



Length (L1)	Ventilation Open Area cm <sup>2</sup>	Ventient EcoSmart Breathe Fully Open with filter				
		Effective Open Area (αA) cm <sup>2</sup>	Ventilation Volume (Q) m <sup>3</sup> /hr		Ventilation Volume (Q) l/s	
			ΔP = 12Pa	Friction Loss Curve Q=	ΔP = 12Pa	Friction Loss Curve Q=
500	25.2	9.6	15.5	13.7 (ΔP/9.8) <sup>0.60</sup>	4.3	3.8 (ΔP/9.8) <sup>0.60</sup>
600	30.5	11.6	18.7	16.6 (ΔP/9.8) <sup>0.60</sup>	5.2	4.6 (ΔP/9.8) <sup>0.60</sup>
700	35.8	13.6	21.9	19.4 (ΔP/9.8) <sup>0.60</sup>	6.1	5.4 (ΔP/9.8) <sup>0.60</sup>
800	41.1	15.6	25.2	22.3 (ΔP/9.8) <sup>0.60</sup>	7.0	6.2 (ΔP/9.8) <sup>0.60</sup>
900	46.4	17.6	28.3	25.1 (ΔP/9.8) <sup>0.60</sup>	7.9	7.0 (ΔP/9.8) <sup>0.60</sup>
1000	51.7	19.6	31.6	28.0 (ΔP/9.8) <sup>0.60</sup>	8.8	7.8 (ΔP/9.8) <sup>0.60</sup>
1100	57.0	21.7	35.0	31.0 (ΔP/9.8) <sup>0.60</sup>	9.7	8.6 (ΔP/9.8) <sup>0.60</sup>
1200	62.3	23.7	38.3	33.9 (ΔP/9.8) <sup>0.60</sup>	10.6	9.4 (ΔP/9.8) <sup>0.60</sup>
1300	67.6	25.7	41.4	36.7 (ΔP/9.8) <sup>0.60</sup>	11.5	10.2 (ΔP/9.8) <sup>0.60</sup>
1400	72.9	27.7	44.7	39.6 (ΔP/9.8) <sup>0.60</sup>	12.4	11.0 (ΔP/9.8) <sup>0.60</sup>
1500	78.2	29.7	47.9	42.4 (ΔP/9.8) <sup>0.60</sup>	13.3	11.8 (ΔP/9.8) <sup>0.60</sup>

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		Effective Open Area (αA) cm <sup>2</sup>	Ventilation Volume (Q) m <sup>3</sup> /hr		Ventilation Volume (Q) l/s	
			ΔP = 12Pa	Friction Loss Curve Q=	ΔP = 12Pa	Friction Loss Curve Q=
500	25.2	11.1	18.0	15.9 (ΔP/9.8) <sup>0.60</sup>	5.0	4.4 (ΔP/9.8) <sup>0.60</sup>
600	30.5	13.4	21.6	19.1 (ΔP/9.8) <sup>0.60</sup>	6.0	5.3 (ΔP/9.8) <sup>0.60</sup>
700	35.8	15.8	25.5	22.6 (ΔP/9.8) <sup>0.60</sup>	7.1	6.3 (ΔP/9.8) <sup>0.60</sup>
800	41.1	18.1	29.2	25.9 (ΔP/9.8) <sup>0.60</sup>	8.1	7.2 (ΔP/9.8) <sup>0.60</sup>
900	46.4	20.4	32.9	29.1 (ΔP/9.8) <sup>0.60</sup>	9.1	8.1 (ΔP/9.8) <sup>0.60</sup>
1,000	51.7	22.7	36.6	32.4 (ΔP/9.8) <sup>0.60</sup>	10.2	9.0 (ΔP/9.8) <sup>0.60</sup>
1,100	57.0	25.1	40.5	35.9 (ΔP/9.8) <sup>0.60</sup>	11.3	10.0 (ΔP/9.8) <sup>0.60</sup>
1,200	62.3	27.4	44.2	39.1 (ΔP/9.8) <sup>0.60</sup>	12.3	10.9 (ΔP/9.8) <sup>0.60</sup>
1,300	67.6	29.7	47.9	42.4 (ΔP/9.8) <sup>0.60</sup>	13.3	11.8 (ΔP/9.8) <sup>0.60</sup>
1,400	72.9	32.1	51.8	45.9 (ΔP/9.8) <sup>0.60</sup>	14.4	12.8 (ΔP/9.8) <sup>0.60</sup>
1,500	78.2	34.4	55.4	49.1 (ΔP/9.8) <sup>0.60</sup>	15.4	13.6 (ΔP/9.8) <sup>0.60</sup>

**NOTES**

Please contact PGA for air flow data when the Ventient EcoSmart Breathe is in the 33% open position or if another filter type is required. The addition of interior and exterior covers will impact on air flow performance depending on the inclusion of acoustic treatment, intumescent fire barrier materials and exterior ember and insect screens. This data may be available.

Effective open area (αA) is calculated in house in Japan using apparatus conforming to JIS C9603.

The use of local air cleaning devices in a room can reduce minimum outdoor air requirements (as per AS1668.2 Appendix D) thus reducing required outdoor air quantities via the trickle vent.

Seek advice from gas appliance suppliers regarding use of open flued appliances in any enclosures subject to negative pressures. Advice relating specifically to health care circumstances should be sought for applications intended for health care facilities.

Please consult the user guide for instructions on filter access and maintenance.

Where there are specific noise and vibration isolation requirements, seek advice from an acoustic and vibration consultant. Further data is available.

The designer must consider the position of the openings with respect to contamination, wind effects and uniformity of distribution as outlined in AS1668.2