

The houseboat of the future will have multiple floors and be versatile in its use. Here are our top 5 floating buildings – from farms to office complexes.

Architecture wants to defy climate change and its consequences with floating buildings. After all, the Intergovernmental Panel on Climate Change, or IPCC for short, expects sea levels to rise by up to one metre by the end of the century. Venice is already regularly flooded. Many major cities such as Miami and Jakarta have to prepare for flooding. This has led to a boom in the development

of floating construction projects. The benefits of so-called amphibious buildings are obvious: attached to pontoons or floating platforms, they adapt to the water level instead of having to withstand it. And the possibilities are already impressive.

### 5. Theatre by the river France

The L'Île Ô theatre in Lyon by Waterstudio NL was built from lightweight cross-laminated timber. The modern cultural centre with its two event halls and three levels floats elegantly on the Rhône. Workshops, training courses and events take place in the modular rooms. Visitors can enjoy the view of the water from the 140 m² roof terrace. The reinforced concrete pontoon was prefabricated in Edouard-Herriot harbour and then placed on the water. The complete reinforced

concrete hull has a length of more than 40 metres and a width of around 11 metres. The ship's side height of 2.70 metres was formed and concreted in three cycles using a wall formwork system. The complete outer wall, the 25 cm thick hull floor and four reinforcing hull crossbeams were integrated into the first cycle.

# **4. Floating Spa & Hotel**Lapland

At the Arctic Bath spa hotel in Lapland, the floating spa and some of the boutique cabins float on the Lule älv river. Only a wooden footbridge connects them to the mainland. The complex was designed by a team of architects led by Bertil Harström, Johan Kauppi and Annkathrin Lundqvist - in remembrance of the Nordic tradition of floating wood. Luxury and comfort do not have to be sacrificed in the Arctic wilderness. Since 2020, you can enjoy Scandinavian hygge in its purest form at the design hotel. And relax in the floating spa after Northern Lights spotting or a dog sledding tour.

## **3. Church as a memorial** Germany

The VINETA was placed on Lake Störmthal, which was created by the flooding of a former open-cast coal mine and only fully opened to the public in 2014, back in 2010 as part of the *Art Instead of Coal* initiative. At 15 metres high, the church is one of the tallest floating structures on Germany's lakes. The building serves as a memorial to the places that had to make way for coal mining. The

architecture of VINETA is also inspired by the traditional village churches of the region. The tower room and house can be hired for events. Although the floating church is operated by the secular Kristallpalast Varieté Leipzig, civil weddings can still be booked.

### **2. Floating farm** The Netherlands

The world's first floating farm has been in operation since May 2019 and was designed by Goldsmith in Rotterdam. Fresh microgreens, vegetables and herbs are grown here in an intelligent, closed system based on the closed-loop principle. According to the operator, the vertical farm in the belly of the farm requires 85% less water than traditional cultivation and does not need any pesticides at all. For the dairy cows on the upper floor, species-appropriate husbandry is the top priority.

The floating farm in Rotterdam aims to produce sustainable, organic and fresh food close to urban consumers - a lighthouse project with potential.

### 1. Office complex The Netherlands

We are staying in Rotterdam: the three-storey Floating Office Rotterdam, designed by Powerhouse Company, is located off the Kop van Zuid peninsula. The skeleton construction consists of large glulam beams with stiffening cross-laminated timber ceilings and walls. With its green roof, numerous balconies and large glass façade, the floating complex is in no way inferior to the fixed structures. Solar panels supply the building with electricity and the cooling and

heating system is installed in the ceilings. Cold is extracted directly from the water and channelled into the building via integrated water pipes in the 15 concrete pontoons on which the building stands. In addition to the office space on the upper floors, there is also a restaurant and a swimming pool on the ground floor. In total, 5,880 m² of climate-resilient floor space has been created in a central location.