

Model BL-6709
6" (152.4 mm) Blast Resistant Horizontal Storm Resistant Louver

Material:

Material:	6063-T6 Alloy
Nominal Thickness:	Heads: 0.070" (1.78 mm) Sills, Jambes & Mullions: 0.081" (2.05 mm)
Nominal Blade Thickness:	0.070" (1.78 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.

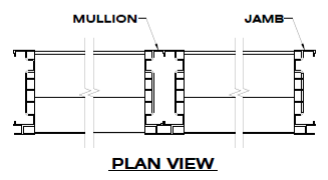
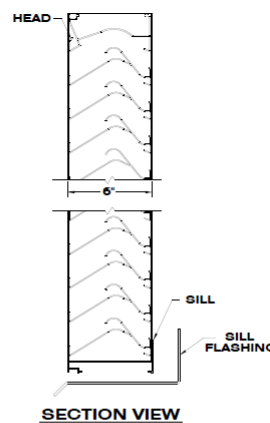
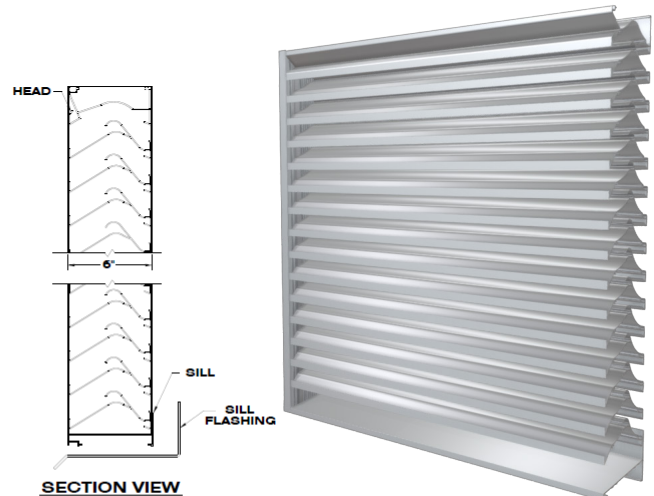
Tested with mill finish and no screen

- Free area = 7.46 ft² (0.70 m²)
- Percent free area = 46.6%
- Free area velocity at the point of beginning water penetration (@ 0.01oz. / ft² of free area based on a 15 minute interval test) = 1,250 FPM (6.4 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 3.5 m/s (679 FPM)
 - Max. intake free area velocity 6.7 m/s (1,311 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 3.5 m/s (674 FPM)
 - Max. intake free area velocity 6.7 m/s (1302 FPM)

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

Construction Specialties Inc. certifies that the louver model BL-6709 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 = 0.28 (Class 3)
 AMCA certifies the coefficient class only

Blast Data:

Model BL-6709 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

Model BL-6709

6" (152.4 mm) Blast Resistant Horizontal 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

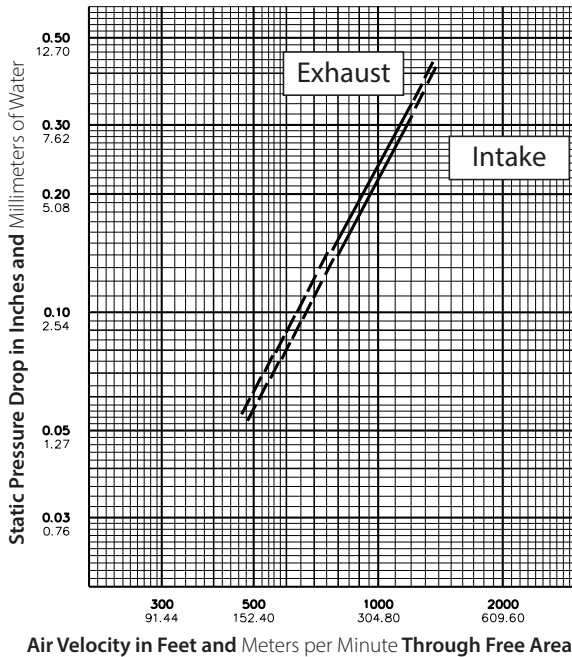
Core Velocity Through Cal. Plate (m/s):	0.0	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0
Core Velocity Through Louver (ft/min):	0	132	197	287	380	482	591	679	783	846	997
Free Area Velocity (ft/min):	0	255	380	554	734	931	1141	1311	1512	1634	1925
Rating Effectiveness:	A	A	A	A	A	A	A	A	B	B	C
Effectiveness Ratio (%):						99.9	99.9	99.4	97.1	95.7	91.0

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	401	495	567	674	793	878	965	
Free Area Velocity (ft/min):	0	185	375	548	774	956	1095	1302	1531	1695	1864	
Rating Effectiveness:	A	A	A	A	A	A	A	A	B	C	C	
Effectiveness Ratio (%):					99.2	99.1	99.2	99.0	97.5	94.6	91.0	
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.



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>

Width in Inches and Meters

	18	24	30	36	42	48	54	60	66	72
	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	1.68	1.83
18	0.73	1	1.27	1.55	1.82	2.1	2.37	2.64	2.92	3.19
0.46	0.07	0.09	0.12	0.14	0.17	0.19	0.22	0.25	0.27	0.30
24	1.08	1.49	1.9	2.31	2.72	3.13	3.54	3.95	4.36	4.77
0.61	0.10	0.14	0.18	0.21	0.25	0.29	0.33	0.37	0.40	0.44
30	1.45	2	2.55	3.1	3.65	4.2	4.75	5.3	5.85	6.4
0.76	0.14	0.19	0.24	0.29	0.34	0.39	0.44	0.49	0.54	0.59
36	1.85	2.55	3.25	3.95	4.65	5.35	6.05	6.75	7.45	8.15
0.91	0.17	0.24	0.30	0.37	0.43	0.50	0.56	0.63	0.69	0.76
42	2.25	3.1	3.95	4.8	5.65	6.49	7.34	8.19	9.04	9.89
1.07	0.21	0.29	0.37	0.45	0.52	0.60	0.68	0.76	0.84	0.92
48	2.6	3.59	4.57	5.55	6.54	7.46	8.5	9.49	10.47	11.46
1.22	0.24	0.33	0.42	0.52	0.61	0.70	0.79	0.88	0.97	1.06
54	2.96	4.08	5.2	6.31	7.43	8.55	9.67	10.79	11.91	13.03
1.37	0.27	0.38	0.48	0.59	0.69	0.79	0.90	1.00	1.11	1.21
60	3.32	4.57	5.83	7.08	8.34	9.59	10.85	12.1	13.36	14.61
1.52	0.31	0.42	0.54	0.66	0.77	0.89	1.01	1.12	1.24	1.36
66	3.7	5.1	6.5	7.9	9.3	10.7	12.1	13.49	14.89	16.29
1.68	0.34	0.47	0.60	0.73	0.86	0.99	1.12	1.25	1.38	1.51
72	4.1	5.65	7.2	8.74	10.29	11.84	13.39	14.94	16.49	18.04
1.83	0.38	0.52	0.67	0.81	0.96	1.10	1.24	1.39	1.53	1.68
78	4.48	6.17	7.87	9.56	11.26	12.95	14.64	16.34	18.03	19.72
1.98	0.42	0.57	0.73	0.89	1.05	1.20	1.36	1.52	1.68	1.83
84	4.84	6.67	8.49	10.32	12.15	13.98	15.81	17.63	19.46	21.29
2.13	0.45	0.62	0.79	0.96	1.13	1.30	1.47	1.64	1.81	1.98
90	5.19	7.16	9.12	11.08	13.05	15.01	16.97	18.93	20.9	22.86
2.29	0.48	0.66	0.85	1.03	1.21	1.39	1.58	1.76	1.94	2.12
96	5.55	7.65	9.75	11.85	13.95	16.05	18.14	20.24	22.34	24.44
2.44	0.52	0.71	0.91	1.10	1.30	1.49	1.69	1.88	2.08	2.27
102	5.95	8.2	10.45	12.69	14.94	17.19	19.44	21.69	23.94	26.19
2.59	0.55	0.76	0.97	1.18	1.39	1.60	1.81	2.01	2.22	2.43
108	6.35	8.74	11.14	13.54	15.94	18.34	20.74	23.13	25.53	27.93
2.74	0.59	0.81	1.04	1.26	1.48	1.70	1.93	2.15	2.37	2.59
114	6.71	9.25	11.79	14.33	16.87	19.4	21.94	24.48	27.02	29.56
2.90	0.62	0.86	1.10	1.33	1.57	1.80	2.04	2.27	2.51	2.75
120	7.07	9.74	12.42	15.09	17.76	20.43	23.11	25.78	28.45	31.12
3.05	0.66	0.91	1.15	1.40	1.65	1.90	2.15	2.39	2.64	2.89
126	7.43	10.24	13.04	15.85	18.66	21.47	24.27	27.08	29.89	32.7
3.20	0.69	0.95	1.21	1.47	1.73	1.99	2.26	2.52	2.78	3.04
132	7.8	10.75	13.7	16.64	19.59	22.54	25.49	28.44	31.38	34.33
3.35	0.72	1.00	1.27	1.55	1.82	2.09	2.37	2.64	2.92	3.19
138	8.2	11.29	14.39	17.49	20.59	23.69	26.78	29.88	32.98	36.08
3.51	0.76	1.05	1.34	1.62	1.91	2.20	2.49	2.78	3.06	3.35
144	8.59	11.84	15.09	18.34	21.58	24.83	28.08	31.33	34.58	37.82
3.66	0.80	1.10	1.40	1.70	2.01	2.31	2.61	2.91	3.21	3.51

Upper Numerals English Units/Lower Numerals Metric Units