

# **Silavent**

## Specification for Silavent Green Line HRX MVHR Appliance



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## Scope of works

Supply and install an MVHR appliance suitable for installation in either a 600mm kitchen wall cupboard, on a wall or in a loft.

The airflow performance shall meet the Building Regulation (Approved Document F) extract requirements for System 4 to suit the installation dwelling.

The specific fan power (SFP) shall meet the Building Regulation (Approved Document L1A) requirement of less than or equal to 1.5 W/(l/s).

The heat exchanger efficiency shall meet the Building Regulation (Approved Document L1A) requirement of greater than or equal to 70%.

The installation shall comply with the requirements of the Domestic Ventilation Compliance Guide 2010.

## Typical scope of works specification

Supply and install a Silavent Green Line HRX MVHR appliance suitable for installation in either a 600mm kitchen wall cupboard, on a wall or in a loft as supplied by:

Polypipe Ventilation  
Sandall Stones Road  
Kirk Sandall Industrial Estate  
Kirk Sandall  
Doncaster  
DN3 1QR

The airflow performance shall meet the Building Regulation (Approved Document F) extract requirements for System 4 to suit the installation dwelling.

The specific fan power (sfp) shall meet the Building Regulation (Approved Document L1A) requirement of less than or equal to 1.5 W/(l/s).

The heat exchanger efficiency shall meet the Building Regulation (Approved Document L1A) requirement of greater than or equal to 70%.

The installation shall comply with the requirements of the Domestic Ventilation Compliance Guide 2010.

## Relevant Building Regulation clauses

### Airflow requirements

- Approved Document F – Means of Ventilation – 2010 Edition  
Table 5.2d System 4 – Continuous mechanical supply and extract with heat recovery (MVHR)

### Specific fan power and heat exchanger efficiency

- Approved Document L1A – Conservation of fuel and power in new dwellings – 2010 Edition - Section 4.23

## Detailed specification clauses

### Operation

The supply and extract ventilation appliance shall be positioned as indicated on the drawings and shall be in accordance with the particular schedule in the specifications.

The combined supply and extract with heat recovery appliance, 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. The extracted air shall also be filtered before it reaches the heat exchanger.

The ventilation appliance 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 appliance shall alter its speed to adjustable, normal and boost rates.

The appliance shall have the facility to commission the supply and extract fans on minimum speed (continuous background ventilation), and boost speed, via inbuilt minimum and maximum speed adjustment. The fans shall have infinitely variable speed control.

### Specification

The appliance shall be able to be 'handed' during installation by selecting one of two condensate drain point options.

The appliance mounting and electrical connections shall be external to the appliance to avoid opening the main body casing at installation.



The appliance wiring and control centre shall be mounted remotely from the appliance to avoid moisture damage to the electronic controls. Connection between the wiring centre and the appliance shall be made through pre-wired and labelled plugs and sockets on flying leads, to ensure correct installation.

The appliance shall be fully insulated providing excellent thermal and acoustic characteristics and shall be complete with a multi plate counter flow high efficiency heat exchanger, with a thermal efficiency of up to 88%. The heat exchanger shall be protected by G3/EU3 grade filters on fresh air inlet and system extract.

The appliance 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 for an ambient temperature of 50°C.

The appliance shall be supplied complete with integral condensate collection trays and 32mm drain connections.

The appliance shall contain a heat exchanger bypass facility operated by remote switch. The operation shall be effected by two thermo actuators. The bypass operation will not reduce the airflow through the appliance.

The appliance shall be suitable for 125mm diameter circular ducting.

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

Appliances shall be Silavent Green Line HRX as manufactured by Polypipe Ventilation.

## **Manufacturer**

Polypipe Ventilation

## **Product range**

Silavent Green Line HRX

## **Materials**

Body, injection moulded, expanded black polypropylene

Heat exchanger, polystyrene

Impeller, injection moulded black polypropylene



## Size

125mm diameter duct connection sockets

Outside maximum dimensions 564mm wide x 755mm high x 290mm deep

## Accessories

- Silavent adjustable overrun timer, code ANC108A
- Silavent humidity control (with adjustable overrun timer), code ANC802A
- Silavent humidity control (with adjustable overrun timer and manual override with neon indicator), code ANC808A
- Silavent PIR movement control (with adjustable overrun timer), code ANC813A
- Silavent 6-Switched live backfeed protected junction box, code ELE150R
- Domus 297 condensate drainage kit

## Electrical rating

230V      50Hz      184W      IPX4

## Appendix A – Range details

### Models & upgrades available:

HRX-S	MVHR Appliance
HRX-B	MVHR Appliance with summer bypass
HRX-FP	MVHR Appliance with frost protection
HRX-BFP	MVHR Appliance with summer bypass and frost protection
HRX-FS	MVHR Appliance and fascia
HRX-FB	MVHR Appliance with summer bypass and fascia
HRX-FFP	MVHR Appliance with frost protection and fascia
HRX-FBFP	MVHR Appliance with fascia, summer bypass and frost protection
HRXC-B	Bypass upgrade kit
HRXC-FP	Frost protection upgrade kit
HRXC-F	Fascia upgrade
HRX-SILVER	Extended warranty
HRX-GOLD	Extended warranty

### Accessories available:

297	Domus Condensation Drainage kit
HRXC-AF	Air filter (2 pack)

### Controls available:

ANC108A	Adjustable overrun timer
ELE150R	6 switched live backfeed-protected junction box
ANC802A	Humidity control with adjustable overrun timer

ANC808A	Humidity control with adjustable overrun timer and manual override with neon indicator
ANC813A	PIR movement sensor with adjustable overrun timer

## Appendix B – Installation instructions

To download the installation instruction guide, please [click here](#) or visit our technical toolbox at <http://toolbox.polypipe.com>

## Appendix C – Performance curve

