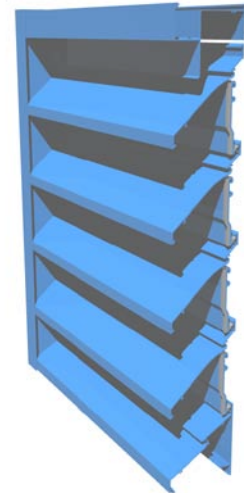


**TEST DATE:**

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

- Free area = 5.63 ft<sup>2</sup> (0.523 m<sup>2</sup>)
- Percent free area = 35.2%
- Maximum recommended air intake velocity = 700 FPM (3.56 m/s)  
Air volume @ 700 FPM free area velocity = 3941 CFM (1.86 m<sup>3</sup>/s)  
Pressure drop @ 700 FPM free area velocity = 0.07 in. H<sub>2</sub>O (17.4 Pa)
- Maximum recommended air exhaust velocity = 1750 FPM (8.89 m/s)  
Air volume @ 1750 FPM free area velocity = 9853 CFM (4.65 m<sup>3</sup>/s)  
Pressure drop @ 1750 FPM free area velocity = 0.41 in. H<sub>2</sub>O (101.8 Pa)



**SUGGESTED SPECIFICATIONS:**

**GENERAL:** Furnish and install where indicated on the drawings C/S 6" (152.4 mm) STEP BLADE DUAL COMBINATION EXT. MULLION LOUVER **MODEL 6945** as manufactured by Construction Specialties, Inc. Cranford, New Jersey and Mississauga, Ontario. Complete details shall be submitted to the architect for approval prior to fabrication. Supplier must be a member of AMCA or BSRIA

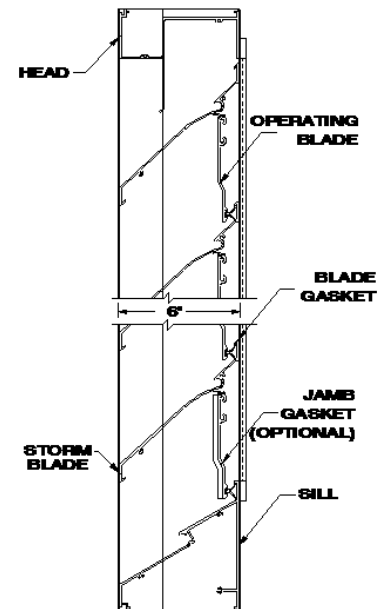
**MATERIAL:** Heads, sills, jambs, and mullions to be one piece structural members of 6063-T6 alloy with integral caulking slot and retaining beads. Mullions shall be sliding interlock type. Blades to be one piece extrusions with reinforcing bosses. Extrusion thicknesses shall be as follows: Heads, Sills, jambs and mullions: 0.081" (2.06 mm), Fixed Blades: 0.81" (2.06mm) Operating Blades: 0.081" (2.06 mm). 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. Operating blades shall have 1/2" (12.7 mm) diameter, zamac alloy pinions operating in self-lubricating nylon bearings. All operating blades shall be operated by concealed drive arms at each jamb and mullion, and assembled with stainless steel shoulder rivets. Drive arms to be interconnected by a 5/8" (15.88 mm) diameter torque bar. All louver blades and sills shall be equipped with vinyl gaskets. **Optional:** Operating louver blades to also be equipped with jamb gaskets riveted to blade ends.

**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.)

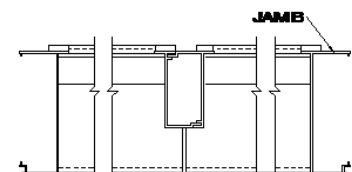
**TEST DATA:** The louver manufacturer shall submit test data on a 4' x 4' (1.22 m x 1.22 m) unit showing that the louver conforms to the following:

Free area	=5.63 ft <sup>2</sup> (0.523 m <sup>2</sup> )
Intake pressure drop at 700 fpm. (3.56 m/s) free area velocity	= 0.07 in. H <sub>2</sub> O (17.4 Pa)
Exhaust pressure drop at 1000 fpm (5.08 m/s) free area velocity	= 0.13 in. H <sub>2</sub> O (32.3 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.



**SECTION VIEW**



**PLAN VIEW**

# PERFORMANCE DATA MODEL 6945

## Width 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	0.35	0.66	0.96	1.26	1.57	1.87	2.17	2.47	2.78
0.61	0.03	0.06	0.09	0.12	0.15	0.17	0.20	0.23	0.26
30	0.54	1.01	1.47	1.93	2.40	2.86	3.33	3.79	4.25
0.76	0.05	0.09	0.14	0.18	0.22	0.27	0.31	0.35	0.39
36	0.73	1.35	1.98	2.60	3.23	3.85	4.48	5.11	5.73
0.91	0.07	0.13	0.18	0.24	0.30	0.36	0.42	0.47	0.53
42	0.86	1.60	2.34	3.08	3.81	4.55	5.29	6.03	6.77
1.07	0.08	0.15	0.22	0.29	0.35	0.42	0.49	0.56	0.63
48	0.92	1.70	2.49	3.28	4.06	4.85	5.63	6.42	7.21
1.22	0.09	0.16	0.23	0.30	0.38	0.45	0.52	0.60	0.67
54	1.11	2.05	3.00	3.95	4.89	5.84	6.79	7.74	8.68
1.37	0.10	0.19	0.28	0.37	0.45	0.54	0.63	0.72	0.81
60	1.29	2.40	3.51	4.62	5.73	6.82	7.94	9.05	10.16
1.52	0.12	0.22	0.33	0.43	0.53	0.63	0.74	0.84	0.94
66	1.48	2.75	4.02	5.29	6.56	7.83	9.10	10.37	11.64
1.68	0.14	0.26	0.37	0.49	0.61	0.73	0.85	0.96	1.08
72	1.66	3.09	4.51	5.93	7.36	8.78	10.21	11.63	13.05
1.83	0.15	0.29	0.42	0.55	0.68	0.82	0.95	1.08	1.21
78	1.79	3.32	4.85	6.39	7.92	9.45	10.99	12.52	14.05
1.98	0.17	0.31	0.45	0.59	0.74	0.88	1.02	1.16	1.31
84	1.86	3.45	5.04	6.63	8.22	9.82	11.41	13.00	14.59
2.13	0.17	0.32	0.47	0.62	0.76	0.91	1.06	1.21	1.36
90	2.04	3.80	5.55	7.30	9.06	10.81	12.56	14.31	16.07
2.29	0.19	0.35	0.52	0.68	0.84	1.00	1.17	1.33	1.49
96	2.23	4.15	6.06	7.97	9.89	11.80	13.72	15.63	17.54
2.44	0.21	0.39	0.56	0.74	0.92	1.10	1.27	1.45	1.63
102	2.42	4.50	6.57	8.65	10.72	12.80	14.87	16.94	19.02
2.59	0.22	0.42	0.61	0.80	1.00	1.19	1.38	1.57	1.77
108	2.59	4.81	7.03	9.25	11.47	13.68	15.90	18.12	20.34
2.74	0.24	0.45	0.65	0.86	1.07	1.27	1.48	1.68	1.89
114	2.72	5.04	7.37	9.70	12.03	14.36	16.68	19.01	21.34
2.90	0.25	0.47	0.68	0.90	1.12	1.33	1.55	1.77	1.98
120	2.80	5.19	7.59	9.99	12.38	14.78	17.18	19.58	21.97
3.05	0.26	0.48	0.71	0.93	1.15	1.37	1.60	1.82	2.04
126	2.98	5.54	8.10	10.66	13.22	15.78	18.33	20.89	23.45
3.20	0.28	0.51	0.75	0.99	1.23	1.47	1.70	1.94	2.18
132	3.17	5.89	8.61	11.33	14.05	16.77	19.49	22.21	24.93
3.35	0.29	0.55	0.80	1.05	1.31	1.56	1.81	2.06	2.32
138	3.36	6.24	9.12	12.00	14.88	17.76	20.64	23.52	26.40
3.51	0.31	0.58	0.85	1.11	1.38	1.65	1.92	2.19	2.45
144	3.52	6.53	9.54	12.56	15.57	18.59	21.60	24.61	27.63
3.66	0.33	0.61	0.89	1.17	1.45	1.73	2.01	2.29	2.57
150	3.66	6.79	9.92	13.06	16.19	19.32	22.46	25.59	28.72
3.81	0.34	0.63	0.92	1.21	1.50	1.79	2.09	2.38	2.67
156	3.74	6.94	10.14	13.34	16.55	19.75	22.95	26.15	29.36
3.96	0.35	0.64	0.94	1.24	1.54	1.83	2.13	2.43	2.73
162	3.92	7.29	10.65	14.01	17.38	20.74	24.11	27.47	30.83
4.11	0.36	0.68	0.99	1.30	1.61	1.93	2.24	2.55	2.86
168	4.11	7.64	11.16	14.69	18.21	21.74	25.26	28.78	32.31
4.27	0.38	0.71	1.04	1.36	1.69	2.02	2.35	2.67	3.00
174	4.30	7.99	11.67	15.36	19.04	22.73	26.41	30.10	33.79
4.42	0.40	0.74	1.08	1.43	1.77	2.11	2.45	2.80	3.14
180	4.44	8.25	12.06	15.87	19.68	23.49	27.30	31.11	34.92
4.57	0.41	0.77	1.12	1.47	1.83	2.18	2.54	2.89	3.24
186	4.49	8.33	12.18	16.03	19.88	23.72	27.57	31.42	35.26
4.72	0.42	0.77	1.13	1.49	1.85	2.20	2.56	2.92	3.28
192	4.68	8.68	12.69	16.70	20.71	24.72	28.72	32.73	36.74
4.88	0.43	0.81	1.18	1.55	1.92	2.30	2.67	3.04	3.41
198	4.86	9.03	13.20	17.37	21.54	25.71	29.88	34.05	38.22
5.03	0.45	0.84	1.23	1.61	2.00	2.39	2.78	3.16	3.55

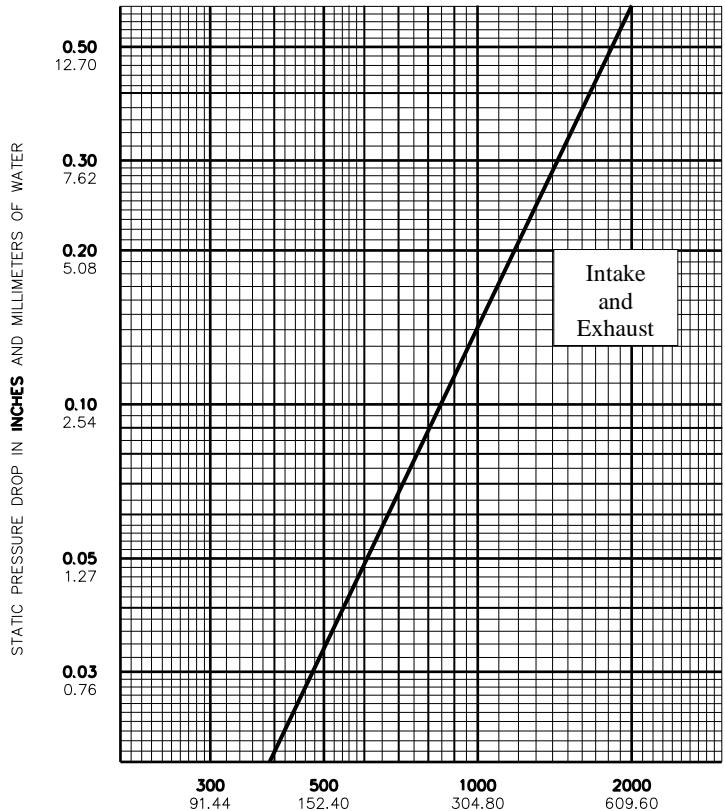
Height in Inches and Meters

## Water Penetration Statement

AMCA defines the point of beginning water penetration as the free area velocity at which the AMCA water test has yielded 0.02 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 700 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 700 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 700 FPM through the free area. This will help to limit significant water penetration during times of average rain conditions.



AIR VELOCITY IN FEET AND METERS PER MINUTE THROUGH FREE AREA

For a 48" X 48" sized louver

**Construction Specialties, Inc.**  
**Manufacturing & Sales Location**

www.c-sgroup.com

**Cranford, New Jersey**  
 49 Meeker Avenue 07016  
 Telephone: (800) 631-7379  
 Fax: (908) 272-2920

**Mississauga, Ontario**  
 895 Lakefront Promenade L5E 2C2  
 Telephone: (888) 895-8955  
 Fax: (905) 274-6241

*A member of the C/S Group of Companies  
 For assistance with overseas requirements,  
 call C/S International (908) 236-0800*

Upper Numerals English Units/Lower Numerals Metric Units