



*Wind Driven Rain
Resistance Louvre*



Introduction

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

With free area of approximately 57%, Prudent Aire Wind Driven Rain Resistance Louvre 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.
- Standard 57% free area
- Excelent pressure drop performance.
- Aluminium construction for low maintenance and high resistance to corrosion.
- Louvre Deep of 127mm.
- Blade pitch of 50mm
- Bird Screen are available upon request
- Minimum size: 300mm x 300mm
- Maximum size single section size: 1200mm x 1200mm
- Louvres 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



Sides Frame
Extruded
Aluminium



Top/Bottom Frame
Extruded
Aluminium

Vanes



Extruded
Aluminium

Bird Screen



Available
Upon Request

Surface Finishing



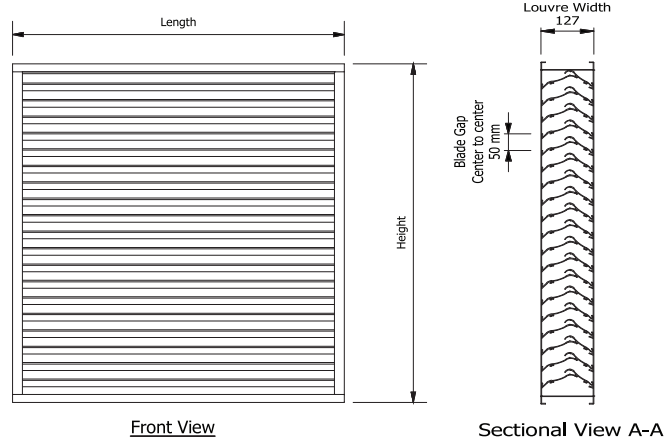
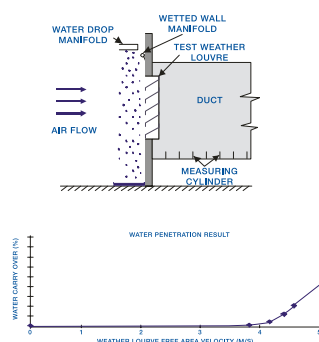
White (Matt)
Customizable
Color



White (Matt)

DIMENSIONS

WATER PENETRATION TEST



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 area is the open area of the louvre face area. Core Velocity is the airflow velocity through the core area of the louvre 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 dividing 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



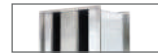
Fire & Smoke Protection



VAV



Others



Accessories



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