

Whole House Ventilation



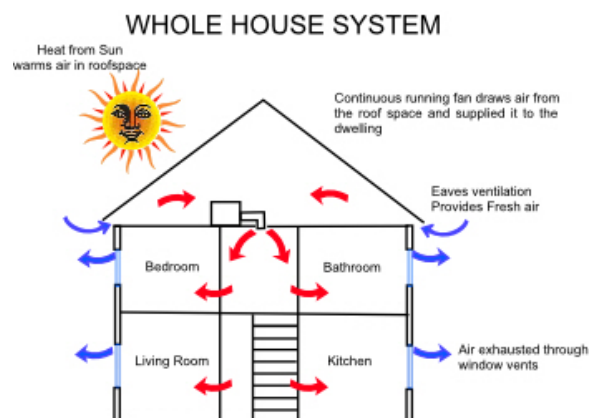
PIV LOFT UNIT

PAM Positive Input Ventilation uses air displacement to ventilate a whole dwelling, thereby improving indoor air quality and stopping or preventing condensation problems from occurring. Predominantly designed for installation in existing properties, the PAM PIV Loft Unit is very easy to install.

A single fan unit mounted in the roof space (for central location for flats) supplies fresh, filtered air into the dwelling via a central hallway or landing. This creates a slight positive air pressure which forces stale, vapour-laden air out via fortuitous air gaps or through humidity sensitive window vents.

The PAM PIV Loft Unit comprises a fan with connector duct and ceiling diffuser. The fan runs continuously, unless the loft temperature exceeds 25°C when the unit will switch off. Above this temperature the hot incoming air would be uncomfortable for the occupants and the risks of condensation are somewhat reduced. When the temperature falls below 25°C, the unit will automatically switch itself back on. At temperatures between 19°C and 25°C the unit operates in heat recovery mode, harnessing the benefits of solar gains whereby the air in the loft is warmer than outside air.

The ceiling diffuser has been aerodynamically designed to direct incoming air along the ceiling (coanda effect) where it mixes with warm, buoyant air before re-circulating downwards, thereby ensuring a more even thermal gradient between the floor and ceiling.



APPLICATIONS

Due to its ease of installation, the PAM PIV Loft Unit is designed primarily for the refurbishment of houses and flats

Features and Benefits

Energy Saving :

Supply air taken from the roof space is slightly warmer than outside air so can provide some energy saving compared with a conventional extract system

Simple and Easy Installation :

Requires only a single electrical connection. Does not require ducting through the interior spaces.

Low Running Costs :

With its DC fan, the PAM PIV Loft Unit is extremely energy efficient, costing from as little as 1p a day to run.

Elapsed Time Meter :

Show total run time, providing landlords with a foolproof check to prove usage.

Minimal Maintenance :

Replacement of the long-life filter is only required every 5 years.

Aerodynamically designed diffuser : The diffuser is designed to direct incoming air along the ceiling, thereby mixing with, re-using and recirculating high level warm air.

System Installation

A full installation guide is supplied with each system. The ceiling must be as airtight as possible to minimize re-circulation of air from within the dwelling. Roof space must be ventilated from outside, e.g. by eaves vents.

Energy Performance

The PAM PIV Loft Unit incorporates an extremely low wattage DC motor, minimizing energy usage.

Incoming air temperature	Ventilation mode	Air volume setting fan speed)	Airflow (l/s)	Power Consumption (W)	Outlet noise dBA at 1 metre
<19°C	Condensation control	1	24	4.1	21.9
		2	36	6.2	26.3
		3	48	8.6	26.1
		4	60	11.1	28.3
19°C - 25°C	Heat Recovery	1	36	6.2	-
		2	48	8.6	-
		3	60	11.1	-
		4	72	14.00	-
>25°C	Comfort	1	0	0	-
		2	0	0	-
		3	0	0	-
		4	0	0	-