

Construction Specialties Inc. certifies that the louver model RSH-5700 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. The AMCA Certified Ratings Seal applies to Wind Driven Rain ratings, Water Penetration Ratings and Air Performance ratings

DESIGN 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 4.0 m/s (763 FPM)
- Maximum intake free area velocity 7.7 m/s (1,514 FPM)

To maintain a **CLASS B (95%) effectiveness rating** with a 50 mph wind speed an rainfall rate of 8 in/hr

- Maximum intake core velocity 4.0 m/s (779 FPM)
- Maximum intake free area velocity 7.9 m/s (1,546 FPM)

*louver tested with 1m² 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 = 7.32 ft² (0.681 m²)
- Percent free area = 45.8%
- Free area velocity at the point of beginning water penetration (@0.01oz. / ft² of free area based on a 15 minute interval test) = 1,169 FPM (5.94 m/s)
- Maximum recommended air intake velocity = 969 FPM (4.9 m/s) Air volume @ 969 FPM free area velocity = 7093 CFM (3.3 m³/s) Pressure drop @ 969 FPM intake velocity = 0.15 in. H₂O (36.5 Pa)
- Maximum recommended air exhaust velocity = 1,606 FPM (8.2 m/s) Air Volume @ 1,606 FPM free area velocity = 11,755 CFM (5.5 m³/s) Pressure drop @ 1,606 FPM free area velocity = 0.50 in. H₂O (124.2 Pa)

SUGGESTED SPECIFICATIONS:

GENERAL: Furnish and install where indicated on the drawings C/S 5" (127.0 mm) STORM RESISTANT FIXED HORIZONTAL LOUVER **MODEL RSH-5700** as manufactured by Construction Specialties, Inc., Lebanon, NJ. Complete details shall be submitted to the architect for approval prior to fabrication.

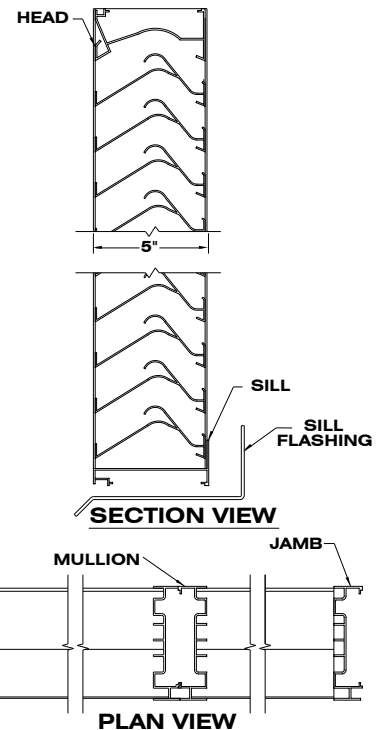
MATERIAL: Frames and blades to be fabricated from 6063-T6 aluminum alloy. Blades to be minimum 0.060" (1.52mm) thick and frames to be minimum 0.075" (1.91 mm) thick. Louver to be mechanically fastened using stainless steel or aluminum fasteners. Louvers to be supplied with 4" (101.6 mm) high by full depth sill flashing formed from minimum 0.050" (1.27 mm) thick aluminum. Sill flashing to have welded side panels. Louvers and sill flashing to be installed in accordance with the manufacturer's recommended procedures to ensure complete water integrity performance of louver system. All louvers to be furnished with ½" intercrimp aluminum mesh, 0.063" diameter wire removable aluminum bird screen in an aluminum frame.

STRUCTURAL DESIGN: Structural supports shall be designed and furnished by the louver manufacturer 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.)

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** "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.

WIND DRIVEN RAIN PERFORMANCE:

The louver test was based on a 39.370" (1.00 m) x 39.370" (1.00 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 29.1-mph (13 m/s) as well as a rainfall rate of 8" per hour (203 mm) and a wind of 50 mph (23.3 m/s). The test data shall show the water penetration effectiveness rating at each corresponding ventilation rate.



Discharge Coefficient
Intake Cd = 0.32 (Class 2)
AMCA certifies the coefficient class only

Core Ventilation Rate (m/s):	0.0	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) @ 29 & 3:	0	132	197	287	380	472	585	688	763	883	989
Free Area Velocity (ft/min) @ 29 & 3:	0	262	391	570	754	937	1161	1365	1514	1752	1966
Rating Effectiveness @ 29 & 3	A	A	A	A	A	A	A	A	A	B	C
Effectiveness Ratio @ 29 & 3 (%)							99.9	99.5	99.4	98.1	94.9
Core Ventilation Rate (ft/min) @ 50 & 8:	0	100	177	285	397	479	565	687	788	876	944
Free Area Velocity (ft/min) @ 50 & 8:	0	198	351	565	788	950	1121	1363	1563	1738	1873
Rating Effectiveness @ 50 & 8	A	A	A	A	B	B	B	B	B	C	C
Effectiveness Ratio @ 50 & 8 (%)		99.4	99.3	99.2	98.9	98.6	98.2	97.3	96	92.9	87.9
Effectiveness Rating:	A = 1 to 0.99		B = 0.989 to 0.95		C = 0.949 to 0.80		D = 0.799 to 0				

PERFORMANCE DATA MODEL RSH-5700

FREE AREAS IN SQ. FEET AND SQ. METERS

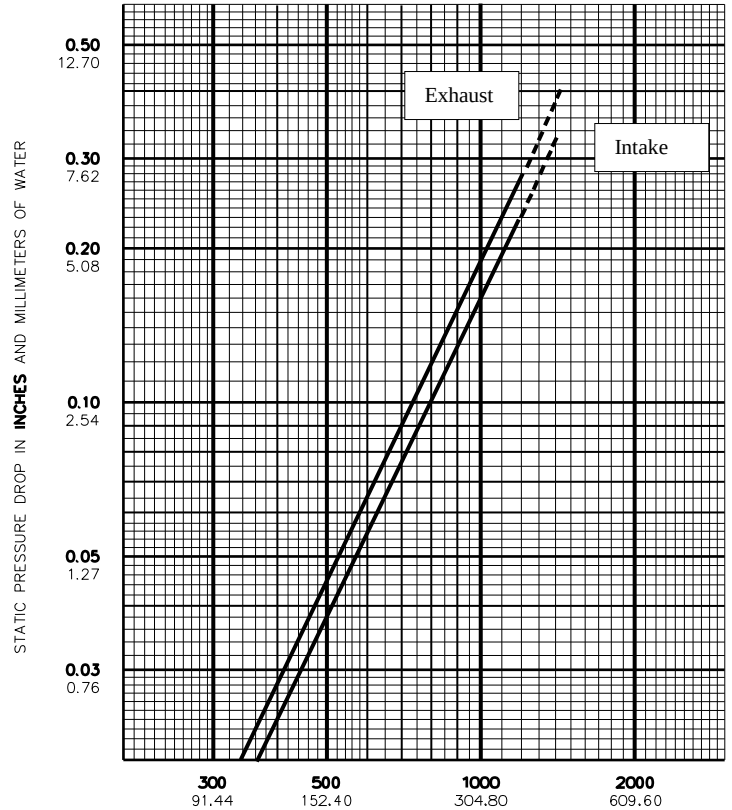
Width in Inches and Meters

	18	24	30	36	42	48	54	60	66	72	78	84	90
	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	1.68	1.83	1.98	2.13	2.29
18	0.81	1.11	1.42	1.72	2.03	2.33	2.64	2.94	3.25	3.55	3.85	4.16	4.36
0.46	0.07	0.10	0.13	0.16	0.19	0.22	0.24	0.27	0.30	0.33	0.36	0.39	0.41
24	1.15	1.59	2.02	2.46	2.89	3.33	3.76	4.20	4.64	5.07	5.51	5.94	6.24
0.61	0.11	0.15	0.19	0.23	0.27	0.31	0.35	0.39	0.43	0.47	0.51	0.55	0.58
30	1.50	2.06	2.63	3.20	3.76	4.33	4.89	5.46	6.03	6.59	7.16	7.72	8.11
0.76	0.14	0.19	0.24	0.30	0.35	0.40	0.45	0.51	0.56	0.61	0.67	0.72	0.75
36	1.84	2.54	3.24	3.93	4.63	5.33	6.02	6.72	7.42	8.11	8.81	9.51	9.98
0.91	0.17	0.24	0.30	0.37	0.43	0.49	0.56	0.62	0.69	0.75	0.82	0.88	0.93
42	2.19	3.02	3.84	4.67	5.50	6.33	7.15	7.98	8.81	9.64	10.46	11.29	11.85
1.07	0.20	0.28	0.36	0.43	0.51	0.59	0.66	0.74	0.82	0.90	0.97	1.05	1.10
48	2.53	3.49	4.45	5.41	6.37	7.32	8.28	9.24	10.20	11.16	12.11	13.07	13.72
1.22	0.24	0.32	0.41	0.50	0.59	0.68	0.77	0.86	0.95	1.04	1.13	1.21	1.27
54	2.88	3.97	5.06	6.15	7.23	8.32	9.41	10.50	11.59	12.68	13.77	14.86	15.59
1.37	0.27	0.37	0.47	0.57	0.67	0.77	0.87	0.98	1.08	1.18	1.28	1.38	1.45
60	3.23	4.45	5.66	6.88	8.10	9.32	10.54	11.76	12.98	14.20	15.42	16.64	17.46
1.52	0.30	0.41	0.53	0.64	0.75	0.87	0.98	1.09	1.21	1.32	1.43	1.55	1.62
66	3.57	4.92	6.27	7.62	8.97	10.32	11.67	13.02	14.37	15.72	17.07	18.42	19.33
1.68	0.33	0.46	0.58	0.71	0.83	0.96	1.08	1.21	1.34	1.46	1.59	1.71	1.80
72	3.92	5.40	6.88	8.36	9.84	11.32	12.80	14.28	15.76	17.24	18.72	20.20	21.20
1.83	0.36	0.50	0.64	0.78	0.91	1.05	1.19	1.33	1.46	1.60	1.74	1.88	1.97
78	4.26	5.87	7.49	9.10	10.71	12.32	13.93	15.54	17.15	18.76	20.37	21.99	23.07
1.98	0.40	0.55	0.70	0.85	0.99	1.14	1.29	1.44	1.59	1.74	1.89	2.04	2.14
84	4.61	6.35	8.09	9.83	11.58	13.32	15.06	16.80	18.54	20.29	22.03	23.77	24.94
2.13	0.43	0.59	0.75	0.91	1.08	1.24	1.40	1.56	1.72	1.88	2.05	2.21	2.32
90	4.95	6.83	8.70	10.57	12.44	14.32	16.19	18.06	19.93	21.81	23.68	25.55	26.81
2.29	0.46	0.63	0.81	0.98	1.16	1.33	1.50	1.68	1.85	2.03	2.20	2.37	2.49
96	5.30	7.30	9.31	11.31	13.31	15.32	17.32	19.32	21.32	23.33	25.33	27.33	28.68
2.44	0.49	0.68	0.86	1.05	1.24	1.42	1.61	1.80	1.98	2.17	2.35	2.54	2.66
102	5.65	7.78	9.91	12.05	14.18	16.31	18.45	20.58	22.72	24.85	26.98	29.12	30.55
2.59	0.52	0.72	0.92	1.12	1.32	1.52	1.71	1.91	2.11	2.31	2.51	2.71	2.84
108	5.99	8.26	10.52	12.78	15.05	17.31	19.58	21.84	24.11	26.37	28.64	30.90	32.42
2.74	0.56	0.77	0.98	1.19	1.40	1.61	1.82	2.03	2.24	2.45	2.66	2.87	3.01
114	6.34	8.73	11.13	13.52	15.92	18.31	20.71	23.10	25.50	27.89	30.29	32.68	34.29
2.90	0.59	0.81	1.03	1.26	1.48	1.70	1.92	2.15	2.37	2.59	2.81	3.04	3.19
120	6.68	9.21	11.73	14.26	16.79	19.31	21.84	24.36	26.89	29.41	31.94	34.46	36.16
3.05	0.62	0.86	1.09	1.32	1.56	1.79	2.03	2.26	2.50	2.73	2.97	3.20	3.36
126	7.03	9.68	12.34	15.00	17.65	20.31	22.97	25.62	28.28	30.93	33.59	36.25	38.03
3.20	0.65	0.90	1.15	1.39	1.64	1.89	2.13	2.38	2.63	2.87	3.12	3.37	3.53
132	7.37	10.16	12.95	15.73	18.52	21.31	24.10	26.88	29.67	32.46	35.24	38.03	39.91
3.35	0.69	0.94	1.20	1.46	1.72	1.98	2.24	2.50	2.76	3.02	3.27	3.53	3.71
138	7.72	10.64	13.55	16.47	19.39	22.31	25.22	28.14	31.06	33.98	36.90	39.81	41.78
3.51	0.72	0.99	1.26	1.53	1.80	2.07	2.34	2.61	2.89	3.16	3.43	3.70	3.88
144	8.07	11.11	14.16	17.21	20.26	23.31	26.35	29.40	32.45	35.50	38.55	41.60	43.65
3.66	0.75	1.03	1.32	1.60	1.88	2.17	2.45	2.73	3.01	3.30	3.58	3.86	4.05
150	8.41	11.59	14.77	17.95	21.13	24.30	27.48	30.66	33.84	37.02	40.20	43.38	45.52
3.81	0.78	1.08	1.37	1.67	1.96	2.26	2.55	2.85	3.14	3.44	3.73	4.03	4.23
156	8.76	12.07	15.38	18.68	21.99	25.30	28.61	31.92	35.23	38.54	41.85	45.16	47.39
3.96	0.81	1.12	1.43	1.74	2.04	2.35	2.66	2.97	3.27	3.58	3.89	4.20	4.40
162	9.10	12.54	15.98	19.42	22.86	26.30	29.74	33.18	36.62	40.06	43.50	46.94	49.26
4.11	0.85	1.17	1.48	1.80	2.12	2.44	2.76	3.08	3.40	3.72	4.04	4.36	4.58
168	9.45	13.02	16.59	20.16	23.73	27.30	30.87	34.44	38.01	41.58	45.16	48.73	51.13
4.27	0.88	1.21	1.54	1.87	2.20	2.54	2.87	3.20	3.53	3.86	4.20	4.53	4.75
174	9.79	13.49	17.20	20.90	24.60	28.30	32.00	35.70	39.40	43.11	46.81	50.51	53.00
4.42	0.91	1.25	1.60	1.94	2.29	2.63	2.97	3.32	3.66	4.00	4.35	4.69	4.92
180	10.14	13.97	17.80	21.64	25.47	29.30	33.13	36.96	40.80	44.63	48.46	52.29	54.87
4.57	0.94	1.30	1.65	2.01	2.37	2.72	3.08	3.43	3.79	4.15	4.50	4.86	5.10
186	10.48	14.45	18.41	22.37	26.34	30.30	34.26	38.22	42.19	46.15	50.11	54.07	56.74
4.72	0.97	1.34	1.71	2.08	2.45	2.81	3.18	3.55	3.92	4.29	4.66	5.02	5.27
192	10.83	14.92	19.02	23.11	27.20	31.30	35.39	39.48	43.58	47.67	51.76	55.86	58.61
4.88	1.01	1.39	1.77	2.15	2.53	2.91	3.29	3.67	4.05	4.43	4.81	5.19	5.45
198	11.18	15.40	19.62	23.85	28.07	32.30	36.52	40.74	44.97	49.19	53.42	57.64	60.48
5.03	1.04	1.43	1.82	2.22	2.61	3.00	3.39	3.79	4.18	4.57	4.96	5.35	5.62

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 0.01 or less ounces of water per square foot of louver free area during a 15-minute test period.



AIR VELOCITY IN FEET AND METERS PER MINUTE THROUGH FREE AREA

For a 48" X 48" sized louver tested to figure 5.5.
Data corrected to standard air density.

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Upper Numerals English Units/Lower Numerals Metric Units

RSH-5700-6