### **Uponor**

References

## **Stavanger Concert Hall**



#### **Uponor involvement**



13.800 m<sup>2</sup>

### **Stavanger Concert Hall**

The new concert hall is an outstanding building and a new benchmark. Uponor has been involved for the underfloor heating and plumbing system as well as snow melting system for outdoor areas.

September 2012 saw the opening of a fantastic palace of culture, Stavanger Concert Hall, right by the waterfront in Sandvigå bay, in the heart of the oil city of Stavanger. The building was designed by Ratio Arkitekter. The concert hall is made up of two parts: a glass orchestral auditorium and a concrete multi-use arena. This means that the building's two parts are acoustically insulated from each other, making it possible to hold two concerts at the same time. The auditoriums have different designs. The ceilings can be raised and lowered in the auditoriums, and they are fitted with adjustable wall hangings in order to achieve acoustic perfection. The concert auditorium can seat an audience of 1,500, but has a maximum capacity of 1,900. The concert hall also contains a café, restaurant, several bars and a large outdoor amphitheatre.

#### **Project Facts:**

Location Completion

Stavanger, Rogaland, Norway 2012

Building Type Product systems

Sports facilities Radiant Heating & Cooling, Local

Heat Distribution, PEX Pipe Systems

Address Website Project Type

Stavanger Konserthus IKS https://www.stavanger- New building

konserthus.no/

Website Apply TB

## Uponor and Apply TB in Stavanger Concert Hall

Uponor underfloor heating systems have been installed in much of the concert hall. Uponor's plumbing systems have also been used for tap water and culverts, and a snow melting system has been placed in parts of the outdoor area. Teknisk Byrå from Apply TB was responsible for the plumbing installations, with Ove Kvalvaag as leading project manager and Geir Gabrielsen as leading foreman. Project Engineer Heidi Pedersen and Regional Manager Arne Aa have assisted Apply TB with the engineering on behalf of Uponor.

The cost framework for Stavanger Concert Hall: NOK 1.225 million (EUR 153,125,000).

Area: 13,800 m<sup>2</sup> Volume: 12,000 m3 Height: 27 m, length 91 m

Capacity: Two auditoriums with a total capacity of 3,400 visitors, as well as the outdoor amphitheatre, with space for an

audience of 10,000.

Energy sources: district heating (approx. 40% renewables) The building is heated and cooled using district heating and district cooling from a joint energy centre located in the multistorey car park. Sources of the renewable energy include surplus heat from exhaust heat and the concert hall's cooling system, as well as energy from the outside air. Surplus heat from the sun in the concert hall's double façade is also included in the thermal recycling system and can contribute to the heating of hot consumer water in neighbouring buildings.

Ventilation: mechanical

Read more external document: http://www.stavanger-konserthus.no/documents?id=74860

NB: the photographs are the property of Stavanger Concert Hall https://www.stavanger-konserthus.no/bildegalleri

#### Stavanger Concert Hall























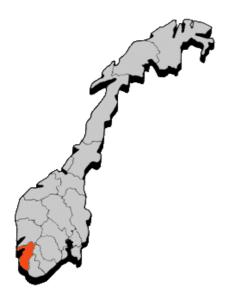












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