



AOV Systems

LP-AOV Product Specification Sheet



LP-AOV Louvered Ventilator

Smoke and Natural ventilator

Tested to BS-EN 12101: Part 2: 2003

Overview

The LP_AOV is a natural and smoke ventilator perfect for comfort ventilation or as part of a N-SHEV (Natural, smoke and heat exhaust ventilation) system.

Product Specification

Sides & Ends

1.5mm press formed aluminium.

Louvre Blade Options

- 1.5mm single skin aluminium.
- 1.5mm double skin with 25mm PIR.
- 2.0mm translucent double skin polycarbonate. ``

Louvre Blade Pivots

6.0mm diameter solid aluminium bearings in shouldered nylon66 bushes for maintenance free operation.

Finish Options

- Mill finish aluminium
- Polyester powder coated to a BS Standard or RAL colour

Optional Accessories

- Birdguards - 12mm square galvanised wire mesh
- Security Bars/Guards - 16mm Ø solid steel bar
- Insect Mesh - woven aluminium
- Fusible link shields
- Internal closure pieces and flashings

Control Options

- Electric
- Pneumatic
- Manual
- Thermal Release

Installation

The LP-AOV is suitable for fixing in a wide variety of applications. The ventilator is supplied in two parts to facilitate easy installation on site, the base assembly and louvre box assembly. The base types and applications are as follows: Turndown Base - mounting onto weathered roof upstand Flat Base - mounting directly onto roof sheeting Glazing Base - integrating into glazing systems The LP-AOV can also be supplied with a hinged base for use as an access hatch.



Louvre Blade U-Values

The LP_AOV can be supplied with both insulated louvre blades and an insulated body to assist in ensuring the building is adequately insulated.

The comparative U-Values for the available louvre blades options are as follows;

Louvre Specification	U-Value W/m ² ° K
Single Skin Aluminium (1.5mm)	6
Insulated Blades (25mm PIR)	0.66
Polycarbonate Blades (2mm Translucent)	1.75

Translucent polycarbonate louvre blades provide excellent daylighting using a durable UV stabilised material. When closed it can provide an average diffused light transmission in excess of 80%, enabling savings on artificial lighting. Pile weather seals are also fitted to the louvre blade edges and sides to minimise heat loss.

Control Options & Certification

The following control options are tested to the below standards

Control Options	Tested To
24v Electric Drive Open/Drive Close	EN-12101
Electric 230v Drive Open/Drive Close	BS-7346
Electric 24v & 230v Spring Return	BS-7346
Pneumatic Air To Open	EN- 12101
Pneumatic Air To Close	EN-12101
Manual	BS-7346

Testing

The LP-AOV has been tested to BS EN 12101 – Part 2: 2003: Specification for natural and heat exhaust ventilators. When closed the ventilator is weatherproof and is tested to BS 5368 Parts 1 & 2.

Test	Class	Test	Class
SN-Pneumatic	SL-500	Temp (Low)	T (-5°C)
SN-Electric	SL-125	Temp (High)	B-300
Wind Load	WL-1500	Reliability	RE-1000

Free Area Tables & Technical Drawing Sheet

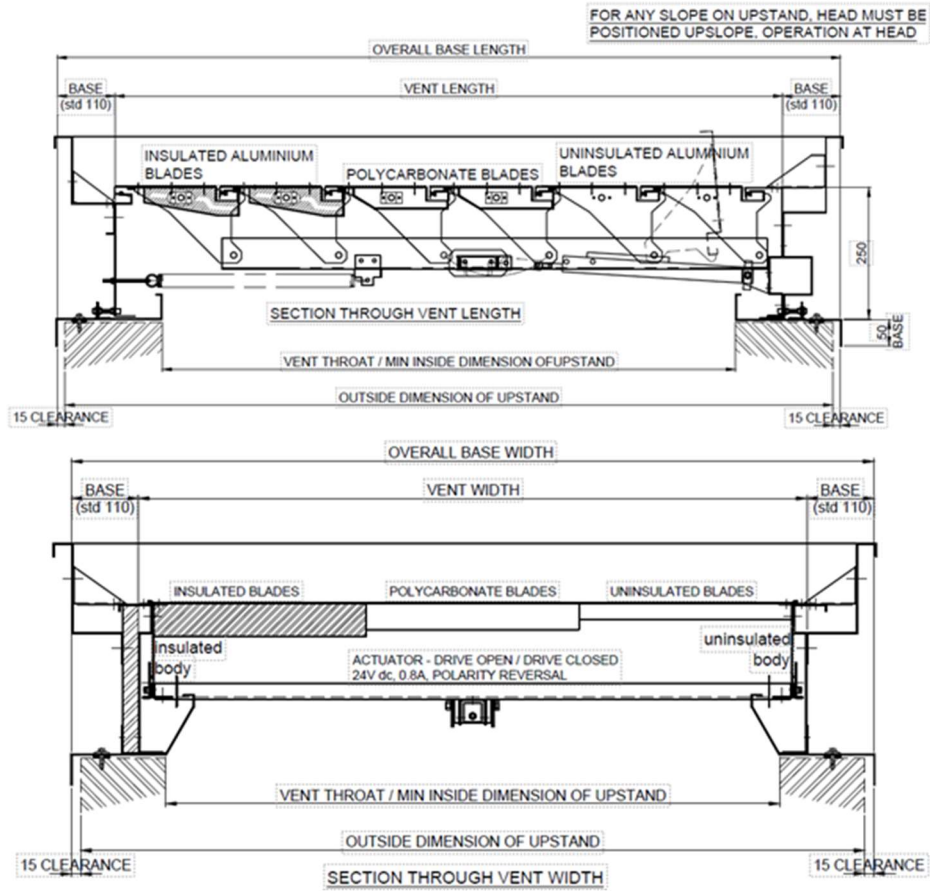
LP-AOV

Vent Width 500mm to 1200mm		Width Code	05		06		07		08		09		10		11		12	
		Vent Width	500		600		700		800		900		1000		1100		1200	
		Throat Width	410		510		610		710		810		910		1010		1110	
Length Code	Vent Length	Throat Length	Av	AvCv	Av	AvCv	Av	AvCv	Av	AvCv	Av	AvCv	Av	AvCv	Av	AvCv	Av	AvCv
04	870	690	0.28	0.23	0.35	0.28	0.42	0.33	0.49	0.38	0.56	0.42	0.63	0.47	0.7	0.52	0.77	0.57
05	1070	890	0.36	0.29	0.45	0.35	0.54	0.41	0.63	0.47	0.72	0.53	0.81	0.59	0.90	0.65	0.99	0.72
06	1270	1090	0.45	0.35	0.56	0.42	0.66	0.49	0.77	0.56	0.88	0.63	0.99	0.70	1.10	0.77	1.21	0.85
07	1470	1290	0.53	0.40	0.66	0.49	0.79	0.58	0.92	0.66	1.04	0.74	1.17	0.82	1.30	0.91	1.43	1.01
08	1670	1490	0.61	0.48	0.76	0.57	0.91	0.67	1.06	0.76	1.21	0.86	1.36	0.95	1.50	1.05	1.65	1.14
09	1870	1690	0.69	0.53	0.86	0.64	1.03	0.76	1.20	0.87	1.37	0.98	1.54	1.07	1.71	1.19	1.88	1.30
10	2070	1890	0.77	0.60	0.96	0.72	1.15	0.84	1.34	0.96	1.53	1.08	1.72	1.20	1.91	1.32	2.10	1.47
11	2270	2090	0.86	0.67	1.07	0.80	1.27	0.94	1.48	1.07	1.69	1.21	1.90	1.34	2.11	1.47	2.32	1.63
12	2470	2290	0.94	0.73	1.17	0.87	1.40	1.04	1.63	1.19	1.85	1.33	2.08	1.48	2.31	1.63	2.54	1.81
13	2670	2490	1.02	0.80	1.27	0.96	1.52	1.14	1.77	1.30	2.02	1.47	2.27	1.63	2.51	1.79	2.76	1.99
14	2870	2690	1.10	0.88	1.37	1.05	1.64	1.23	1.91	1.40	2.18	1.58	2.45	1.78	2.72	1.96	2.99	2.14
15	3070	2890	1.18	0.94	1.47	1.12	1.76	1.31	2.05	1.50	2.34	1.71	2.63	1.90	2.92	2.09	3.21	2.28
16	3270	3090	1.27	1.00	1.58	1.20	1.88	1.40	2.19	1.62	2.50	1.82	2.81	2.03	3.12	2.23	3.43	2.43
17	3470	3290	1.35	1.06	1.68	1.27	2.01	1.51	2.34	1.72	2.66	1.94	2.99	2.15	3.32	2.37	3.65	2.58

Vent Width 1300mm to 2000mm		Width Code	13		14		15		16		17		18		19		20	
		Vent Width	1300		1400		1500		1600		1700		1800		1900		2000	
		Throat Width	1210		1310		1410		1510		1610		1710		1810		1910	
Length Code	Vent Length	Throat Length	Av	AvCv	Av	AvCv	Av	AvCv	Av	AvCv	Av	AvCv	Av	AvCv	Av	AvCv	Av	AvCv
04	870	690	0.83	0.62	0.90	0.67	0.97	0.73	1.04	0.78	1.11	0.84	1.18	0.89	1.25	0.94	1.32	0.99
05	1070	890	1.08	0.78	1.17	0.84	1.25	0.91	1.34	0.98	1.43	1.04	1.52	1.12	1.61	1.18	1.70	1.24
06	1270	1090	1.32	0.92	1.43	1.00	1.54	1.09	1.65	1.16	1.75	1.23	1.86	1.33	1.97	1.40	2.08	1.47
07	1470	1290	1.56	1.09	1.69	1.17	1.82	1.26	1.95	1.36	2.08	1.45	2.21	1.53	2.33	1.65	2.46	1.73
08	1670	1490	1.80	1.26	1.95	1.36	2.10	1.45	2.25	1.55	2.40	1.68	2.55	1.77	2.70	1.87	2.85	2.00
09	1870	1690	2.04	1.41	2.21	1.54	2.38	1.65	2.55	1.77	2.72	1.91	2.89	2.02	3.06	2.13	3.23	2.24
10	2070	1890	2.29	1.59	2.48	1.71	2.66	1.86	2.85	1.99	3.04	2.11	3.23	2.27	3.42	2.40	3.61	2.53
11	2270	2090	2.53	1.77	2.74	1.91	2.95	2.04	3.16	2.22	3.36	2.35	3.57	2.49	3.78	2.63	3.99	2.77
12	2470	2290	2.77	1.96	3.00	2.11	3.23	2.26	3.46	2.45	3.69	2.60	3.92	2.76	4.14	2.91	4.37	3.06
13	2670	2490	3.01	2.15	3.26	2.32	3.51	2.48	3.76	2.65	4.01	2.81	4.26	2.98	4.51	3.15	4.76	3.31

Av = Geometric Free Area (m²) - Performance may vary depending on the build of the blade as per Approved Doc B
 AvCv = Areodynamic Free Area (m²) - Results obtained during EN12101 Part 2

Standard Drawings



Weight Chart

Width Code	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20
Length Code																
04	13.00	14.00	15.00	16.00	17.00	18.00	19.00	20.00	21.00	22.00	23.00	24.00	25.00	26.00	27.00	28.00
05	15.00	16.00	17.00	18.00	19.00	20.00	21.00	22.50	23.25	24.25	25.50	26.50	27.50	29.00	30.25	31.00
06	17.50	18.50	19.50	20.50	21.50	22.50	23.75	25.00	26.25	27.25	28.50	30.25	32.00	33.50	34.50	35.50
07	18.75	19.50	21.25	22.50	23.75	25.00	26.25	27.00	28.25	29.50	31.00	32.25	33.50	35.00	36.25	37.50
08	20.25	21.50	23.25	24.50	25.75	27.00	28.50	30.00	31.25	32.50	34.00	35.25	36.50	38.00	39.50	41.00
09	21.75	23.00	24.50	26.00	27.75	29.00	30.50	32.00	33.50	35.00	36.50	38.00	39.50	41.00	42.50	44.00
10	23.50	25.00	27.00	28.50	30.00	31.50	33.00	34.50	36.00	37.50	39.50	41.00	42.50	44.00	45.75	47.50
11	25.25	27.50	29.50	30.75	32.00	33.50	35.25	37.00	38.50	40.00	42.00	43.75	45.50	47.00	48.00	49.00
12	27.00	29.25	30.50	32.00	33.75	35.50	37.25	39.25	41.00	43.00	45.00	46.75	48.50	51.00	52.75	54.00
13	28.50	30.00	32.00	34.00	36.00	38.00	40.00	42.00	43.50	45.00	47.50	49.50	51.50	53.00	54.00	56.00
14	31.50	33.50	35.50	37.50	39.00	40.50	42.25	44.00	45.50	47.25	49.50	51.00	53.00	55.00	56.00	59.00
15	34.50	36.25	37.75	39.25	40.75	42.25	43.50	45.00	47.50	49.50	51.50	53.25	55.00	56.50	58.00	61.50
16	37.25	39.50	41.25	42.75	44.25	45.75	47.00	48.25	49.75	51.50	53.50	55.50	57.00	58.00	60.50	63.75
17	40.50	42.00	43.25	44.75	46.25	47.75	49.00	50.25	51.75	53.50	55.50	57.00	58.50	60.50	62.25	67.00

About Us

AOV Systems covers the entirety of the UK. We offer an exciting range of Smoke Ventilation, Natural Ventilation, Control Panels, Roof Access Hatches, Gated Handrails, Louvres and Rooflights. Offering supply only as well as supply and installation packages.

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