



Cascade Series[®] Fixed Aluminium Louvres



Louvreclad's Cascade Series[®] is a 100mm pitch, extruded aluminium louvre which is best suited to projects where maximum airflow is critical to the design. This high-performance and aerodynamic louvre has been designed to ensure low pressure drops and provide 64% free open area.

Distinctive Features:

- Blades are of sheet metal construction and are available in Colorbond[®] steel and aluminium
- Large amount of open area for maximum airflow
- Controls the entry of cold air, dust and wind-driven rain

Attention to Detail:

- 64% free open area
- Maximum blade span: 1000mm
- Single stage or two-stage configurations



MAXIMUM AIRFLOW

Performance tested to AS/NZS 4740:2000



Rain Defence: Standard: Class D | Two stage: Class A
Aerodynamics: Standard: Class 1 | Two stage: Class 2
Note: Full CFD report available on request.

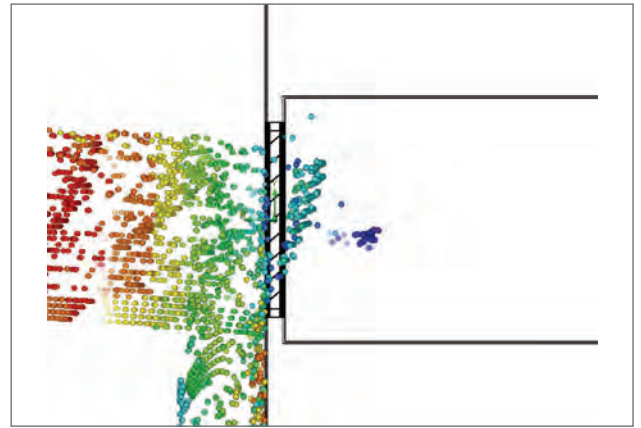
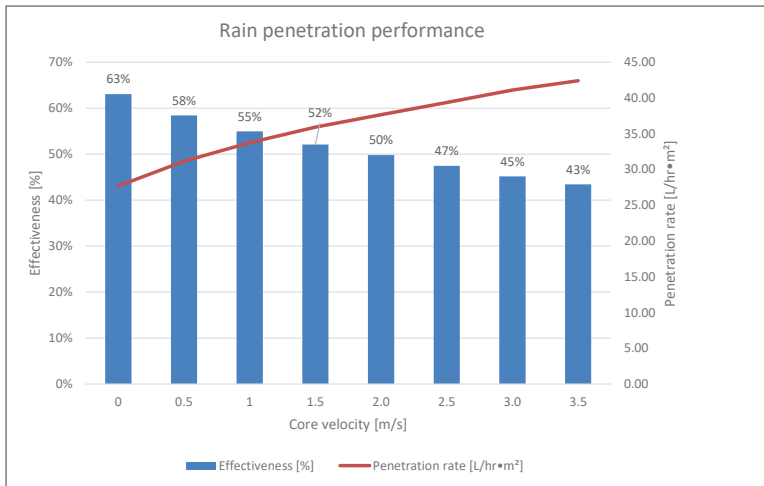


visit louvrecad.com phone 1300 165 678

PERFORMANCE DATA - SINGLE STAGE

The Cascade Series® is also available as a two-stage louvre system to meet the rain defence requirements. Like all Louvreclad fixed louvre systems, the Cascade Series can be supplied as pre-fabricated panels or a continuous louvre system. The Cascade Series® is certified for incidental live load making it a superior option for all commercial and industrial projects.

Performance tested to AS/NZS 4740:2000 Louvreclad Cascade Series® this high-performance louvre achieves a Class 2 for aerodynamics and Class D for rain defence, while providing 64% free open area making it an ideal choice for mechanical plant rooms, commercial screening and integrating into architectural facades when maximum airflow is a crucial to the design.

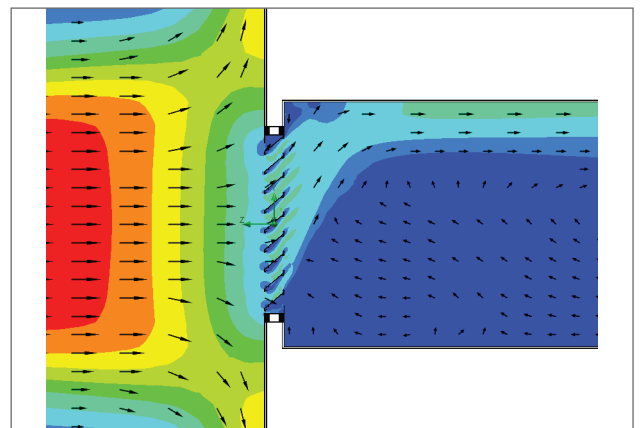
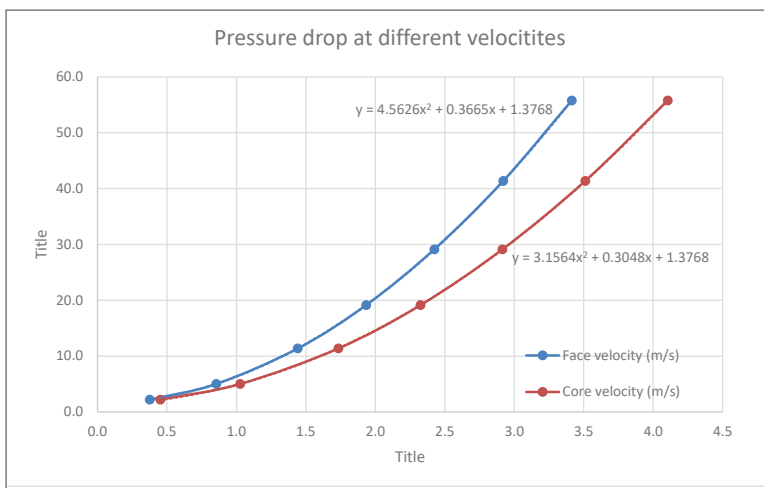


Rain penetration

Rain Defence tested to AS/NZS 4740:2000

Rain penetration analysis is tested to AS/NZS 4740:2000 and was conducted at a constant rain flow rate with ventilation rates ranging from 0.5m³/s to 3.5 m³/s. The results concluded that the ventilator has low rain defence performance and is summarized in Table 2.

The average rain penetration effectiveness at core velocities from 0 to 3.5m/s was 52% effective achieving a Class D rating



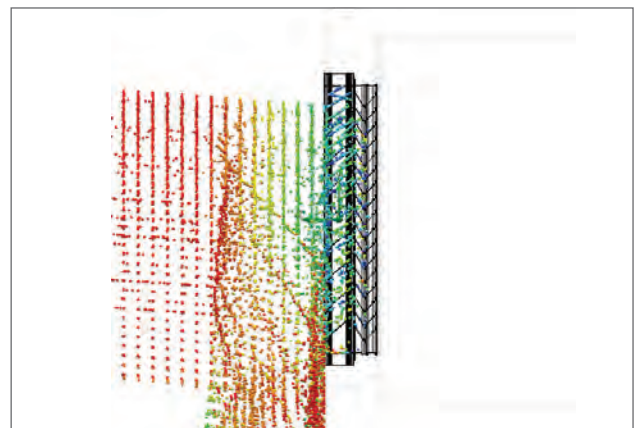
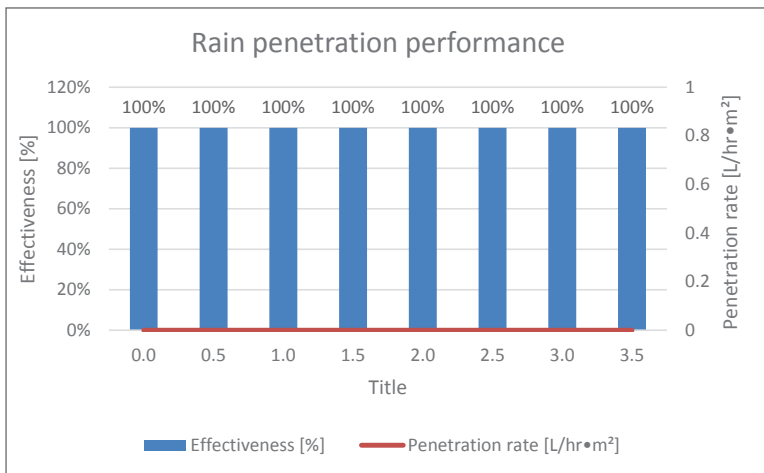
Velocity vectors

Aerodynamics tested to AS/NZS 4740:2000

The aerodynamics and discharge coefficient analysis was conducted to AS/NZS 4740:2000 with the ventilation rate ranging from 0.4m/s to 3.4m/s. Table 2 summarizes the ventilator's aerodynamic performance at different face velocities, resulting in an average discharge coefficient of 0.612 and effective aerodynamic area of 0.32m² while achieving a Class 2 performance rating.

PERFORMANCE DATA - TWO STAGE

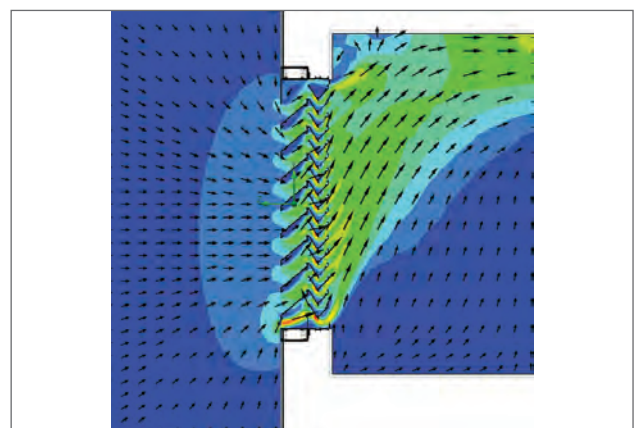
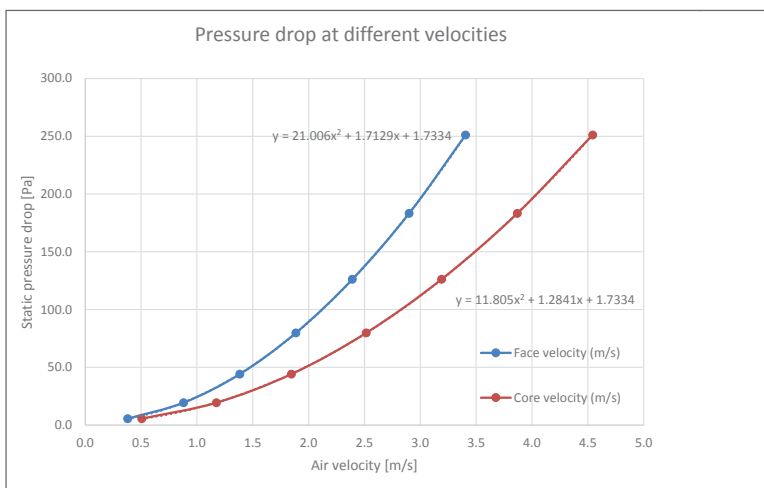
Louvreclad's Cascade Series[®] Two-stage louvre achieves an A2 Performance Classification in accordance AS/NZS 4740:2000. The double interlocking blades ensure 100% effective rain defence making it one of the highest performing louvres on the market and providing the perfect balance between these two-compromising factors of rain defence and aerodynamics. Designed for zero vision, the Cascade Series[®] two-stage louvre can be supplied in pre-fabricated panels or as a continuous louvre.



Rain penetration

Rain Defence tested to AS 4740:2000

Rain penetration analysis is tested to AS/NZS 4740:2000 and was conducted at a constant rain flow rate with ventilation rates ranging from 0.5m3/s to 3.5 m3/s. The results concluded that the ventilator has superior rain defence performance and is summarized in Table 2. The average rain penetration effectiveness at core velocities from 0 to 3.5m/s was 100% effective achieving a Class A rating.



Velocity vectors

Aerodynamics tested to AS 4740:2000

This aerodynamic and discharge coefficient analysis was conducted to AS4740:2000 with the ventilation rate ranging from 0.4m/s to 3.4m/s. Table 2 summarizes the ventilator's aerodynamic performance at different face velocities.

The Cascade Series[®] Two Stage louvre tested performance resulted in an effective aerodynamic area of 0.16m² and an average discharge coefficient of 0.562 achieving a Class 2 performance rating.

DRAFT SPECIFICATION

Louvres will be Louvreclad Cascade Series® 100mm pitch, extruded aluminium louvre (single stage, two-stage) The louvre should provide [64% or 50%] free open area. The louvre should be performance tested to AS/NZS4740:2000 and for single stage louvres, achieve a Class D for rain defence and Class 1 for aerodynamics. For Two Stage Louvres achieve a Class A for rain defence and Class 2 for aerodynamics.

Base Material & Finish

Louvres will be manufactured in [powder coated/anodised] aluminium finish in [state colour]

Accessories

Louvres will be fitted with [nominate options/accessories from the selection].

Installation and Mounting

Installation and mounting details will be designed in accordance with proprietary systems and recommendations as designed and manufactured by Louvreclad Pty. Ltd. Phone: 1300 165 678 Email: sales@louvreclad.com

Base Material Options

- Extruded Aluminium

Finishes Available

Choose from the following range of finishes:

- complete powder coated range
- complete anodised range

Specialised coatings are also available on request.

Accessories

Bird/Vermin Mesh

Select from the following:

- galvanised
- galvanised powder coated
- stainless steel
- plastic
- perforated metal
- expanded metal

Insect Mesh

Select from the following:

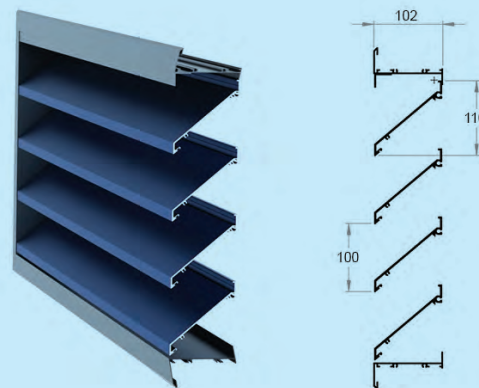
- aluminium
- fibreglass
- stainless steel
- perforated metal

Other Louvre Accessories

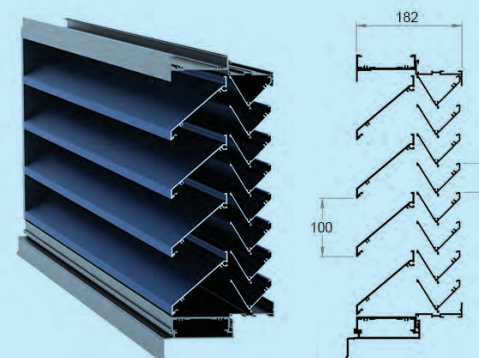
- Security screens and bars
- Blanking sheets
- Volume control dampers
- Fire and smoke dampers
- Dust filters
- 2nd stage louvre

PROFILES

Cascade Series® standard louvre



Cascade Series® two-stage louvre



📍 WOULD YOU LIKE TO KNOW MORE?

If you have any questions about this product, or if you would like to speak to a member of our expert team about how we can tailor a solution for you, call: **1300 165 678** or visit: louvreclad.com