References

The Ágora Building Valencia



Uponor involvement

✓	5000

The Ágora Building, Valencia

Designed by the local architect Santiago Calatrava, the Ágora building marks the conclusion of Valencia's City of Arts and Sciences complex in Spain.

Project Facts:

Location	Completion
Valencia, Spain	2012
Building Type	Product systems
Sports facilities	Radiant Heating & Cooling, Local Heat Distribution
Address	Project Type
Av. Autopista del Saler, nº 7, El Saler	Renovation

Partners

developer
Ayuntamiento de Valencia

installer
Rochina, S.A

Located between the L'Assut de l'Or bridge and de Oceanografic aquarium, this spectacular building was conceived as a large multi-use covered square to accommodate events of all kinds.

Most of the design of the Ágora will closely resemble the other buildings by Calatrava and, by extension, the City of Arts and Sciences.

When designing the building, one of the major objectives of the engineers was energy efficiency; they wanted to add in the most advanced solutions for underfloor heating and power generation. Another important thing was to create a balance between technical and financial considerations as regards the budget for the work, both from the initial cost and the operating costs that will arise in the coming years. After looking at several underfloor heating systems they opted for Uponor's solutions with heat and cooling through a radiating floor.

After several simulations and studies, the team - together with Uponor - designed an industrial underfloor heating and cooling system based on the building's optimal use of surface area, space and general usage.

In the Uponor underfloor heating and cooling system the distribution of temperatures is uniform across the entire surface, no warmer patches arise, which, together with a lack of air movement, contributes towards greater personal satisfaction and an increase in efficiency at work. The system works at temperatures of roughly 24 ºC for cooling and 21 ºC for heating. This allows for pumping water at temperatures of 14-16 ºC for cooling and 30-35 ºC for heating. These temperatures ranges mean renewable energies can be used and they contribute towards reducing CO^2 emissions. In addition, being a low temperature system.

Uponor's underfloor heating means up to a 30% overall energy saving.

The technical support provided by Uponor, striving to find the best solutions and performing the technical work, was a service bery highly rated by the engineers working on the project.

The Ágora Building, Valencia



