

Construction Specialties Middle East LLC certifies that the model S-4770-MF 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 wind driven sand and air performance.



## PERFORMANCE LOUVERS

### MODEL S-4770-MF

C/S 4" (101.6MM) SAND TRAP LOUVER



### SUGGESTED SPECIFICATIONS:

**GENERAL:** Furnish and install where indicated on the drawings C/S 4" (101.6 mm) VERTICAL BLADE SAND TRAP LOUVER MODEL S-4770-MF as manufactured by Construction Specialties Middle East LLC Dubai, UAE. Complete details shall be submitted to the architect for approval prior to fabrication.

**MATERIAL:** Louver to be mechanically fastened using stainless steel or aluminum fasteners. Heads, sills and mullions to be fabricated from 6063 extrusion alloy. Heads, sills, jambs and mullions will be 0.079" (2.00 mm) thick, blades will be 0.063" (1.6 mm). Optional 0.079" (2.00 mm) thick blade available. Louvers to be installed in accordance with the manufacturer's recommended procedures to ensure sand rejection performance of louver system.

**Available material option, Stainless Steel (SS) and Galvanized Steel (GS).**

### SCREEN OPTIONS:

- Stainless steel insect screen with extruded aluminum frame.
- Bird screen with extruded aluminum frame (Available material option, Aluminum, Stainless Steel (SS) and Galvanized Steel (GS).

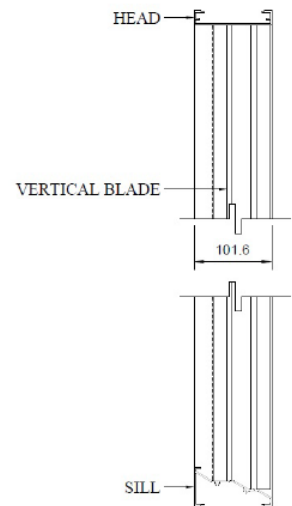
**STRUCTURAL DESIGN:** Structural supports shall be designed with 38% free area for the front face and 44% for the rear face. Furnished by the louver manufacturer to carry a wind load of not less than \_\_\_\_ psf. (kPa). (Note: If this paragraph is omitted or if the design wind load is not specified, the louvers will be manufactured in self supporting units up to a maximum of 8' (2438.4 mm) wide by 5' (1523.9 mm) high. Any additional structural supports required to adequately secure these units within the opening shall be the responsibility of others.)

### FINISH OPTIONS:

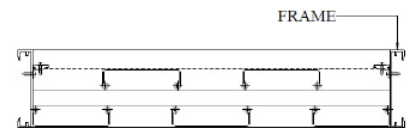
- Kynar (PVDF) finish, 20-year limited warranty.
- PE-SDF (Polyester - super durable powder coat) finish, 25-year limited warranty.
- Durasol (Hyperdurable power coat) finish, 30-year limited warranty.
- Anodize finish

### SAND REJECTION PERFORMANCE:

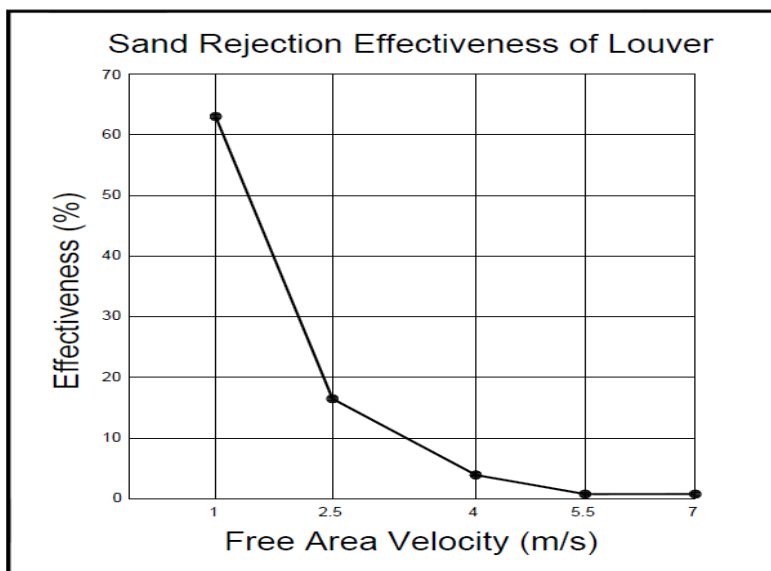
The sand rejection performance is based on a 48.00" x 48.00" (1.22 m x 1.22 m) louver area tested per AMCA 500-L, Ventilation for buildings – Terminals – Performance testing of louvers subject to simulation sand at an airflow speed of 20-25 m/s. The sand used throughout the wind driven sand test procedure shall be dry and conform to a mixture of the nine size gradings specified in AMCA 511, Section 10, Table 4.



**SECTION VIEW**



**PLAN VIEW**



Sand Rejection Effectiveness of Louver		
Free Area Velocity, m/s	Sand Rejection Effectiveness (%)	Penetration Class
1	63	D
2.5	17	D
4	4	D
5.5	1	D
7	1	D

# PERFORMANCE DATA MODEL S-4770-MF

## FREE AREA TABLE

FREE AREAS IN SQ. FEET AND SQ. METERS

HEIGHT IN INCHES AND METERS

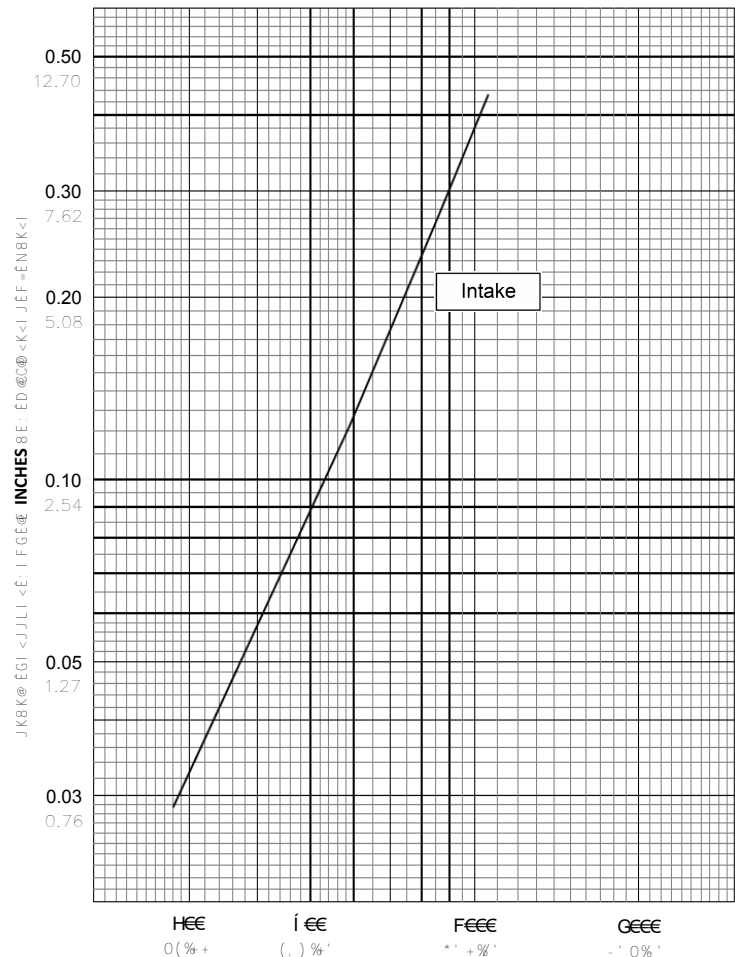
	18	24	30	36	42	48	54	60	66	72	78	84	90	96
	0.46	0.61	0.76	0.91	1.07	1.22	1.37	1.52	1.68	1.83	1.98	2.13	2.29	2.44
18	0.69	0.95	1.21	1.48	1.76	2.02	2.28	2.55	2.83	3.09	3.36	3.62	3.90	4.16
0.46	0.06	0.09	0.11	0.14	0.16	0.19	0.21	0.24	0.26	0.29	0.31	0.34	0.36	0.39
24	1.03	1.42	1.82	2.21	2.64	3.03	3.43	3.82	4.24	4.64	5.03	5.43	5.85	6.25
0.61	0.10	0.13	0.17	0.21	0.24	0.28	0.32	0.35	0.39	0.43	0.47	0.50	0.54	0.58
30	1.32	1.83	2.34	2.85	3.39	3.90	4.41	4.91	5.46	5.96	6.47	6.98	7.52	8.03
0.76	0.12	0.17	0.22	0.26	0.31	0.36	0.41	0.46	0.51	0.55	0.60	0.65	0.70	0.75
36	1.53	2.12	2.71	3.30	3.92	4.51	5.10	5.69	6.32	6.90	7.49	8.08	8.71	9.30
0.91	0.14	0.20	0.25	0.31	0.36	0.42	0.47	0.53	0.59	0.64	0.70	0.75	0.81	0.86
42	1.77	2.45	3.13	3.82	4.54	5.22	5.91	6.59	7.31	8.00	8.68	9.36	10.08	10.77
1.07	0.16	0.23	0.29	0.35	0.42	0.49	0.55	0.61	0.68	0.74	0.81	0.87	0.94	1.00
48	2.06	2.85	3.64	4.43	5.27	6.06	6.85	7.64	8.49	9.28	10.07	10.86	11.70	12.49
1.22	0.19	0.26	0.34	0.41	0.49	0.56	0.64	0.71	0.79	0.86	0.94	1.01	1.09	1.16
54	2.40	3.32	4.24	5.17	6.15	7.07	7.99	8.92	9.90	10.82	11.74	12.67	13.65	14.57
1.37	0.22	0.31	0.39	0.48	0.57	0.66	0.74	0.83	0.92	1.01	1.09	1.18	1.27	1.35
60	2.74	3.80	4.85	5.90	7.03	8.08	9.14	10.19	11.31	12.37	13.42	14.48	15.60	16.65
1.52	0.25	0.35	0.45	0.55	0.65	0.75	0.85	0.95	1.05	1.15	1.25	1.34	1.45	1.55
66	3.05	4.23	5.40	6.57	7.82	9.00	10.17	11.34	12.60	13.77	14.94	16.12	17.37	18.54
1.68	0.28	0.39	0.50	0.61	0.73	0.84	0.94	1.05	1.17	1.28	1.39	1.50	1.61	1.72
72	3.26	4.51	5.77	7.02	8.36	9.61	10.87	12.12	13.46	14.71	15.96	17.22	18.55	19.81
1.83	0.30	0.42	0.54	0.65	0.78	0.89	1.01	1.13	1.25	1.37	1.48	1.60	1.72	1.84
78	3.46	4.79	6.12	7.45	8.87	10.20	11.53	12.86	14.28	15.61	16.94	18.27	19.69	21.02
1.98	0.32	0.45	0.57	0.69	0.82	0.95	1.07	1.19	1.33	1.45	1.57	1.70	1.83	1.95
84	3.77	5.22	6.67	8.12	9.66	11.11	12.56	14.01	15.56	17.01	18.45	19.90	21.45	22.90
2.13	0.35	0.48	0.62	0.75	0.90	1.03	1.17	1.30	1.45	1.58	1.71	1.85	1.99	2.13
90	4.11	5.69	7.27	8.85	10.54	12.12	13.70	15.28	16.97	18.55	20.13	21.71	23.40	24.98
2.29	0.38	0.53	0.68	0.82	0.98	1.13	1.27	1.42	1.58	1.72	1.87	2.02	2.17	2.32
96	4.45	6.17	7.88	9.59	11.42	13.13	14.84	16.56	18.38	20.10	21.81	23.52	25.35	27.06
2.44	0.41	0.57	0.73	0.89	1.06	1.22	1.38	1.54	1.71	1.87	2.03	2.19	2.36	2.51

WIDTH IN INCHES AND METERS

Upper Numerals English Units/Lower Numerals Metric Units

## Air Performance

Unit test size (48" x 48")  
Airflow rate at standard air density  
and the AMCA figure 5.5



AIR VELOCITY IN FEET PER MINUTE THROUGH FREE AREA

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