

## Residential development Zelgstrasse, Uster

15.04.2024



On Zelgstrasse in Uster, the developer UBS Sima is creating a pioneering residential neighborhood with a clear focus on environmentally conscious and forward-looking modular construction. Originally planned as a conventional construction project with 164 apartments, it evolved—thanks to an innovative competitive design process—into a flagship project for sustainable, rapid, and low-emission construction—with minimal noise and traffic impact. With the help of the TS3 system, the residential complex is being built in record time.

### The Project

The transition from the originally planned concrete structure to a timber structure went smoothly, as the design using TS3 cross-laminated timber panels with two load-bearing axes is similar to that of reinforced concrete projects. The five buildings, comprising a total of 164 apartments across 15,200 m<sup>2</sup> of floor space, not only rely on sustainable construction methods but also incorporate advanced technologies. The complete implementation of the project in wood ensures that the building materials can be fully recycled and reused once the buildings reach the end of their useful life. Zelgstrasse in Uster thus becomes a prime example of thoughtful planning and the use of innovative technologies in the service of a sustainable future.

### Construction Method

The floor slabs consist of cross-laminated timber panels. These are joined using TS3 technology to form a large, two-way load-bearing slab. This allows a large portion of the interior walls to be constructed using lightweight construction methods. This facilitates the building's future conversion. The individual load-bearing columns are located within the interior walls and are therefore not visible. The exterior walls are constructed using wood-frame construction. In addition to the windows, the facade and the blinds were also factory-installed.

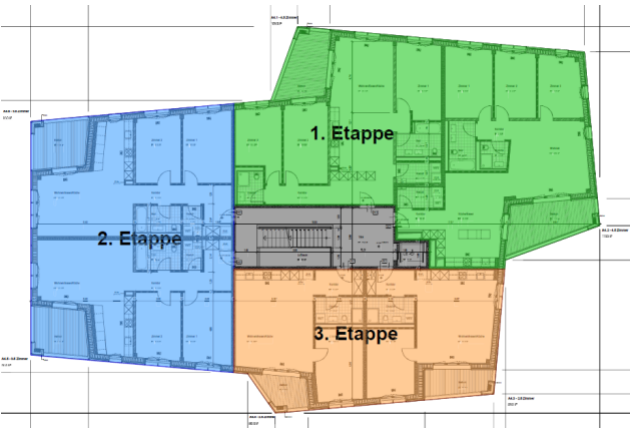
### The Challenges

Just-in-time production requires that planning be completed on schedule, that fabrication begin on time, and that production can start promptly with sufficient lead time. Constructed safely, precisely, and with minimal noise and traffic disruption in the shortest possible time, so that tenants can move back in quickly. This reduces the construction period by a total of 11 months.

[Customer testimonials from the perspective of the building owner / investor: UBS SIMA / Rhomberg](#)

[Customer testimonials from the perspective of project developer Rhomberg \(Swissbau 2024 presentation\)](#)





### **Construction data**

- Gross floor area: 15,200 m<sup>2</sup>
- Cross-laminated timber: 3,180 m<sup>3</sup>
- TS3 technology: 4,150 running meters of joints

### **Client**

UBS Sima

### **Timber construction**

Renggli AG, Schötz

### **Civil engineer**

Timbatec Timber Construction Engineers Switzerland AG,  
Zurich

### **Construction management**

Rhomberg AG

### **CLT Manufacturer**

Theurl Timber Structures, Steinfeld, Austria