WHEN SOLUTION MEETS SAFETY

The Iranian Hospital, Dubai, is undergoing a makeover and extension. Aldes ME, which has provided fire safety measures and ventilation and air conditioning solutions to the project, presents the case study.

THE BACKGROUND

The Iranian Hospital, located on Al Wasl Road, Dubai, is one of the iconic buildings in the emirate. Set up in 1973, it is regarded as a reliable healthcare centre in the GCC region. In keeping with the UAE's development, the hospital has been earmarked for expansion to serve more than 150 nationalities in the country. Aldes ME has been associated with the project to integrate fire safety, air conditioning and ventilation solutions to the new facility.

AIM

The objective was to provide the best support and solutions to enhance the safety and indoor air quality for the sensitive project to transform the Iranian Hospital into a modern full service hospital.

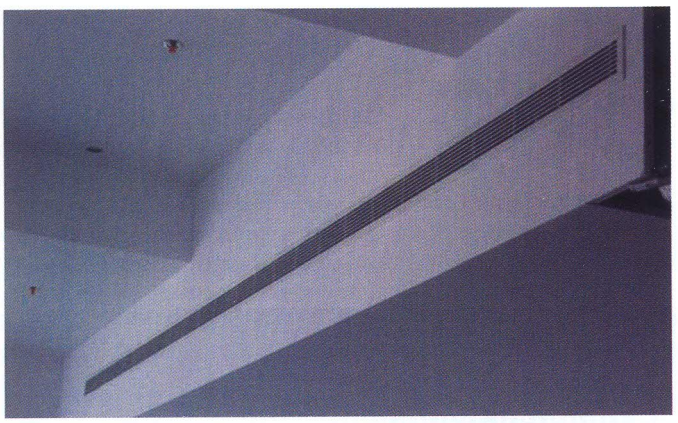
MEASURES ADOPTED

The site was handed over to the main contractor, Al-Sahel Contracting Company in September 2009 to begin construction. Currently, MEP works under the supervision of Bilt Middle East is still in progress.

Aldes ME was chosen to provide fire protection, ventilation and air distribution systems solutions to the project, as it has been associated with several hospital projects before, such as Umm Al Quwain hospital, UAE, and Nantes hospital, France.

As a first step, the company provided full solutions in terms of fire protection dampers in order to ensure safety to the hospital to prevent the spreading of fire, heat and smoke in case of an eventuality.

The consultant, Schuster Pechtold & Partner, required curtain fire dampers with Civil Defence approval and UL certification. The entire range of Aldes ME curtain fire dampers matched the design and compliance requirements. Aldes ME also provided motorised fire and smoke dampers, which prevent the spread of fire and smoke inside a building, with a fire



resistance of 1.5-hours and no smoke leakage. The fire safety solutions are designed, tested and classified in accordance with European standards (EN, NF) or American standards (NFPA, UL) and follow the strict requirements from national building codes, such as the UAE Civil Defence fire code that was released in July 2011.

Two other key design requirements were low noise and perfect airflow. A wide range of by-pass VAV boxes (Variable Air Volume), suitable for airflows range up to 5,440 m^3/h, was delivered on site, in order to provide temperature control and central air distribution for rooms for patients. Every VAV box had to pass through a strict quality check during the manufacturing process as well as after completion, to ensure the delivery of safe products. In addition, 761 VCD (volume control dampers) were designed and manufactured for quiet, efficient and reliable air volume control in ventilation and air conditioning systems.

Slot diffusers, bar grilles and square diffusers were also needed for the project. Aldes was able to support and deal with the MEP consultants and MEP contractors regarding the specific project design and technical requirements on product performances, integration and installation. Aldes is continuing to deliver a complete set of grilles and diffusers to bring the needed indoor air quality to the hospital building.

Aldes is also supporting consultants and contractors up to the point of project completion. With this aim, a French expert from Aldes, France, visited the project site with a Product Manager and Sales Engineer from Aldes ME, to check the installation of the products and to advise the contractor on installation issues.

CONCLUSION

By the first half of 2012, the new Iranian Hospital of Dubai will open at Al Wasl Road. It will be a 220-bed, built-up area of (phase-1) 343,781 square feet, full service medical facility, with VIP, private and semi-private and public rooms equipped with the most advanced technology.

Speaking about the hospital project and its association with Aldes ME, Amar Bhosale, Project Engineer, Bilt Middle East, says: "As Iranian Hospital is a sensitive project, we were looking for good quality products. Aldes products and services are up to the satisfactory level, and we strongly appreciate the availability of their team to support us during the project construction."