

# Axel Towers - Five Round Towers add New Life to Axeltorv Square in Downtown Copenhagen

The old Scala building in Axeltorv Square - one of the most prestige's locations in Denmark - has been demolished and a new building consisting of five tower-like structures will be a reality.

With a location next to Tivoli Gardens, town hall, town square, central station and the Circus Building in central Copenhagen, expectations are sky high for the new building on Axeltorv Square.

Over the years the Scala plot has housed a theatre, dance restaurants, retail and office centre. Now the new owner of the site, the property company Norden, are to revive the Axeltorv Square with a new landmark building consisting of a five towerlike structures with up to 16 floors.

At street level and on the 1st floor, the building will be fitted with cafes and shops. The upper floors will house ultra-modern office environments designed according to the latest requirements for indoor air quality and energy.

The towers will all be of different sizes, adapted to the surrounding architecture. The five towers will be joined at the top by footbridges, while at street level there will be open space between the towers.

The area is at 23,000  $m^2$  above ground and 14,000  $m^2$  underground and is designed, to meet the Danish sustainability standard.

Opposite previous constructions at Axeltorv, the new building is not builded together with the adjoining property, but is builded at Axeltorv with access from all sides to makes the building unique.

## **Project configurations**

FlowCon International is the sole supplier of balancing valves and differential pressure control valves to the Axel Towers project. The project configurations are as per below;

#### Number of valves: 600

Valve model: FlowCon AB.20 valve with FlowCon E-JUST insert and FlowCon DPCV for risers (DN20-200) Configuration: 4-pipe heating and cooling

Application: Heating and cooling Start date: In 2013 Completion date: End of 2016 Price of the project: 200 mill Euro Size: 40.200 m<sup>2</sup>



### Low energy Class

The architects Lundgaard and Tranberg have designed the five towers. Alectia is the consultant engineer and Ib Andersen VVS is the HVAC contractor.

ALECTIA has designed the installation, indoor climate and energy to the latest standards ensuring a state of the art building in terms of indoor climate and energy efficiency as well as being supervising consultant on the project.

The buildings are thereby set to be certified as "low energy building class 15" according to the Danish building standard BR 10 defining a maximum energy consumption of 41 kWh/m<sup>2</sup> heated floor area per year to cover heat loss, ventilation, cooling, domestic hot water and lighting.



## Why FlowCon?

As a known industry specialist on delivering dynamic valves, it was natural to consider FlowCon International along with other potential suppliers. The choice of FlowCon valves specifically was made due to the insert based structure - improving the site construction process and allowing valve service - energy efficiency, general technical attributes and product flexibility allowing a "tailor made solution" that is 100% customized for Axel Towers.

Statement, Michael Dall, Project Manager, Ib Andersen VVS:

"FlowCon products were technically as well as construction flow wise very suitable for the project in question. As the project is located in the centre of the city area the space is limited and the site difficult to enter. It therefore made perfect sense to have FlowCon valve bodies installed in identical sizes for all locations and later apply the suitable insert with the required flow rate. This process minimized the piping works and reduced the logistic challenge at site. Simultaneously, the balancing procedure is obsolete as the valves are self-balancing helping us to achieve the tight deadline."

FlowCon International is specialized in dynamic applications and is constantly developing and improving in response to market demands. FlowCon International has always enjoyed a reputation as an innovative leader in the dynamic balancing market. Today FlowCon International boasts more than 50 years of HVAC market experience and is presented in more than 60 counties world-wide. Each territory are supported through our regional facilities located in California (USA), Singapore, Dubai and Denmark.



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