

# Residential and commercial building MIN MAX, Opfikon

2016

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Wood dominates the MIN MAX residential building in Glattpark. The two upper floors are made entirely of wood, while the lower floors have been designed as a hybrid construction.

## The project

The 98 apartments of the MIN type have 1.5 to 3.5 rooms and are between 40 and 80 m<sup>2</sup> in size. In addition, the development has three 180 m<sup>2</sup> apartments of the MAX type, which are designed for shared apartments. With this concept, the MIN MAX development is aimed at students, single people, creative people or young professionals. They will find an affordable home in a central location. The design up to the third floor, MIN MAX was constructed as a hybrid building. The supporting structure was designed as a solid skeleton construction, the non-load-bearing exterior walls were prefabricated from wooden elements and assembled after concreting. The upper two floors are a pure timber structure. The exterior and interior walls consist of frame construction elements, the roof construction of box girder elements.

## The construction

The ceilings of the galleries in the two-story apartments are made of solid wood. The outer facade of the ring building consists of sheet metal cladding, while the facade facing the inner courtyard is made of gypsum fiberboard. The challenge very narrow constructions were required for the small two-story residential units in order to create as much living space as possible. Because the roof and gallery ceilings were made entirely of wood, it was possible to gain a lot of room height compared to a solid construction. On these floors, an apartment partition wall had to be inserted practically every two and a half meters. These narrow walls, which are over 5 meters high, have to meet the requirements for sound insulation and fire protection as well as support the roof structure and gallery ceilings.



The apartments of the MIN MAX development are accessible via arcades



Some of the apartments are extremely airy thanks to the galleries



View into one of the two-story apartments type MIN (Photos: Roland Bernath)

### Construction Data

- Solid wood
- glulam 350 m<sup>3</sup>
- Three-layer board spruce/fir 3500 m<sup>2</sup>
- Wood fiber boards 2000 m<sup>2</sup>
- OSB boards 4000 m<sup>2</sup>

### Services of Timbatec

- SIA phase 31 preliminary project
- Cost estimate
- SIA Phase 32 Construction project
- Fire protection planning
- Technical site management and site inspections
- Structural analysis and design
- SIA Phase 41 Tendering and comparison of offers
- SIA Phase 51 Implementation project
- Works planning 3D and 2D

### Civil engineer

Henauer Gugler AG  
8021 Zurich

### Total contractor

Ralbau AG  
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### Owner

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### Architect

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