





Office Case Study

The Hi-Velocity mini duct system makes everyone comfortable at the Welsh Rugby Football
Union offices in the Millennium Stadium, Cardiff

Client requirements

The people working in the Welsh Rugby Union offices in the Millennium Stadium were suffering from cold feet. The heat from their ceiling cassettes, which had been installed during an office re-fit, was causing an uncomfortable draught and most importantly – their feet were cold.

The solution

Cooling & Heating Sales Ltd were asked by the local air conditioning contractor, Celtic Cooling & Heating Ltd to see what could be done to help.

The Hi-Velocity mini duct air distribution system provided an ideal solution. The discrete air outlet vent plates could be positioned in out of traffic areas to eliminate draughts. In addition, the de-stratification effect of the system, created by a combination of the Bernoulli and Venturi principles, would ensure that heat was delivered uniformly throughout the office, with no hot or cold spots.

Two 18kW Hi-Velocity systems were installed out of hours over two weekends. As the requirement was for mainly for heating, the Hi-Velocity air handler was supplied with a hot water coil and connected to a local hot water service. This avoided the problem of overly long pipe runs, which make DX systems difficult and expensive to install.

The people who were suffering most were those whose work stations were nearest the full height windows. The flexibility of Hi-Velocity enabled the contractor to position the air outlets in the ceiling along the window. This out of traffic location protected the occupants from both the heat loss through the window and the draught.

Follow up

The installation was so successful that other areas of the Millennium Stadium are now being quoted for the same Hi-Velocity solution.

Mr Alan Lewis, the Millennium Stadium

"We had ceiling cassettes installed during an office refurbishment. Apart from the draughts they weren't too bad in the summer. In the winter the staff complained bitterly of being too cold. The heat from the cassettes was not reaching their feet and they were uncomfortable. We had two Hi-Velocity systems installed and straight away the problem was resolved to everyone's satisfaction."





Benefits

- Draught-free
- **Heating and cooling**
- Discrete
- Easy to install
- Space saving
- Energy efficient
- Fresh air option
- Quick temperature response
- Air purification option

Installed in

Offices • Luxury houses
Apartments • Hotels • Schools
Factories • Laboratories
Hospitals • Doctors surgeries
Universities • Restaurants
Shopping centres • Theme parks
Leisure centres • Libraries
Home cinemas • Care homes
Commercial kitchens



Cooling & Heating Sales Ltd is the UKs leading expert on mini duct systems

Call us **today** on **0800 731 6352** to find out how Hi-Velocity can be the solution for your project. Email us at <a href="https://doi.org/10.1001/journal.org/10.1001