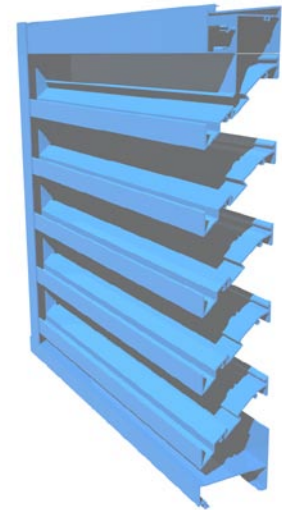


AIRFLOW DATA

For a 4 Foot by 4 Foot Unit

- Free area = 7.93 ft² (0.737 m²)
- Percent free area = 49.56%
- Free area velocity at the point of beginning water penetration (@ 0.01oz. / ft²) =1123 FPM (5.70 m/s)
- Maximum recommended air intake velocity = 923 FPM (4.69 m/s)
Air volume @ 923 FPM free area velocity = 7319 CFM (3.45 m³/s)
Pressure drop @ 923 FPM free area velocity = 0.13 in. H₂O (32.3 Pa)
- Maximum recommended air exhaust velocity = 1750 FPM (8.89 m/s)
Air volume @ 1750 FPM free area velocity = 14385 CFM (6.79 m³/s)
Pressure drop @ 1750 FPM free area velocity = 0.47 in. H₂O (116.7 Pa)



SUGGESTED SPECIFICATIONS:

GENERAL: Furnish and install where indicated on the drawings C/S 4"(101.6 mm) DOUBLE DRAINABLE FIXED EXTRUDED MULLION LOUVER **MODEL A4157** as manufactured by Construction Specialties, Inc. Cranford, New Jersey; Mississauga, Ontario. Complete details shall be submitted to the architect for approval prior to fabrication. Supplier must be a member of AMCA or BSRIA

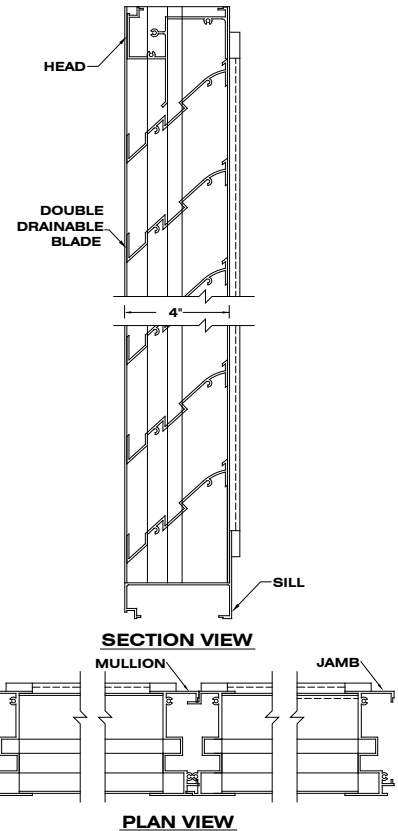
MATERIAL: Heads, sills, jambs, and mullions to be one piece structural members of 6063-T6 alloy with integral caulking slot and retaining beads. Mullions shall be sliding interlock with integral internal drain(s). Blades to be one piece extrusions with gutter(s) designed to catch and direct water to jamb and mullion drains. Extrusion thicknesses shall be as follows: Heads, Sills, jambs, and mullions: 0.081" (2.06 mm) Fixed Blades: 0.081" (2.06 mm) 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. 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 .055" (1.4 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 up 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.

TEST DATA: The louver manufacturer shall submit test data on a 4' x 4' unit showing that the louver conforms to the following:

Free area	=7.93 ft ² (0.737 m ²)
Free area velocity @ point of beginning water penetration (.01 oz./ft ²)	=1123 fpm (5.70 m/s)
Intake Pressure drop at .01 oz. free area velocity	=0.19 in. H ₂ O (47.2 Pa)
Exhaust pressure drop at 1000 fpm (5.08 m/s) free area velocity	=0.15 in. H ₂ O (37.3 Pa)

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 Fluoropolymer coating. Finish to allow zero VOCs** to be emitted 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 2605-5** "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 Fluoropolymer Powder Coat finish. This limited warranty shall begin on the date of material shipment.



PERFORMANCE DATA MODEL A4157

Width in Inches and Meters

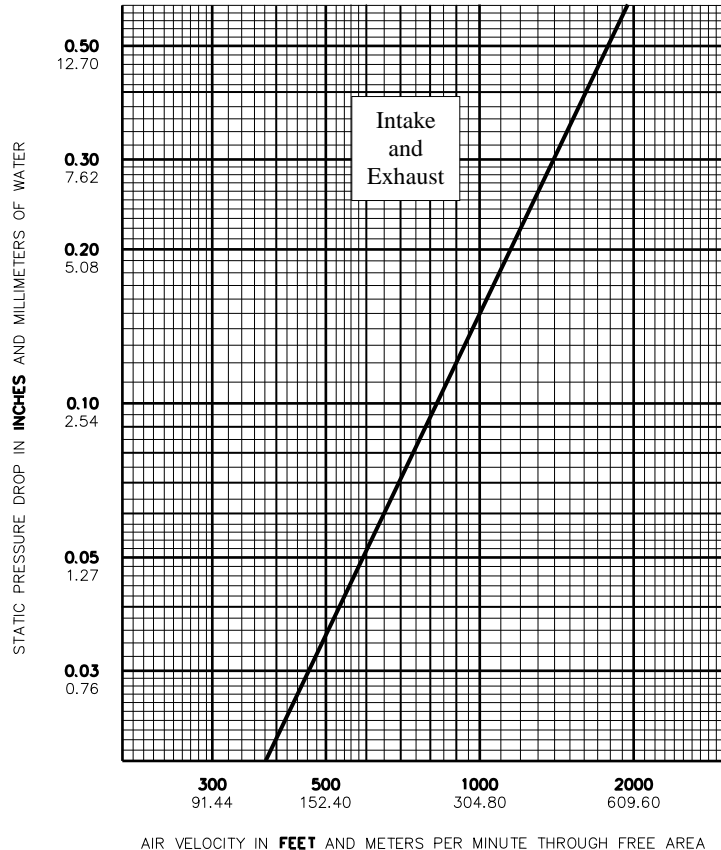
Height in Inches and Meters	12	18	24	30	36	42	48	54	60
	0.30	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52
24	0.65	1.12	1.58	2.04	2.50	2.96	3.43	3.89	4.35
0.61	0.06	0.10	0.15	0.19	0.23	0.27	0.32	0.36	0.40
30	0.79	1.34	1.89	2.45	3.00	3.56	4.11	4.67	5.22
0.76	0.07	0.12	0.18	0.23	0.28	0.33	0.38	0.43	0.48
36	1.05	1.79	2.53	3.26	4.00	4.74	5.48	6.22	6.96
0.91	0.10	0.17	0.24	0.30	0.37	0.44	0.51	0.58	0.65
42	1.31	2.23	3.16	4.08	5.01	5.93	6.85	7.78	8.70
1.07	0.12	0.21	0.29	0.38	0.47	0.55	0.64	0.72	0.81
48	1.57	2.68	3.79	4.90	6.01	7.11	7.93	9.23	10.44
1.22	0.15	0.25	0.35	0.46	0.56	0.66	0.74	0.86	0.97
54	1.70	2.90	4.10	5.31	6.51	7.71	8.91	10.11	11.31
1.37	0.16	0.27	0.38	0.49	0.60	0.72	0.83	0.94	1.05
60	1.96	3.35	4.74	6.12	7.51	8.89	10.28	11.67	13.05
1.52	0.18	0.31	0.44	0.57	0.70	0.83	0.96	1.08	1.21
66	2.23	3.80	5.37	6.94	8.51	10.08	11.65	13.22	14.79
1.68	0.21	0.35	0.50	0.64	0.79	0.94	1.08	1.23	1.37
72	2.36	4.02	5.68	7.35	9.01	10.67	12.34	14.00	15.66
1.83	0.22	0.37	0.53	0.68	0.84	0.99	1.15	1.30	1.45
78	2.62	4.47	6.31	8.16	10.01	11.86	13.71	15.55	17.40
1.98	0.24	0.42	0.59	0.76	0.93	1.10	1.27	1.44	1.62
84	2.88	4.91	6.95	8.98	11.01	13.04	15.08	17.11	19.14
2.13	0.27	0.46	0.65	0.83	1.02	1.21	1.40	1.59	1.78
90	3.14	5.36	7.58	9.79	12.01	14.23	16.45	18.66	20.88
2.29	0.29	0.50	0.70	0.91	1.12	1.32	1.53	1.73	1.94
96	3.27	5.58	7.89	10.20	12.51	14.82	17.13	19.44	21.75
2.44	0.30	0.52	0.73	0.95	1.16	1.38	1.59	1.81	2.02
102	3.53	6.03	8.52	11.02	13.51	16.01	18.50	21.00	23.49
2.59	0.33	0.56	0.79	1.02	1.26	1.49	1.72	1.95	2.18
108	3.80	6.48	9.16	11.83	14.51	17.19	19.87	22.55	25.23
2.74	0.35	0.60	0.85	1.10	1.35	1.60	1.85	2.09	2.34
114	3.93	6.70	9.47	12.24	15.02	17.79	20.56	23.33	26.10
2.90	0.37	0.62	0.88	1.14	1.40	1.65	1.91	2.17	2.42
120	4.19	7.15	10.10	13.06	16.02	18.97	21.93	24.89	27.84
3.05	0.39	0.66	0.94	1.21	1.49	1.76	2.04	2.31	2.59
126	4.45	7.59	10.73	13.88	17.02	20.16	23.30	26.44	29.58
3.20	0.41	0.71	1.00	1.29	1.58	1.87	2.16	2.46	2.75
132	4.71	8.04	11.37	14.69	18.02	21.34	24.67	28.00	31.32
3.35	0.44	0.75	1.06	1.36	1.67	1.98	2.29	2.60	2.91
138	4.84	8.26	11.68	15.10	18.52	21.94	25.36	28.77	32.19
3.51	0.45	0.77	1.09	1.40	1.72	2.04	2.36	2.67	2.99
144	5.11	8.71	12.31	15.92	19.52	23.12	26.73	30.33	33.93
3.66	0.47	0.81	1.14	1.48	1.81	2.15	2.48	2.82	3.15
150	5.37	9.16	12.94	16.73	20.52	24.31	28.10	31.89	35.67
3.81	0.50	0.85	1.20	1.55	1.91	2.26	2.61	2.96	3.31
156	5.50	9.38	13.26	17.14	21.02	24.90	28.78	32.66	36.54
3.96	0.51	0.87	1.23	1.59	1.95	2.31	2.67	3.03	3.39
162	5.76	9.83	13.89	17.98	22.02	26.09	30.15	34.22	38.28
4.11	0.54	0.91	1.29	1.67	2.05	2.42	2.80	3.18	3.56
168	6.02	10.27	14.52	18.77	23.02	27.27	31.52	35.77	40.02
4.27	0.56	0.95	1.35	1.74	2.14	2.53	2.93	3.32	3.72
174	6.28	10.72	15.15	19.59	24.02	28.46	32.89	37.33	41.76
4.42	0.58	1.00	1.41	1.82	2.23	2.64	3.06	3.47	3.88
180	6.41	10.94	15.47	20.00	24.52	29.05	33.58	38.11	42.63
4.57	0.60	1.02	1.44	1.86	2.28	2.70	3.12	3.54	3.96
186	6.68	11.39	16.10	20.81	25.53	30.24	34.95	39.66	44.38
4.72	0.62	1.06	1.50	1.93	2.37	2.81	3.25	3.68	4.12
192	6.94	11.83	16.73	21.63	26.53	31.42	36.32	41.22	46.12
4.88	0.64	1.10	1.55	2.01	2.46	2.92	3.37	3.83	4.28
198	7.07	12.06	17.05	22.04	27.03	32.02	37.01	42.00	46.99
5.03	0.66	1.12	1.58	2.05	2.51	2.97	3.44	3.90	4.37

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.

Tests on non-drainable louvers have shown that the point of beginning water penetration for 4 and 6 inch deep louvers usually occurs at between 600 and 800 FPM free area velocity. In addition, the total amounts of water penetration for non-drainable louvers significantly higher in comparison to drainable louvers when intake velocities exceed the 600 to 800 FPM range.

Because of these characteristics, C/S recommends that drainable blade louvers be used for air intake applications whenever water entrainment must be minimized. In addition, we suggest that non-drainable louver air intake velocities be held to 600 FPM through the free area. This will help to limit significant water penetration during times of average rain conditions.



For a 48" X 48" sized louver

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Upper Numerals English Units/Lower Numerals Metric Units

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