MODEL 9880

C/S 9″ (228.6 mm) OPERATING INSULATED AIRFOIL LOUVER

TEST DATA:

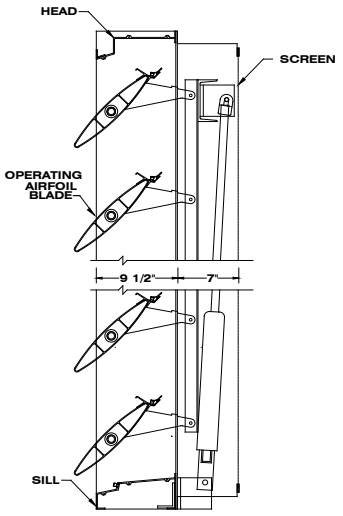
For a 4 Foot by 4 Foot Unit. *Tested with mill finish and without birdscreen*

- Free area = 8.85 ft^2 (0.822 m^2)
- Percent Free Area = 55.3
- Maximum recommended air intake velocity = 700 FPM (3.56 m/s)
  Air Volume @ 700 FPM free area velocity = 6195 CFM (2.92 m^3/s)
  Pressure drop @ 700 FPM intake velocity = 0.10 in.H_2O (24.8 Pa)
- Maximum recommended air exhaust velocity = 1530 FPM (7.77 m/s)
  Air Volume @ 1530 FPM free area velocity = 13541 CFM (6.39 m^3/s)
  Pressure drop @ 1530 FPM exhaust velocity = 0.50 in. H_2O (124.4 Pa)

SUGGESTED SPECIFICATIONS:

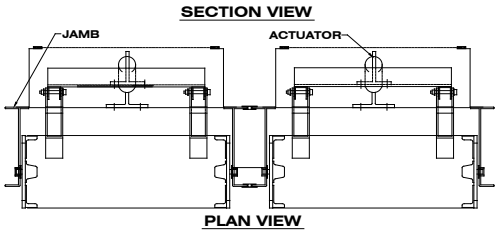
GENERAL: Furnish and install where indicated on the drawings C/S 9″ (228.6 mm) OPERATING INSULATED AIRFOIL LOUVER **MODEL 9880** as manufactured by Construction Specialties, Inc., Cranford, NJ; Mississauga, Ontario. Complete details shall be submitted to the architect for approval prior to fabrication. Supplier must be a member of AMCA or BSRIA

MATERIAL: Head, sills and jambs to be one piece structural members of 6063-T6 alloy. Blades to be one piece hollow aluminum sections without seams or joints. Airfoil blades to be filled with Expandofoam Poyurethane that achieves a minimum R value of 5. All louver blades shall be equipped with double vinyl gaskets the full width of the blade and a molded neoprene closure gasket covering the full perimeter of the blade end. When closed, air leakage through the louver shall be less than 0.65 CFM per square foot of free area (0.20 cubic meters per minute per square meter) at a wind velocity of 30 MPH (48 km/h). Extrusion thicknesses shall be as follows: Heads, sills, jambs and mullions to be 0.125″ (3.18 mm) thick. 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.



STRUCTURAL DESIGN: Structural supports shall be designed and furnished by the louver manufacture to carry a wind load of not less than _____ psf (kPa). (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:	8.85 ft^2 (0.822 m^2)
Intake pressure drop at 700 FPM (3.56 m/s free area velocity:	0.10 in. H_2O (24.8 Pa)
Exhaust pressure drop at 1000 FPM (5.08 m/s) free area velocity :	0.21 in. H_2O (52.2 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 9880

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	**0.45**	**0.87**	**1.28**	**1.70**	**2.12**	**2.53**	**2.95**	**3.37**	**3.78**
0.61	0.04	0.08	0.12	0.16	0.20	0.24	0.27	0.31	0.35
36	**0.90**	**1.74**	**2.57**	**3.40**	**4.24**	**5.07**	**5.90**	**6.74**	**7.57**
0.91	0.08	0.16	0.24	0.32	0.39	0.47	0.55	0.63	0.70
48	**1.35**	**2.60**	**3.85**	**5.10**	**6.35**	**7.60**	**8.85**	**10.10**	**11.35**
1.22	1.35	2.60	3.85	5.10	0.59	0.71	0.82	0.94	1.05
60	**1.81**	**3.47**	**5.14**	**6.81**	**8.47**	**10.14**	**11.81**	**13.47**	**15.14**
1.52	0.17	0.32	0.48	0.63	0.79	0.94	1.10	1.25	1.41
72	**2.26**	**4.34**	**6.42**	**8.51**	**10.59**	**12.67**	**14.76**	**16.84**	**18.92**
1.83	0.21	0.40	0.60	0.79	0.98	1.18	1.37	1.56	1.76
84	**2.71**	**5.21**	**7.71**	**10.21**	**12.71**	**15.21**	**17.71**	**20.21**	**22.71**
2.13	0.25	0.48	0.72	0.95	1.18	1.41	1.65	1.88	2.11
96	**3.16**	**6.08**	**8.99**	**11.91**	**14.83**	**17.74**	**20.66**	**23.58**	**26.49**
2.44	0.29	0.56	0.84	1.11	1.38	1.65	1.92	2.19	2.46
108	**3.61**	**6.94**	**10.28**	**13.61**	**16.94**	**20.28**	**23.61**	**26.95**	**30.28**
2.74	0.34	0.65	0.95	1.26	1.57	1.88	2.19	2.50	2.81
120	**4.06**	**7.81**	**11.56**	**15.31**	**19.06**	**22.81**	**26.56**	**30.31**	**34.06**
3.05	0.38	0.73	1.07	1.42	1.77	2.12	2.47	2.82	3.16
132	**4.51**	**8.68**	**12.85**	**17.01**	**21.18**	**25.35**	**29.51**	**33.68**	**37.85**
3.35	0.42	0.81	1.19	1.58	1.97	2.35	2.74	3.13	3.52
144	**4.97**	**9.55**	**14.13**	**18.72**	**23.30**	**27.88**	**32.47**	**37.05**	**41.63**
3.66	0.46	0.89	1.31	1.74	2.16	2.59	3.02	3.44	3.87
156	**5.42**	**10.42**	**15.42**	**20.42**	**25.42**	**30.42**	**35.42**	**40.42**	**45.52**
3.96	0.50	0.97	1.43	1.90	2.36	2.83	3.29	3.75	4.22
168	**5.87**	**11.28**	**16.70**	**22.12**	**27.54**	**32.95**	**38.37**	**43.79**	**49.20**
4.27	0.55	1.05	1.55	2.05	2.56	3.06	3.56	4.07	4.57
180	**6.32**	**12.15**	**17.99**	**23.82**	**29.65**	**35.49**	**41.32**	**47.15**	**52.99**
4.57	0.59	1.13	1.67	2.21	2.75	3.30	3.84	4.38	4.92
192	**6.77**	**13.02**	**19.27**	**25.52**	**31.77**	**38.02**	**44.27**	**50.52**	**56.77**
4.88	0.63	1.21	1.79	2.37	2.95	3.53	4.11	4.69	5.27
204	**7.22**	**13.89**	**20.56**	**27.22**	**33.89**	**40.56**	**47.22**	**53.89**	**60.56**
5.18	0.67	1.29	1.91	2.53	3.15	3.77	4.39	5.01	5.63
216	**7.67**	**14.76**	**21.84**	**28.92**	**36.01**	**43.09**	**50.17**	**57.26**	**64.34**
5.49	0.71	1.37	2.03	2.69	3.35	4.00	4.66	5.32	5.98
228	**8.13**	**15.63**	**23.13**	**30.63**	**38.13**	**45.63**	**53.13**	**60.63**	**68.13**
5.79	0.75	1.45	2.15	2.85	3.54	4.24	4.94	5.63	6.33
240	**8.58**	**16.49**	**24.41**	**32.33**	**40.24**	**48.16**	**56.08**	**63.99**	**71.91**
6.10	0.80	1.53	2.27	3.00	3.74	4.47	5.21	5.95	6.68
252	**9.03**	**17.36**	**25.70**	**34.03**	**42.36**	**50.70**	**59.03**	**67.36**	**75.70**
6.40	0.84	1.61	2.39	3.16	3.94	4.71	5.48	6.26	7.03
264	**9.48**	**18.23**	**26.98**	**35.73**	**44.48**	**53.23**	**61.98**	**70.73**	**79.48**
6.71	0.88	1.69	2.51	3.32	4.13	4.95	5.76	6.57	7.38
276	**9.93**	**19.10**	**28.26**	**37.43**	**46.60**	**55.77**	**64.93**	**74.10**	**83.27**
7.01	0.92	1.77	2.63	3.48	4.33	5.18	6.03	6.88	7.74
288	**10.38**	**19.97**	**29.55**	**39.13**	**48.72**	**58.30**	**67.88**	**77.47**	**87.05**
7.32	0.96	1.85	2.75	3.65	4.53	5.42	6.31	7.20	8.09
300	**10.83**	**20.83**	**30.83**	**40.83**	**50.83**	**60.83**	**70.84**	**80.84**	**90.84**
7.62	1.01	1.94	2.86	3.79	4.72	5.65	6.58	7.51	8.44
312	**11.28**	**21.70**	**32.12**	**42.54**	**52.95**	**63.37**	**73.79**	**84.20**	**94.62**
7.92	1.05	2.02	2.98	3.95	4.92	5.89	6.85	7.85	7.82
324	**11.74**	**22.57**	**33.40**	**44.24**	**55.07**	**65.90**	**76.74**	**87.57**	**98.41**
8.23	1.09	2.10	3.10	4.11	5.12	6.12	7.13	8.14	9.14
336	**12.19**	**23.44**	**34.69**	**45.94**	**57.19**	**68.44**	**79.69**	**90.94**	**102.10**
8.53	1.13	2.18	3.22	4.27	5.31	6.36	7.40	8.45	9.49
348	**12.64**	**24.31**	**35.97**	**47.64**	**59.31**	**70.97**	**82.64**	**94.31**	**105.90**
8.84	1.17	2.26	3.34	4.43	5.51	6.59	7.68	8.76	9.85
360	**13.09**	**25.17**	**37.26**	**49.34**	**61.43**	**73.51**	**85.59**	**97.68**	**109.70**
9.14	1.22	2.34	3.46	4.58	5.71	6.83	7.95	9.07	10.20
372	**13.54**	**26.04**	**38.54**	**51.04**	**63.54**	**76.04**	**88.54**	**101.00**	**113.50**
9.45	1.26	2.42	3.58	4.74	5.90	7.06	8.23	9.39	10.50

Height in Inches and Meters

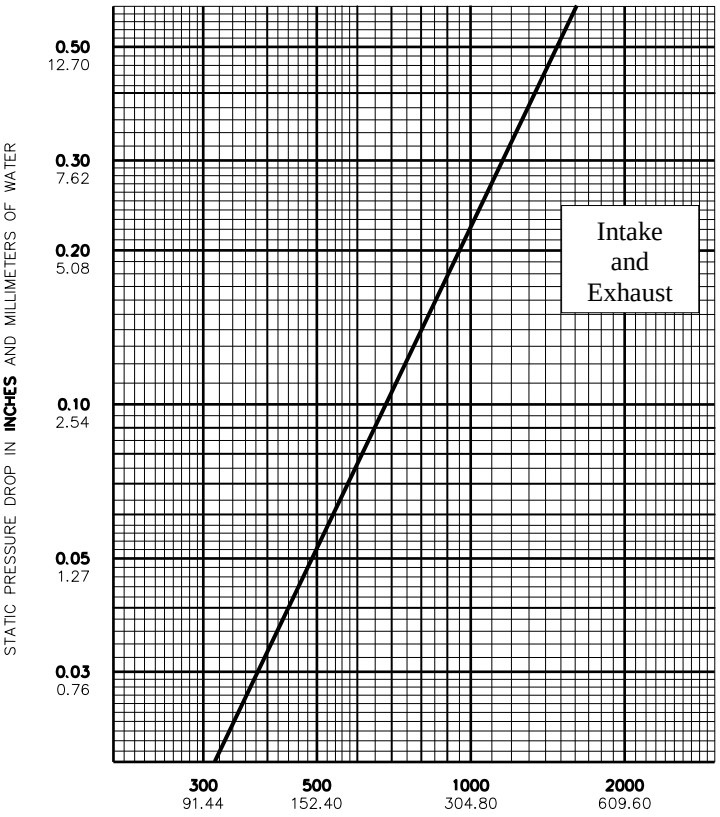
Upper Numerals English Units/Lower Numerals Metric Units

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.



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