



DEMAND CONTROL VENTILATION

Legislation



Energy Performance of Buildings Directive (EPBD)

Building Regulations Parts L and F (effective April 2006), recognises the need for the creation of healthier working environments in the workplace for new and refurbished commercial buildings of all types. (The EU is working towards an energy reduction in energy consumption of buildings of 20% by 2010.)

The EPBD requires buildings to save energy whilst providing efficient and effective ventilation by use of the SBEM (Simplified Building Energy Model) to measure CO₂ emissions and provide energy certification.

Building Regulations Document Part L2 – Conservation of fuel and power

The 2006 Edition for non-dwellings states that ...”reasonable provisions shall be made for the conservation of fuel and power in building...”

Building Regulations Part L2A for new buildings and Building Regulations Part L2b for existing buildings

These documents provide guidelines for the conservation of fuel and power in new or existing buildings (other than dwellings) states that....” the system should be capable of achieving a specific fan power at 25% of design flow rate no greater than that achieved at 100% design flow rate. Reasonable provision for ventilation system fans rated at more than 1100W would be to equip them with variable speed drives.” The specific performance limits of the system are detailed in the Non-Domestic Heating Cooling and Ventilation Compliance Guidelines including energy efficient performance and effective control systems.

Building Regulation Part F

Means of ventilationadvises that in the Building Regulations Part F 2006 Edition, Section 2 - relating to buildings other than dwellings. The requirements of natural and mechanical ventilation systems are highlighted. It specifies fresh air ventilation rates for air supply to offices (10 litres per second per person) in Table 2.1b with specific extract ventilation rates for rooms (including those with photocopiers, printers, food preparation and sanitary areas provided in table 2.1a. Further additional information is provided for guidance in Tables 2.2 and 2.3.

BS EN 13779:2007

Ventilation for non-residential buildingsprovides performance requirements for ventilation and room conditioning systems and is part of a series of European Standards that are aimed at providing harmonisation of methodology for the calculation of the energy performance of buildings.

Building Bulletin

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This document provides regulations, standards and guidelines for the ventilation of school buildings.