

# Wall Opensky

Smoke & Natural Ventilator

TESTED TO BS-EN 12101:Part 2 2003

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

## 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

Wall Opensky is suitable for installation into any wall or glazed construction. It can be fixed directly into the wall fabric or supplied with either of the following optional extras.

- **Glazing Adapters** - To seamlessly fit into glazing systems.
- **Rear Fixing Flange** - For mounting external onto the wall.
- **Front Fixing Flange** - For mounting the vent flush with the wall.

Closure flashings can also be provided allowing for a neat finish to wall openings.



## Louvre Blade U-values

The wall Opensky can be supplied with insulated louvre blades 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 <sup>2</sup> °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 Wall 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
Temp (Low)	T (-5°C)
Temp (High)	B-300
Reliability	RE-1000

# Wall Opensky

## Free Area Tables & Technical Drawings

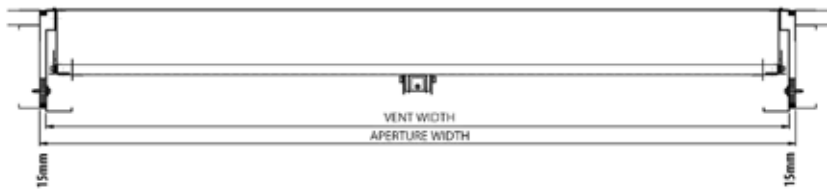
Selecting Your Vent -  
For Smoke Ventilation use OSWEN  
For Natural Ventilation use OSW

OSWEN **05** **12** — Width Code  
— Length Code

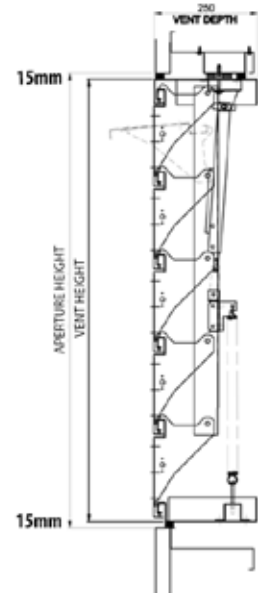
Vent Width 500mm to 1200mm		Width Code	05	06	07	08	09	10	11	12								
		Vent Width	500	600	700	800	900	1000	1100	1200								
		Aperture Width	530	630	730	830	930	1030	1130	1230								
Length Code	Vent Height	Aperture Height	Av	AvCv	Av	AvCv	Av	AvCv	Av	AvCv	Av	AvCv	Av	AvCv	Av	AvCv	Av	AvCv
04	870	900	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	1100	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	1300	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	1500	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	1700	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	1900	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	2100	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	2300	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	2500	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	2700	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	2900	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	3100	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	3300	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	3500	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								
		Aperture Width	1330	1430	1530	1630	1730	1830	1930	2030								
Length Code	Vent Height	Aperture Height	Av	AvCv	Av	AvCv	Av	AvCv	Av	AvCv	Av	AvCv	Av	AvCv	Av	AvCv	Av	AvCv
04	870	900	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	1100	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	1300	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	1500	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	1700	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	1900	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	2100	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	2300	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	2500	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	2700	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	2900	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	3100	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	3300	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	3500	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



### • Typical Detail Of Wall Opensky



### Unit Weights (kg) Typical configuration - Uninsulated blade/uninsulated body

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