# Nauenstrasse, Tann ZH

2020





The newly built apartment house in Tann is located directly next to the Nauenbach. The wooden house with 4 floors offers a total of 5 rental apartments in a quiet location.

# The project

The planning of the project was a small family plan of the Timbatec employee. The architect in charge and the civil engineer are siblings of one of the employees. The building is built as a wooden structure from the floor slab. The solid wooden ceilings rest on the interior load-bearing axes and exterior walls. The cantilevered balconies were all constructed without columns. All beams and columns, as well as the ceilings, are visible and were treated with a UV protection with a light white content. Timbatec was responsible for the entire timber structural design, the detailed design and the fire protection design including quality assurance.

## The construction

From the floor slab onwards, the building is a pure timber construction. The elevator shaft and staircase are also made of wood. The escape staircase is a steel construction. The timber construction was realized very efficiently. The three interior load-bearing axes with beams and slabs as single span beams are visible. The ceiling span 4.0-4.5m is optimal. The supporting axes with beams are supported every 3.5m.

# The challenge

The challenge was the cantilevered balconies with 90 degrees against the span direction of the slabs. These were executed with load-bearing balcony parapets anchored in the exterior walls.





Interior view



Attic

## **Construction Data**

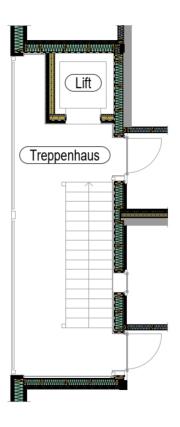
- Wood-based panels 25 m<sup>3</sup>
- Structural timber / BSH 150 m<sup>3</sup>

#### **Construction costs**

- BKP 1-9: 5.5 million Swiss francs
- BKP 2: 2.3 million Swiss francs
- BKP 214: 0.5 million Swiss francs

#### **Services of Timbatec**

- SIA Phase 31 Preliminary design
- SIA Phase 32 Construction project
- SIA Phase 41 Tendering and comparison of offers
- SIA Phase 51 Implementation project
- SIA Phase 52 Execution
- Fire protection planning



Detail staircase

# Architect

Architekturbüro Rüegg, 8733 Eschenbach

# Client

Marlise and Hans-Jakob Wetli, 8632 Tann ZH

# Timberconstruction engineer

Timbatec Holzbauingenieure Schweiz AG, 8005 Zurich

# Timberconstruction

Artho Holz- und Elementbau AG, 8735 St. Gallenkappel

#### Civil engineer

EBP Schweiz AG, 8008 Zurich

#### **Construction management**

Architekturbüro Rüegg, 8733 Eschenbach

#### **Photography**

Architekturbüro Rüegg, 8733 Eschenbach

