CONSULTANTS SPECIFICATION

OPERATION

The supply and extract ventilation unit shall be positioned as indicated on the drawings and shall be in accordance with the particular fan schedule in the specification.

The combined supply and extract with heat recovery unit, shall supply filtered fresh air to each of the habitable rooms and vitiated air shall be extracted from the wet areas e.g. bathroom, en-suite, w.c, kitchen, utility rooms, etc. The supply air shall be pre-heated by the warm extract air via the integrated counter-flow heat exchanger element. The extracted air shall also be filtered before it reaches the heat exchanger block.

The ventilation unit shall vary its speed and therefore the ventilation rate, as it receives signals from one of the following:

- Manual activation from 3 position switch.
- Optional remote RF boost switch humidity sensor.
- Optional externally interconnected sensors.

Via optional PCB.

When signals are received, the fan shall alter its speed to selectable, pre-set normal and boost rates.

The unit shall have the facility to commission the supply and extract fans via inbuilt minimum and maximum speed adjustment; the fans shall have infinitely variable speed control. Once the duty of the fans is set on the facia mounted controller the unit shall automatically adjust its speed to maintain the air volume flow rate selected on a constant volume principle.

A summer bypass shall be included that shall allow fresh air to bypass the heat exchanger, when the incoming air temperature is at or above the designated "set point".

MRXBOX90L - UNIT SPECIFICATION

The unit shall be fully insulated providing excellent thermal and acoustic characteristics and shall be complete with a multi plate counter flow high efficiency heat exchanger block, with a thermal efficiency of up to 95%. The heat exchanger shall be protected by G4 grade filters on fresh air inlet and system extract. The heat exchanger and filters shall be accessible via facia access panels, enabling quick and easy maintenance.

The unit shall have low energy, high efficiency d.c. fan/motor assemblies with sealed for life bearings, the impellers shall be forward curved centrifugal type. The motors shall be suitable of an ambient temperature of 40°C.

The unit shall have integral temperature sensors that shall monitor the incoming and extracted air temperatures to provide frost protection as well as controlling the summer bypass.

A fascia mounted control unit with microprocessor controls with LCD display enabling infinitely variable adjustment of the air volume.

The unit shall be supplied complete with an insulated condensate drip tray and 20mm drain connection.

The breakout noise level and power requirements shall be as detailed by the unit manufacturer and in accordance with the ventilation equipment schedule.

MRXBOX90L - CONTROL OPTIONS

All versions shall have a pre-wired and factory fitted, fascia mounted multi function control panel with LCD display providing the following:

- Integral speed control on supply and extract – 3 speeds available: -
  1. Low speed background ventilation control/set point.
  2. Medium speed ventilation control/set point, for day to day boost.
  3. High speed ventilation control/set point for summer boost.
- Constant volume facility to adjust for system pressure.
- Filter dirty & maintenance indication on fascia control.

The standard warranty for MRXBOX90 series shall be for 5 years.