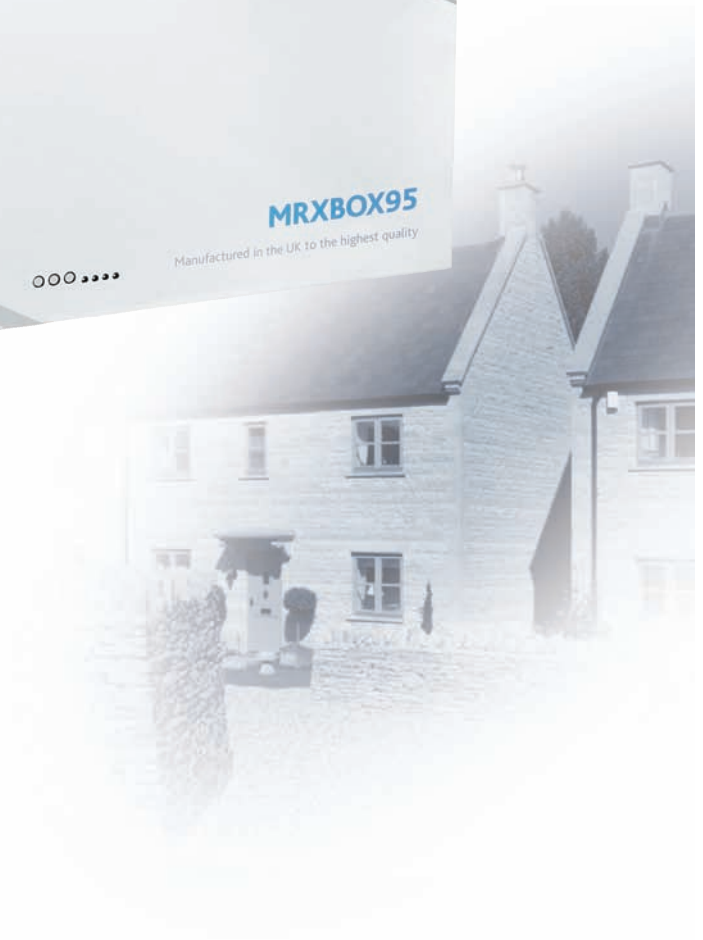


## MRXBOX95-WALL MECHANICAL SUPPLY & EXTRACT WITH HEAT RECOVERY

UP TO 95% EFFICIENT, SAP APPENDIX Q RECOGNISED.  
WALL/CUPBOARD MOUNTING DESIGN FOR SMALL TO MEDIUM  
HOUSES & APARTMENTS.



## BENEFITS

**MRXBOX95-WALL** is designed to provide optimised balanced (supply and extract) mechanical ventilation with heat recovery. Tempered air is delivered into 'living' areas whilst extracting moisture laden air from 'wet' areas, creating comfortable well ventilated homes. MRXBOX95-WALL uses the latest generation of low voltage DC fans and motors, counter flow heat exchanger and easy accessible controls. The heat exchanger block can recover up to 95% of the normally wasted heat. The two independent fans has full speed control for background and boost ventilation rates as well as a run-on timer facility.

### MEETS BUILDING REGULATIONS

SAP Appendix Q recognised. Part F&L - England & Wales. Scottish technical handbook (BRE398 referenced). Technical booklet K1998.

### HIGH EFFICIENCY

Heat exchanger is up to 95% efficient.

### EASY INSTALLATION

Compact, lightweight and simple to install. Full installation service available.

### LOW MAINTENANCE REQUIREMENT

Filter replacement typically every 12 - 18 months.

### NO NEED FOR TRICKLE VENTS

A cost saving and tenant acceptability.

### IMPROVES INDOOR AIR QUALITY

Prevents condensation by keeping moisture levels low - creating a healthier environment.

### FLEXIBLE SOLUTION

MRXBOX95-WALL ensures a flexible solution with multi 125mm dia. spigots.

### EXTREMELY LOW NOISE LEVELS

Quiet running unit ensuring occupant acceptability.

### FREE OF CHARGE CODE ADVISORY SERVICE

Takes the stress out of specifying.

### WIDE CHOICE

Range of ducting and grilles available, please contact Nuair.

### OPTIONAL SUMMER BYPASS AVAILABLE

Provides cooling during warmer months. MRXBOX95B-WALL.

### 5 YEAR WARRANTY

5 year parts and 1 year labour warranty guarantee reduced life costs and peace of mind.

### OPTIONAL SENSORS AND DETECTORS

Customise MRXBOX95-WALL for enhanced performance. All supplied with pre-plugged 10m data cable and incorporates status LED.

#### MRXBOX95-PIR (passive infra red)

A low voltage sensor, detects movement and activates system. Incorporates overrun timer and timer adjustments.



#### MRXBOX95-HUM

A low voltage sensor, activates the system when the RH level is above set point. Incorporates overrun timer and RH setpoint level adjustment.

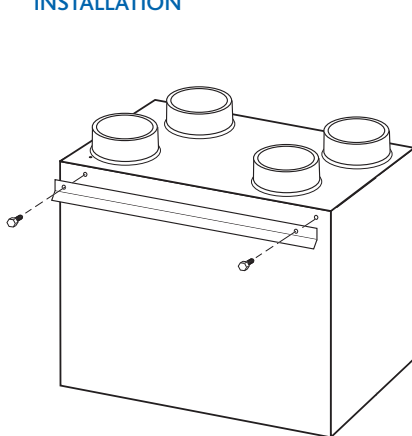


#### MRXBOX95-RFI

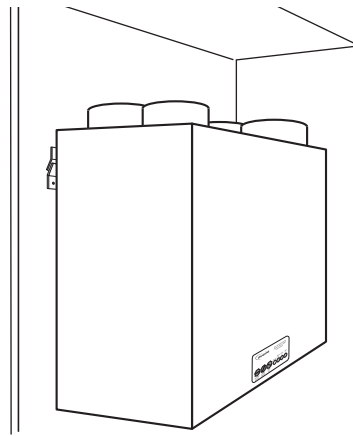
If fan failure occurs the audio visual indicator will flash a warning.



### INSTALLATION

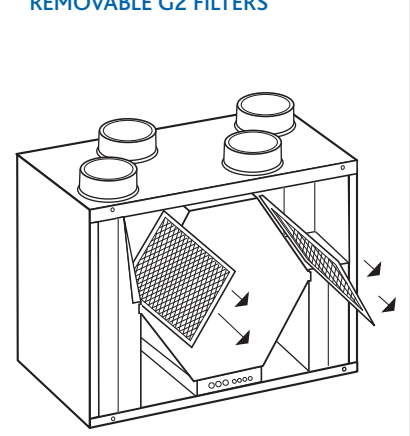


A 2 piece metal bracket is provided with the unit for wall mounting. One part of the bracket is mounted on the wall and the second part of the bracket is attached to the back of the unit.



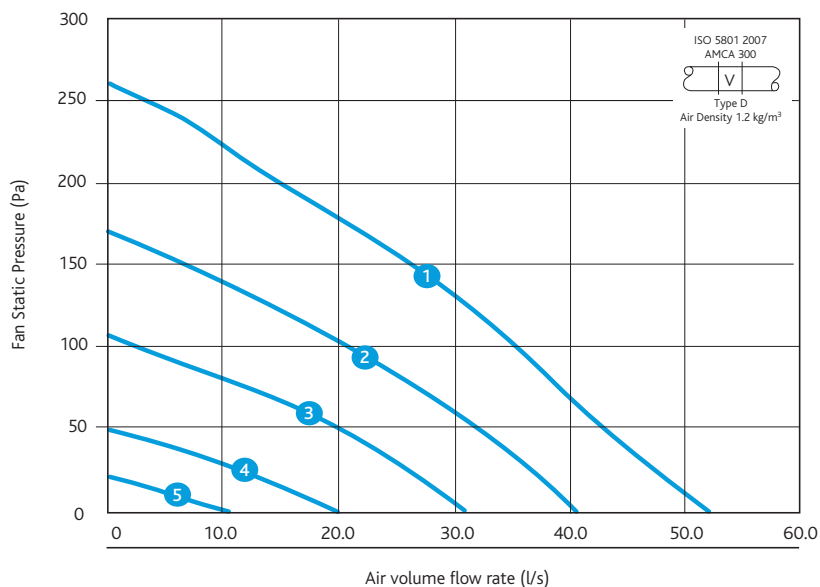
The unit and bracket are then installed onto the bracket on the wall.

### REMOVABLE G2 FILTERS

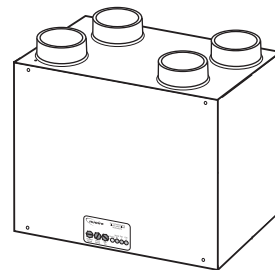


PERFORMANCE MRXBOX95-WALL

MRXBOX95

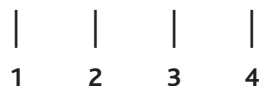


Casing



Code descriptions

MR-XBOX-95-WALL



1. Multi-room supply and extract heat recovery
2. Product range
3. Efficiency
4. Wall/cupboard application

SAP APPENDIX Q TEST RESULTS

Application	Specific fan power (W/l/s)	Heat exchange efficiency %	Energy Saving Trust Best Practice Performance Compliant
Kitchen Plus 1 wet room	0.59	92	Yes
Kitchen Plus 2 wet rooms	0.68	91	Yes
Kitchen Plus 3 wet rooms	0.83	90	Yes

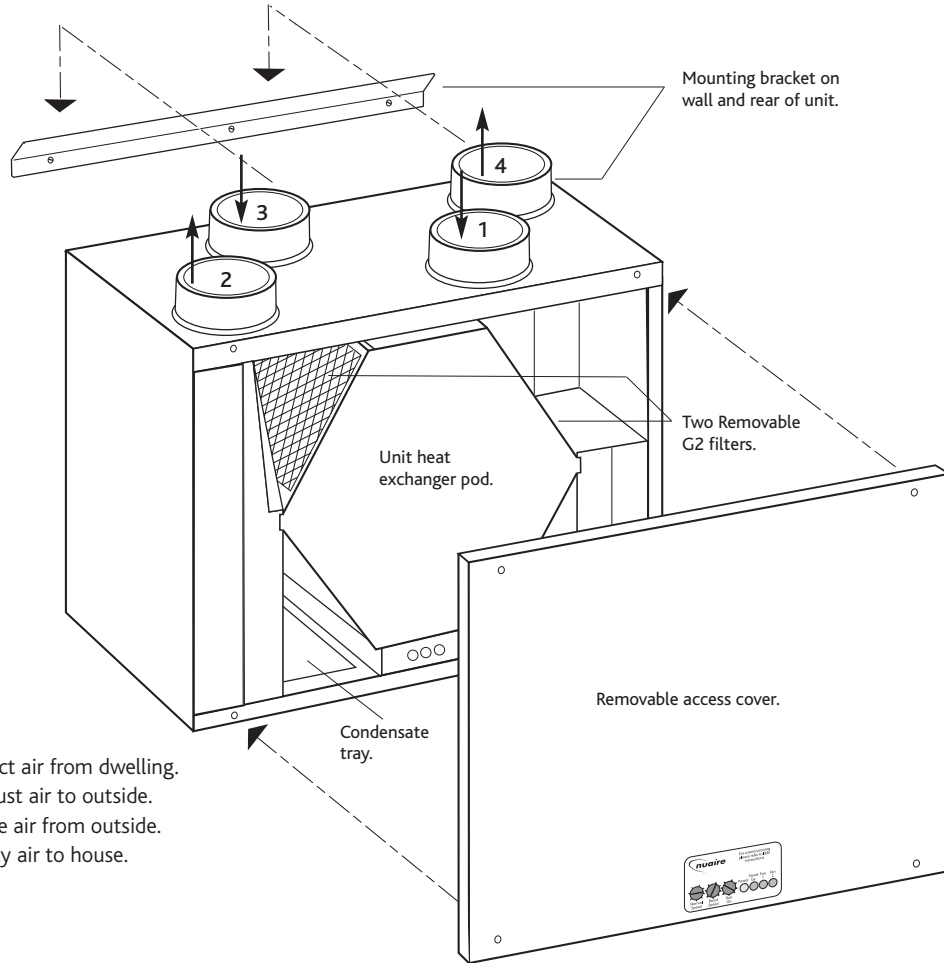
MRXBOX95-WALL

ELECTRICAL & SOUND

Curve	Maximum power consumption (Watts)		Sound Power Levels dB re 1pW							dBA @3m	
			63	125	250	500	1K	2K	4K		8K
1	71	Open inlet	45	41	48	47	41	39	24	24	30
		Open outlet	48	51	57	59	54	47	39	33	41
		Breakout	51	50	53	51	43	38	30	26	33
2	39	Open Inlet	44	39	46	44	36	34	20	19	26
		Open outlet	44	48	52	53	48	41	29	25	36
		Breakout	50	48	51	48	38	33	25	21	30
3	21	Open inlet	42	38	43	37	31	26	20	17	21
		Open outlet	42	46	49	49	42	35	23	19	31
		Breakout	48	46	47	44	32	27	19	15	26
4	10	Open inlet	40	35	39	32	23	18	12	9	16
		Open outlet	40	43	44	43	33	20	14	13	24
		Breakout	46	43	43	38	23	18	10	6	21
5	5	Open inlet	35	29	30	20	5	-	-	-	<10
		Open outlet	36	38	37	33	18	11	-	-	15
		Breakout	42	38	36	28	8	3	-	-	13

The maximum power consumption shown above (Watts) is consumed on units running continuously, not taking into account any heat recovery saving and based on SAP Appendix Q testing.

UNIT COMPONENTS



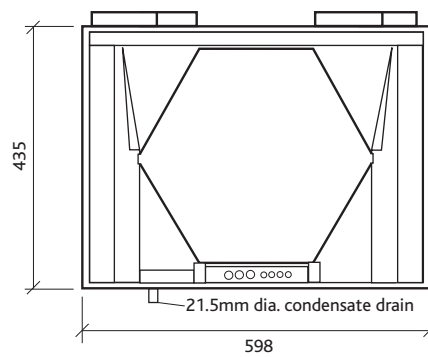
Spigot Location & Ducting references

- Spigot 1. 125mm dia. = extract air from dwelling.
- Spigot 2. 125mm dia. = exhaust air to outside.
- Spigot 3. 125mm dia. = intake air from outside.
- Spigot 4. 125mm dia. = supply air to house.

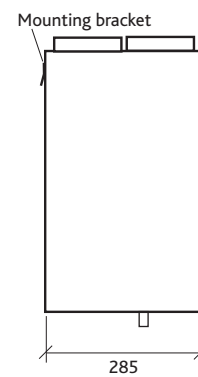
DIMENSIONS (MM)

Weight 13 Kg

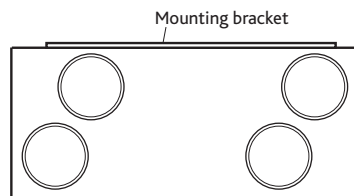
VIEW FROM FRONT WITH COVER REMOVED



SIDE VIEW



VIEW FROM TOP



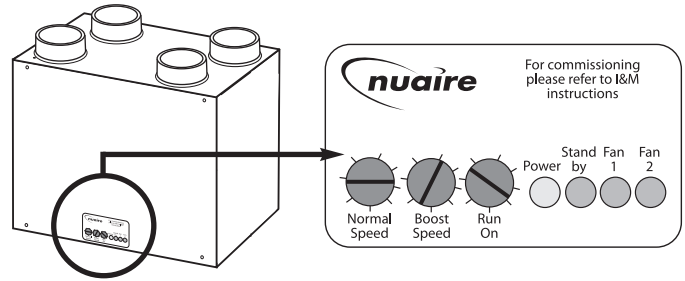
**ELECTRICAL CONNECTION**

Please note: the electrical connection of the unit must be carried out by a qualified electrician.

**Electrical details:-**

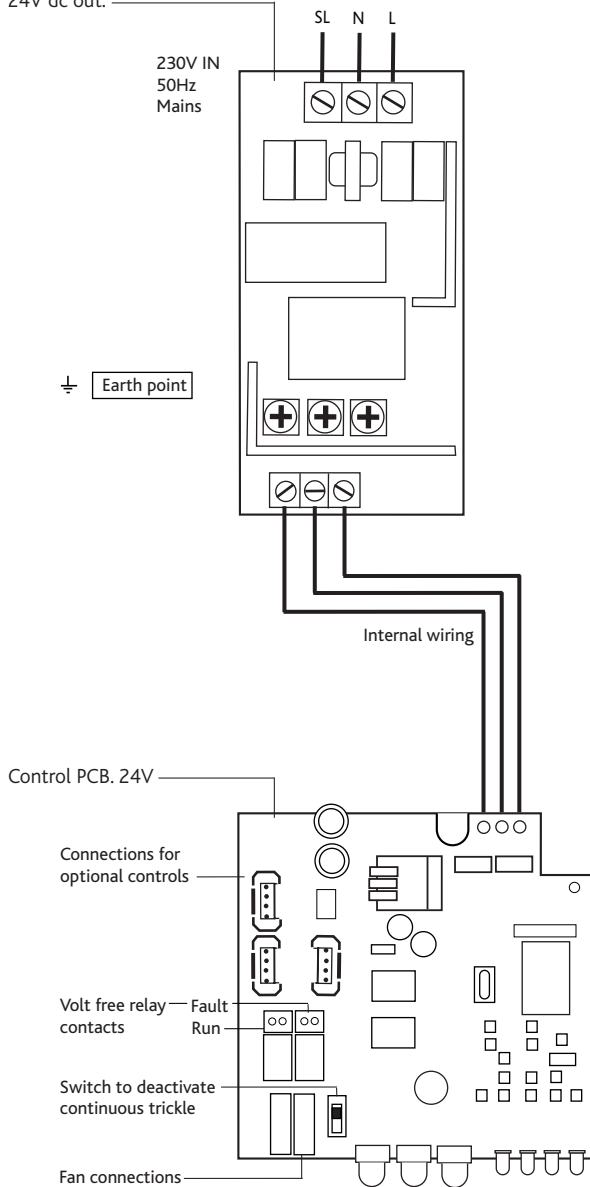
<b>Voltage:</b>	240V 1ph 50Hz
<b>Consumption:</b>	75W (max) 0.6 Amp
<b>Fuse rating:</b>	3 Amp

NOTE: This unit must be earthed.

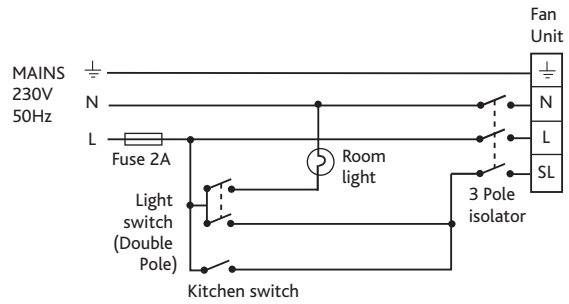


Detail of unit control on front panel.

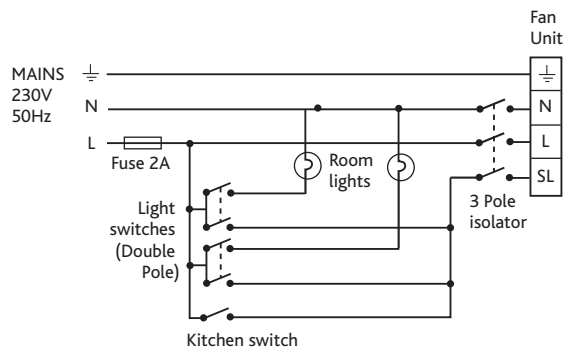
Power supply PCB. 230V in, 24V dc out.



**UNIT SERVING KITCHEN AND BATHROOM**



**UNIT SERVING KITCHEN AND TWO BATHROOMS**



## CONSULTANTS SPECIFICATION

### OPERATION

The supply and extract system shall be wall/cupboard mounted 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-WALL - 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 G2 grade filters on fresh air inlet and system extract. The heat exchanger and filters shall be accessible via the front access panel, 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 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 125mm circular ducting. D204 x 60mm.

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-WALL

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-WALL - 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 indicator

Units shall be the MRXBOX95-WALL as manufactured by Nuaire.