## **Consultants Specification**

Low energy Positive Input Ventilation system for use in homes with a loft.

The unit shall be robustly constructed from ABS polymer.

Flame retardant filters of G4 grade, surface area approximately 0.47m<sup>2</sup> (with 5 year typical maintenance period) shall be fitted, which may be removed from the unit without the use of tools. The filters shall be arranged such as to prevent their obstruction in the loft space.

The unit shall incorporate a forward curved centrifugal impeller and high efficiency brushless DC motor fitted with sealed for life, self-lubricating bearings and locked rotor protection. The unit's average power consumption shall be 0.17 watts per l/s airflow; excluding power consumed by the heating element within DRI-ECO-HEAT-HC when running..

The unit shall be supplied with a 2m length of flexible ducting and all necessary connectors and fittings.

The unit shall weigh 3.5kg and we recommend the unit is suspended from the roof structure. The unit shall be supplied with a purpose designed flame retardant polymer diffuser for efficient, directable air input. The diffuser design shall be optimised for use in areas where smoke detectors are fitted. The unit shall include 5 programmable temperature control strategies, 6 volume control settings and an optional high duty boost setting, providing an airflow rate of 70 l/s for optimum performance and occupant comfort. All control/ duty strategies shall be optimised for maximum performance and occupant comfort.

An internal run motor shall record the unit's operational time. For information on reducing radon egress, it is suggested that the details given in Positive Pressurisation: A BRE Guide to Radon Remedial Measures in Existing Dwellings may be considered.

## DRI-ECO-HC

The DRI-ECO-HC fan unit includes an internal sensor to regulate the fan speed according to the temperature of the loft. The internal sensor will increase airflow to the dwelling when the temperature in the loft space is anywhere between 19-24 degrees celsius. The unit's 'Fixed Temperature Heat Recovery' strategy shall be achieved via a sensor located in the unit and shall improve energy performance accordingly. This unit has all of the controls for the fan in the ceiling vent allowing the user to control, programme and monitor the unit from inside the property.

The unit shall be offered with a 7 year warranty.

## DRI-ECO-LINK-HC

The DRI-ECO-LINK-HC fan unit includes an internal sensor to regulate the fan speed according to the temperature of the loft. The internal sensor will increase airflow to the dwelling when the temperature in the loft is anywhere between 19-24 degrees celsius. If the DRI-ECO-RH is purchased then the temperature sensor integral to this ancillary will be used to communicate with the PIV unit and should the temperature in the loft become warmer than the dwelling, the fan will boost. The unit's 'Fixed Temperature Heat Recovery' strategies shall be achieved via these sensors and shall improve energy performance accordingly. This unit has all the controls for the fan in the ceiling vent allowing the user to control, programme and monitor the unit from inside the property. It also has the ability to be controlled using a radio frequency function and can be boosted from a remote wall mounted switch, remote CO<sub>2</sub> detector and an remote humidity sensor.

The unit shall be offered with a 7 year warranty; 1 year parts and labour, remaining years parts only. This warranty is void if the equipment is modified without authorisation, is incorrectly applied, misused, disassembled or not installed, commissioned and maintained in accordance with the details contained in the I&M manual and general good practice.

## DRI-ECO-HEAT-HC

The DRI-ECO-HEAT-HC fan unit includes an internal sensor to regulate the fan speed according to the temperature of the loft. The internal sensor will increase airflow to the dwelling when the temperature in the loft is anywhere between 19-24 degrees celsius. If the DRI-ECO-RH is purchased then the temperature sensor integral to this ancillary will be used to communicate with the PIV unit and should the temperature in the loft become warmer than the dwelling, the fan will boost. The unit's 'Fixed Temperature Heat Recovery' strategies shall be achieved via these sensors and shall improve energy performance accordingly. This unit has all the controls for the fan in the ceiling vent allowing the user to control, programme and monitor the unit from inside the property. A heater section incorporating a 400w heating element shall be fitted to the diffuser. It shall be electronically controlled so as to minimise energy use. A temperature sensor shall be fitted to the outlet of the heater and will control the output of the heater in an attempt to maintain the set point. The set point will be adjustable between 6°C and 20°C. It also has the ability to be controlled using a radio frequency function and can be boosted from a remote wall mounted switch, remote CO<sub>2</sub> detector and an remote humidity sensor.

The unit shall be offered with a 7 year warranty; 1 year parts and labour, remaining years parts only. This warranty is void if the equipment is modified without authorisation, is incorrectly applied, misused, disassembled or not installed, commissioned and maintained in accordance with the details contained in the I&M manual and general good practice.