

WPL *Wind-Driven Rain
Resistance Louver*



Introduction

Wind-Driven Rain Resistance Louver mainly used in exterior installations for providing protection against water penetrate into indoor and air discharge or intake as well.

With effective free area of approximately 46%, the Wind-Driven Rain Resistance Louver provides a combination of both water ingress protection as well as ventilation system at efficient levels. Blades are also equipped with drip sill for diverting water away.

CONSTRUCTIONS & FEATURES

- Louver Blade designed for minimise the penetration of wind-driven rain.
- Tested in accordance AMCA 500-L Wind-Driven Rain Penetration Test.
- 46% of Free Area
- Excelent pressure drop performance.
- Aluminium construction for low maintenance and high resistance to corrosion.
- Louver Deep of 127mm.
- Blade pitch of 50mm
- Bird Screen are available upon request
- Minimum size: 300mm x 300mm
- Maximum size single section size: 1000mm x 1000mm
- Louvers larger than the maximum single section size will require site assembly of smaller sections.
- BeckryFluor is PVDF 70% acrylic 30% that meets AAMA 2605 with minimum 2 coats. For metallic colors minimum is 3 coats.

MATERIALS

Frames



Extruded Aluminium

Vanes



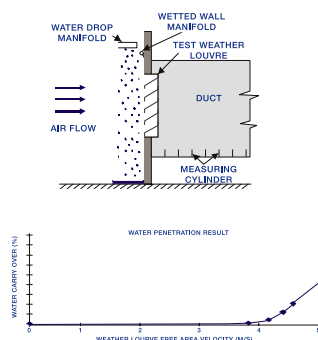
Extruded Aluminium

Bird Screen

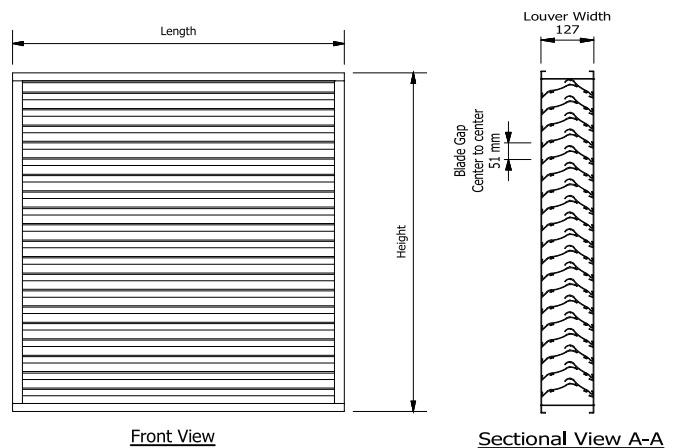


Available Upon Request

WATER PENETRATION TEST



DIMENSIONS



Free Area Guide

Width Height	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
0.3	0.01	0.01	0.01	0.02	0.03	0.03	0.03	0.04
0.4	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.90
0.5	0.04	0.05	0.07	0.08	0.10	0.12	0.13	0.14
0.6	0.05	0.08	0.10	0.12	0.14	0.16	0.18	0.20
0.7	0.07	0.10	0.13	0.16	0.19	0.21	0.24	0.27
0.8	0.10	0.13	0.17	0.20	0.24	0.27	0.30	0.34
0.9	0.11	0.15	0.19	0.23	0.27	0.31	0.35	0.39
1.0	0.12	0.17	0.21	0.26	0.31	0.35	0.40	0.45

Wind-Driven Rain Performance

47 kph wind 76 per hour rain conditions

Core Velocity [m/s]	Airflow [m ³ /min]	Free Area Velocity [m/s]	Effectiveness Ratio	Class	Discharge Loss Class Intake
0	0	0	99.9%	A	2
0.5	30	1.1	99.9%	A	2
1.0	60	2.0	99.9%	A	2
1.5	90	3.0	99.9%	A	2
1.9	120	4.0	99.9%	A	2
2.4	150	4.9	99.9%	A	2
3.0	180	5.9	99.8%	A	2
3.4	210	6.9	99.7%	A	2
4.0	240	7.9	98.9%	A	2
4.5	270	8.9	97.3%	B	2
5.0	300	9.9	95.3%	B	2

Note:

1. Core are is the open are of the louver face [face area less louver frames]. Core Velocity is the airflow velocity through the Core Area of the louver [1m x 1m]
2. Free Area of test size is calculated according to AMCA standard 500-L.
3. Wind Driven Rain Penetration Classes:

Class	Effectiveness
A	99.9% to 99%
B	98.9% to 95%
C	94.9% to 80%
D	Below 80%

4. Intake Discharge Loss Class 2

Discharge Loss Coefficient is calculated by diving a louvers actual airflow rate Vs a theoretical airflow for the opening. It provides an indication of the louvers airflow characteristics.

5. Discharge Loss Classes:

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



WPL

*Wind-Driven Rain
Resistance Louver*



Products Range

Grilles



Diffusers



Dampers



Fire & Smoke Protection



Accessories



VAV



Silencer



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