



Web: www.proair.ie
Email: proair@proair.ie
Tel: 091 73 9442

**Unit 1, Polkeen Industrial Estate
Castlegar, Tuam Road
Galway**

Heat Recovery Ventilation System Control Strategies

Houses are living things, designed and built for real people. People make conscious decisions continuously about all the things they do as they go about their daily chores. Many systems installed in our homes can be automated to varying degrees. Lights can be set to come on when someone enters a room and go off a short time after they exit. A heating system can be programmed to come on at a certain time and temperature. However there are some aspects of a house that require personal decision making and a small amount of action. Examples are the kind of music one would like to listen to and the setting of the alarm system.

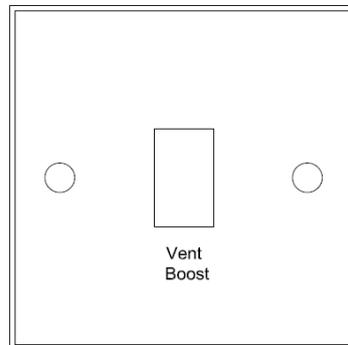
One other system in the house which can be automated but might not be desirable to automate is the ventilation system. The ventilation system is designed to work away quietly in the background twenty three hours of the day at low speed and occasionally speed up to maximum to deal with certain situations. Examples of these occasional situations might be daily showering or when spills and/or accidents.

The ventilation system is there to get rid of excess pollutants and provide a good indoor environment on a continuous basis. Examples of excess pollutants to be removed are excess moisture from showers/cooking, smells from toilets/pets and excess levels of carbon dioxide (stuffiness).

No one sensor can sense all of these and because of this, we at ProAir Systems recommend that the user be the final arbiter on when to trigger the system to boost. The ProAir system can accept a signal from a number of sources including humidity sensors, movement sensors and a manually operated push switch but does not have the intelligence to decipher the difference between the signals. For example, if the system is set to operate automatically on the onset of high humidity it won't know which bathroom is the source of the humidity and may not always react the way one wants. Further it will never be able to react to a temporary odour from a toilet.

This is why our vast experience with thousands of customers informs us that the best and most reliable form of control is a manual push switch where the occupant has full control.

This is a simple switch which looks exactly like the light switch



but differs from the light switch in that it only stays on for the time that a person has their finger on it. This is sufficient to trigger the ventilation system to full speed for a pre-determined period which the occupant can control at the main ventilation control panel.

Our best advice would be to legislate for both manual and humidity. The humidity input can be disabled if it suffers from nuisance trips etc. Manual operation is always reliable because the switches are hard wired and connected to one another.

To find out more about our ProAir 600LI unit click on this link
<http://www.proair.ie/products/proair-600/>