

Case Study ESG

Amsterdam CBD's first hybrid timber office building



PROJECT:
The CubeHouse



COMPANY:
a.s.r. real estate



LOCATION
Netherlands

Challenge

There were multiple challenges for the construction of The CubeHouse:

- > **Location:** the last plot of the “Mahler4” core area of the Amsterdam South-Axis, with many limitations:
 - Located partly above the existing Mahler4 parking, creating significant structural challenge for the engineering teams;
 - High-rise neighbouring office buildings, which protested against the new development;
 - Location right next to the Amsterdam Zuid train station, part of the “Zuidasdok” project involving under-tunneling the A10 highway and enlarging the train station.
- > **Tenants:** BNP Paribas and Arcadis for their new Dutch headquarters, requiring:
 - The highest level of sustainable office matching their sustainability goals and creating the workplace of the future;

- Ready by the end of 2025 to relocate on time from their (multiple) existing offices;
- Realising and managing tenant's fit-out packages during the development and construction process.

Solution / Approach

Repeated iterations of the building design by the architect, in consultation with the developer and end-investor, coupled with repeated consultations with the Municipality, resulted in a building design of layered cubes one on top of another, giving the building its name: The CubeHouse.

Importantly, a hybrid-timber construction was chosen, which has several advantages:

- > **Lighter construction:** Wood is lighter than concrete, meaning a wooden construction could become higher and offer more m² space with the same weight. This was important as the construction is built upon an existing parking garage.



- > **Faster construction:** The wooden elements arrive from the factory in Austria labelled with a QR-code and are assembled together on-site. This shortens the construction time on site significantly, which was necessary in order to meet the tenants deadlines and coordinate with the “Zuidasdok” project. For both it was paramount The CubeHouse be ready by the end of 2025.
- > **Sustainable construction:** The 13,000 m³ of sustainable timber stores 9,000 tonnes of CO₂, equivalent to the electricity consumption of 10,000 households in 1 year.
- > **Pleasant working environment:** It has been researched that a natural working environment, with visible wood and plants, increases concentration and decreases illness.

Results

The CubeHouse is born out of a shared ambition by G&S&, Arcadis, BNP Paribas, SO-IL and a.s.r. real estate to create the workplace of the future.

The joint efforts of the team counting developers, architects, builders, tenants and the owner led to optimisation of the available space and design, for an innovative and inspiring development of the first hybrid timber office of the Amsterdam South-Axis.

The CubeHouse will be a place people want to come to, with:

- > *A social heart for the neighborhood*, with a publicly accessible rooftop garden and a publicly accessible ground floor, The Cube: space for collaboration, innovation, celebration, social initiatives;
- > *Top-notch sustainability credentials:* Paris-proof upon delivery and BREEAM Excellent, with a healthy building certificate;
- > *A pleasant, natural working environment:* visible wooden columns and semi-open Breathe Spaces on three floors: green semi-outdoor zones with natural ventilation.

The CubeHouse is currently under construction, with delivery scheduled for 31 December 2025. The BREEAM Excellent and WELL Gold certifications are not only targets but contractual obligations between a.s.r. real estate and G&S& in the turn-key development agreement. Both teams are actively working to secure these certifications.



Outcomes

The wide sustainability vision of The CubeHouse enables CO₂ reduction on three fronts:

Building stage: Minimizing embodied carbon, through:

- 75% of the materials used being recycled and/or bio-based, mainly timber originating from sustainably managed forests, and also recycled concrete.

Operational stage: minimizing operational carbon. The building will be Paris-proof at delivery through:

- Up to 75% of the building shell's forecasted energy demand being generated sustainably on-site, with solar panels on the roofs and parts of the façade forecasted to generate ca. 138.000 kWh/year;
- Connection to an existing TES (Thermal Energy Storage) installation, heat pumps, and connection to district heating;
- Smart building systems used to minimise energy consumption, LED lighting including presence detection and daylight control;
- Water re-use: water crates on the roof and rooftop garden surfaces collect up

to 175 m³ of rainfall, which is subsequently used to flush toilets and water the 400 m² garden and 590 m² roof gardens and Breathe Spaces.

Sustainable mobility: minimizing carbon related to mobility to/from the building through:

- Amsterdam Zuid train and metro station: the Brittenpassage, the new entrance created for the expanded Amsterdam Zuid station, is located right next to The CubeHouse; travelling by train with the NS, is carbon-neutral;
- A generously-sized bike parking facility offers space for 300 bicycles and 30 scooters, 10% with electric charging facilities;
- No own parking places; there is a direct access to the Mahler parking garage, which also offers electric charging points for cars.

The start of construction was in December 2023. The highest point was reached in June 2025, and delivery is planned end 2025.

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a.s.r. real estate

a.s.r. real estate, part of insurer a.s.r., is a professional organization with a long-term vision, in which quality and sustainability play a central role. The ASR Dutch Mobility Office Fund invests in high-quality office buildings near the main public transport hubs of the five largest cities (G5) in the Netherlands. Dynamic locations in which working, living and leisure are intertwined. a.s.r. real estate is dedicated to achieving a carbon-neutral portfolio by 2045.