

Last month the last timber modules of 'Juf Nienke', a new fully circular apartment building at the entrance to the Centrumeiland, were installed, reaching the highest point of the building. A fitting opportunity to catch up with Juf Nienkes' architects Bjarne Mastenbroek (SeARCH) and Thomas Rau (RAU) on site.

Prefabricated timber houses

With the last modules in place, we start working on the finishing in order to welcome its first residents in the most sustainable apartment building of Amsterdam by fall 2022. Half of the 61 prefabricated timber apartments designed by SeARCH & RAU for developer Dokvast within 'Juf Nienke' are intended for teachers and other residents who work in the essential services within Amsterdam, such as education, healthcare, and police forces.

Catch-up with the architects

Thomas Rau: 'The municipality set incredibly high standards for this site. Which meant that if you were to use traditional methods, the desired level of performance was simply not achievable. They really asked for a Formula One car at this location, so, we really had to develop this completely from scratch.

Bjarne Mastenbroek: 'Both RAU and SeARCH are front runners in timber construction. We have the experience, but that does not mean that it was an easy journey. There are regulations, the demands of contractors, and hesitancy from clients to navigate, so you must work very hard to realize the building in timber...and then you just stand stronger as a team.

Circular, nature-inclusive and energy-positive

'Juf Nienke' is a circular, nature-inclusive and energy-positive building with a strong urban presence. Housing modules are stacked high above a grand staircase to create a large vertical void and signal the entrance to 'Juf Nienke'. Residents climb these stairs to reach a raised timber deck with a beautiful view of the quiet communal courtyard. This raised terrace also acts as a communal street running through to the other side of the building and connects the three housing blocks.

The materials used in 'Juf Nienke' are mainly biobased and recycled; they have a low environmental impact and are largely renewable. The prefabricated timber modules (made HSB & partly CLT) can be paired horizontally or stacked vertically to create a variety of housing typologies. By varying the depths of the prefabricated timber modules but keeping a standard width of 4m the housing is completely demountable. This means 'Juf Nienke' can easily be adapted in the future.

By building the housing entirely out of timber it stores over 580.000 kg CO₂, actively responding to the challenge posed by climate change and contributes to a healthy living environment. By prefabricating the timber housing we lower the amount of waste, often created during construction, minimize the impact on its surroundings and reduce construction time significantly.

The planting of both the courtyard and the raised communal deck has been carefully chosen to enrich the biodiversity. Lining the edge of the raised deck within the central garden are a series of niches for bats and birds and high above the entrance staircase the facade is continued to create a bat hotel for the winter months.