

Ashmount SEN School, Loughborough

Consultant

- Leicester Council

Client

- Derry Building Services

Sector

- Education

Products

- Wind-iVent Systems

Equipment

- Natural Ventilation Systems

Application

- Balance Terminals



Front Entrance



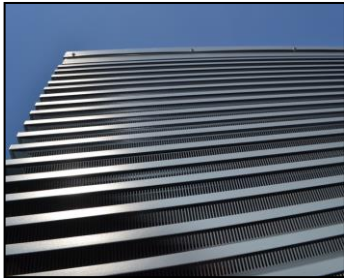
Wind-iVent - Natural Ventilation Systems

Airtherm Engineering have recently completed the new installation of two natural ventilation systems for Derry Building Services Limited based in Newark. Airtherm had previously designed and selected the correct systems to serve the new hall within the School. This process required critical information to establish the correct airflow and terminal size, and working closely with both Derry Building Services and Leicester Council this installation was a success.

Control Solutions Available



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.



Class 'A' – 99.8% Rejection



Natural Ventilation Terminals



Internal view within Hall

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Product Range

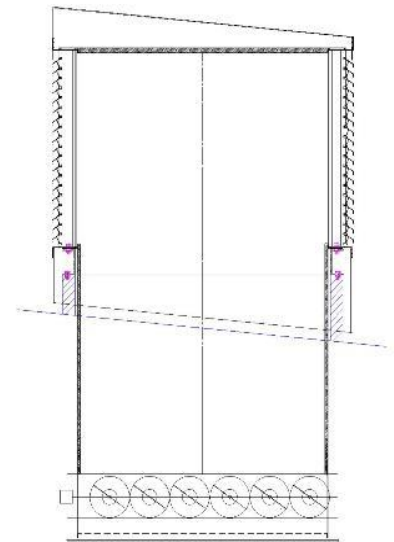
The Airtherm “Wind-iVent” is a natural ventilation system operating on established aerodynamic principles. As external wind flows around the terminal itself, positive and negative pressure areas are generated. On the positive side air enters the louvres of the terminal and is directed down through the 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%.

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