Референции

Uponor's bio-based PEX pipes in Klivet



Участие на Uponor

Selected supplier for A-hus’s research and development facility, Klivet. | Uponor Comfort Pipe PLUS Blue, 20 mm | Uponor Combi Pipe PLUS Blue, 16 mm | Uponor Smatrix Pulse - wireless

Uponor's bio-based PEX pipes in Klivet

Uponor’s bio-based PEX pipes at the research and development center, Klivet.
Uponor is supplying the world’s first bio-based PEX pipes to A-hus’s own research and development facility, Klivet.

Факти за проекта:

Location
Fjärås, Sweden

Завършване
2023

Тип сграда
Еднофамилно жилище

Адрес
Fjärås, Kungsbacka municipality

Website
https://www.a-hus.se/det-har-ar-a-hus/klivet-forskningshus-utvecklingshus-klimatneutralt-byggande

Тип на проекта
Нова сграда

Партньори

A-hus Research and Development Center, Klivet	A-hus www.a-hus.se

Bio-based PEX pipes in A-hus research and development building, Klivet

For A-hus' research and development house, Klivet, Uponor's bio-based PEX pipes were an obvious choice to minimize climate impact and eventually be able to build climate-neutral.
For the house manufacturer A-hus, the issue of sustainability is a high priority, they are constantly working to create better conditions for future generations. It is a matter of course to take responsibility in the industry and they have a strong focus on innovation and research to reduce the climate footprint. A-hus aims for all their detached houses to be climate neutral by 2030.

A-hus challenges with the research and development building, Klivet
In order to challenge traditional construction and to build with a lower climate footprint, a research and development building, Klivet, has been completed in Fjärås. The project is about deviating from the normal construction process by choosing materials and solutions that provide a lower climate impact during construction without incurring a higher cost. Klivet is a house that is largely similar to the energy-efficient wooden houses that A-hus builds today, but with a number of changes that were initially estimated to reduce the climate footprint by up to 30%.

What contributes to climate-neutral construction in KlivetIn the development project, A-hus has involved a large number of innovative and sustainability-conscious suppliers to achieve the project's climate and sustainability goals. The focus has been to find alternatives to building components and materials that currently account for the largest part of the climate impact in a newly built house. The greatest focus has been on:

- The foundation - wood instead of concrete. The wooden foundation has reduced the climate footprint by 63%, compared to ordinary concrete foundations for this type of house and under normal ground conditions.
- Roof - cardboard instead of concrete. Instead of concrete tiles, Klivet has a roofing made of cardboard that gives a 56% lower climate footprint compared to traditional concrete tiles.
- Walls - bio-based insulation. The walls have bio-based insulation, i.e. insulation made from recycled newsprint instead of mineral wool. The interior cladding consists of fibre gypsum, a screw fastening board with a lower climate footprint than the current standard, plaster and OSB. The interior walls are largely made of building boards made from recycled milk cartons.
- Energy - ventilation recycling. A heating system consisting of an outdoor air heat pump and ventilation recycling. With this, the house gets a lower energy consumption than the same house with a traditional exhaust air heat pump.

"Klivet will of course have underfloor heating and we use the world's first bio-based PEX pipe, which reduces the carbon footprint compared to traditional PEX pipes used in underfloor heating."
Jimi Leo, Technical Product Owner at A-hus

The world's first 100% bio-based PEX pipe in Klivet
Klivet naturally has water-borne underfloor heating, an investment for the home that is both economical and energy-efficient. Uponor was selected as the supplier of underfloor heating, with the world's first 100% bio-based PEX pipe, Uponor Comfort Pipe PLUS Blue. With the choice of bio-based PEX pipes, the carbon footprint is reduced by up to 90% compared to traditional PEX pipes (fossil-based) used in underfloor heating installations.

"The bio-based PEX pipe helps our customers achieve sustainability goals in all types of projects. Because if we want to achieve sustainable construction, all parts of the construction project will need to contribute, including the pipes in the HVAC system," says Robert Molund, CEO of Uponor AB.

With underfloor heating from Uponor, homeowners also have great opportunities to influence the energy consumption of the household's heat distribution. Uponor's wireless underfloor heating control, Smatrix Pulse, provides maximum room comfort while being a highly energy-efficient system, with up to 20% lower energy consumption. With the unique Auto-Balancing function, no loops need to be adjusted, but the underfloor heating system adapts to the household's usage patterns, in all seasons. The Uponor Smatrix Style thermostats measure the temperature in each room with high precision and interact with the control center when changes are needed or desired. Smatrix Pulse automatically optimises the home's energy use, provides a more even heat distribution and therefore consumes less energy.

Fantastic results - smaller climate footprint During
the construction of Klivet, A-hus has made conscious choices of suppliers with innovative and climate-smart solutions, which have contributed to climate-neutral construction. The result was a 37% lower climate footprint compared to a standard project during the construction phase. This can be converted into 7.5 tons of carbon dioxide, or 2 round-the-world trips by plane.

Uponor, as a supplier of Uponor PEX Pipe Blue, now offers the market the opportunity to lead the way to green building and contribute to a sustainable construction industry, where the choice to use bio-based PEX pipes for HVAC systems reduces the carbon footprint by up to 90% compared to fossil-based PEX pipes.

With common sustainability goals and the climate in focus, we can build for the future together.

Here you can read more about A-hus' research and development house, Klivet

Image gallery

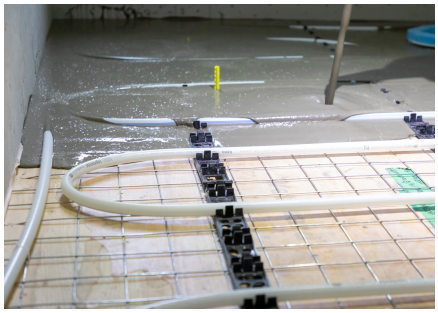












> Bio-based PEX pipes help our customers achieve sustainability goals in all types of projects. Because if we want to achieve sustainable construction, every part of the construction project will need to contribute—including the pipes in the plumbing system.

+GF+

Свържете се с нас

Търговско представителство
Uponor GmbH – България

Телефон +359 889 609 933
W www.uponor.com