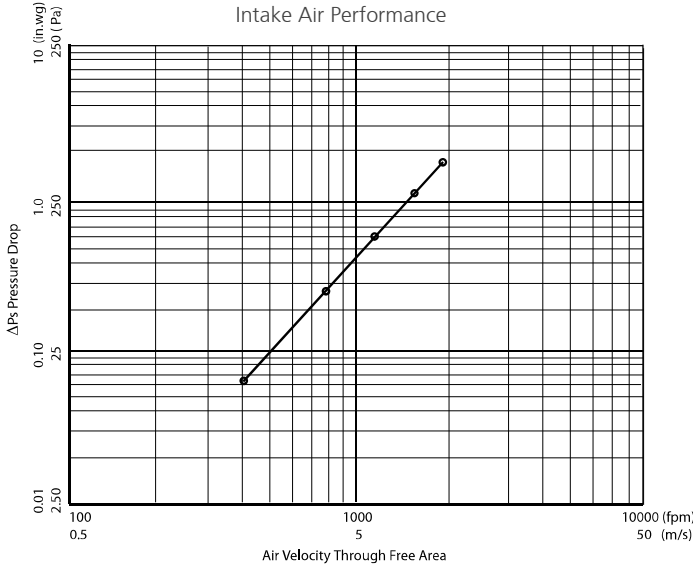


Air Louvers | **Engineering Performance Data**

Free Area Chart -Sand Trap Louver [STL-A/GI]:

		Outer Height Inches (mm)															
		12 300	18 450	24 600	30 750	36 900	42 1050	48 1200	54 1350	60 1500	66 1650	72 1800	78 1950	84 2100	90 2250	96 2400	
Outer Width in Inches (mm)	12 300	0.17	0.27	0.38	0.48	0.59	0.69	0.80	0.90	1.01	1.11	1.22	1.32	1.43	1.53	1.64	
	18 450	0.02	0.03	0.04	0.04	0.05	0.06	0.07	0.08	0.09	0.10	0.11	0.12	0.13	0.14	0.15	
	24 600	0.45	0.73	1.00	1.28	.56	1.83	2.11	2.39	2.67	2.94	3.22	3.50	3.77	4.05	4.33	
	30 750	0.04	0.07	0.09	0.12	0.14	0.17	0.20	0.22	0.25	0.27	0.30	0.32	0.35	0.38	0.40	
	36 900	0.59	0.95	1.31	1.67	2.04	2.40	2.76	3.12	3.49	3.85	4.21	4.57	4.94	5.30	5.66	
	42 1050	0.05	0.09	0.12	0.16	0.19	0.22	0.26	0.29	0.32	0.36	0.39	0.42	0.46	0.49	0.53	
	48 1200	0.73	1.18	1.62	2.07	2.52	2.97	3.42	3.87	4.32	4.77	5.22	5.67	6.12	6.57	7.02	
	54 1350	0.07	0.11	0.15	0.19	0.23	0.28	0.32	0.36	0.40	0.44	0.48	0.53	0.57	0.61	0.65	
	60 1500	0.86	1.40	1.93	2.47	3.00	3.54	4.07	4.61	5.14	5.68	6.21	6.75	7.28	7.81	8.36	
	66 1650	0.08	0.13	0.18	0.23	0.28	0.33	0.38	0.43	0.48	0.53	0.58	0.63	0.68	0.73	0.78	
	72 1800	1.00	1.63	2.25	2.87	3.49	4.11	4.74	5.36	5.98	6.60	7.22	7.84	8.47	9.09	9.71	
	78 1950	0.09	0.15	0.21	0.27	0.32	0.38	0.44	0.50	0.56	0.61	0.67	0.73	0.79	0.84	0.90	
	84 2100	1.14	1.85	2.56	3.26	3.97	4.68	5.39	6.09	6.80	7.51	8.21	8.92	9.63	10.33	11.05	
	90 2250	0.11	0.17	0.24	0.30	0.37	0.43	0.50	0.57	0.63	0.70	0.76	0.83	0.89	0.96	1.03	
	96 2400	1.28	2.07	2.86	3.65	4.45	5.24	6.04	6.83	7.62	8.41	9.20	10.00	10.79	11.58	12.38	
	2400	0.12	0.19	0.27	0.34	0.41	0.49	0.56	0.63	0.71	0.78	0.85	0.93	1.00	1.08	1.15	
1650	1.42	2.30	3.18	4.06	4.94	5.82	6.70	7.58	8.45	9.34	10.21	11.09	11.97	12.85	13.74		
1800	0.13	0.21	0.30	0.38	0.46	0.54	0.62	0.70	0.79	0.87	0.95	1.03	1.11	1.19	1.28		
1950	1.56	2.53	3.49	4.45	5.42	6.38	7.35	8.31	9.27	10.24	11.20	12.17	13.13	14.10	15.07		
2100	0.14	0.23	0.32	0.41	0.50	0.59	0.68	0.77	0.86	0.95	1.04	1.13	1.22	1.31	1.40		
2250	1.70	2.75	3.80	4.85	5.91	6.95	8.01	9.06	10.11	11.16	12.21	13.27	14.32	15.37	16.43		
2400	0.16	0.26	0.35	0.45	0.55	0.65	0.74	0.84	0.94	1.04	1.13	1.23	1.33	1.43	1.53		
2550	1.84	2.98	4.11	5.24	6.29	7.52	8.66	9.79	10.93	12.07	13.20	14.34	15.48	16.62	17.76		
2700	0.17	0.28	0.38	0.49	0.59	0.70	0.80	0.91	1.02	1.12	1.23	1.33	1.44	1.54	1.65		
2850	1.97	3.20	4.42	5.64	6.86	8.08	9.31	10.53	11.75	12.98	14.19	15.42	16.64	17.86	19.09		
3000	0.18	0.30	0.41	0.52	0.64	0.75	0.86	0.98	1.09	1.21	1.32	1.43	1.55	1.66	1.70		
3150	2.12	3.43	4.74	6.05	7.36	8.61	9.99	11.29	12.60	13.92	15.22	16.54	17.85	19.15	20.48		
3300	0.20	0.32	0.44	0.56	0.68	0.81	0.93	1.05	1.17	1.29	1.41	1.54	1.66	1.78	1.90		

Average Louver Free Area in ft² = 0.33 x [W X H] / 144, where W = Outer Width-2.56" and H = Outer Height-2.56"



Test Results			
Free Area Velocity		Pressure Drop	
fpm	m/s	inch.wg	Pa
400	2.0	0.06	15
800	4.0	0.27	68
1200	6.0	0.59	148
1600	8.0	1.05	263
2000	10.0	1.66	415

AMCA Standard 500-L Intake Test Figure 5.5 setup for size - 48" x 48" (outer dimension) Data is corrected to standard air density

Selection Example:

Given:
Airflow: 2850cfm
Free area velocity : 600fpm (Assumed)

Calculation:

Free Area = Airflow/ louver free area velocity
= 2850/600
= 4.75 ft²

From Free Area Chart, selected size of the louver is 48" X 48"
From the graph, Louver pressure drop = 0.15 In.wg



Century Mechanical Systems Factory LLC certifies that the Model: STL-A/GI 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 only. Tested for air performance in accordance with ANSI/AMCA-500L-12