

MEV-SVS

Consultants Specification

Operation

The ventilation system serving each apartment shall be designed in accordance with Approved Document F 2006 Edition (means of ventilation) of the Building Regulations 2000 for England and Wales.

The system shall enable the apartment to be adequately ventilated without the need for opening windows and thus minimising noise ingress.

The system shall consist of dedicated supply and extract units with a unique multi spigoted distribution box on the supply system, enabling each room to be individually ventilated. The System shall operate as follows:-

The extract unit shall run continuously at a low/background ventilation rate and shall boost to a higher ventilation rate when the room being ventilated is in use, this increase shall be triggered via a manual boost switch or a "switched live" signal, typically a manual switch in the kitchen or a lightswitch. The extract unit only ventilates the "wet rooms" within the apartment i.e. bathroom, en-suite, kitchen and utility rooms.

The MEV-SVS system supplied complete with supply unit, an extract unit and a distribution box.

The units shall have a unique control system that enables the following control philosophy;

- The extract fan will operate continuously and will boost under direct manual control or switched live signal.
- The supply fan shall operate under manual control and if operating, will boost when the extract fan boosts.
- The supply unit shall supplement natural infiltration and provide fresh filtered air continuously into all "habitable rooms" at a background ventilation rate in its passive mode, and , when in active mode, operate at a higher supply ventilation rate determined by the extract fan's setting.

The supply and extract fans serving their respective areas shall be as indicated on the drawings and shall be in accordance with the fan schedule. The fresh air shall be supplied and the vitiated air shall be extracted from each area via rigid or flexible ductwork of specified dimensions.

If specified the system shall be provided complete with low depth attenuators mounted adjacent to the external wall, to minimise externally generated noise ingress.

All necessary ductwork fittings and ancillaries shall be allowed for.

Supply and extract unit specification

The supply and extract units shall be manufactured to the following specification:-

- Units shall be no deeper than 185mm.
- Acoustic and thermal lining to provide low noise levels within the apartment and to minimise condensate formation within the units.

Optional Controls

The MEV-SVS system units can be individually controlled by any Ecosmart sensor. An ideal solution during the summer to keep the property fresh is to have the supply unit only, linked to an ES-TEMP (temperature sensor). When the property is unoccupied and the temperature rises the supply unit will automatically increase the ventilation rate to compensate. Alternatively a manual speed control to give the user complete override can be used. Boost must first be selected.

- Low energy d.c. motor with advanced impeller technology, ensuring the most energy efficient installation.
- Maximum input power 52W/fan.
- Complete with a G4 filter.
- Multiple spigots 4x100mm dia. & 2x125mm dia. on suction side.
- Integrated balancing dampers in each spigot connection.
- Integrated single point mounting bracket with anti vibration strip.
- 5 year warranty.
- ISO 9002.

The casing shall be made of Aluzinc, corrosion resistant steel conforming to BS EN 10215:1995.

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

- 'Dial-a-Duty' Infinitely variable constant volume / variable pressure background ventilation control.
- 'Dial-a-Duty' Infinitely variable constant volume / variable pressure boost ventilation control.
- Integral adjustable run on timer.
- Integral S/L terminal for boost trigger from remote switch, e.g. light switch.
- Integral low voltage terminal for boost trigger from kitchen (if required).
- Automatic speed adjustment to maintain airflow in "filter dirty" conditions.
- Volt free failure/status indication.

The unit can be switched to operate at the maximum flow rate setting by one of the following means.

- Switched live signal.
- Optional Ecosmart or Mains plug in sensor ; humidity, temperature or PIR.
- External volt free contact (SELV signal used). Please note the flow rate setting can only be achieved if the system resistance does not exceed the fan's maximum performance.

The distribution box provided with the supply unit shall be manufactured to the following specification:-

- It shall be acoustically lined to minimise noise transmittance.
- Multiple spigots 4 number 121x60 and 2 number 204x60.
- It shall be no deeper than 90mm. Overall dimensions 300x300 x90mm.
- Manufactured from Aluzinc, corrosion resistant steel conforming to BS EN 10215:1995.

The unit shall be the MEV-SVS as manufactured by Nuaire.



ES-UCF Manual Control.



ES-TEMP Temperature Sensor.



MEV-SVS UC Supply unit override switch.