



John Lennon Airport

Client

Liverpool John Lennon Airport

Project

Car park ventilation for Liverpool Airport

Location

Liverpool

"This prestigious project shows the importance of updating ventilation systems when structural changes are made following construction."

Overview

Enclosed car park ventilation

Liverpool's John Lennon Airport is one of the UK's busiest and longest-serving, and is the site of several car parks. Among these is a 900-space multi-storey (with adjacent hotel) which was recently redeveloped to include offices on its ground floor. This structural change meant the previously naturally ventilated conditions were altered, and an assisted ventilation system was required.

Airvent's expertise was called upon to ensure the appropriate level of powered ventilation was installed for day-to-day ventilation, with suitably intelligent control systems governing it.

Operations

The ground floor area covers 4000m² and Airvent was required to design, install and commission a scheme to assist natural ventilation, reducing harmful build-ups of gases, providing fresh air to car park users and offering optional smoke clearance in case of a fire.

Airvent's solution consisted of a series of fire-rated bi-directional Sentry impulse fans, linked to a control system which is in turn linked to CO detectors and wind direction monitors. This turnkey solution removes the need for major extraction systems and enables the fans to conserve energy by only operating when required, and doing so in accordance with the prevailing wind direction.

The design saved the customer on installation cost, architectural limitations and running expenses, without compromising on visitor safety.