0.42	0.54	0.64	0.74	0.83	0.93	1.06	1.15
66	2.30	2.69	3.84	4.99	6.53	7.68	8.83	9.98	11.13	12.67	13.82
1.68	0.21	0.25	0.36	0.46	0.61	0.71	0.82	0.93	1.03	1.18	1.28
72	2.54	2.96	4.23	5.50	7.19	8.46	9.72	10.99	12.26	13.95	15.22
1.83	0.24	0.27	0.39	0.51	0.67	0.79	0.90	1.02	1.14	1.30	1.41
78	2.77	3.23	4.62	6.00	7.85	9.23	10.62	12.00	13.39	15.24	16.62
1.98	0.26	0.30	0.43	0.56	0.73	0.86	0.99	1.12	1.24	1.42	1.54
84	3.00	3.50	5.01	6.51	8.51	10.01	11.51	13.02	14.52	16.52	18.02
2.13	0.28	0.33	0.47	0.60	0.79	0.93	1.07	1.21	1.35	1.53	1.67
90	3.24	3.78	5.40	7.01	9.17	10.79	12.41	14.03	15.65	17.80	19.42
2.29	0.30	0.35	0.50	0.65	0.85	1.00	1.15	1.30	1.45	1.65	1.80
96	3.47	4.05	5.78	7.52	9.83	11.57	13.30	15.04	16.78	19.09	20.82
2.44	0.32	0.38	0.54	0.70	0.91	1.07	1.24	1.40	1.56	1.77	1.93
102	3.70	4.32	6.17	8.03	10.50	12.35	14.20	16.05	17.90	20.37	22.23
2.59	0.34	0.40	0.57	0.75	0.98	1.15	1.32	1.49	1.66	1.89	2.06
108	3.94	4.59	6.56	8.53	11.16	13.13	15.10	17.06	19.03	21.66	23.63
2.74	0.37	0.43	0.61	0.79	1.04	1.22	1.40	1.59	1.77	2.01	2.20
114	4.17	4.87	6.95	9.04	11.82	13.90	15.99	18.08	20.16	22.94	25.03
2.90	0.39	0.45	0.65	0.84	1.10	1.29	1.49	1.68	1.87	2.13	2.33
120	4.41	5.14	7.34	9.54	12.48	14.68	16.89	19.09	21.29	24.23	26.43
3.05	0.41	0.48	0.68	0.89	1.16	1.36	1.57	1.77	1.98	2.25	2.46

Upper Numerals English Units/Lower Numerals Metric Units