

**AIRLITE**

*High performance natural louvred ventilator – for natural day to day ventilation and smoke control*

*The Airlite ventilator provides exceptionally high insulation and low air leakage as well as excellent aerodynamic and acoustic properties. It can provide both inlet and extract ventilation as well as allow the entry of natural daylight. It is suited to most industrial and commercial buildings, and conforms with EN 12101-2.*

*Its features and benefits are described overleaf.*

**VENTILATOR DESIGN**

The ventilator is available from 500mm to 2000mm throat width in mm increments, and in 7 sizes from 1200mm to 3000mm throat length in 300mm increments.

Depending on the application, louvres are made from 16 mm clear or opaque (light transmitting) or 16mm grey (non-light transmitting) 7 layer multiwall polycarbonate.

Double seals on the base and on the louvre are used to reduce air leakage when closed.

An optional moveable wind baffle which disappears when the ventilator is closed, helps the ventilator to be aerodynamically efficient.

The ventilator can be supplied either mill finish or painted to a RAL colour.

Optional accessories include bird, insect, burglar and safety guards.

**CONTROLS**

Controls are either electric (24V DC) or pneumatic. For the pneumatic version, either double action locking mechanisms, failsafe open are available. If used either as an electric or a pneumatic smoke ventilator, activation is either by local thermal fuse which opens the unit at a pre-selected temperature, or by response to an external release signal.

**PERFORMANCE**

Depending on its size and the options selected, Airlite can withstand a wind load of up to 12,500 N/m<sup>2</sup> and a snow load of up to 4,500 N/m<sup>2</sup>.

It can achieve an insulation value of up to 1.18W/m<sup>2</sup>K. Air permeability for a medium size unit of 17.1 m<sup>3</sup>/hm<sup>2</sup> at 50 Pa has been achieved on test.

**FEATURES AND BENEFITS**

**Energy efficient** - Airlite has been designed with the Energy Performance in Buildings Directive in mind, providing exceptionally high insulation and low air leakage.

**High aerodynamic, thermal and acoustic performance** - Airlite is aerodynamically efficient. It is highly insulated and is exceptionally air tight. It also provides a high degree of sound insulation.

**Unique optional movable wind baffle** – This can be installed to overcome side wind effects. This is only visible when the ventilator opens.

**Wide range of applications** - Airlite is classed as a dual purpose ventilator, providing both day to day and smoke control ventilation. Airlite can also be installed in the vertical either for low level air inlet or for high level extract.

Airlite allows the entry of natural daylight through its polycarbonate blades. There are pneumatic or electric controls and a wide range of accessories and finishes.

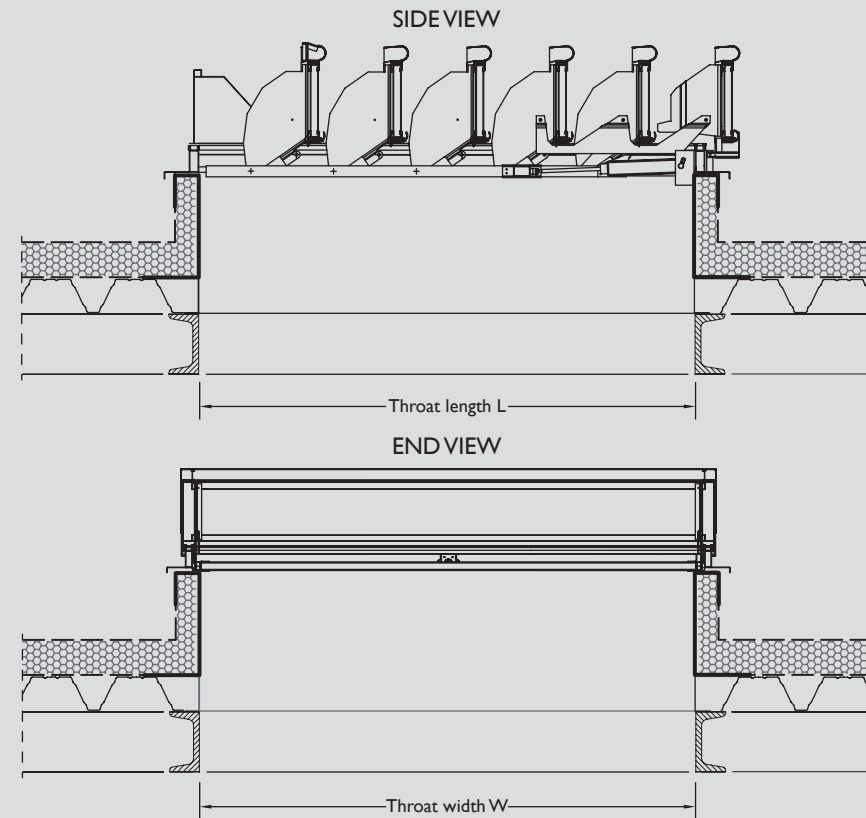
**Easy to install** - Airlite is delivered fully assembled to site and may be installed at any angle from the horizontal to the vertical. It has a wide range of base profiles to suit all sheeting, curb or glazing applications. A variable flanged variant is available for vertical installation into curtain walling, glazing or prepared openings.

**Durable** - Airlite is manufactured from tough, corrosion resistant aluminium alloy, with stainless steel fixings.

**Certified performance** - Airlite has been exhaustively tested and certified to EN 12101-2: 2003 in accredited third party test laboratories and is CE marked.

**Quality of manufacture** - Airlite is manufactured under strict quality control to ISO 9001. Each unit is given a functional test before despatch.

**Design service** - Colt provides a pre-order design service. Please contact Colt for more information relating to the application, specification, installation or servicing of Airlite.



		Length L (mm)						
		1200	1500	1800	2100	2400	2700	3000
500	Av	0.60	0.75	0.90	1.05	1.20	1.35	1.50
	MFA	0.46	0.58	0.71	0.83	0.95	1.07	1.20
	Aa	0.35	0.45	0.54	0.63	0.73	0.82	0.92
1000	Av	1.20	1.50	1.80	2.10	2.40	2.70	3.00
	MFA	0.92	1.17	1.41	1.66	1.90	2.15	2.39
	Aa	0.72	0.91	1.10	1.29	1.48	1.67	1.87
1500	Av	1.80	2.25	2.70	3.15	3.60	4.05	4.50
	MFA	1.38	1.75	2.12	2.48	2.85	3.22	3.59
	Aa	1.11	1.39	1.68	1.97	2.26	2.56	2.86
2000	Av	2.40	3.00	3.60	4.20	4.80	5.40	6.00
	MFA	1.84	2.33	2.82	3.31	3.80	4.29	4.78
	Aa	1.50	1.89	2.28	2.67	3.07	3.47	3.88

Av = Measured throat area (m<sup>2</sup>) MFA = Measured free area (m<sup>2</sup>) to Approved Document B diagram C7 Aa = Aerodynamic free area (m<sup>2</sup>)

These values are for a ventilator installed onto a flat roof with a movable wind baffle.