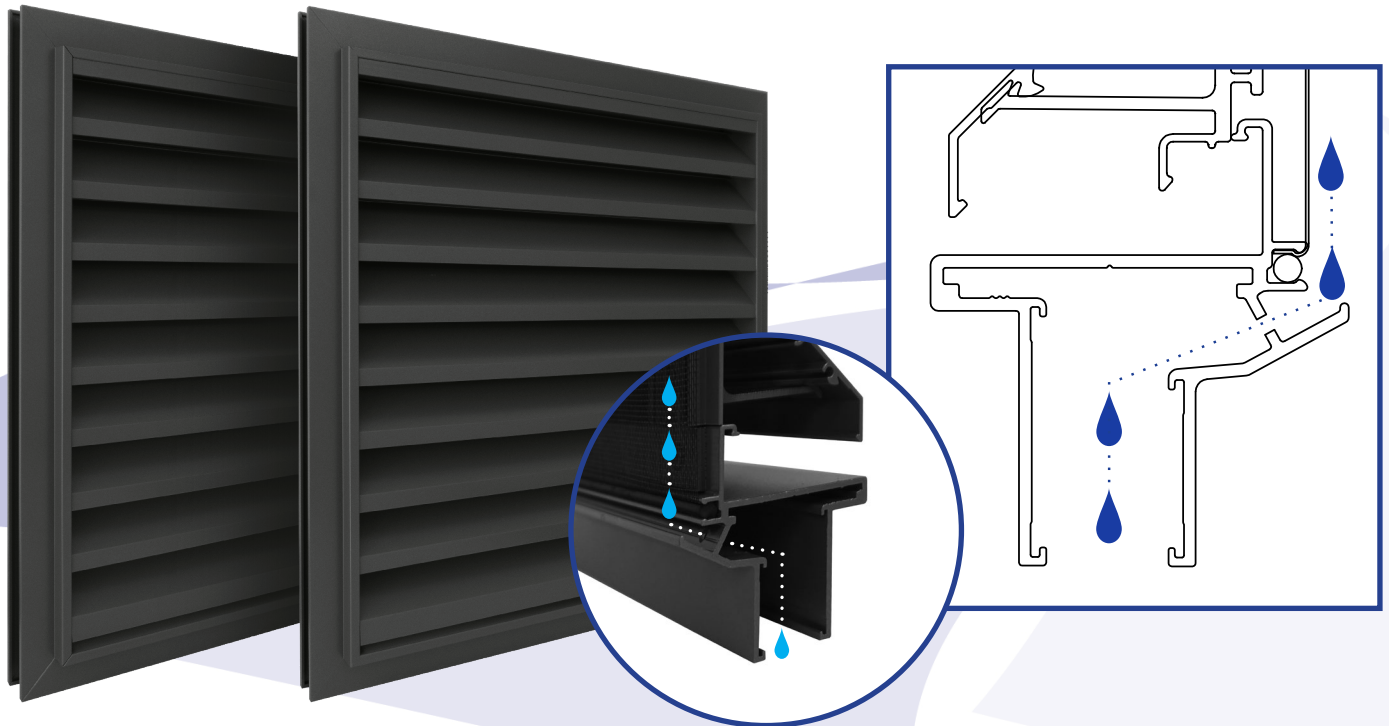


AVS50 GL DR

(Integrally Drained) Product Data Sheet



United Kingdom Patent Application No. 1413937.2

General Description

The AVS 50 is a medium format extruded aluminium louvre system specifically designed for use within the window industry that has been extensively used in schools and higher education facilities, hospitals as well as a number of high profile residential and retail schemes. The UNIQUE new **DR** version of this product has been specifically designed to allow any water that collects on the flyscreen and drops down to track out of the base of the louvre and into the existing drainage system of the window or curtain wall system. Suitability of this method of drainage should be checked with the relevant window systems supplier to confirm acceptability.

Technical Details

Materials

- Extruded Aluminium alloy profiles to 6063 T6
- Profile thickness 1.5mm
- Mechanically jointed with Zintec corner chevrons

Performance

- Class 'A' weather rating with Fibreglass Insect Mesh
- Class 'B' weather rating with Stainless Steel Insect Mesh
- Refer to BSRIA performance evaluation data on pages 2 & 3 of the product data sheet
- 50% Free area based on louvre core (excludes top and bottom blade arrangements and any intervening blade carrying profiles)
- Mean Ce Factor 0.202 (Class 3)

Dimensions

- 50mm Blade Pitch
- Product depth 66mm o/all
- Glazed-in outer frames to suit 24 & 28mm as standard
- Glazing rebate height 29mm (refer to section drawing on page 5)

Options

- 24 or 28mm Glazed-In Outer Frames as standard
- Flyscreen Options include External Grade Fibreglass as standard or Stainless Steel
- Enhanced Security Option
- Blanking Panels – thermal (composite) or simple sheet blanking
- Birdguard

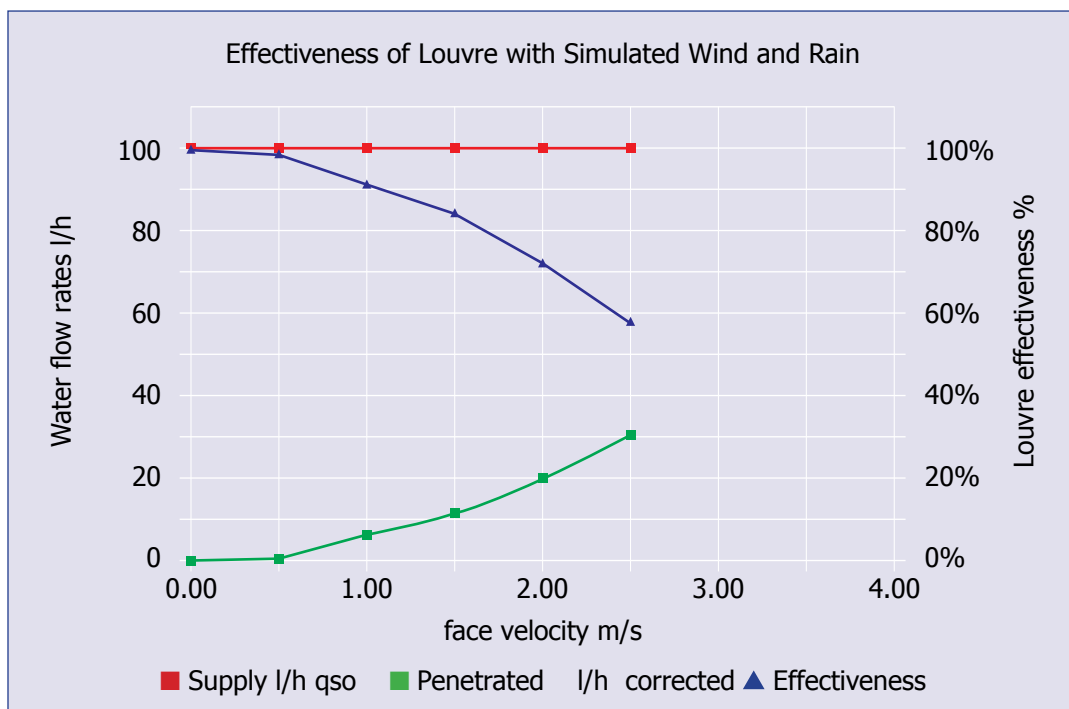
Tel: 01903 726 348 • Fax: 01903 680 022

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Classification from design tests undertaken by BSRIA based on a 980 x 980 core louvre area (0.960m²).

Weathering Performance with Fibreglass Insect Mesh:

VENTILATION RATE		WATER FLOW RATES		Effectiveness	
Volume m ³ /s	Velocity m/s	Supply l/h	Penetrated l/h	Effectiveness	Classification
0.00	0.00	100.2	0.3	99.6%	A
0.48	0.50	100.2	0.9	98.7%	B
0.96	1.00	100.2	6.1	91.5%	C
1.44	1.50	100.2	11.2	84.4%	C
1.92	2.00	100.2	19.8	72.4%	D
2.40	2.50	100.2	30.6	57.6%	D



Performance testing is undertaken in line with BS EN 13030:2001 Ventilation for Buildings. Terminals. Performance testing of louvres subject to simulated rain.

It should be noted that testing is undertaken on louvres of a specific size range only, generally 1m x 1m and so the performance data in relation to weathering is only applicable to a louvre of that size and under the conditions described in the test. Accordingly performance data should only ever be used as a guide to actual performance or to provide comparative performance between different louvre types.

AVS50 GL DR

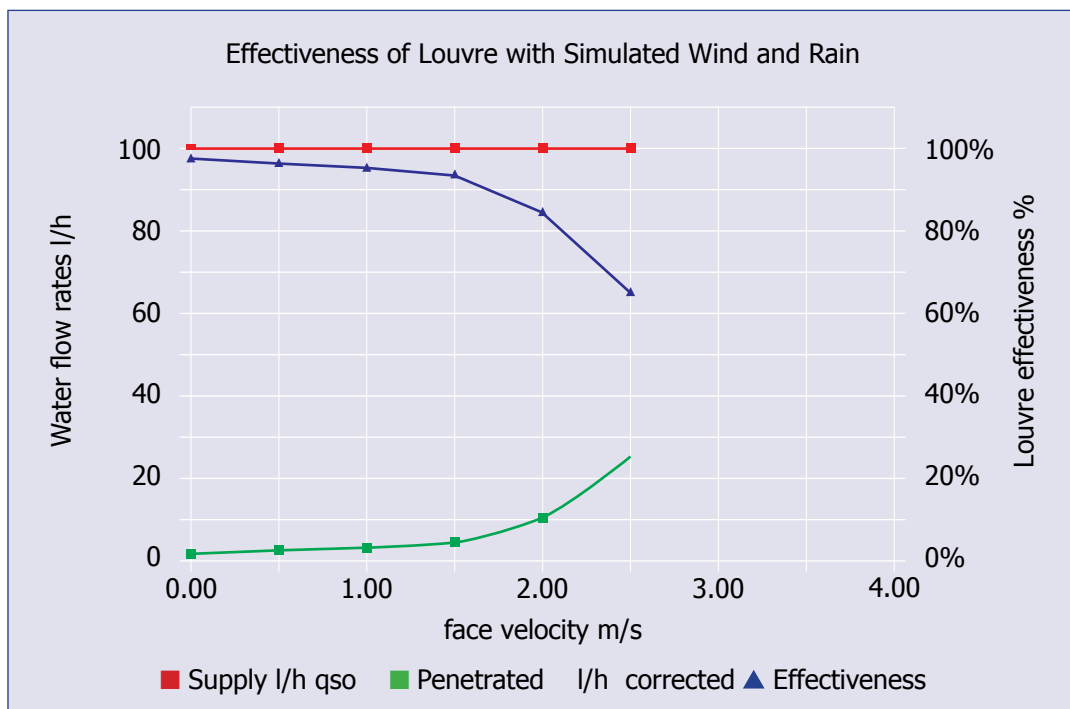
Performance Data 2



Classification from design tests undertaken by BSRIA based on a 980 x 980 core louvre area (0.960m²).

Weathering Performance with Stainless Steel Insect Mesh:

VENTILATION RATE		WATER FLOW RATES		Effectiveness	
Volume m ³ /s	Velocity m/s	Supply l/h	Penetrated l/h	Effectiveness	Classification
0.00	0.00	100.2	1.7	97.0%	B
0.48	0.50	100.2	2.6	96.4%	B
0.96	1.00	100.2	3.2	95.5%	B
1.44	1.50	100.2	4.5	93.7%	C
1.92	2.00	100.2	10.8	85.0%	C
2.40	2.00	100.2	25.1	65.2%	D



Performance testing is undertaken in line with BS EN 13030:2001 Ventilation for Buildings. Terminals. Performance testing of louvres subject to simulated rain.

It should be noted that testing is undertaken on louvres of a specific size range only, generally 1m x 1m and so the performance data in relation to weathering is only applicable to a louvre of that size and under the conditions described in the test. Accordingly performance data should only ever be used as a guide to actual performance or to provide comparative performance between different louvre types.

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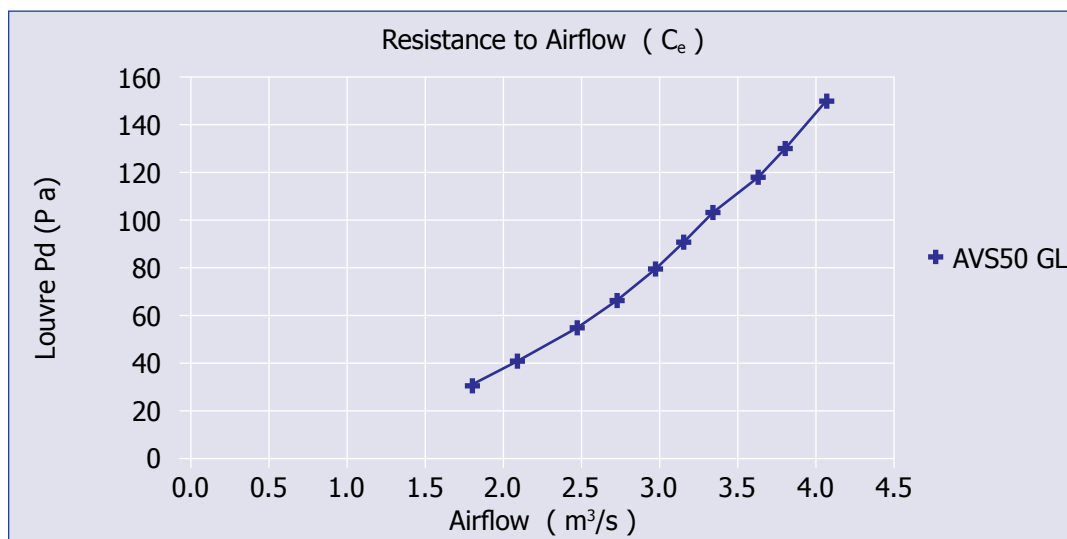
Advanced Ventilation Systems Ltd, Unit U9, Rudford Industrial Estate, Ford Road, Nr Arundel, West Sussex, BN18 0BD

AVS50 GL DR

Performance Data 3

Airflow Performance with Flyscreen:

Louvre pd Pascals	LOUVRE FACE VELOCITY		AIR FLOW RATE		Coefficient C_e
	m/s		Test m^3/s	Theoretical m^3/s	
31.4	1.91		1.814	6.828	0.266
41.2	2.23		2.113	7.821	0.270
55.7	2.60		2.468	9.094	0.271
67.3	2.88		2.730	9.996	0.273
79.2	3.13		2.968	10.844	0.274
90.9	3.32		3.148	11.617	0.271
102.7	3.54		3.356	12.348	0.272
117.6	3.82		3.620	13.213	0.274
130.4	4.01		3.804	13.914	0.273
150.7	4.30		4.076	14.958	0.273
				mean C_e	0.272
				Class	3



NB. The theoretical airflow rate is based on the face area of the louvre with the blades removed, and the coefficient is the measured airflow rate divided by the theoretical airflow rate

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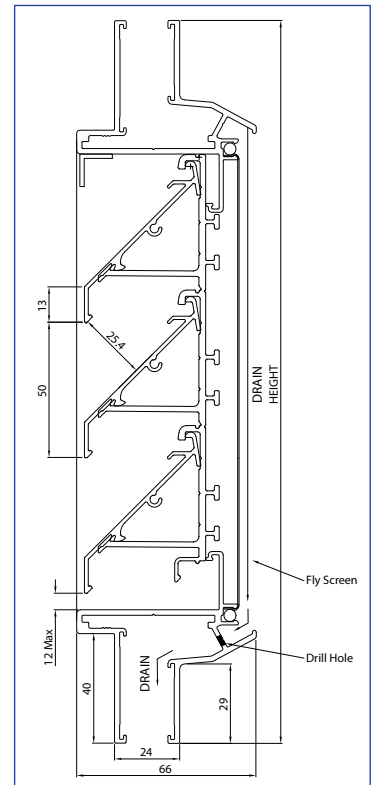
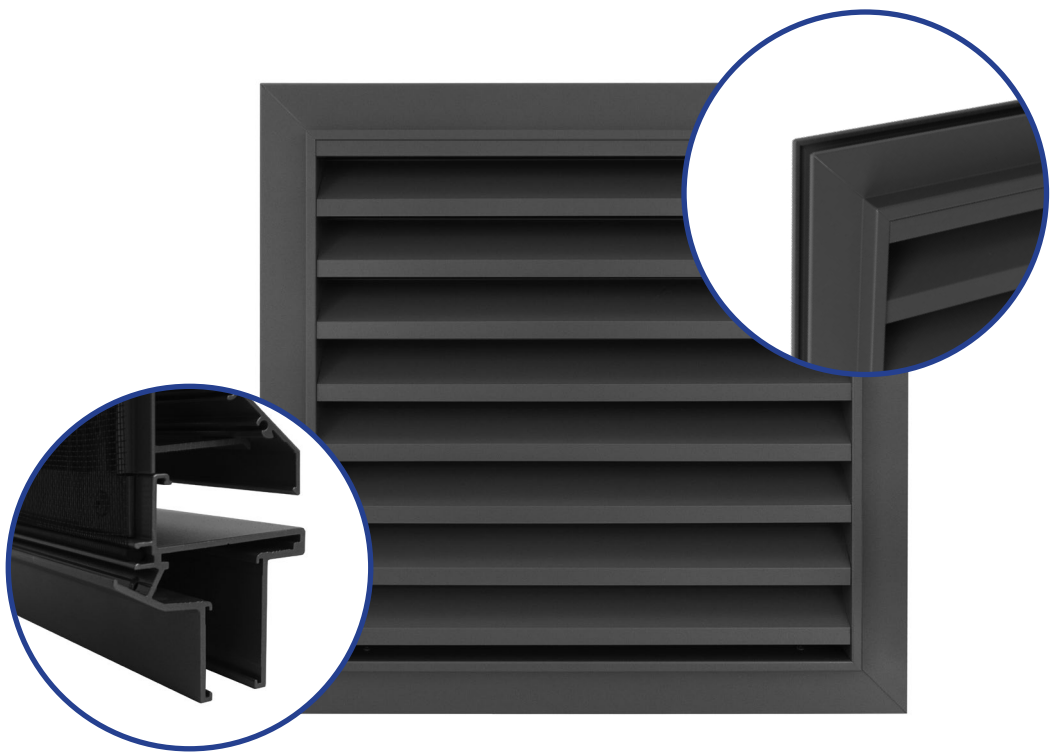
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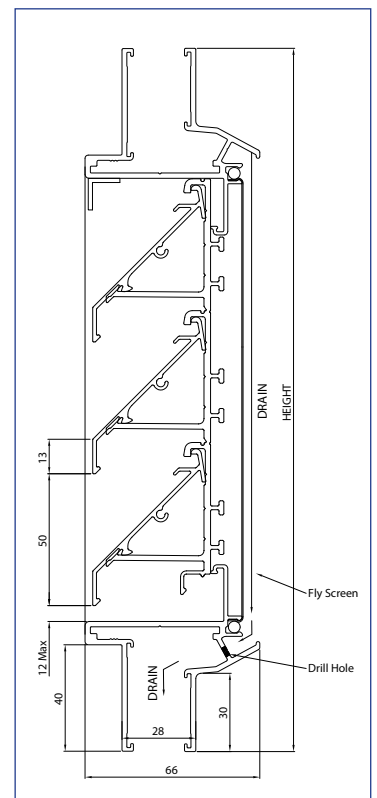
AVS50 GL DR

Product Variants

AVS50 GL24 DR



AVS50 GL28 DR



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