

Technical Data Sheet



Roof Opensky Smoke & Natural Ventilator

General Specification

The Roof Opensky is an attractive, economical low profile louvred ventilator which has been specifically designed for both smoke and heat exhaust and natural ventilation applications.

	Features				
Base Assembly	1.5mm Press formed aluminium.				
Sides & Ends	1.5mm press formed and cleated 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	

Base Types & Installation

Opensky 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 Roof Opensky can also be supplied with a hinged base for use as an access hatch.

Louvre Blade U-values

The roof Opensky 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 roof Opensky 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

Selecting Your Vent – For Smoke Ventilation use OSWEN, For Natural Ventilation use OSW

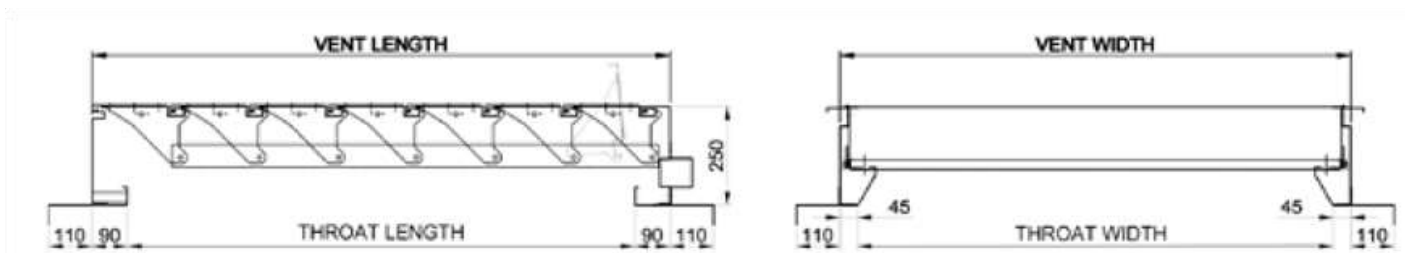
OSWEN	05 (length code)	12 (width code)
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Vent Width 500mm to 1200mm		Width Code	05		06		07		08		09		10		11		12	
		Vent Width	500		600		700		800		900		1000		1100		1200	
		Throat Width	410		510		610		710		810		910		1010		1110	
Length Code	Vent Length	Throat 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	0.70	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



Free Area Tables & Technical Drawing Continued

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
14	2870	2690	3.25	2.31	3.52	2.49	3.79	2.67	4.06	2.85	4.33	3.02	4.60	3.20	4.87	3.38	5.14	3.56
15	3070	2890	3.50	2.47	3.79	2.66	4.07	2.86	4.36	3.05	4.65	3.24	4.94	3.43	5.23	3.62	5.52	3.81
16	3270	3090	3.74	2.64	4.05	2.84	4.36	3.04	4.67	3.24	4.97	3.45	5.28	3.65	5.59	3.85	5.90	4.05
17	3470	3290	3.98	2.80	4.31	3.01	4.64	3.23	4.97	3.44	5.30	3.66	5.63	3.87	5.95	4.09	6.28	4.30

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 testing using wind shields

-  Typical Detail Of Roof Opensky
-  Turndown Base

Unit Weights (kg)

Typical configuration - Uninsulated blade/uninsulated body (base not included)

Width Code	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20
Length Code							1mtr				1.5mtr					
04	17.50	18.50	19.50	20.50	21.50	22.50	23.50	24.50	25.75	27.00	28.00	29.25	30.25	31.25	32.50	34.00
05	20.00	21.00	22.00	23.00	24.00	25.00	26.00	27.00	28.50	30.00	31.00	32.75	33.50	35.00	36.50	38.00
06	22.50	23.50	24.50	25.50	26.50	27.50	29.25	30.00	31.50	33.00	34.50	36.50	38.50	40.00	41.75	43.00
07	25.00	26.00	27.00	28.00	29.00	30.00	31.50	33.00	35.00	36.50	38.00	39.25	40.50	42.25	44.25	45.50
08	27.50	28.50	29.50	30.50	31.50	32.50	34.25	36.00	38.00	39.50	41.00	42.75	44.50	46.50	48.00	49.50
09	30.00	31.00	32.00	33.00	34.00	35.00	37.00	39.00	41.25	43.00	44.50	46.25	48.00	50.00	51.75	53.50
10	32.50	33.50	34.50	36.00	37.00	38.00	40.00	42.00	44.00	46.00	48.00	49.75	51.50	53.75	55.50	57.50
11	35.00	36.00	37.25	38.50	39.25	40.50	42.75	45.00	47.50	49.25	51.00	53.00	55.00	56.75	58.25	59.50
12	38.00	39.00	40.00	41.00	42.00	43.00	45.25	47.50	50.00	52.50	54.50	56.75	59.00	62.00	63.75	65.50
13	40.50	41.50	42.25	43.25	44.50	46.00	48.25	50.50	53.50	56.00	57.50	60.00	62.50	64.50	66.00	67.50
14	43.00	44.25	45.50	46.25	47.25	48.50	51.00	53.50	57.00	59.50	61.00	63.50	66.00	69.00	71.25	73.50
15	46.00	47.00	48.00	49.00	50.00	51.00	53.75	56.50	59.50	62.00	64.50	67.00	69.50	72.50	74.50	76.50
16	48.50	50.00	51.00	52.00	53.00	54.00	56.75	59.50	63.00	66.00	68.00	70.50	73.00	76.00	77.75	79.50
17	51.00	52.25	54.00	55.50	56.75	58.50	60.25	62.00	64.25	67.00	71.00	74.00	77.00	79.50	81.00	82.50