

Superstructure Zelgstrasse, Uster

15.04.2024



On Zelgstrasse in Uster, the client UBS Sima is realising a pioneering residential quarter with a clear focus on environmentally conscious and future-oriented system construction. Originally planned as a conventional construction project with 164 flats, thanks to an innovative competition process it has developed into a flagship project for sustainable, fast and low-emission construction - with minimal noise and traffic pollution. With the help of the TS3 system, the residential complex was built in the shortest possible time.

The Project

The transition from the originally planned concrete building to a timber construction went smoothly, as the planning with the biaxial load-bearing TS3 cross-laminated timber panels is similar to reinforced concrete projects. The five buildings with a total of 164 flats on an area of 15,200 m² not only rely on sustainable construction methods, but also integrate advanced technologies. The complete realisation of the project in wood ensures that the building materials can be fully recycled and reused once the building is no longer in use. Zelgstrasse in Uster thus becomes a prime example of well thought-out planning and the use of innovative technologies in the service of a sustainable future.

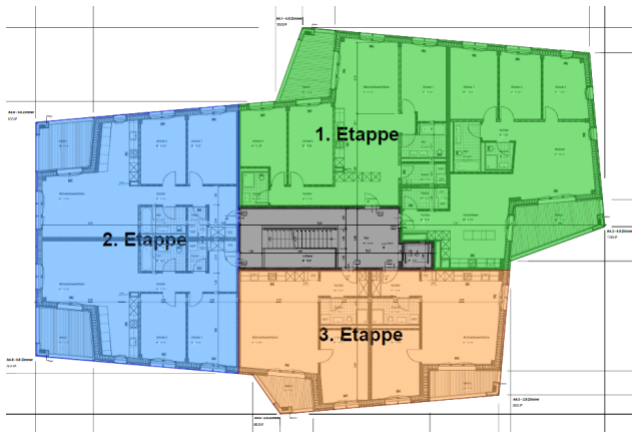
The construction method

The ceilings consist of cross-laminated timber panels. These are connected using TS3 technology to form a large, biaxial load-bearing ceiling. This allows a large part of the interior walls to be constructed using lightweight construction. This allows the building to be converted at a later date. The individual load-bearing supports are positioned in the area of the interior walls and are therefore not visible. The exterior walls are made of timber frame construction. In addition to the windows, the façade and blinds were also installed at the factory.

The challenges

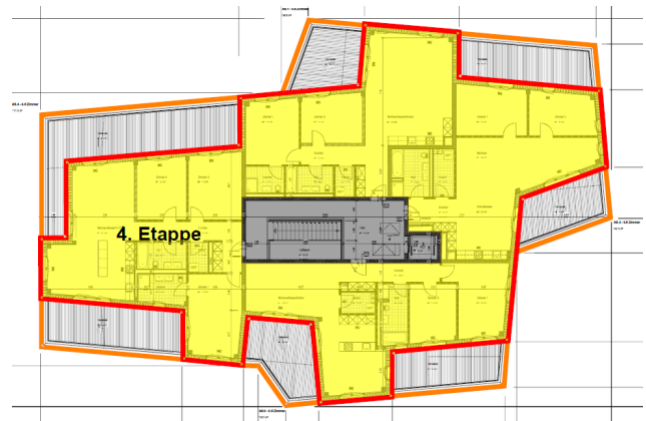
Just-in-time requires that the planning is completed on schedule and that the fabrication can start on time and with sufficient lead time. Safe, precise, noise- and traffic-friendly construction in the shortest possible time, so that tenants can move back in quickly. This shortens the construction time by a total of 11 months.





Construction data

- Gross floor area: 15'200m²
- Cross laminated timber: 3180m³
- TS3 technology: 4150m¹



Client

UBS Sima

Timber construction

Renggli AG, Schötz

Civil engineer

Timbatec Holzbau Ingenieure Schweiz AG, Zürich

Construction management

Rhomberg AG

CLT - Manufacturer: Theurl Timber Structures Steinfeld AT