

Austro Tower in Vienna, Austria:

**New heights
with Uponor technology**

Uponor



Source: ZOOM VP

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➤ Perfect indoor climate on 38 floors

Vienna's latest skyscraper, which is 136-metres tall, is heated and cooled using water from the Danube Canal. The thermally active building systems (TABS) Uponor Contec ensures perfect temperature regulation on each of the 38 storeys.

Vienna has a new skyscraper – and what a fine sight! The Austro Tower is the tallest building on the banks of the Danube Canal in the third municipal district of Vienna – and the fifth-tallest building in Austria. Spanning 38 storeys, it offers some 28,000 m² of office space, not to mention a conference centre, an employee restaurant and a cafe. The project developer is SORAVIA, the general contractor Swietelsky AG. Since May 2020, the Austro Tower has had a new owner: DEKA Immobilien Investment GmbH. This multinational property fund management firm acquired the tower for a new property fund in partnership with Master-KVG Institutional Investment-Partners (2IP).

Facts

- Vienna, Austria
- Office building
- Area: 28,000 m² office space
- Number of floors: 38
- Surface heating and cooling systems
- Completion: 2021

Uponor participation

- Uponor Contec TAB system
- Uponor Tacker Underfloor heating

► The requirement: LEED and ÖGNI platinum standard

Anyone working in or visiting the new structure will, on the one hand, benefit from the superb location – with outstanding transport links to the city centre and airport – and, on the other, the breathtaking view: from above, the new district by the Danube Canal, between the TownTown business district and the new skyscraper complex Trillple, can be easily surveyed. Thirdly, the building boasts everything necessary to keep users happy and comfortable, while keeping the impact on the environment and climate to a minimum. That's why the Austro Tower is subject to the most stringent sustainability criteria: the building has been designed to achieve platinum standard, both in the international LEED system and Austrian ÖGNI certification.



»» “We opted for the Uponor Contec TAB system, as this product meets the specified quality standards in full.” ‹‹

Ing. Franz Salzinger, HVAC and Sanitary Project Manager
at KGT Gebäudetechnik GmbH



► “River power” and thermally active building system (TABS)

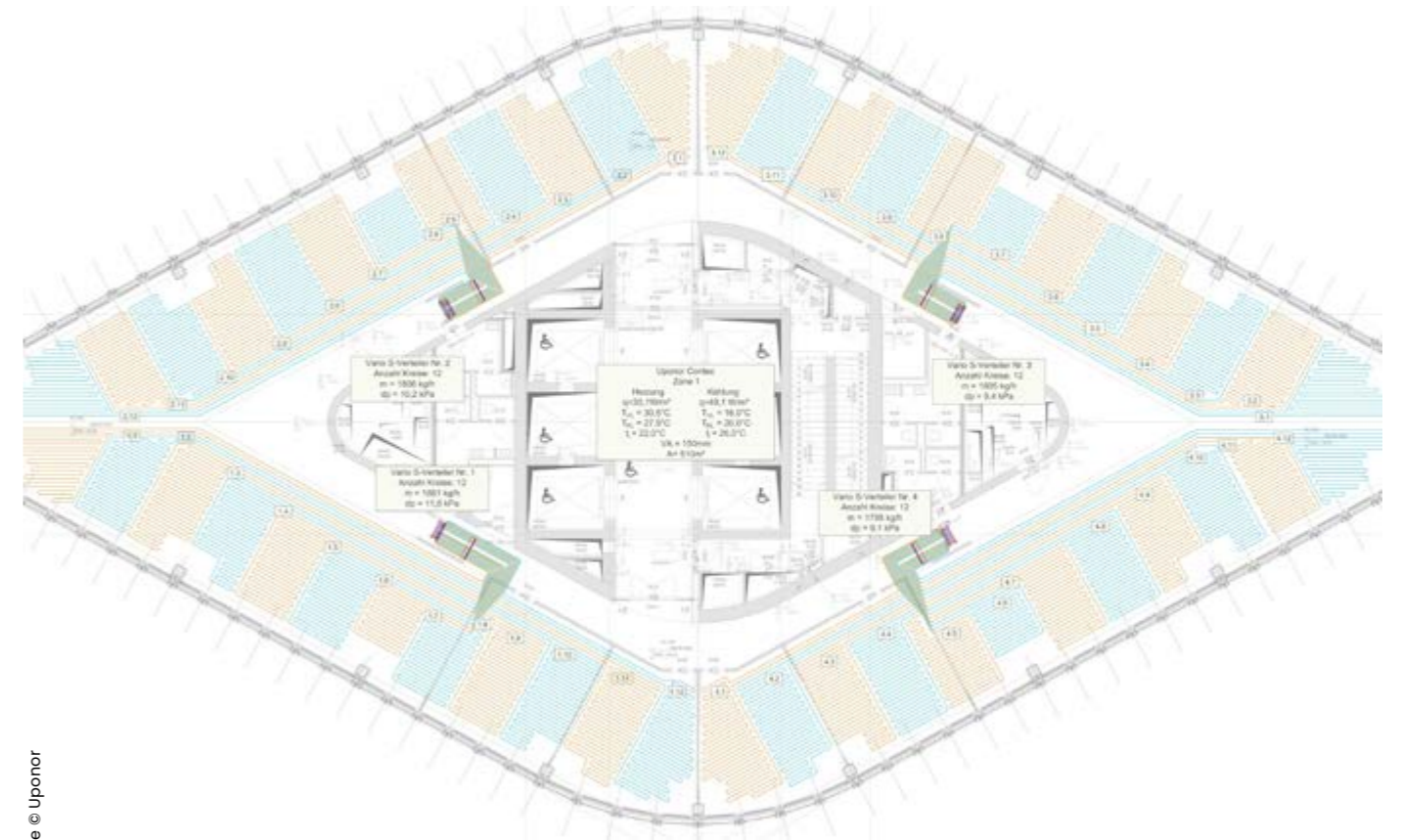
An innovative energy system plays a key role in this regard. Just like the neighbouring Trillple complex, the Austro Tower is heated and cooled using water from the Danube Canal, thereby maximising the location's potential. The water is channelled to an energy centre in one of the Trillple towers, where it is – depending on the season – either heated or cooled using high-temperature heat pumps. The energy is transported into the individual high-rise buildings by means of a district heating/cooling network. Five deep wells act as a backup for the ‘river power’; in an emergency, an electric boiler can be activated. In keeping with the strong environmental commitment, the concrete core ceilings of the individual storeys are thermally activated. ‘This type of heating and cooling is exceptionally energy-efficient and ideal for renewable sources of energy. It therefore represents an excellent choice whenever a stringent sustainability standard needs to be met. A high degree of user comfort is ensured, as are the owner's requirements in terms of a short construction period and low overall construction, maintenance and operating costs,’ explains Ing. Wolfgang Schermann of Vasko + Partner, the specialist planners for the building services engineering. The general contractor Swietelsky AG tasked the company KGT Gebäudetechnik GmbH with the installation of the heating, cooling, ventilation, air conditioning, sanitary and sprinkler equipment. ‘We opted for the Uponor Contec TAB system, as this product meets the specified quality standards in full,’ notes Ing. Franz Salzinger, HVAC and Sanitary Project Manager at KGT Gebäudetechnik GmbH.

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➤ More than 22,000 m² Uponor Contec for the office storeys

In order to thermally activate the 30 cm-thick concrete ceilings, the installers fitted Uponor Contec modules on the ceilings' lowest reinforcement layer. The individual modules were prefabricated on-site. Each of these modules comprises a backing mat and the exceptionally flexible and highly resistant Uponor PE-Xa pipes, which are used to transport the heating or cooling water. The pipes, which have an exterior diameter of 20 mm and a wall thickness of 2 mm, have been installed at a distance of approx. 6 cm to the lower edge.

The Uponor Contec system not only utilises the surfaces of the ceilings for heat transfer, but also the storage capability of the concrete. For example, the ceilings can be cooled overnight before once again absorbing heat from the building during the day. 'This kind of system offers the advantage that it is both silent and invisible. It also avoids draughts, as the operating temperature is only marginally higher or lower than the ambient temperature,' explains Herbert Renner, Uponor sales representative. Some 600 m² of Uponor Contec have been installed on each office storey, which equates to more than 22,000 m² overall.



Source © Uponor

➤➤ Spanning 38 storeys, the Austro Tower offers some 28,000 m² of office space, not to mention a conference centre, an employee restaurant and a cafe. Uponor supported the planning and construction team with installation plans, among other things. ◀◀

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► Tacker system with composite pipes for the ground floor and restaurant

In addition to TAB system, other Uponor products are in use in the skyscraper: the Uponor Tacker underfloor heating system has been installed on the ground floor, the first floor (restaurant area) and the 35th floor. It is also used for cooling on the ground floor. The wet-installation system can be installed exceptionally quickly, as the insulation layer and cover are already incorporated within the Tacker plates. The system is universally compatible with all screed types and the pipes can be easily installed using an ergonomic tacker device. "As the invitation to tender specified composite pipes for the underfloor heating, Uponor MLC composite pipes were chosen," reports Renner. The convectors were connected with Uponor Unipipes, MLC, S-Press.

► Support with installation planning

In addition to supplying products, Uponor also advised and supported the installation team, e.g. when it came to installation planning and instructing the installers. Despite coronavirus restrictions, the Austro Tower celebrated its topping-out on schedule in early 2021. The main tenants will be able to move in following completion at the end of the year: the Austro Tower will be the new headquarters of the companies SORAVIA, AUSTRO CONTROL and ASFINAG.

Project information

- Location: Vienna
- Country: Austria
- Website:
<https://www.soravia.at/project/austro-tower>
- Completion: 2021
- Project type: New construction
- Use: Office, conference centre and gastronomy

Participating companies

- Project developer: SORAVIA
Website: <https://www.soravia.at>
- General contractor: Swietelsky AG, Linz
Website: <https://www.swietelsky.at>
- Architecture: ATP Wien Planungs GmbH, Vienna
Website: <https://www.atp.ag>
- HVAC and sanitary planning:
VASKO+PARTNER INGENIEURE
Ziviltechniker für Bauwesen und
Verfahrenstechnik GesmbH, Vienna
Website: <https://vasko-partner.at>
- HVAC and sanitary planning:
KGT Gebäudetechnik GmbH, Feldbach
Website: <https://kgt.at>



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That's moving forward.
And that's what Uponor is all about.

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Building Solutions Europe
Franklinstraße 61-63
60486 Frankfurt am Main

T +49 (0) 9521 690 57
www.uponor.com