

UNIT SPECIFICATON

The unit is the MultiPlexBox as supplied by Airflow Developments. It is sized as indicated on the relevant dimension diagrams. Its technical performance will be in line with the technical specification provided. The unit will provide an efficient method of air distribution within a mechanical supply and extract ventilation system. The unit will adjust according to local air requirements and can detect humidity and VOC's when combined with optional sensors. This unit, when providing air distribution for an MVHR unit can achieve clean indoor air with minimal Airflow Developments resistance. The main structure of the unit is manufactured from steel. Inside the unit are sound attenuating foam blocks to reduce the noise pollution. Airflow Developments will be controlled within the unit using flow dampeners regulated by pressure sensors situated internally in the unit. The unit makes use of Ø75mm and Ø125mm supply and extract ports, depending on your selected model. The unit can be vertically or horizontally mounted to the wall, a sloping roof or a ceiling and can be suspended using the connection plate supplied by Airflow Developments. When installing the MultiPlexBox behind a suspended ceiling or hollow wall, a service door will be required with internal dimension of 800mm x 1200mm for maintenance of the unit. Information on mounting and the maintenance of the unit is given in the instruction manual provided by Airflow Developments. The unit has a compact design and allows for easy transportation and fitting. The MultiPlexBox offers the features of multiple individual components in one product. If a system were to recreate what the MultiplexBox can offer it would require: 2x silencers, 2x volume flow controllers, 2x sound attenuators, 2x air quality sensors). This unit has the advantage of containing these features in one contained product. The unit consists of a separated supply air chamber and an extract air chamber.

CONTROL OPTIONS

The unit can also be controlled through sensors and manual controllers in both a touch screen and standard format. Commissioning of the unit is simple using Airflow Developments provided commissioning software. Enter the desired values and Airflow Developments and then you can replicate this across multiple areas and units. Each box can be named and located on the software for easy reference.

All the controls for the unit are as listed below Humidity sensors and Combi sensors are not as standard in the unit. Manual controllers must be brought separately:

- Humidity Sensor (Internal)
- Combi Sensor (Internal)
- Central Controller (External Controller)
- ECO Element Controller (External Controller)
- Touch Element Controller (External Controller)
- Commissioning Software

OPERATION

The unit is intended for the supply and extract ventilation of living spaces and buildings, in combination with a central ventilation system. The unit is not be a ready-to-use ventilation product and is designed to distribute the air of an MVHR system. The product must be operated once it has been installed and connected to the ventilation ducting system.

The supply and extract chambers are equipped with a measuring orifice and a volume flow control damper. The volume flow control dampers can be controlled separately using the commissioning software.

When designing the unit's ductwork, using the guidance provided by Airflow Developments you will ensure maximum performance from your MultiPlexBox unit. Supply and extract air rooms should be defined in advance of the unit's installation.

KEY FEATURES

The features and benefits of the unit are:

- Highly durable and easy to maintain unit.
- Low flow resistance and high noise attenuation.
- Fast and easy installation.
- When using Airflex Pro the connections are airtight due to the sealing ring design and offer better performance than a traditional branch system.
- Flexible mounting positions, on the floor, ceiling, wall, suspended and in concrete.
- Efficient air distribution and ventilation control for your desired space.

COMMISSIONING

The MultiPlexBox commissioning software allows central commissioning of all units connected in the network, through a central laptop. These settings can then be applied across your MultiPlexBox network.

- Complex and time-consuming pressure difference measurement is eliminated.
- Individual fine-tuning: Various additional sensor configuration options are available allowing you to adjust sensor sensitivity and specific room humidity.
- Once set, the defined parameters can be saved on a PC and transferred to other boxes.

Each MultiPlexBox installation shall enable precise air distribution and is able to communicate back to the main system where Airflow Developments are locally adjusted.

The commissioning software enables configuration of the set extract and supply air requirements for each room, and also allows configuration of the BUS address of the unit, as well as adjusting the sensor sensitivity, see any errors and set all controls for the unit.