Construction Specialties™

PERFORMANCE LOUVERS

MODEL S-4770

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

Construction Specialties International India Pvt Ltd certifies that the model S-4770 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.

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 as manufactured by Construction Specialties International India Pvt Ltd. Complete details shall be submitted to the architect for approval prior to fabrication.

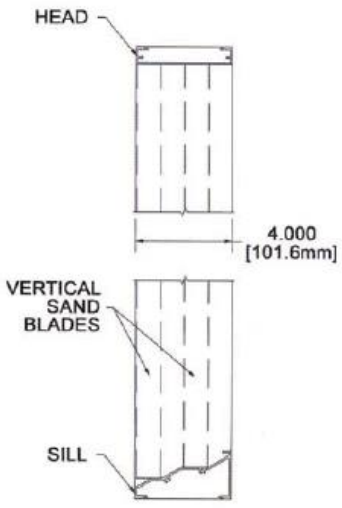
MATERIAL: Louver to be mechanically fastened using stainless steel or aluminum fasteners. Heads, sills and mullions to be fabricated from 6063 extrusion alloy. Heads, sills, jambs and mullions will be 0.079" (2.00 mm) thick, blades will be 0.063" (1.6 mm). Optional 0.079" (2.00 mm) thick blade available. Louvers to be installed in accordance with the manufacturer's recommended procedures to ensure sand rejection performance of louver system. All louvers to be furnished with 5/8" (15.87 mm) flattened expended mesh, aluminum bird screen with a 0.055" (1.4 mm) thick extruded 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 8' (2438.4 mm) wide by 8' (2438.4 mm) high. Any additional structural supports required to adequately secure these units within the opening shall be the responsibility of others.)

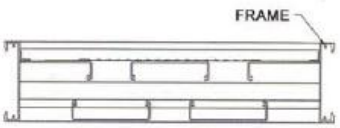
FINISH: Louvers shall be finished in Kynar 500®/Haylar 5000 ®, a minimum 1 mil (0.025 mm) thick full strength 70% resin fluoropolymer coating. The coating shall meet or exceed all requirements of AAMA spec 2605 "Voluntary Specification for High Performance Organic Coatings on Architectural Extrusions and Panels." The Louver manufacturer shall supply an industry standard 5-year limited warranty against failure of the Kynar 500®/Hylar 5000® finish. This limited warranty shall begin on the date of material shipment (Note: Kynar 500 ®/Hylar 5000® finish with an extended 20 year limited warranty is available as an option at extra cost.) The finish will be applied to the exterior elements only.

SAND REJECTION PERFORMANCE:

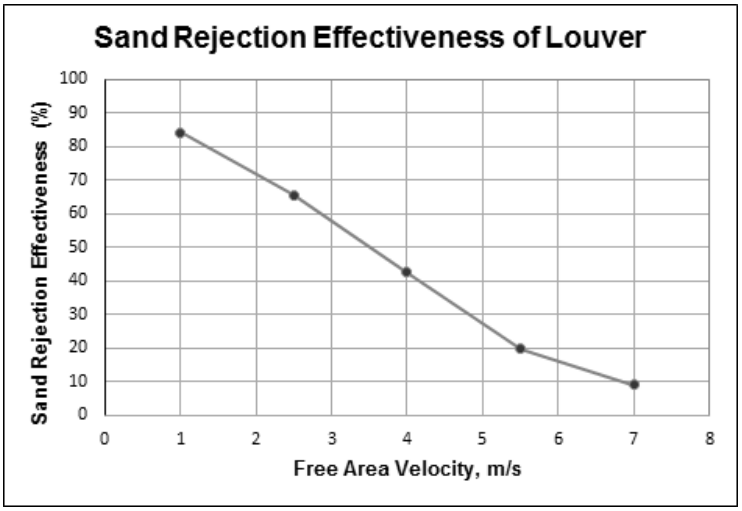
The sand rejection performance is based on a 48.00" x 48.00" (1.22 m x 1.22 m) louver area tested per AMCA 500-L, Ventilation for buildings – Terminals – Performance testing of louvers subject to simulation sand at an airflow speed of 20-25 m/s. The sand used throughout the wind driven sand test procedure shall be dry and conform to a mixture of the nine size gradings specied 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	84	B
2.5	66	D
4	42	D
5.5	20	D
7	9	D

FREE AREA TABLE

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

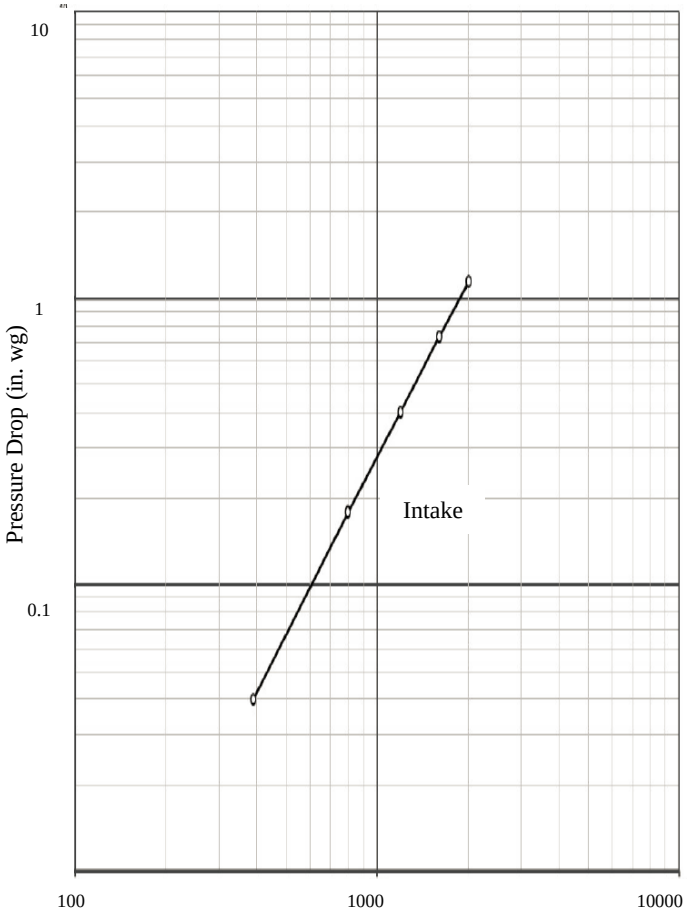
Height in Inches and Meters

Width 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	**0.48**	**0.67**	**0.86**	**1.04**	**1.24**	**1.43**	**1.61**	**1.80**	**2.00**	**2.18**	**2.37**	**2.55**	**2.75**	**2.94**
0.46	0.04	0.06	0.08	0.10	0.12	0.13	0.15	0.17	0.19	0.20	0.22	0.24	0.26	0.27
24	**0.70**	**0.96**	**1.23**	**1.50**	**1.78**	**2.05**	**2.32**	**2.59**	**2.87**	**3.14**	**3.41**	**3.67**	**3.96**	**4.23**
0.61	0.06	0.09	0.11	0.14	0.17	0.19	0.22	0.24	0.27	0.29	0.32	0.34	0.37	0.39
30	**0.91**	**1.26**	**1.60**	**1.95**	**2.33**	**2.67**	**3.02**	**3.37**	**3.74**	**4.09**	**4.44**	**4.79**	**5.16**	**5.51**
0.76	0.08	0.12	0.15	0.18	0.22	0.25	0.28	0.31	0.35	0.38	0.41	0.44	0.48	0.51
36	**1.12**	**1.55**	**1.98**	**2.41**	**2.87**	**3.30**	**3.73**	**4.16**	**4.62**	**5.05**	**5.48**	**5.91**	**6.36**	**6.79**
0.91	0.10	0.14	0.18	0.22	0.27	0.31	0.35	0.39	0.43	0.47	0.51	0.55	0.59	0.63
42	**1.33**	**1.85**	**2.36**	**2.87**	**3.42**	**3.93**	**4.44**	**4.96**	**5.50**	**6.02**	**6.53**	**7.04**	**7.59**	**8.10**
1.07	0.12	0.17	0.22	0.27	0.32	0.37	0.41	0.46	0.51	0.56	0.61	0.65	0.71	0.75
48	**1.55**	**2.14**	**2.74**	**3.33**	**3.97**	**4.56**	**5.16**	**5.75**	**6.39**	**6.99**	**7.58**	**8.18**	**8.81**	**9.41**
1.22	0.14	0.20	0.25	0.31	0.37	0.42	0.48	0.53	0.59	0.65	0.70	0.76	0.82	0.87
54	**1.76**	**2.44**	**3.11**	**3.79**	**4.51**	**5.19**	**5.87**	**6.54**	**7.27**	**7.94**	**8.62**	**9.30**	**10.02**	**10.69**
1.37	0.16	0.23	0.29	0.35	0.42	0.48	0.55	0.61	0.67	0.74	0.80	0.86	0.93	0.99
60	**1.97**	**2.73**	**3.49**	**4.25**	**5.06**	**5.82**	**6.58**	**7.34**	**8.15**	**8.91**	**9.67**	**10.42**	**11.23**	**11.99**
1.52	0.18	0.25	0.32	0.39	0.47	0.54	0.61	0.68	0.76	0.83	0.90	0.97	1.04	1.11
66	**2.19**	**3.03**	**3.87**	**4.71**	**5.61**	**6.45**	**7.29**	**8.13**	**9.03**	**9.87**	**10.71**	**11.55**	**12.45**	**13.29**
1.68	0.20	0.28	0.36	0.44	0.52	0.60	0.68	0.76	0.84	0.92	0.99	1.07	1.16	1.23
72	**2.40**	**3.32**	**4.25**	**5.17**	**6.15**	**7.08**	**8.00**	**8.92**	**9.91**	**10.83**	**11.75**	**12.68**	**13.66**	**14.58**
1.83	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
78	**2.61**	**3.62**	**4.62**	**5.63**	**6.70**	**7.71**	**8.71**	**9.71**	**10.79**	**11.79**	**12.80**	**13.80**	**14.87**	**15.88**
1.98	0.24	0.34	0.43	0.52	0.62	0.72	0.81	0.90	1.00	1.10	1.19	1.28	1.38	1.48
84	**2.83**	**3.91**	**5.00**	**6.09**	**7.25**	**8.33**	**9.42**	**10.51**	**11.67**	**12.75**	**13.84**	**14.93**	**16.09**	**17.17**
2.13	0.26	0.36	0.46	0.57	0.67	0.77	0.88	0.98	1.08	1.18	1.29	1.39	1.49	1.60
90	**3.04**	**4.21**	**5.38**	**6.55**	**7.79**	**8.96**	**10.13**	**11.30**	**12.55**	**13.72**	**14.89**	**16.05**	**17.30**	**18.47**
2.29	0.28	0.39	0.50	0.61	0.72	0.83	0.94	1.05	1.17	1.27	1.38	1.49	1.61	1.72
96	**3.25**	**4.50**	**5.76**	**7.01**	**8.34**	**9.59**	**10.84**	**12.09**	**13.43**	**14.68**	**15.93**	**17.18**	**18.52**	**19.77**
2.44	0.30	0.42	0.53	0.65	0.77	0.89	1.01	1.12	1.25	1.36	1.48	1.60	1.72	1.84

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 through Free Area (fpm)
Data corrected to standard air density
-o-Test Pressure Drop