WLVE-281 Wind-Driven Rain Louver

Application

FLOWTECH's WLVE-281 Wind-Driven Rain Louver is specially designed for high ability to water-penetration. The WLVE-281 is an **AMCA CERTIFIED LOUVER**, it can effectively block water from penetrating through spaces between blades due to the good design of drainable blade shape, therefore secure the indoor possessions.

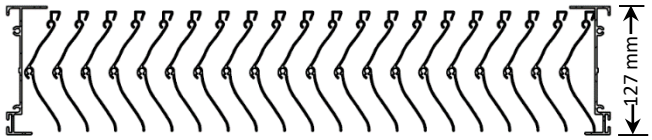
Standard Construction

Frame Extruded 6063-T5 aluminum of 2.0 mm thickness

Blade Extruded 6063-T5 of 1.5 mm thickness, positioned on approximately 28 mm blade spacing

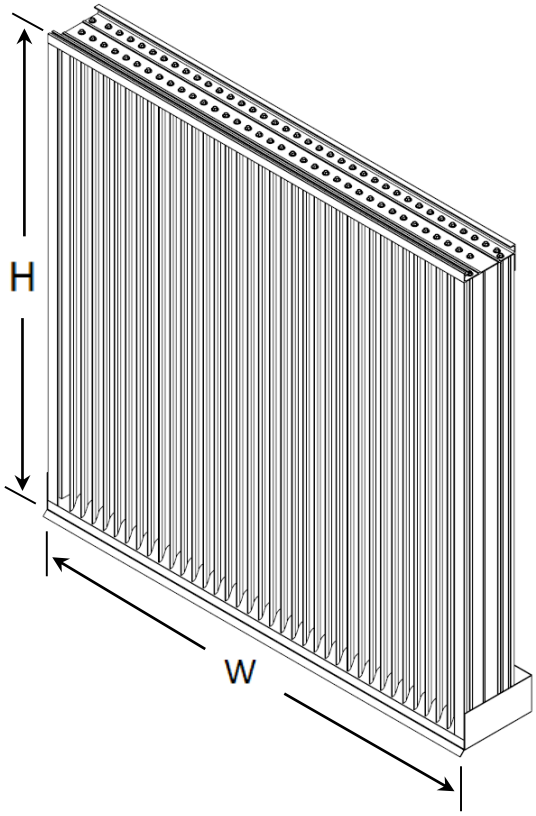
Minimum Size 12 in.(305 mm) W x 12 in.(305 mm) H

Maximum Size 120 in.(3048 mm) W or 84 in.(2134 mm) H (limited to 60 ft. sq.)



Options

- A variety of bird and insect screens
- Filter rack
- Flanged Frame
- A variety of surface finish
- Sill pan



Wind-Driven Rain Performance

76 mm/hr Rainfall & 13 m/s Wind Velocity					203 mm/hr Rainfall & 22 m/s Wind Velocity				
Core Velocity		Volume Air Flow Rate	Water Penetration		Core Velocity		Volume Air Flow Rate	Water Penetration	
fpm	m/s	m^3/s	Class	Effective	fpm	m/s	m^3/s	Class	Effective
0	0	0	A	100	0	0	0	A	100
98	0.5	0.5	A	100	98	0.5	0.5	A	100
197	1.0	1.0	A	100	197	1.0	1.0	A	100
295	1.5	1.5	A	100	295	1.5	1.5	A	100
394	2.0	2.0	A	100	394	2.0	2.0	A	100
492	2.5	2.5	A	100	492	2.5	2.5	A	100
591	3.0	3.0	A	100	591	3.0	3.0	A	100
689	3.5	3.5	A	100	689	3.5	3.5	A	100
787	4.0	4.0	A	100	787	4.0	4.0	A	99.2
886	4.5	4.5	A	100	886	4.5	4.5	A	99.2
984	5.0	5.0	A	100	984	5.0	5.0	A	99.4

*WLVE-281 Discharge Loss Coefficient Class (Intake) = 1

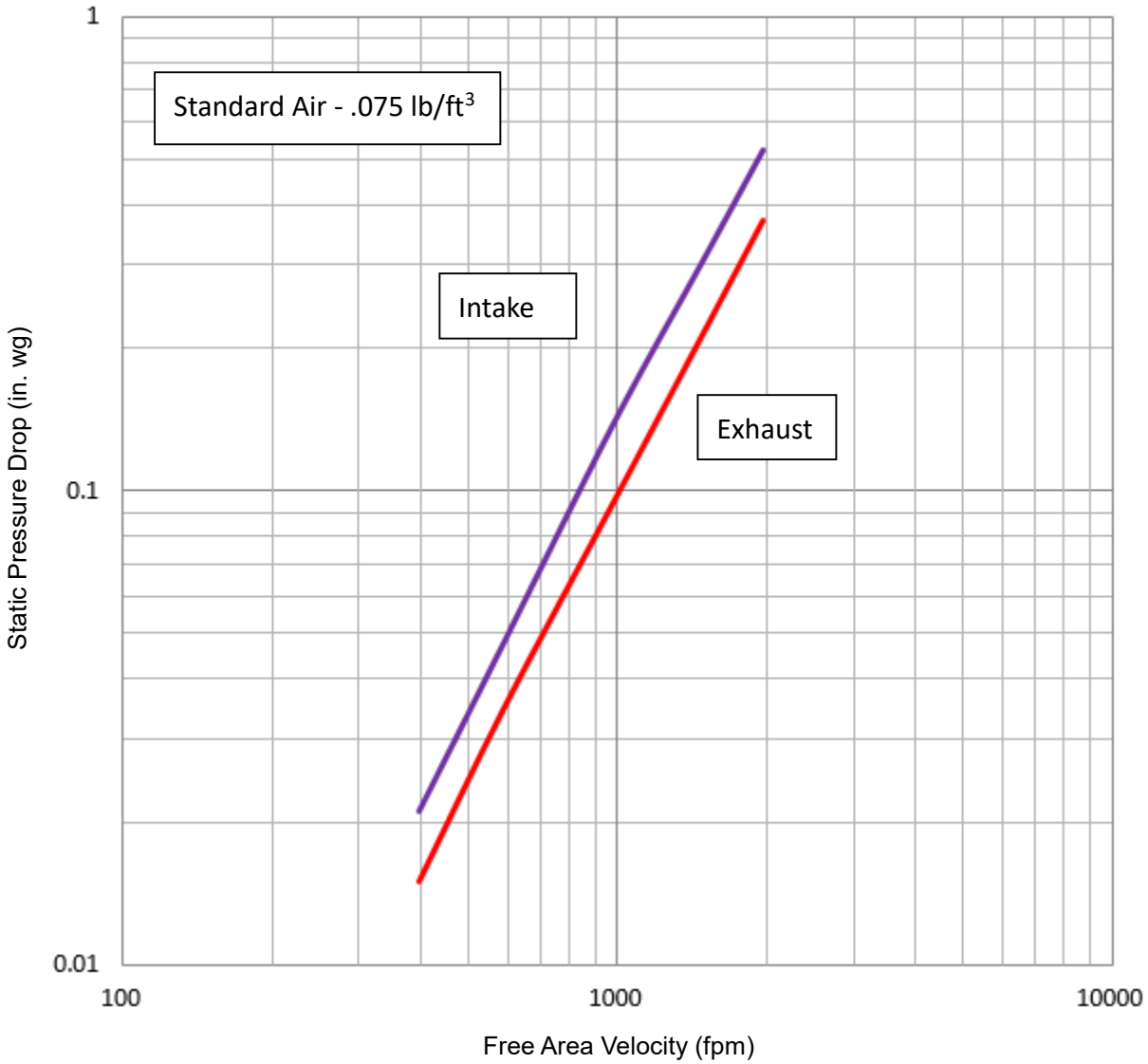
WLVE-281 Discharge Loss Coefficient Class (Exhaust) = 1

Discharge Loss Coefficient Classifications	
Class	Discharge Loss Coefficient
1	0.4 and Above
2	0.3 to 0.399
3	0.2 to 0.299
4	0.199 and Below

Wind-driven Rain Penetration Classifications	
Class	Effectiveness
A	1 to 0.99
B	0.989 to 0.95
C	0.949 to 0.80
D	Below 0.80

FLOWTECH Co. Ltd. certifies that the WLVE-281 shown hereon 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 Rain and Air Performance ratings.

Air Performance



1. Tested in accordance with ANSI/AMCA 500-L, Figure 5.5
2. Test sample size is 48 in. x 48 in.
3. Data are based on intake and exhaust performance.

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Free Area Chart (sq. m.)

Height (m)	Width (m)												
	0.305	0.457	0.610	0.762	0.914	1.067	**1.219**	1.524	1.829	2.134	2.438	2.743	3.048
0.305	0.030	0.047	0.065	0.086	0.103	0.124	0.141	0.180	0.218	0.256	0.294	0.333	0.371
0.457	0.054	0.085	0.116	0.154	0.185	0.223	0.254	0.323	0.392	0.461	0.530	0.599	0.668
0.610	0.077	0.123	0.168	0.222	0.268	0.322	0.367	0.467	0.566	0.666	0.766	0.865	0.965
0.762	0.101	0.161	0.220	0.291	0.350	0.421	0.480	0.610	0.741	0.871	1.001	1.131	1.262
0.914	0.125	0.198	0.271	0.359	0.432	0.520	0.593	0.754	0.915	1.076	1.237	1.398	1.558
1.067	0.149	0.236	0.323	0.428	0.515	0.619	0.706	0.898	1.089	1.281	1.472	1.664	1.855
1.219	0.173	0.274	0.375	0.496	0.597	0.718	**0.819**	1.041	1.263	1.486	1.708	1.930	2.152
1.372	0.197	0.312	0.426	0.564	0.679	0.817	0.932	1.185	1.438	1.691	1.943	2.196	2.449
1.524	0.220	0.349	0.478	0.633	0.762	0.916	1.045	1.329	1.612	1.895	2.179	2.462	2.746
1.676	0.244	0.387	0.530	0.701	0.844	1.015	1.158	1.472	1.786	2.100	2.415	2.729	3.043
1.829	0.268	0.425	0.582	0.770	0.926	1.114	1.271	1.616	1.961	2.305	2.650	2.995	3.340
1.981	0.292	0.463	0.633	0.838	1.009	1.213	1.384	1.759	2.135	2.510	2.886	3.261	3.636
2.134	0.316	0.500	0.685	0.906	1.091	1.312	1.497	1.903	2.309	2.715	3.121	3.527	3.933

Core Area Chart (sq. m.)

Height (m)	Width (m)												
	0.305	0.457	0.610	0.762	0.914	1.067	**1.219**	1.524	1.829	2.134	2.438	2.743	3.048
0.305	0.067	0.108	0.148	0.189	0.229	0.269	0.310	0.390	0.471	0.552	0.632	0.713	0.794
0.457	0.106	0.170	0.233	0.297	0.361	0.424	0.488	0.615	0.742	0.869	0.996	1.124	1.251
0.610	0.145	0.232	0.319	0.406	0.492	0.579	0.666	0.840	1.013	1.187	1.360	1.534	1.708
0.762	0.184	0.294	0.404	0.514	0.624	0.734	0.844	1.064	1.284	1.504	1.724	1.944	2.165
0.914	0.223	0.356	0.489	0.623	0.756	0.889	1.022	1.289	1.555	1.822	2.088	2.355	2.621
1.067	0.262	0.418	0.575	0.731	0.888	1.044	1.201	1.514	1.826	2.139	2.452	2.765	3.078
1.219	0.300	0.480	0.660	0.840	1.019	1.199	**1.379**	1.738	2.098	2.457	2.816	3.176	3.535
1.372	0.339	0.542	0.745	0.948	1.151	1.354	1.557	1.963	2.369	2.775	3.180	3.586	3.992
1.524	0.378	0.604	0.830	1.057	1.283	1.509	1.735	2.187	2.640	3.092	3.544	3.997	4.449
1.676	0.417	0.666	0.916	1.165	1.415	1.664	1.913	2.412	2.911	3.410	3.908	4.407	4.906
1.829	0.456	0.728	1.001	1.274	1.546	1.819	2.091	2.637	3.182	3.727	4.272	4.818	5.363
1.981	0.495	0.790	1.086	1.382	1.678	1.974	2.270	2.861	3.453	4.045	4.636	5.228	5.820
2.134	0.533	0.853	1.172	1.491	1.810	2.129	2.448	3.086	3.724	4.362	5.000	5.638	6.277