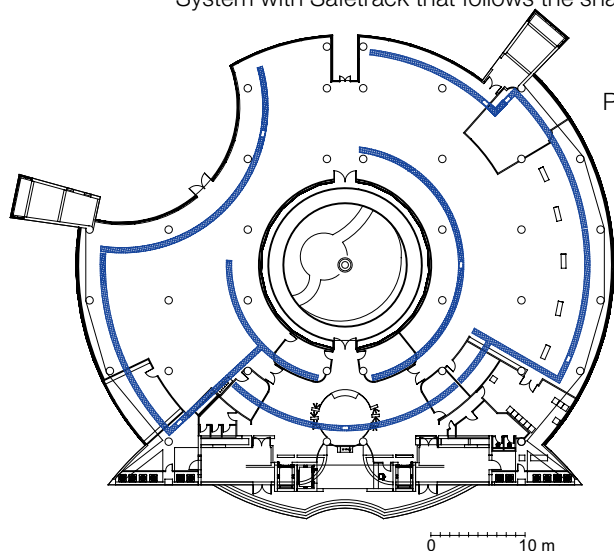


## KE-REFERENCE: ALGIDA UNILEVER, TURKEY

Modern production technology has rendered it possible to produce very special systems for Textile Based Ventilation (TBV) designed for a specific radius and with Safetrack that follows the shape. The new product mixes well with ordinary passive low impulse systems as well as the hybrid solution that combines the low impulse system with lasercut inject holes. A good example is the system that KE Fibertec has supplied to Algida Unilever's head office in Istanbul.

With the new laser technology it is now possible to supply far more flexible solutions for complicated projects. Solutions that meet both air technical as well as aesthetical requirements, and solutions that incorporate the ventilation ducts in to the design of the building making them not merely a necessary evil.

A good example of the new design is the system that KE Fibertec has supplied to Algida Unilever in Istanbul. The demand from the architect was for the ventilation system to fit into the circular office building without blurring the architectural concept of the construction. Therefore, KE Fibertec's solution of a curved KE-Interior® System with Safetrack that follows the shape was chosen.



Ground plan of Algida Unilever's office building in Istanbul.  
The KE-Interior System is shown in blue colour.

Prior to the actual project engineering, a demand analysis was required to establish the required specification of the system. Unilever demanded that the ventilation plant be used both for heating and cooling. At the same time they wanted an indoor climate that allowed sedentary work at a temperature of approx. 22°C and an air velocity of max. 0.20 m/s, i.e. full comfort conditions.



KE-Interior System with curved ducts and rails

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Furthermore, they wanted to divide the offices into 6 different zones that are all demand-controlled according to the number of persons and orientation of the windows.

Each zone is equipped with a room thermostat to provide optional heating or cooling.

The system is dimensioned for a total air quantity of 24,000 m<sup>3</sup>/h, corresponding to 4,000 m<sup>3</sup>/h in each zone.

The inlet temperatures of the cooling and heating systems are +15°C and +28°C, respectively, corresponding to a  $\Delta T$  of max. 7°C and min. 6°C.



Since the system is to handle both cooling and heating, it was decided to make a system with laser-cut inject holes in the ducts to ensure proper comfort conditions as well as a uniform air distribution and temperature throughout the occupied zone.

Early operational experiences from Algida Unilever in Istanbul have been very positive. An added bonus aside the good comfort has been low noise levels and easy maintenance.

Further, the positive experiences of the system have already resulted in another order for KE Fibertec for the next stage of the building project.