## **Uponor**

References

# Nathan, Zevenaar



#### **Uponor involvement**



Uponor PE-Xa, Uponor Tacker, Uponor Uni Pipe PLUS, Uponor MLC

## Nathan, Zevenaar

The technical heart of Nathan Zevenaar

The technical heart of Nathan Zevenaar:

from the bridge over the railway you can't miss Nathan's new building. A sleek, modern building, designed based on the very latest in technical climate solutions. It represents the beating heart of Nathan, as a new office for employees, but above all as a knowledge and expertise centre for sustainable climate technology. The entire ground floor is reserved for the 500 m2 showroom and the education and training centre for the Nathan Academy.

#### **Project Facts:**

Location Completion

Zevenaar, the Netherlands, 2018

Netherlands

Building Type Product systems

Office building Radiant Heating & Cooling, Gas

installation

Website Project Type

https://www.nathan.nl/over- New building

nathan/ons-kennis-en-

expertisecentrum/

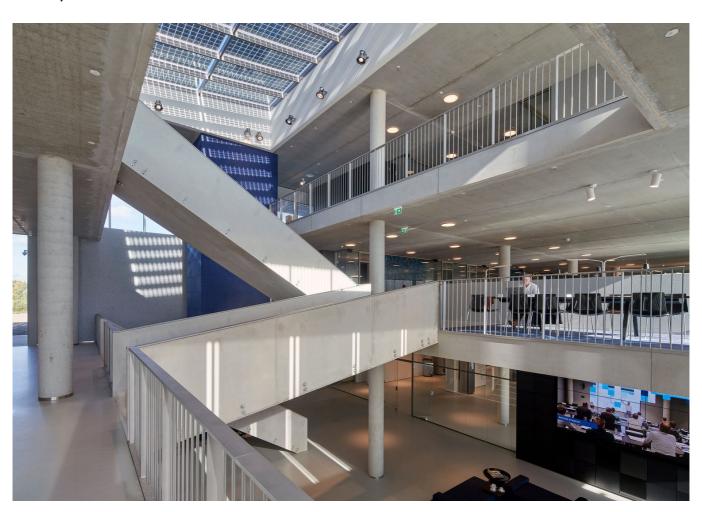
### Unique construction with a unique result

The new building, like the old office in Duiven, is heated and cooled by means of an open-loop aquifer thermal energy storage (ATES) system. To this end, two source holes were bored by Nathan Projects in July 2017. The source filters are installed in the second aquifer at a depth of between 60 and 90 metres. The sources are connected to two alpha innotec SWP heat pumps, each of 45 kW.

In Nathan's new building, concrete was very deliberately chosen. Concrete possesses the necessary mass for concrete core activation. It therefore forms the core of the new air-conditioning system and supplies approximately 85% of the building's heating and cooling needs. It ensures a stable indoor temperature in both winter and summer. The precast concrete slabs are prefitted with Uponor PE-Xa pipes for ceiling heating and cooling, cast-in sprinkler connections, electricity and ventilation ducts in the airdeck factory.

This results in a unique construction with a unique outcome. The concrete floors of the first and second floors and the loft therefore have all their technical installations precast in the concrete. The floors are also fitted with underfloor heating and cooling. An Uponor tackerboard system using a 16x2 mm PE-Xa pipe is used for underfloor heating and cooling throughout the building, including the warehouse area.

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