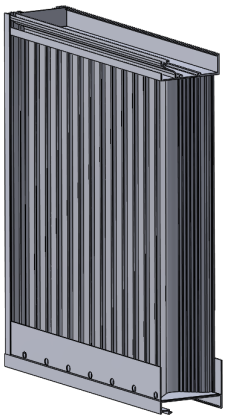
Construction Specialties™

MODEL RS-5800

C/S 5" (127.0 mm) STORM RESISTANT FIXED VERTICAL LOUVER

Construction Specialties Inc. certifies that the louver model RS-5800 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, water penetration ratings, and wind driven rain ratings.



APPLICATION AND DESIGN:

RS-5800 is tested in accordance with AMCA 500-L Air Performance, Water Penetration and Wind Driven Rain. RS-5800 is tested in accordance with AMCA 550 Test Method for High Velocity Wind Driven Rain Resistant Louvers.

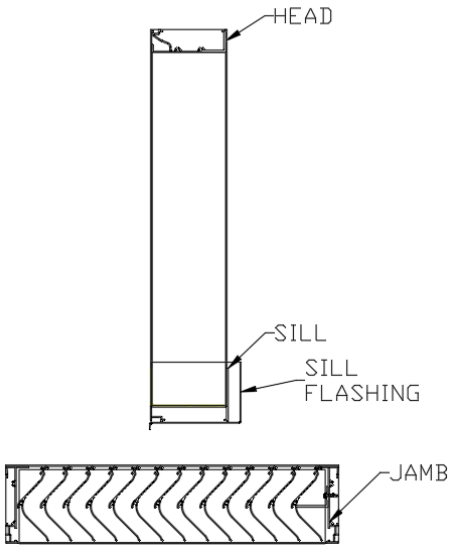
TEST DATA:

*To maintain a **CLASS A (99%) effectiveness** rating with a 29.1 mph wind speed an rainfall rate of 3 in/hr*

- Maximum intake core velocity 5.0 m/s (984 FPM)
- Maximum intake free area velocity 8.0 m/s (1,574 FPM)

*To maintain a **CLASS A (99%) effectiveness** rating with a 50 mph wind speed an rainfall rate of 8 in/hr*

- Maximum intake core velocity 5.0 m/s (984 FPM)
- Maximum intake free area velocity 8.0 m/s (1,574 FPM)
- *louver tested with 1m^2 core area, mill finish and no screen



AIRFLOW DATA:

For a 4 Foot by 4 Foot Unit. *Tested with mill finish and no screen*
Free area = 8.67 ft^2 (0.810 m^2)
Percent free area = 54.0%
Free area velocity at the point of beginning water penetration (@0.01oz. / ft^2 of free area based on a 15 minute interval test) = 1,250 FPM (6.35 m/s)

Maximum recommended air intake velocity = 1,050 FPM (5.3 m/s)
Air volume @ 1,050 FPM free area velocity = 9,104 CFM (4.3 m^3/s)
Pressure drop @ 1,050 FPM intake velocity = 0.217 in. H_2O (53.9 Pa)

Maximum recommended air exhaust velocity = 1,615 FPM (8.2 m/s)
Air Volume @ 1,615 FPM free area velocity = 14,002 CFM (6.6 m^3/s)
Pressure drop @ 1,615 FPM free area velocity = 0.50 in. H_2O (124.2 Pa)

WIND DRIVEN RAIN PERFORMANCE:

The louver test was based on a 39.370" (1.0 m) x 39.370" (1.0 m) core area unit tested at a rainfall rate of 3" per hour (75 mm/hr) and with a wind directed to the face of the louver at a velocity of 29.1 mph (13 m/s) as well as a rainfall rate of 8" per hour (203 mm) and a wind velocity of 50 mph (23.3 m/s). The test data shall show the water penetration effectiveness rating at each corresponding ventilation rate.

Core Ventilation Rate (m/s):	0	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0
Core Ventilation Rate (ft/min):	0	132	197	287	380	472	587	680	767	868	984
Free Area Ventilation Rate (ft/min):	0	211	315	459	608	755	939	1088	1227	1388	1574
Rating Effectiveness @ 29 & 3	A	A	A	A	A	A	A	A	A	A	A
Effectiveness Ratio @ 29 & 3 (%)											100
Core Ventilation Rate (ft/min):	0	96	194	284	400	496	571	679	792	888	984
Free Area Ventilation Rate (ft/min):	0	154	310	454	640	793	913	1086	1267	1420	1574
Rating Effectiveness @ 50 & 8	A	A	A	A	A	A	A	A	A	A	A
Effectiveness Ratio @ 50 & 8 (%)									99.6	99.6	99.5
Effectiveness Rating:	A = 1 to 0.99		B = 0.989 to 0.95		C = 0.949 to 0.80		D = 0.80 to 0				

amca INTERNATIONAL LISTED
HIGH VELOCITY RAIN RESISTANT LOUVER
See www.AMCA.org for all certified or listed products
This label does not signify AMCA airflow performance certification.

Construction Specialties Inc. certifies that the louver model RS-5800 shown herein is approved to bear the AMCA Listing Label. The ratings shown are based on tests and procedures performed in accordance with AMCA Publications and comply with the requirements of the AMCA Listing Label Program. The AMCA Listing Label applies to High Velocity Wind Driven Rain Resistant Louvers.

To download details and specifications visit www.c-sgroup.com. For technical and design assistance call 800-631-7379

SUGGESTED SPECIFICATIONS:

GENERAL: Furnish and install where indicated on the drawings C/S 5 (127.0 mm) STORM RESISTANT FIXED VERTICAL LOUVER **MODEL RS-5800** 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. 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.

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.

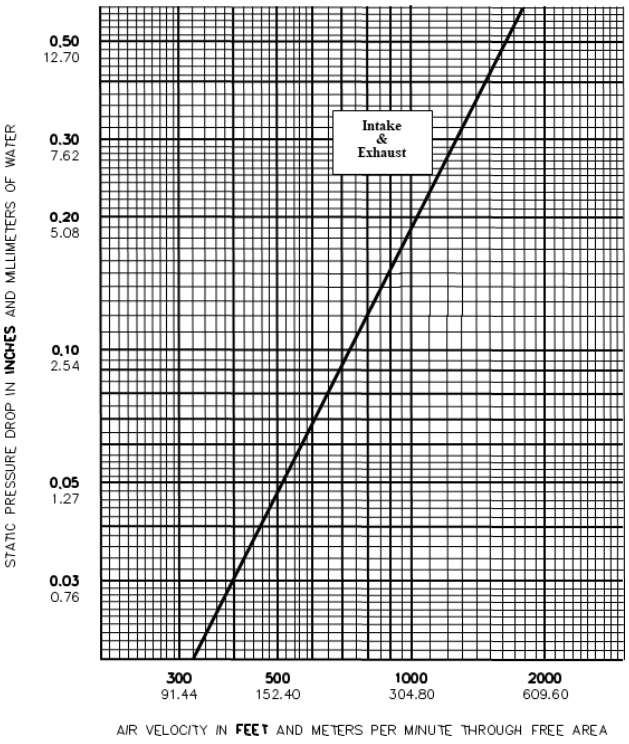
FREE AREA TABLE FREE AREAS IN **SQ. FEET** AND SQ. METERS

Width in Inches and Meters

Height 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	**0.81**	**1.17**	**1.54**	**1.90**	**2.26**	**2.62**	**2.98**	**3.34**	**3.71**	**4.07**
0.46	0.08	0.11	0.14	0.18	0.21	0.24	0.28	0.31	0.34	0.38
24	**1.19**	**1.72**	**2.25**	**2.77**	**3.30**	**3.83**	**4.36**	**4.89**	**5.42**	**5.94**
0.61	0.11	0.16	0.21	0.26	0.31	0.36	0.40	0.45	0.50	0.55
30	**1.56**	**2.26**	**2.95**	**3.65**	**4.34**	**5.04**	**5.73**	**6.43**	**7.13**	**7.82**
0.76	0.15	0.21	0.27	0.34	0.40	0.47	0.53	0.60	0.66	0.73
36	**1.94**	**2.80**	**3.66**	**4.53**	**5.39**	**6.25**	**7.11**	**7.97**	**8.84**	**9.70**
0.91	0.18	0.26	0.34	0.42	0.50	0.58	0.66	0.74	0.82	0.90
42	**2.31**	**3.34**	**4.37**	**5.40**	**6.43**	**7.46**	**8.49**	**9.52**	**10.55**	**11.57**
1.07	0.22	0.31	0.41	0.50	0.60	0.69	0.79	0.88	0.98	1.08
48	**2.69**	**3.89**	**5.08**	**6.28**	**7.47**	**8.67**	**9.86**	**11.06**	**12.26**	**13.45**
1.22	0.25	0.36	0.47	0.58	0.69	0.81	0.92	1.03	1.14	1.25
54	**3.07**	**4.43**	**5.79**	**7.15**	**8.52**	**9.88**	**11.24**	**12.60**	**13.97**	**15.33**
1.37	0.28	0.41	0.54	0.66	0.79	0.92	1.04	1.17	1.30	1.42
60	**3.44**	**4.97**	**6.50**	**8.03**	**9.56**	**11.09**	**12.62**	**14.15**	**15.68**	**17.20**
1.52	0.32	0.46	0.60	0.75	0.89	1.03	1.17	1.31	1.46	1.60
66	**3.82**	**5.51**	**7.21**	**8.90**	**10.60**	**12.30**	**13.99**	**15.69**	**17.39**	**19.08**
1.68	0.35	0.51	0.67	0.83	0.98	1.14	1.30	1.46	1.62	1.77
72	**4.19**	**6.05**	**7.92**	**9.78**	**11.64**	**13.51**	**15.37**	**17.23**	**19.10**	**20.96**
1.83	0.39	0.56	0.74	0.91	1.08	1.25	1.43	1.60	1.77	1.95
78	**4.57**	**6.60**	**8.63**	**10.66**	**12.69**	**14.72**	**16.75**	**18.78**	**20.81**	**22.84**
1.98	0.42	0.61	0.80	0.99	1.18	1.37	1.56	1.74	1.93	2.12
84	**4.94**	**7.14**	**9.34**	**11.53**	**13.73**	**15.93**	**18.12**	**20.32**	**22.52**	**24.71**
2.13	0.46	0.66	0.87	1.07	1.28	1.48	1.68	1.89	2.09	2.30
90	**5.32**	**7.68**	**10.04**	**12.41**	**14.77**	**17.14**	**19.50**	**21.86**	**24.23**	**26.59**
2.29	0.49	0.71	0.93	1.15	1.37	1.59	1.81	2.03	2.25	2.47
96	**5.69**	**8.22**	**10.75**	**13.28**	**15.81**	**18.34**	**20.88**	**23.41**	**25.94**	**28.47**
2.44	0.53	0.76	1.00	1.23	1.47	1.70	1.94	2.17	2.41	2.64
102	**6.07**	**8.77**	**11.46**	**14.16**	**16.86**	**19.55**	**22.25**	**24.95**	**27.65**	**30.34**
2.59	0.56	0.81	1.06	1.32	1.57	1.82	2.07	2.32	2.57	2.82
108	**6.44**	**9.31**	**12.17**	**15.04**	**17.90**	**20.76**	**23.63**	**26.49**	**29.36**	**32.22**
2.74	0.60	0.86	1.13	1.40	1.66	1.93	2.20	2.46	2.73	2.99
114	**6.82**	**9.85**	**12.88**	**15.91**	**18.94**	**21.97**	**25.00**	**28.03**	**31.07**	**34.10**
2.90	0.63	0.92	1.20	1.48	1.76	2.04	2.32	2.60	2.89	3.17
120	**7.19**	**10.39**	**13.59**	**16.79**	**19.99**	**23.18**	**26.38**	**29.58**	**32.78**	**35.97**
3.05	0.67	0.97	1.26	1.56	1.86	2.15	2.45	2.75	3.04	3.34

Upper Numerals English Units/Lower Numerals Metric Units



For a 48" x 48" sized louver tested to figure 5.5

Data corrected to standard air density

Construction Specialties, Inc.
Manufacturing & Sales Location

www.c-sgroup.com

Lebanon, New Jersey

3 Werner Way 08833

Telephone: (800) 631-7379

louvers@c-sgroup.com

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