CONSULTANTS SPECIFICATION

OPERATION

The supply and extract system shall be positioned in the loft space in accordance with 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 all 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 ventilation unit shall vary its speed and therefore the ventilation rate, as it receives signals from one of the following:

- Switched live signal from light / remote switches
- Optional externally interconnected sensors

When signals are received, the fan shall alter its speed to adjustable, normal and boost rates.

An adjustable run-on facility is integrated into the unit which allows the fans to run-on for between 1 and 60 minutes after the signals have been switched off.

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.

MRXBOX95-LOFT - 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 the top access panel, enabling quick and easy maintenance.

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

The unit shall be supplied complete with an insulated condensate drip tray and 21.5mm drain connection.

The unit shall be suitable for 150mm or 125mm circular ducting.

Anti-vibration mounts are supplied with each unit to prevent vibration being tramsmitted to the ceiling timbers.

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

OPTIONAL SUMMER BYPASS - MRXBOX95B-LOFT

The summer bypass facility during the warmer months can reduce the temperature in a room by a few degrees, whilst still ventilating that room effectively. The bypass damper opens when a 230V switch signal is applied to the unit. (via a manual switch) This opens the damper via a wax actuator. When the switch signal is de-activated the unit returns to its original state (air through the heat exchanger).

MRXBOX95-LOFT - CONTROL OPTIONS

All versions shall have the following functions integrally mounted within the fan unit on a purpose made PCB, all such components pre-wired and factory fitted by the manufacturer: -

- Integral speed control on supply and extract.
- Integral background ventilation control/set point.
- Integral boost ventilation control/set point.
- Integral run on timer.
- Fan failure indication.
- Integral S/L terminal for boost from remote switch, e.g. light switch.

OPTIONAL CONTROLS

MRXBOX95-PIR Passive infra-red detector
MRXBOX95-HUM Humidistat
MRXBOX95-RFI Remote fail indictor
Units shall be the MRXBOX95-LOFT as manufactured by Nuaire.