Ventive™ S Technical Specification

Buoyancy driven air exchanges:

The above is based on the house size test facility monitored by Imperial College London. Buoyancy driven ventilation through single unit delivered 28m³/h of fresh air at temperature difference (the driving factor) of 13 degree C.

This means that each Ventive S is capable of approximately 1 full air exchange per hour in average Living Room, 2-3 in average Kitchen or 3-4 exchanges per hour in average bathroom on buoyancy drive alone.

At lower air temperature difference (e.g. 8°C), Ventive S delivers 16m³/h of fresh air (on buoyancy alone) which translates into 12 exchanges per day in average the Living room, approximately 1 exchange per hour in an average kitchen and over 2 exchanges per hour in an average bathroom.

Please note that the above measures buoyancy in isolation. The combined buoyancy and wind assisted performance will be higher across all temperature ranges.
Wind assisted air exchanges:

The above wind tunnel tests demonstrate the performance of the cowl at wind speeds between 0.8 and 7m/s (2.9 to 25 km/h). At wind speed 2.7m/s the ventilation rate raises to 5m\(^3\)/h, increasing gradually to 11m\(^3\)/h at the wind speed of 3.2m/s (the average wind speed in built up areas). The cowl is designed to throttle the flow at higher wind speeds to avoid discomfort.

Ventive combines wind induced drive with buoyancy to provide continuous, all year round ventilation.

Heat Recovery Efficiency:

Independent monitoring of the heat exchanger measured its performance as 92% with an air volume flow of 30\(^3\)/h.

At lower flow rates the performance increases to up to 97%, as verified by Imperial College London (ref: Peter Childs, the Professorial Lead in Engineering Design in the Faculty of Engineering).