

Sports hall ventilation

Fresh, filtered air is supplied in the sports hall by a computer controlled air handling unit. The system is designed to change the air in the hall frequently – it does not re-circulate the used air.

It works by drawing fresh air into the hall from outside the building and extracting used air by passing it through the unit before releasing it back to the outside. This process captures outgoing warm air generated in the hall through a heat recovery system to use as a source of heating for incoming air in colder weather.

The air handling unit is mounted externally and provides ventilation via high level air ducts. The incoming air supply and extracted air systems are separate to limit crossover.

Four sensors within the sports hall measure both temperature and carbon dioxide levels and are linked to the air handling unit through computer controls. The control system automatically switches the unit on when levels are raised.

Additional ventilation within the sports hall is provided by two manually operated louvre windows mounted at high level on the gable ends of the building.