References

Hausboot-Marina

Uponor involvement

- 450 running metres Uponor Ecoflex Supra PLUS pipe

Hausboot-Marina, Bad Bederkesa

450 metres of Uponor Ecoflex Supra PLUS pipes are used to transport drinking water and waste water in a new houseboat marina.
• Eight floating holiday homes on three footbridges
• Underwater connection to houseboats
• Integrated heating cable keeps cables frost-free

Life on the water decelerates: Slowly it flows along, quietly hitting the aluminium hull, the sun's rays reflecting on the smooth surface, birds can be heard, fish show themselves and the surrounding nature is so close. What was developed as a hip alternative in the hip big cities with rivers, canals and lakes is now also firmly moored in the Elbe-Weser Canal on three jetties of the new houseboat marina in Bad Bederkesa. The eight floating holiday houseboats are connected to the local drinking water supply and sewage system with 450 m pre-insulated Uponor Ecoflex Supra PLUS pipes. Thanks to the integrated heating cable, the pipes remained frost-free even in the first winter.

Project Facts:

Location	Completion	
Bad Bederkesa, Germany	2018	
Building Type	**Product systems**	
Single family home	Local Heat Distribution	
Address	**Website**	**Project Type**
Dobbendeel Bad Bederkesa am See	http://www.hausboote-bederkesa.de	New building

Partners

Building owner: Hausboot Reederei GmbH, Cuxhaven

Execution: Harald Otte, Inh. Sandra Otte, Geestland

Delivery and project planning: Uponor GmbH

Not the only luxury the Tiny Houses offer on a boat hull. Floor-deep windows make the water and the play of light of the sun on the water directly experienceable. Air and sun can be enjoyed on the 25 m² roof terrace and a small dinghy awaits a rowing tour in the neighbouring Bederkesaer See. If the sun does not warm up, an electric fireplace can be "lit" in the living room.

Joachim Frost, managing director of Hausboot-Reederei GmbH, ignited the idea for the houseboat marina. He has had a houseboat in Bremerhaven since 2016 and found enthusiastic supporters for his project to moor the floating holiday homes in the tranquil Hadelner Canal in the mayor and business development of Bad Bederkesa. With success: The houseboats, each weighing 11 t, were built faster than planned, delivered with a low loader, washed with a heavy crane and of course christened - even though the boats are currently equipped without rudder and engine.

Since November 2018, the eight houseboats have been moored on newly constructed floating jetties behind the dam. The jetties can be reached via two bridge jetties, covered with weather-resistant and slip-resistant WPC panels, so that guests can safely reach their floating domicile. The houseboats are firmly moored in rows to the steel dolphins and can be reached via short bridge bridges.

The new jetties also make it possible to access the houseboats with electricity, drinking water and sewage pipes. The outriggers on the water side were used as a support for the Uponor Ecoflex Supra PLUS pipe. To ensure that the pipes are securely fixed and can still float, a local locksmith made special brackets from corrosion-resistant stainless steel.

Not the only requirements for the flexible pre-insulated pipe with the corrugated outer casing. "The high-quality polyethylene of the casing pipe is UV-resistant. This is very important for this unusual application as the pipe is constantly exposed to sunlight", explains Enrico Soeder of Uponor. He supervised the project, advised the client and the executing SHK specialist company Otte, Geestland, and instructed them in the installation process.

In order to be able to connect the pipes to the houseboats under water, the cross-section of the internal PE pipes was reduced from 63 mm in diameter to 25 mm for drinking water and 32 mm for waste water. "We have experience with the installation of Uponor Ecoflex - but only in the ground. The product recommendations and installation instructions from Enrico Soeder were very helpful", reports Sandra Otte, owner of the SHK specialist company of the same name. Enrico Soeder is one of Uponor's specialists for the Ecoflex system. They support specialist planners and fabricators throughout Germany in the planning and instruction of processing on site.

Uponor Ecoflex Supra PLUS consists of an internal PE service pipe, surrounding insulation and the protective jacket pipe made of high-quality polyethylene. The insulation is made of a multi-layer, age-resistant, permanently elastic, closed-cell, cross-linked polyethylene. The Ecoflex Supra PLUS pipe is available in dimensions from 25 to 110 mm. The pre-insulated pipes can also be laid in tight radii without additional elements. This saves time and money. The pipe system is manufactured in Germany according to certified and quality-tested standards. Uponor offers a ten-year declaration of liability as an expression of quality.