

## MEVDC & MEVAC

### Consultants Specification

#### MEVDC unit -

The unit shall be designed specifically for incorporation within a system designed to comply with the requirements of Part F Building Regs. Ducting and grilles forming part of the system are specified elsewhere.

The unit shall be manufactured by a BSI Registered Firm with ISO 9000 certification. The unit's casing shall be of ABS, Moulded plastic with a part lined lid of high density class "O" flame retardant acoustic insulation designed to limit noise breakout from the unit to a maximum of 34dBA (DC model) - hemi-spherical radiation.

The unit shall incorporate a low profile single point mounting bracket for horizontal or vertical mounting of the unit. When installed the unit shall not project any more than 190mm from the surface onto which it installed.

Air discharge from the unit shall be via a tapered spigot for easy connection to ducting. The unit shall be capable of multiple air inlets formatting. The unit casing shall have the facility to allow the connection, via tapered air inlet spigots supplied with the unit of up to 4 No. 100 mm diameter and 2 No. 125mm diameter air inlet ducts.

The unit shall incorporate a quick release, access panel for easy maintenance if filter is fitted. Replacement filter codes are G2 = 776717 and G4 = 776718.

The unit shall be constructed with one removable panel allowing full maintenance access. The unit shall incorporate a fully speed adjustable (note: stepped speed control shall not be acceptable) low energy, high efficiency DC fan/motor assembly with sealed for life bearings designed to operate continuously at a pre-set "background" design airflow rate with the ability to increase to a pre-set "boost" design airflow rate as and when required. It shall operate up to an ambient temperature of 40°C and be fitted with a one shot thermal overload protective device.

The impeller should be a centrifugal backward curved type, dynamically balanced mounted directly onto the motor.

The unit shall incorporate electrical connections to allow for the unit's "boost" airflow to be triggered by any one or combination of the following:

1. A switched live signal, 230V.
2. A remote speed control.

When the unit "boost" has been triggered by the switched live signal the unit shall incorporate an adjustable "run on" facility (optional).

The MEVDC unit shall be offered with a 5 year warranty.

MEVDC-ES (optional Ecosmart control).

The unit shall be provided with a casing mounted, easily accessible, factory connected, user control panel providing the following airflow control settings:

- (a) Setting of the unit's "background" design airflow rate via a calibrated dial labelled between 10 and 90 litres/second.
- (b) Setting of the units "boost" design airflow rate via a calibrated dial labelled between 10 and 90 litres/second.

- (c) Setting of the "boost" airflow run on time via a calibrated dial labelled between 0 and 60 minutes.

The unit shall incorporate a factory fitted, automatic constant volume control facility to ensure as far as is practical that the pre-set "background" and "boost" design airflows are maintained, within the capabilities of the unit's performance levels.

The control panel shall also incorporate a fan status indicator light and the facility to check and provide visual indication that the installed unit is actually achieving the duties set at the dial.

#### MEVAC unit -

The unit shall be designed specifically for incorporation within a system designed to comply with the requirements of Part F Building Regs. Ducting and grilles forming part of the system are specified elsewhere.

The unit shall be manufactured by a BSI Registered Firm with ISO 9000 certification. The unit's casing shall be of ABS, Moulded plastic with a part lined lid of high density class "O" flame retardant acoustic insulation designed to limit noise breakout from the unit to a maximum of 45dBA (AC model) - hemi-spherical radiation.

The unit shall incorporate a low profile single point mounting bracket for horizontal or vertical mounting of the unit. When installed the unit shall not project any more than 190mm from the surface onto which it installed.

Air discharge from the unit shall be via a 125mm diameter tapered spigot for easy connection to ducting. The unit shall be capable of multiple air inlets formatting. The unit casing shall have the facility to allow the connection, via tapered air inlet spigots supplied with the unit, of up to 4 No.100 mm diameter and 2 No. 125mm diameter air inlet ducts.

The unit shall incorporate a quick release, access panel for easy maintenance if filter is fitted.

The AC version should be a capacitor run external rotor motor capable of 2 fixed speeds. 230V 50Hz AC with ball race bearings, greased for life. It shall operate up to an ambient temperature of 40°C and be fitted with a one shot thermal overload protective device.

The impeller should be a centrifugal backward curved type, dynamically balanced mounted directly onto the motor.

The unit shall incorporate electrical connections to allow for the unit's "boost" airflow to be triggered by a switched live signal.

The MEVAC unit shall be offered with a 3 year warranty.