## Typical Specification Zehnder ComfoAir 160

The unit shall consist of a body manufactured in powder coated aluminium. The unit shall be fully insulated using high quality EPP to maintain excellent thermal characteristics and prevent shrinkage over time. It shall have constant volume DC motors with sealed for life bearings. The fan shall have a backward curved centrifugal impellor. The heat exchanger shall be a multi-plate, counter flow design constructed from Polystyrene with laser welded joints and shall retain up to 89% of the temperature differential of outgoing air with the option to upgrade to an enthalpy heat exchanger for latent and sensible heat transfer plus moisture recovery negating the need for a condensate drain.

The unit shall contain filters manufactured from synthetic material which has been tested to a minimum of G4 standard with the option to upgrade to F7. The filters shall be pleated to reduce the pressure drop and required cleaning time. The unit shall have 125mm duct connections and be suitable for vertical wall or horizontal ceiling mounting. Integrated preheater options shall be available to enable balanced ventilation with external air temperatures -10°C.

The unit shall have 100% summer bypass and provide filtered supply air, even under bypass conditions as well as frost protection. The unit shall contain a temperature sensor for each air stream to ensure correct and logical operation of the bypass valves by evaluating differential as well as absolute temperature.

Control shall be via one of the following options;

- 2 x 0-10V ports
- Volt free contact switch
- Wireless RF switches
- · Wired remote ventilation programmer/system monitor
- Switched live contact controller

The unit shall be constructed to have a removable cover to allow full maintenance access. The removable cover should enable access to the supply/extract fan, heat exchanger and access to electrical connections. The motors shall be suitable for removal without the requirement for the unit to be removed from situ and be available as spare parts for a minimum of 10 years even after ceasing manufacture of the unit.

The unit shall be accredited by the PassivHaus Institute. The unit shall conform to LVD and EMC standards and be CE Marked in addition to having an EU compliant energy rating label with a minimum grade of A.

The unit shall be manufactured by Zehnder.