HAUT Amsterdam, la plus haute tour en bois des Pays-Bas

Do Janne VERMEULEN
Team V Architecture
Amsterdam, Pays

1. Tender

The development site of HAUT beside the River Amstel did not simply go to the highest bidder. In assessing offers, the municipality of Amsterdam also weighed both architectural quality and sustainability. The selected proposal is for a twenty-one-floor residential tower in timber, one of the tallest such structures in the world. The innovative project will help to put timber back on the world map as a structural building material.

HAUT rendering seen from River Amstel (© Zwartlicht/Team V Architecture)

2. Sustainability

In contrast to concrete and steel, the production of timber causes no CO2 emissions. Timber actually stores CO2. Moreover, timber is renewable if harvested from sustainable production forestry. HAUT is an example of innovative sustainability in other ways, too. The building is fitted with solar panels on the roof and façade, a cold source in the ground, sensor-controlled installations with low-temperature floor heating and cooling, nesting boxes for birds and bats, charging points for shared electric cars, and a rooftop garden with rainwater storage.

Cross-laminated timber (CLT) floor and wall panels (© Jannes Linders)

3. Hybrid Timber

The load-bearing structure of HAUT is made of cross-laminated timber (CLT) panels, which are manufactured off-site, ensuring low waste production and fast and clean on-site assemblage. There are no standard building regulations for high-rise timber construction. The design team therefore invested considerable time and energy in technical innovation and safety. The floors and walls are constructed in timber, but a structure made completely of timber in wet and windy Amsterdam would have been impossible. Consequently, the foundations, basement, and core are made of concrete.

4. Haute architecture

A benefit of timber construction is that it offers a warm feel and allows for a high level of customization, or bespoke "haute architecture." CLT panels are easily adaptable, offering first buyers a choice in the size of their apartment, the number of floors, the layout, and the positioning of double-height spaces, loggias, and balconies. Unlike most timber buildings, only the inner walls of HAUT are load-bearing, which allows for large floor-to-ceiling windows in the façade. The irregular pattern of balconies and the pronounced, double-height spaces facing the River Amstel make HAUT's architecture distinctive.

www.hautamsterdam.nl

HAUT seen from River Amstel (© Jannes Linders)

HAUT

Location	Korte Ouderkerkerdijk Amsterdam
Program	Residential tower of 73 meters in height, with approximately 52 apartments of different sizes; a public plinth with urban winter garden, underground car and bicycle park
Gross floor area	14,500 m2
Client	Lingotto, Nicole Maarsen
Start – Opening	2016–2022
Structural engineering	Arup
Contractor	JP Van Eesteren
Timber construction	Brüninghoff Bausysteme, Assmann Beraten + Planen AG, Holzbau (delivery, prefabrication, and assembly of wooden elements)
Sustainability label	BREEAM Outstanding