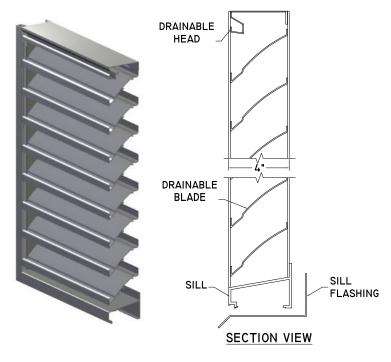
C/S Blast Louver

BLAST DATA:

C/S Model BL-4179 is designed to withstand up to an 12.6 psi blast pressure at an impulse of 77.8 psi-msec.

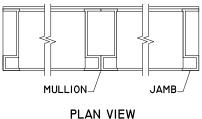
Typical Blast Requirements					
Pressure	Impulse				
4.0 psi	28.0 psi-msec				
6.0 psi	42.0 psi-msec				
8.0 psi	59.0 psi-msec				
12.6 psi	77.8 psi-msec				



TEST DATA:

For a 4 Foot by 4 Foot Unit. Tested with mill finish and no screen.

- \Rightarrow Free area = 8.80 ft² (0.82 m²)
- \Rightarrow Percent free area = 55.0%
- \Rightarrow Free area velocity at the point of beginning water penetration (@ 0.01 oz/ft² of free area based on a 15 minute interval test) = 1087 FPM (5.52 m/s)
- ⇒ Maximum recommended air intake velocity = 887 FPM (4.51 m/s) Air Volume @ 887 FPM free area velocity = 7806 CFM (3.68 m³/s) Pressure drop @ 887 FPM intake velocity = 0.12 in H_20 (29.8 Pa)



The louver manufacturer shall submit test data on a 4' x 4' (1.22 m x 1.22 m) unit showing that the louver conforms to the following: (Based on a 15 minute test duration)

Free Area:	8.80 ft ² (0.82 m ²)
Free area velocity @ point of beginning water penetration (0.01 oz/ft²):	1087 FPM (5.52 m/s)
Intake pressure drop @ 0.01 oz/ft² free area velocity:	0.18 in H ₂ O (44.7 Pa)
Exhaust pressure drop at 1000 FPM (5.08 m/s) free area velocity:	0.13 in H ₂ O (32.3 Pa)

Discharge Coefficient

Intake $C_d = 0.39$ (Class 2) AMCA certifies the coefficient class only

Data corrected to standard air density
Tested to AMCA fig. 5.5



Construction Specialties Inc. certifies that the louver model BL-4179 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 air performance ratings and water penetration ratings.

FINISH: All louvers shall be finished with C/S Powder Coat, a coating to be 1.5 to 3 mil. Thick full strength 100% resin Flouropolymer coating. Finish to allow zero VOCs to be omitted into facility of application. Finish to adhere to a 4H Hardness rating. All finishing procedures shall be one continuous operation in the plant of the manufacturer. The coating shall meet or exceed all requirements of AAMA specification 2605 "Voluntary Specification for High Performance Organic Coatings on Architectural Extrusions and Panels." The louver manufacturer shall supply an industry standard 20-year limited warranty against failure or excessive fading of the Flouropolymer Powder Coat finish. This limited warranty shall begin on the date of material shipment.

SUGGESTED SPECIFICATIONS:

GENERAL: Furnish and install where indicated on the drawings C/S 4" (101.6 mm) **BLAST RESISTANT** HIGH PERFORMANCE DRAINABLE LOUVER **MODEL BL-4179** as manufactured by Construction Specialties, Inc. Lebanon, New Jersey. Complete details shall be submitted to the architect for approval prior to fabrication.

MATERIAL: Heads, sills, jambs and mullions to be one piece structural members of 6063-T6 alloy with integral caulking slot and retaining beads. Mullions shall be sliding interlock with integral internal drain(s). Heads to be one piece extrusion with gutter(s) designed to catch and direct water to jamb and mullion drains. Closed cell compression gaskets shall be provided between bottom of the mullion or jamb and the top of the sill to insure leak tight connections. Blades to be one piece extrusions with reinforcing bosses. All fasteners to be aluminum or stainless steel. All louvers to be furnished with 5/8" (15.87 mm) flattened expanded mesh, aluminum bird screen with a 0.055" (1.40 mm) thick extruded aluminum frame. Screens and screen frames to be standard mill finish.

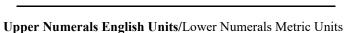
STRUCTURAL DESIGN: Structural supports shall be designed and furnished by the louver manufacturer to carry a wind load of not less than ______psf (Pascals). (Note: If this paragraph is omitted or if the design wind load is not specified, the louvers will be manufactured in self-supporting units to a maximum of 5' (1524 mm) wide by 8' (2438 mm) high. Any additional structural supports required to adequately secure these units within the opening shall be the responsibility of others.

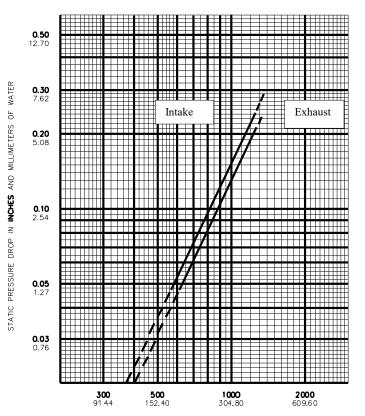
FREE AREA TABLE

FREE AREAS IN SQ. FEET AND SQ. METERS

Width in Inches and Meters

	18 0.46	24 0.61	30 0.76	36 0.91	42 1.07	48 1.22	54 1.37	60 1.52
18	0.91	1.25	1.60	1.95	2.29	2.51	2.86	3.20
0.46	0.08	0.12	0.15	0.18	0.21	0.23	0.27	0.30
24	1.30	1.80	2.29	2.79	3.28	3.59	4.09	4.59
0.61	0.12	0.17	0.21	0.26	0.31	0.33	0.38	0.43
30	1.79	2.47	3.15	3.83	4.52	4.94	5.62	6.30
0.76	0.17	0.23	0.29	0.36	0.42	0.46	0.52	0.59
36	2.28	3.14	4.01	4.88	5.75	6.29	7.16	8.02
0.91	0.21	0.29	0.37	0.45	0.53	0.58	0.66	0.75
42 1.07	2.76 0.26	3.81 0.35	4.86 0.45	5.91 0.55	6.97 0.65	7.62 0.71	8.67 0.81	9.73 0.90
48	3.19	4.40	5.61	6.83	8.04	8.80	10.01	11.22
1.22	0.30	0.41	0.52	0.63	0.75	0.82	0.93	1.04
54	3.62	5.00	6.37	7.75	9.13	9.99	11.37	12.75
1.37	0.34	0.46	0.59	0.72	0.85	0.93	1.06	1.18
60	4.05	5.59	7.14	8.68	10.22	11.19	12.73	14.28
1.52	0.38	0.52	0.66	0.81	0.95	1.04	1.18	1.33
66	4.47	6.17	7.88	9.58	11.28	12.35	14.05	15.76
1.68	0.42	0.57	0.73	0.89	1.05	1.15	1.31	1.46
72	4.96	6.85	8.74	10.63	12.52	13.70	15.59	17.47
1.83	0.46	0.64	0.81	0.99	1.16	1.27	1.45	1.62
78	5.45	7.53	9.60	11.68	13.75	15.05	17.13	19.20
1.98	0.51	0.70	0.89	1.08	1.28	1.40	1.59	1.78
84 2.13	5.90 0.55	8.15 0.76	10.40 0.97	12.65 1.18	14.90 1.38	16.30 1.51	18.55 1.72	20.80 1.93
90	6.33	8.74	11.15	13.56	15.97	17.48	19.89	22.30
2.29	0.59	0.81	1.04	1.26	1.48	1.62	1.85	2.07
96	6.76	9.34	11.91	14.49	17.06	18.67	21.25	23.82
2.44	0.63	0.87	1.11	1.35	1.59	1.73	1.97	2.21
102	7.15	9.88	12.60	15.33	18.05	19.76	22.48	25.21
2.59	0.66	0.92	1.17	1.42	1.68	1.84	2.09	2.34
108	7.64	10.55	13.46	16.37	19.29	21.10	24.02	26.93
2.74	0.71	0.98	1.25	1.52	1.79	1.96	2.23	2.50
114	8.13	11.23	14.32	17.42	20.52	22.45	25.55	28.65
2.90	0.76	1.04	1.33	1.62	1.91	2.09	2.37	2.66
120 3.05	8.61 0.80	11.89 1.10	15.17 1.41	18.46 1.71	21.74 2.02	23.79 2.21	27.07 2.51	30.35 2.82
126	9.04	12.48	15.92	19.37	22.81	24.96	28.40	31.85
3.20	0.84	1.16	1.48	1.80	2.12	2.32	2.64	2.96
132	9.47	13.08	16.69	20.29	23.90	26.16	29.76	33.37
3.35	0.88	1.22	1.55	1.89	2.22	2.43	2.77	3.10
138	9.90	13.68	17.45	21.22	25.00	27.35	31.13	34.90
3.51	0.92	1.27	1.62	1.97	2.32	2.54	2.89	3.24
144	10.32	14.26	18.19	22.12	26.06	28.51	32.45	36.38
3.66	0.96	1.32	1.69	2.06	2.42	2.65	3.01	3.38





AIR VELOCITY IN **FEET** AND METERS PER MINUTE THROUGH FREE AREA For a 48" x 48" sized louver test to figure 5.5.

Data corrected to standard air density.

Construction Specialties, Inc. Manufacturing & Sales Location

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For assistance with overseas requirements, Call C/S International (908) 236-0800

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Height in Inches and Meters