Sentinel Totus D-ERV

Sentinel Totus D-ERV is a new range of energy recovery ventilation systems for multi occupancy and variable demand rooms. Using energy efficient EC/DC fans, 90% HR with intelligent sensing and control, the system meets the ventilation requirements of both new builds and refurbishment projects.

Ideal for applications where the rooms are used at different times of the day by a variable number of people, the Sentinel Totus D-ERV system will monitor occupancy, ventilation rate and air quality, and respond accordingly to maintain the atmosphere within preset limits and recovery up to 90% of extracted energy.

Typical applications include:

✓ A network of hotel bathrooms, flats or apartments, which require ventilation, but are only used in limited periods particularly in the morning and in the evening.

✓ School classrooms and lecture theatres which are only occupied during lesson time by a variable number of students, but when used must keep CO₂ levels within prescribed limits.

✓ Office meeting rooms or open plan areas which again are used periodically during the day by a variable number of staff and visitors, but when occupied must meet required airflow rates.

Automatic sensing and control runs the system according to the maximum demand requirements of the building zone, whether it be carbon dioxide levels, temperature, humidity or air quality - triggered by people entering or leaving the rooms. Common configurations include Electronic Static Pressure (ESP) controllers for constant pressure systems.
Meeting Rooms and Classrooms

Network Supply and Extract hierarchical Sensor Control

Typical networked supply and extract balanced hierarchical system with enabling switching control (ON/OFF, time clock or PIR) and proportional hierarchical maximum demand control from combined temperature and/or CO₂ sensors.
Central Extract Controlled System - Hotels or Apartments

Electronic Static Pressure (ESP) Control
Typical Central extract system using discreet inline duct mounted dampers controlled by individual room mounted switching devices or proportional control sensors [MIN/MAX] within each toilet/bathroom to control individual extract zones. Fan speed control with electronic static pressure control (ESP) maintaining target pressure set point as individual zones open/close based on presence of occupants or Humidity sensor.