

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:

- Switched live signal from light / remote switches.

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

The unit shall have the facility to commission the supply and extract fans independently on minimum speed (continuous background ventilation), boost control will control both fans to the same volume, via inbuilt minimum and maximum speed adjustment;. The fans shall have infinitely variable speed control.

MRXBOX95-LH2 - 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 EC 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 transmitted 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-LH2

The bypass damper opens when a 230V signal is applied to the unit (via a manual switch, supplied). This opens the damper via an actuator. When the switch signal is de-activated the unit returns to its original state (air through the heat exchanger). Outside air supplied through the bypass is still filtered, so the air quality is optimal, irrespective of the bypass setting (Open or closed).

MRXBOX95-LH2 - 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: -

- Independent control of background supply and extract flow rates.
- Single control of boost ventilation rates
- Run time monitor included
- Integral Fan failure indication.
- Integral S/L terminal for boost from remote switch, e.g. light switch.

OPTIONAL CONTROL

MRXBOX95LH-RFI Remote fail indicator.

Units shall be the MRXBOX95-LH2 as manufactured by Nuair.