

## FRESH AIR LOUVERS

(AV-FAL)

## **AEROVAC FRESH AIR LOUVER**

## **INTRODUCTION**

AEROVAC fresh air are specially designed for fresh air intake for the HVAC system. Louvers usually provide airflow, both intake and exhaust, to HVAC and other building systems, while protecting these openings against rain and offering minimum resistance to the airflow.

AEROVAC louvers are carefully designed with low pressure drop and prevent rainwater penetration. Our louvers are extremely suitable for ventilation as well as for aesthetic appearance, thus making it a preferred choice for architectural louvers as well.



AEROVAC®

### **CONSTRUCTION:**

Frame : 1.2mm thick High quality Extruded Aluminium profiles

Blade : 1.2mm thick High quality Extruded Aluminium profiles

Filter : ½ "Aluminium Washable Filter

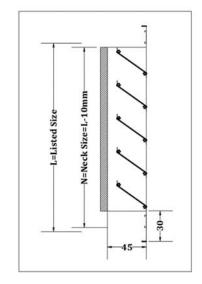
Finish : RAL 9010 Powder coated finish

## **OPTIONS:**

• Filter: Aluminium washable filter with 1" thickness

• **Damper**: Control damper

• **Finish:** Mill finish aluminium, Any RAL Colour available upon request



## **FEATURES**

- Louver is composed of casing and horizontal blade assembly, fabricated with a high quality of extruded aluminium profiles with the advantage of durability & anti-corrosion.
- The blades are constructed maximum at 45 degrees to have the highest free area and provide minimum resistance to airflow and protect against water penetration.
- The louvers provide 40% effective free area with minimum resistance to airflow.
- The horizontal blades are closed spaced to minimize the water penetration and prevent water getting beyond the louvre.





# FRESH AIR LOUVERS (AV-FAL)

## **ENGINEERING PERFORMANCE DATA:**

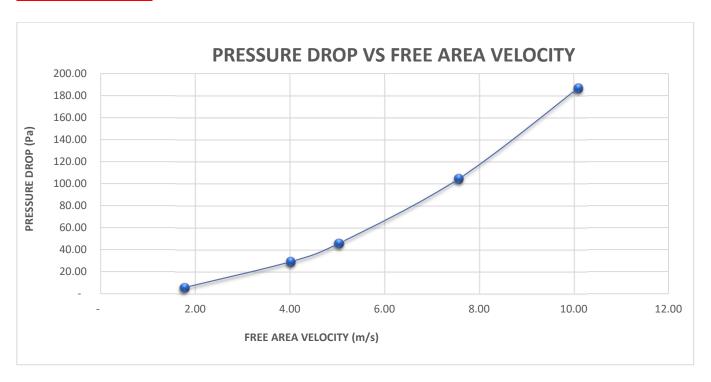
FRESH AIR LOUVER (AV-FAL)															
FREE AREA CHART															
WxH	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96
	300	450	600	750	900	1050	1200	1350	1500	1650	1800	1950	2100	2250	2400
12	0.39	0.59	0.79	0.98	1.18	1.37	1.57	1.77	1.96	2.16	2.36	2.55	2.75	2.95	3.14
300	0.04	0.05	0.07	0.09	0.11	0.13	0.15	0.16	0.18	0.20	0.22	0.24	0.26	0.27	0.29
18	0.59	0.88	1.18	1.47	1.77	2.06	2.36	2.65	2.95	3.24	3.54	3.83	4.12	4.42	4.71
450	0.05	0.08	0.11	0.14	0.16	0.19	0.22	0.25	0.27	0.30	0.33	0.36	0.38	0.41	0.44
24	0.79	1.18	1.57	1.96	2.36	2.75	3.14	3.54	3.93	4.32	4.71	5.11	5.50	5.89	6.28
600	0.07	0.11	0.15	0.18	0.22	0.26	0.29	0.33	0.36	0.40	0.44	0.47	0.51	0.55	0.58
30	0.98	1.47	1.96	2.45	2.95	3.44	3.93	4.42	4.91	5.40	5.89	6.38	6.87	7.36	7.86
750	0.09	0.14	0.18	0.23	0.27	0.32	0.36	0.41	0.46	0.50	0.55	0.59	0.64	0.68	0.73
36	1.18	1.77	2.36	2.95	3.54	4.12	4.71	5.30	5.89	6.48	7.07	7.66	8.25	8.84	9.43
900	0.11	0.16	0.22	0.27	0.33	0.38	0.44	0.49	0.55	0.60	0.66	0.71	0.77	0.82	0.88
42	1.37	2.06	2.75	3.44	4.12	4.81	5.50	6.19	6.87	7.56	8.25	8.94	9.62	10.31	11.00
1050	0.13	0.19	0.26	0.32	0.38	0.45	0.51	0.57	0.64	0.70	0.77	0.83	0.89	0.96	1.02
48	1.57	2.36	3.14	3.93	4.71	5.50	6.28	7.07	7.86	8.64	9.43	10.21	11.00	11.78	12.57
1200	0.15	0.22	0.29	0.36	0.44	0.51	0.58	0.66	0.73	0.80	0.88	0.95	1.02	1.09	1.17
54	1.77	2.65	3.54	4.42	5.30	6.19	7.07	7.95	8.84	9.72	10.61	11.49	12.37	13.26	14.14
1350	0.16	0.25	0.33	0.41	0.49	0.57	0.66	0.74	0.82	0.90	0.99	1.07	1.15	1.23	1.31
60	1.96	2.95	3.93	4.91	5.89	6.87	7.86	8.84	9.82	10.80	11.78	12.77	13.75	14.73	15.71
1500	0.18	0.27	0.36	0.46	0.55	0.64	0.73	0.82	0.91	1.00	1.09	1.19	1.28	1.37	1.46
66	2.16	3.24	4.32	5.40	6.48	7.56	8.64	9.72	10.80	11.88	12.96	14.04	15.12	16.20	17.28
1650	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.51	1.61
72	2.36	3.54	4.71	5.89	7.07	8.25	9.43	10.61	11.78	12.96	14.14	15.32	16.50	17.68	18.85
1800	0.22	0.33	0.44	0.55	0.66	0.77	0.88	0.99	1.09	1.20	1.31	1.42	1.53	1.64	1.75
78	2.55	3.83	5.11	6.38	7.66	8.94	10.21	11.49	12.77	14.04	15.32	16.60	17.87	19.15	20.42
1950	0.24	0.36	0.47	0.59	0.71	0.83	0.95	1.07	1.19	1.30	1.42	1.54	1.66	1.78	1.90
84	2.75	4.12	5.50	6.87	8.25	9.62	11.00	12.37	13.75	15.12	16.50	17.87	19.25	20.62	22.00
2100	0.26	0.38	0.51	0.64	0.77	0.89	1.02	1.15	1.28	1.40	1.53	1.66	1.79	1.92	2.04
90	2.95	4.42	5.89	7.36	8.84	10.31	11.78	13.26	14.73	16.20	17.68	19.15	20.62	22.09	23.57
2250	0.27	0.41	0.55	0.68	0.82	0.96	1.09	1.23	1.37	1.51	1.64	1.78	1.92	2.05	2.19
96	3.14	4.71	6.28	7.86	9.43	11.00	12.57	14.14	15.71	17.28	18.85	20.42	22.00	23.57	25.14
2400	0.29	0.44	0.58	0.73	0.88	1.02	1.17	1.31	1.46	1.61	1.75	1.90	2.04	2.19	2.34





## FRESH AIR LOUVERS (AV-FAL)

## **AIR PERFORMANCE:**



Test Results:									
Free Area	a Velocity	Pressure Drop							
(fpm)	(m/s)	(i.wg)	(Pa)						
349	1.57	0.02	5.0						
792	4.02	0.12	29.0						
992	5.04	0.18	45.0						
1490	7.57	0.42	104.0						
1987	10.09	0.75	186.0						

## **TEST INFORMATION:**

Tested for Air performance in accordance with ANSI/AMCA Standard 500-L, Figure 5.5.

Test sample size is 48 in.  $\times$  48 in. with a tolerance of +0, -0.25 in.

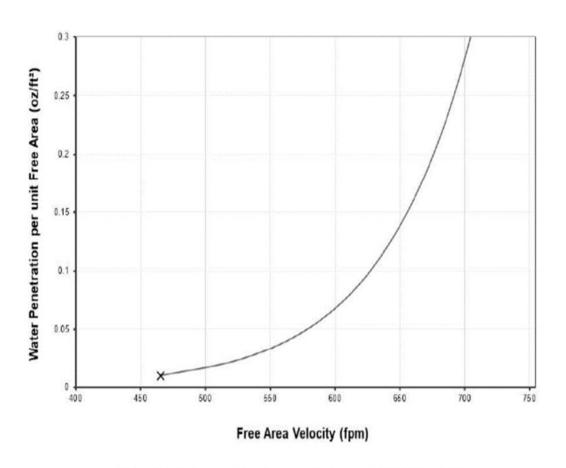
Louver air performance data are based on intake performance.





## FRESH AIR LOUVERS (AV-FAL)

## **WATER PENETRATION:**



--- Water Penetration per Free Area X Beginning of Water Penetartion

Beginning of water penetration as per AMCA publication 511
Section 8.3.2 based on AMCA measured Free Area > or =465.4 fpm

## **TEST INFORMATION:**

Tested for water penetration in accordance with ANSI/AMCA Standard 500-L, Figure 5.6.

Test sample size is 48 in.  $\times$  48 in. with a tolerance of +0, -0.25 in.

Louver water penetration test data are based on intake performance.





## EXHAUST AIR LOUVERS

(AV-EAL)

## **AEROVAC EXHAUST AIR LOUVER**

## **INTRODUCTION**

AEROVAC Exhaust air louvers are specially designed for exhaust air intake for the HVAC system. Louvers usually provide airflow, both intake and exhaust, to HVAC and other building systems, while protect ng these openings against rain and offering minimum resistance to the airflow.

AEROVAC louvers are carefully designed with low pressure drop and prevent rainwater penetration. Our louvers are extremely suitable for ventilation as well as for aesthetic appearance, thus making it a preferred choice for architectural louvers as well.



**AEROVAC®** 

## **CONSTRUCTION:**

Frame : 1.2mm thick High quality Extruded Aluminium profiles

Blade : 1.2mm thick High quality Extruded Aluminium profiles

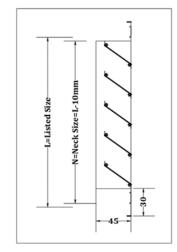
Screen : GI Bird Wire Mesh

Finish : RAL 9010 Powder coated finish

## **OPTIONS:**

• **Mesh:** Stainless Steel wire Mesh

• **Finish:** Mill finish Aluminium, Any RAL Colour available upon request



## **FEATURES**

- Louver is composed of casing and horizontal blade assembly, fabricated with a high quality of extruded aluminium profiles with the advantage of durability & anti-corrosion.
- The blades are constructed maximum at 45 degrees to have the highest free area and provide minimum resistance to airflow and protect against water penetration.
- The louvers provide 40% effective free area with minimum resistance to airflow.
- The horizontal blades are closed spaced to minimize the water penetration and prevent water getting beyond the louvre.





# EXHAUST AIR LOUVERS (AV-EAL)

## **ENGINEERING PERFORMANCE DATA:**

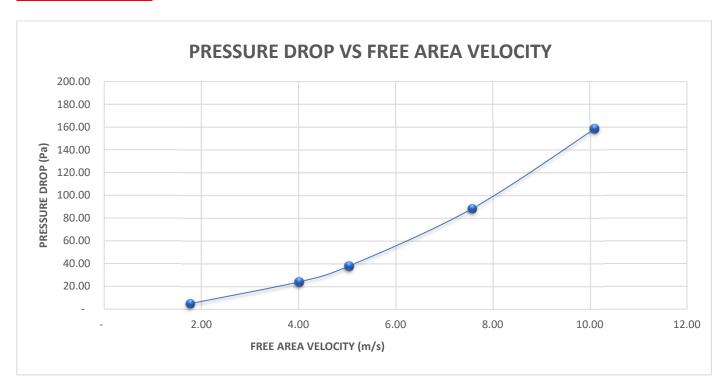
EXHAUST AIR LOUVER (AV-EAL)															
FREE AREA CHART															
WxH	12	18	24	30	36	42	48	54	60	66	72	78	84	90	96
	300	450	600	750	900	1050	1200	1350	1500	1650	1800	1950	2100	2250	2400
12	0.39	0.59	0.79	0.98	1.18	1.37	1.57	1.77	1.96	2.16	2.36	2.55	2.75	2.95	3.14
300	0.04	0.05	0.07	0.09	0.11	0.13	0.15	0.16	0.18	0.20	0.22	0.24	0.26	0.27	0.29
18	0.59	0.88	1.18	1.47	1.77	2.06	2.36	2.65	2.95	3.24	3.54	3.83	4.12	4.42	4.71
450	0.05	0.08	0.11	0.14	0.16	0.19	0.22	0.25	0.27	0.30	0.33	0.36	0.38	0.41	0.44
24	0.79	1.18	1.57	1.96	2.36	2.75	3.14	3.54	3.93	4.32	4.71	5.11	5.50	5.89	6.28
600	0.07	0.11	0.15	0.18	0.22	0.26	0.29	0.33	0.36	0.40	0.44	0.47	0.51	0.55	0.58
30	0.98	1.47	1.96	2.45	2.95	3.44	3.93	4.42	4.91	5.40	5.89	6.38	6.87	7.36	7.86
750	0.09	0.14	0.18	0.23	0.27	0.32	0.36	0.41	0.46	0.50	0.55	0.59	0.64	0.68	0.73
36	1.18	1.77	2.36	2.95	3.54	4.12	4.71	5.30	5.89	6.48	7.07	7.66	8.25	8.84	9.43
900	0.11	0.16	0.22	0.27	0.33	0.38	0.44	0.49	0.55	0.60	0.66	0.71	0.77	0.82	0.88
42	1.37	2.06	2.75	3.44	4.12	4.81	5.50	6.19	6.87	7.56	8.25	8.94	9.62	10.31	11.00
1050	0.13	0.19	0.26	0.32	0.38	0.45	0.51	0.57	0.64	0.70	0.77	0.83	0.89	0.96	1.02
48	1.57	2.36	3.14	3.93	4.71	5.50	6.28	7.07	7.86	8.64	9.43	10.21	11.00	11.78	12.57
1200	0.15	0.22	0.29	0.36	0.44	0.51	0.58	0.66	0.73	0.80	0.88	0.95	1.02	1.09	1.17
54	1.77	2.65	3.54	4.42	5.30	6.19	7.07	7.95	8.84	9.72	10.61	11.49	12.37	13.26	14.14
1350	0.16	0.25	0.33	0.41	0.49	0.57	0.66	0.74	0.82	0.90	0.99	1.07	1.15	1.23	1.31
60	1.96	2.95	3.93	4.91	5.89	6.87	7.86	8.84	9.82	10.80	11.78	12.77	13.75	14.73	15.71
1500	0.18	0.27	0.36	0.46	0.55	0.64	0.73	0.82	0.91	1.00	1.09	1.19	1.28	1.37	1.46
66	2.16	3.24	4.32	5.40	6.48	7.56	8.64	9.72	10.80	11.88	12.96	14.04	15.12	16.20	17.28
1650	0.20	0.30	0.40	0.50	0.60	0.70	0.80	0.90	1.00	1.10	1.20	1.30	1.40	1.51	1.61
72	2.36	3.54	4.71	5.89	7.07	8.25	9.43	10.61	11.78	12.96	14.14	15.32	16.50	17.68	18.85
1800	0.22	0.33	0.44	0.55	0.66	0.77	0.88	0.99	1.09	1.20	1.31	1.42	1.53	1.64	1.75
78	2.55	3.83	5.11	6.38	7.66	8.94	10.21	11.49	12.77	14.04	15.32	16.60	17.87	19.15	20.42
1950	0.24	0.36	0.47	0.59	0.71	0.83	0.95	1.07	1.19	1.30	1.42	1.54	1.66	1.78	1.90
84	2.75	4.12	5.50	6.87	8.25	9.62	11.00	12.37	13.75	15.12	16.50	17.87	19.25	20.62	22.00
2100	0.26	0.38	0.51	0.64	0.77	0.89	1.02	1.15	1.28	1.40	1.53	1.66	1.79	1.92	2.04
90	2.95	4.42	5.89	7.36	8.84	10.31	11.78	13.26	14.73	16.20	17.68	19.15	20.62	22.09	23.57
2250	0.27	0.41	0.55	0.68	0.82	0.96	1.09	1.23	1.37	1.51	1.64	1.78	1.92	2.05	2.19
96	3.14	4.71	6.28	7.86	9.43	11.00	12.57	14.14	15.71	17.28	18.85	20.42	22.00	23.57	25.14
2400	0.29	0.44	0.58	0.73	0.88	1.02	1.17	1.31	1.46	1.61	1.75	1.90	2.04	2.19	2.34





## EXHAUST AIR LOUVERS (AV-EAL)

## **AIR PERFORMANCE:**



Test Results:									
Free Are	ea Velocity	Pressure Drop							
(fpm)	(m/s)	(i.wg)	(Pa)						
348	1.77	0.02	4.0						
790	4.01	0.10	23.0						
992	5.04	0.15	37.0						
1492	7.58	0.36	88.0						
1988	10.10	0.64	158						

## **TEST INFORMATION:**

Tested for Air performance in accordance with ANSI/AMCA Standard 500-L, Figure 5.5.

Test sample size is 48 in.  $\times$  48 in. with a tolerance of +0, -0.25 in.

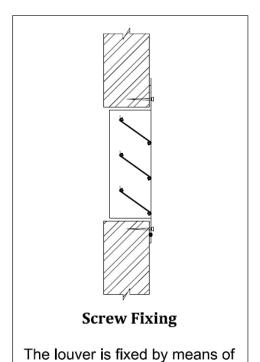
Louver air performance data are based on Exhaust performance.



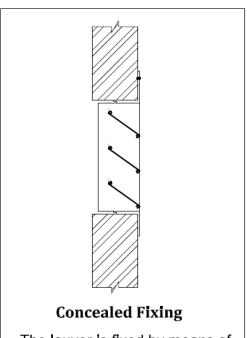


## EXHAUST AIR LOUVERS (AV-EAL)

## **PINSTALLATION DETAILS**



visible screws.



The louver is fixed by means of spring clips to the wall where no screws are visible.

