Airocle

15 Redbank Pl, Picton NSW 2571

P.O. Box 58 NSW 2571 n info@airocle.com.au airocle.com.au

[F] 02 46770558



A SERIES DATA SHEET

Airocle's A Series is a sheet metal constructed louvre. Designed to provide high performance and weather protection with minimal panel depth. There are 2 blade pitches available for the A Series.

110mm for Cyclonic regions and 125mm for noncyclonic regions.

Computational Fluid Dynamic Analysis was done to obtain credible data on this louvre.

- Depth of Blade = 91mm
- Blade pitch = 110mm / 125mm
- Approximate weight = 5kg/m2
- Pressure drop no greater than 40 Pascal at 3m/s
- Available with all hardware
- Available in a panel or continuous look

PERFORMANCE SPECIFICATIONS:

• Free Open Area

FOA = 53% (110mm pitch)

- = 50% (125mm pitch)
- Coefficient of Discharge, Cd = 0.60
- Effective Aerodynamic Area, EAA = 0.3

PERFORMANCE LEVEL:

According to AS 4740: 2000 (Natural Ventilators— Classification and performance)

• Airflow Performance: Class 2

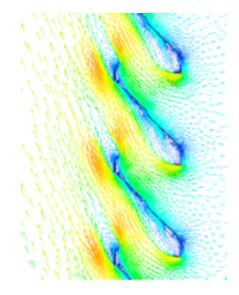


Figure 1: A Series CFD Testing, Velocity Vector

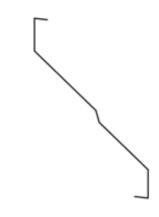


Figure 2: A Series louvre blade

IMPORTANT NOTES

It is important that the wind velocity through the free open area (FOA) of a louvre is identified. This will then determine the pressure drop of the louvre and will govern the degree of possible water penetration due to rain. No external louvre can carry a guarantee that water penetration will be prevented in all weather conditions involving wind and/or rain. When there is no control over the wind velocity passing through the louvre, the louvres' performance in relation to water penetration cannot be guaranteed. Airocle can assist in selecting a louvre with the right performance class, and understanding the circumstances around the louvre to minimize water ingress. Contact Airocle if you require assistance in choosing the most suitable louvre for your needs.

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A Series Pressure Drop 45 40 35 Pressure Drop (Pa) $v = 1.6243x^2 - 0.1397x + 0.086$ 30 25 20 15 10 5 0 2 0 1 3 4 5 Throat Velocity (m/s)

Figure 3: A Series Louvre Pressure Drop Graph for a 1m H x 1m W Louvre Panel

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