

Dörflistrasse, Pfäffikon

2020



The new apartment building on two plots on Dörflistrasse in Pfäffikon ZH will be ready for occupancy from 2020. The 4-story building offers 17 apartments with 2½ to 4½ rooms.

The project

The new building with 17 apartments and an underground garage is located on two plots. From the first floor the building is made of wood. The exception is the staircase, which is made of reinforced concrete. The ceiling is made of solid wood, all walls are of stud construction. The building envelope is a compact façade with directly plasterable soft fiber boards. Partial areas are covered with wooden formwork. The superstructures are sound-optimized by Timbatec. The floor slabs could thus be reduced to a minimum height, but without creating acoustic deficits and large deformations. The increased sound insulation requirements were thus easily met.

The construction

The timber construction was done in stud construction with solid timber ceilings. Individual columns with beams clear larger areas. The use of steel and concrete in timber construction was avoided as far as possible. Thus, the underground garage, basement and staircase are the only reinforced concrete components. A structurally simple and efficient solution was sought to minimize settlement in the timber structure, and was found with load-transmitting beech dowels in the floor slab.

The challenge

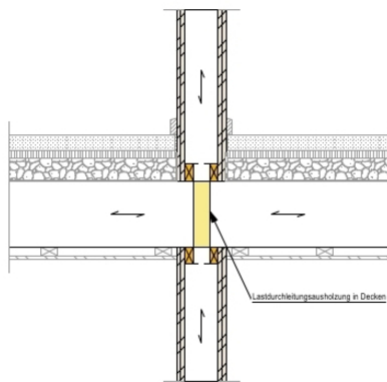
Although this is a single building, two different builders were involved. The two parts of the building had to be separated with a fire wall. The load transmission and settlement prevention also had to be solved without the use of large amounts of steel and complex details.



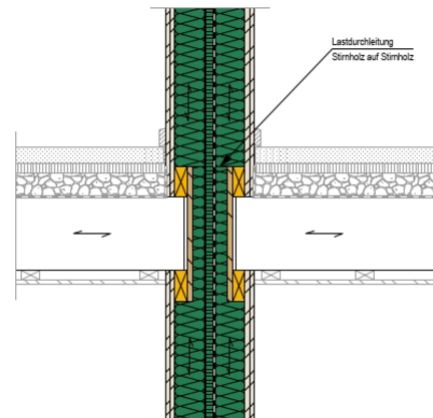
Construction phase attic



Finished apartment



Detail load transmission apartment partition wall



Detail load transmission inside wall

Construction Data

- Glulam 293 m³
- CLT 10 m³
- Structural timber 108 m³
- OSB 24 m³
- Gypsum fiberboards 58 m³
- Soft fiberboards 45 m³

Services of Timbatec

- SIA Phase 32 Construction project
- SIA Phase 51 Implementation project
- SIA Phase 52 Execution
- Statics and construction
- Fire protection planning
- Fire protection Quality assurance QSS2
- Consulting sound insulation (no building physics)

Architect

Benedikt Müller Immobilien GmbH, 8645 Jona Heinz Hörner
Architekt, 8032 Zurich

Building owner

Patrick and Benedikt Müller and Fritz Lüdi, 8330 Pfäffikon

Timber construction engineer

Timbatec Holzbauingenieure Schweiz AG, 8005 Zurich

Timber construction

Flück Holzbau AG, 8602 Wangen

Construction management

Benedikt Müller Immobilien GmbH, 8645 Jona Heinz Hörner
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Photography

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