



## OPERATION

The MVHR system shall operate by extracting air from all wet rooms (Bathroom, kitchen, WC, utility etc.) whilst simultaneously supplying fresh pre-heated, filtered air to the habitable rooms (bedrooms, living room, dining room etc.) via a highly efficient counter flow heat exchanger with a thermal efficiency of up to 93%.

The system shall operate at the whole dwelling supply rate (trickle rate) as standard and shall offer a boost facility which increases the ventilation rate in line with the applicable building regulation requirements.

Boost control shall be by means of a switched live signal from light switches in wet rooms/ bathroom areas, an integral humidistat within the MVHR system and manual two way boost switches in the Kitchen area (or as required).

## MVHR UNIT SPECIFICATION

The MVHR system shall have 100% variable, independent fan speed control (Trickle and boost settings for each fan) enabling precise on-site commissioning.

The heat exchanger shall be protected by 2 no. G2/3 grade filters. Filter access to be 'tool free' on the front of the system ensuring ease of maintenance. The system shall also come complete with automatic frost protection to protect the internal heat exchanger from extreme temperatures.

The MVHR system shall contain low energy EC fan/ motor assemblies with sealed for life bearings and the impellers shall be the backward curved centrifugal type resulting in a specific fan power (SFP) down to 0.53 W/l/s.

The MVHR system shall be complete with a power free, automatic tempering summer bypass facility which offers 100% filtration. The summer bypass facility shall operate by gradually increasing the amount of air directed around the heat exchanger in a linear scale from 20-27 degree Celsius as the temperature of the extract air from the home raises, thus ensuring occupier comfort during summer months.

The MVHR system shall also be complete with an integral humidistat that continuously monitors the RH% of the air being extracted from the wet rooms. The humidistat shall automatically operate the boost when the set RH% is reached (Factory Set: 70% RH).

The system shall have the facility to operate its boost mode upon receiving any 230V switched live signal (as required). The system shall also come complete with an in-built, automatic boost over-run timer of 15 minutes with the ability to disable as required.

The MVHR unit shall be manufactured from EPP (Expanded Polypropylene) material with excellent thermal and acoustic properties. The system shall be wall, floor, or ceiling mounted in accordance with the design requirements. The system shall retain its heat recovery efficiency and airflow (SFP) efficiencies irrespective of its mounting orientation.

The system shall be complete with a dedicated condensate tray and drainage connection.