

Press Release
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SE Controls Smoke and Natural Ventilation Solution for Airbus

A new 25,000m² office building for leading aircraft manufacturer, Airbus, is using an advanced smoke and natural ventilation system from SE Controls to provide a comfortable working environment for staff while ensuring that an effective smoke and fire control strategy can be implemented in the event of a fire.

The four-storey building, which is part of the £70 million Airbus Aerospace Business Park development at Filton, accommodates more than 2,500 staff and brings together engineering, design and customer support functions that are currently located in several smaller buildings onsite into the new engineering and technology campus.

SE Controls was involved in the project from the early stages to clarify the ventilation strategy and provide calculations on the free area requirements for the smoke vents to ensure compliance and performance standards were met.



Four separate atrium spaces feature as part of the building, designed by AWW Architects, and each incorporates 84 Schüco AWS 102 projected top hung vents. The vents are automatically operated by a total of 336 SCCO 24 30 concealed actuators, which were supplied, installed and commissioned by SE Controls in partnership with specialist façade contractor, Northing Aluminium.

In addition to installing the actuators, the interface control panels were also supplied, installed and commissioned by SE Controls together with the fire rated cabling, which is completely concealed within the curtain walling.

During day-to-day operation, the natural ventilation system responds to signals from sensors linked to the building management system (BMS) to ensure that the indoor air quality and temperature are maintained within the pre-set parameters to maintain a comfortable working environment.

In the event of a fire, the building's alarm system signals the natural ventilation system to automatically close all the vents as part of the smoke and fire control strategy. This not only restricts the flow of oxygen into the building to help suppress the fire but also allows precise control to be taken by fire officers via the system's manual control points, enabling smoke to be cleared from the relevant atrium.



As SE Controls' actuators and Schüco vents have been tested and proven to meet the European smoke vent standard hEN12101-2 and the Construction Products Regulations that came into force in July 2013, the ventilations system is CE marked and fully compliant.

SE Controls' Commercial Director, Martin Oates, commented: "The Airbus project is an excellent example of how a fully compliant life safety critical smoke ventilation system can also be utilised on a day to day basis to provide a controlled natural ventilation solution that maintains comfort for Airbus staff."

He added: "By being brought into the process at a very early stage, we were able to clarify the specification, assist the design team and help resolve any technical and operational issues during the build."

SE Controls specialises in the design, project management and installation of advanced smoke ventilation and natural ventilation solutions to meet the needs of architects, contractors, building services engineers and facilities managers worldwide. Further information on SE Controls' products, solutions and projects can be obtained by visiting www.secontrols.com or calling 01543 443060.

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