

# OVL - 120

## HydroGuard - Vertical Weather Louver

### MODEL OVL-120

#### FEATURES

- Ultra High Aerodynamic Performance
- Louver Coefficient Class 1 Entry and Discharge
- Water Penetration Performance Class A
- Vertical Blade Profile
- Storm Resistant
- Obstructed Line of Sight
- Tested to BS EN13030:2001

#### OPTIONS

##### Finish:

- Powder Coat finish (standard)
- Natural anodised 25µm finish (on request)
- Warranty powder coatings available (on request)
- Insect screens (on request)
- Blank-off panels (on request)
- Head and/or sill flashing (on request)
- Security bars (on request)
- Filter racks (on request)



The OVL-120 louver designed from proven Holyoake louver technology, featuring improved weather performance and aerodynamic performance.



The Holyoake OVL-120 system offers a striking vertical façade louver alternative that can be used in place of more conventional horizontal configurations while providing an effective and functional louver system. Based on proven Holyoake louver technology, the blade features a unique profile that captures water on its surface and minimises carryover through overlapping blades - ensuring both aesthetic appeal and high-performance functionality.



#### TYPICAL APPLICATIONS



The OVL-120 louver can be installed as part of the Mechanical Services System for either intake or exhaust applications and is suited for applications where high airflows are required, or extreme weather conditions are possible.

Typical uses are to provide controlled air movement in conjunction with powered and natural ventilation systems in stadiums, data centres, factories, plant rooms, power stations, and projects that require similar large air volumes.

The OVL-120 louver is constructed with 6063 T6 extruded aluminium, mechanically locked together ensuring a reliable and resilient louver.

#### CONSTRUCTION

<b>Surround:</b>	125mm deep
<b>Blades:</b>	120mm x 1.5mm
<b>Mesh:</b>	Aluminium as standard Stainless Steel 10 x 10 x 0.9mm (on request)
<b>Mullion:</b>	Fitted to rear at intervals no greater than 1000mm spacing
<b>Free Area:</b>	1200mm x 1200mm unit (0.76m <sup>2</sup> ) - 53%



## OVL 120 PRODUCT GUIDE WEIGHTS (KG)

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600 x 600	14	1500 x 1500	74
900 x 900	28	1500 x 4000	193
1200 x 1200	49	2000 x 3500	220

## TESTING STANDARDS

**BS EN 13030: 2001 Standard:** Ventilation for buildings - Terminals  
- Performance testing of louvers subjected to simulated rain

 Pressure Area Velocities	<b>0 - 3.5m/s</b>
 Water Ingress Efficiency	<b>Class A</b>
 Wind Load Rating	<b>Level 1</b>

All louvers have been tested under a simulated exterior wind face velocity of 13m/s (as nominated by AS/NZS 4740:2000) alongside the simulated building intake louver velocities of 0.5m/s to 3.5m/s.

Intake louver velocities equate to the pressure area velocities nominated.

## PERFORMANCE DATA

### Coefficient of Discharge "Cd"

Louver Pressure Drop (Pa)	Louver Face Velocity (m/s)	Coefficient Cd
10.1	1.759	0.426
14.7	2.128	0.428
19.6	2.471	0.430
24.8	2.779	0.430
30.0	3.056	0.430
35.0	3.309	0.431
40.7	3.548	0.429
45.5	3.764	0.430
51.1	3.972	0.429
55.0	4.162	0.432

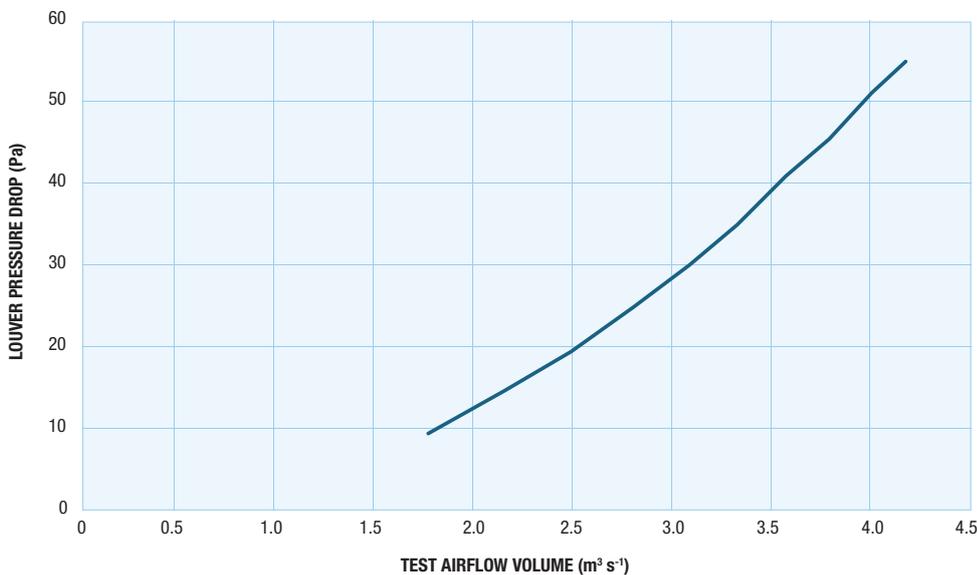
## RAIN PENETRATION

### Test Conforms to BS EN 13030

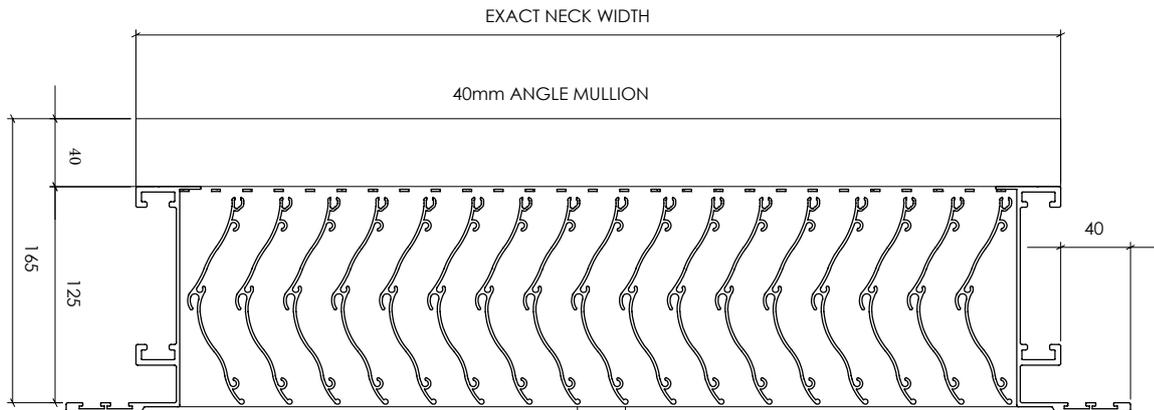
Louver Face Velocity (m/s)	Effectiveness (%)	Classification
0.000	99.7	A
0.501	99.7	A
1.001	99.7	A
1.501	99.8	A
2.001	99.9	A
2.500	100.0	A
3.001	100.0	A
3.500	100.0	A

## MEAN COEFFICIENT OF DISCHARGE 0.429

Test conforms to BS EN 13030 / BS EN 13181

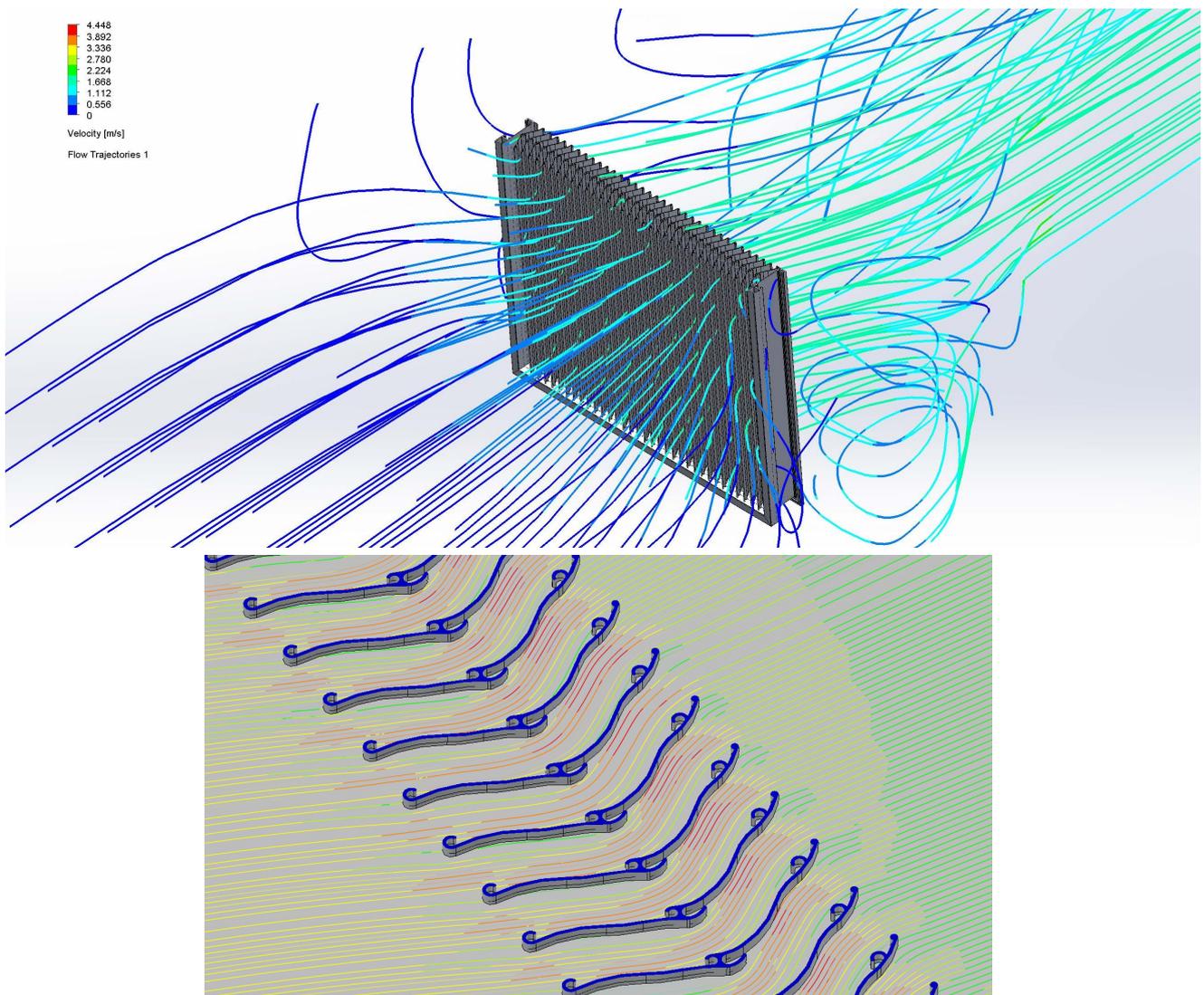


## DIMENSIONAL DATA



## CFD ANALYSIS RESULTS

CFD was used to supplement physical testing to achieve the best possible performance.



Velocity streamlines through the OVL 120 louver (top) with a close-up view of the blades (bottom).