

Project Profile

Coppice Primary School, Wythall

Consultant

- Stewart Associates

Client

- MVS Limited

Sector

- Education & Religion

Products

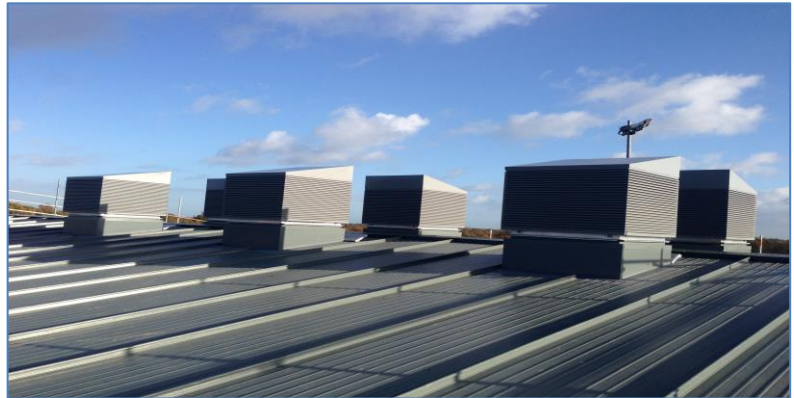
- Wind-iVent Systems

Equipment

- Natural Ventilation Systems

Application

- Balance Terminals



Hall Terminals



Wind-iVent - Natural Ventilation Systems

The Coppice Primary School is a two form entry school, though larger than the average primary school. Airtherm have already completed the 1st phase works by installing two 'Wind-iVent' Systems to the newly completed single storey class rooms. The 2nd phase fix features a further six 1.2msq units for the Hall area which will be used mostly by the Church, and a further six 1.1msq units serving the Classrooms

The new installation of fourteen natural ventilation systems for MVS Limited had been designed and carefully selected from the room data sheets provided, ensuring adequate ventilation rates for the pupils are met.

The natural ventilation systems have been designed in line with all current publications such as CIBSE guidelines, AM10 Natural Ventilation in commercial buildings and Building Bulletin 101. The terminal sizes have been selected by our new computer aided software 'Wind-iCalc' and fully conforms to the CIBSE requirements.

Control Solutions Available





Classroom Ventilation Terminals



External view on flat roof

Product Range

The Airtherm “Wind-iVent” Class ‘A’ is a natural ventilation system operating on established aerodynamic principles. As external wind flows around the terminal itself, positive and negative pressure areas are generated. On the positive side air enters the louvres of the terminal and is directed down through the internal vanes into the room below allowing a fresh air supply to be delivered, and on the negative side the stack draws the stale unwanted air which is expelled through the terminal into the atmosphere.

Manufacture

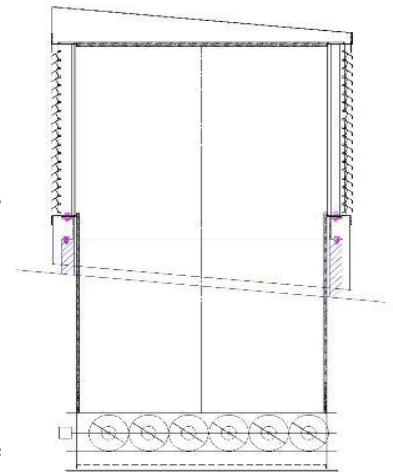
The units are be manufactured in accordance with BS EN ISO 9001, and to suit the architectural and design parameters as indicated in the design specification and drawings. Internal airways are to be protected by incorporating anti-bird mesh to the terminal louvres. Our systems can be manufactured to achieve 99.8% effectiveness (class A) when tested with a simulate rainfall of 75mm/hour and wind speed of 15m/sec based on a free area of 55%.

Installation

Units can be installed on almost every roof including flat, pitched and even on the roof apex where appropriate. The roof fabric of commercial applications has bearing on the openings and roof plates that are required to install the systems competently. We offer a roof plate solution for all situations, including self mount flashings and curb mount flashings with suitable upstands.

The features and advantages of such a system:

- ☀ A fresh air supply for workers - proven to increase productivity & reduce staff sickness
- ☀ Naturally ventilated - reduce your energy costs and carbon footprint without the need for mechanical ventilation
- ☀ Night time purge of stale air - creating a fresh working environment for staff the following morning
- ☀ Better control of building temperature and CO² levels
- ☀ Free cooling



Typical diagram

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