

Addition of another storey to MFH Schäfliigraben, Wallisellen

2020



The Schäfliigraben development in Wallisellen consists of three apartment buildings. With the increase in wood up to additional two floors, 15 new bright apartments in wood, with exposed wood ceiling, have been created.

The project

The addition to the existing buildings was made in a light and modern wooden construction. Inside, the wooden ceilings are visible, otherwise the wood remains structurally active. However, hidden and outside is finished with a new clinker facade. This facade is attached to the wooden structure for stabilization. The visible wooden ceiling is made of horizontal glulam. The existing part of the building was extensively renovated. This included the renewal of the facade, renovation of the wet cells and the addition of a lift to the staircase. New, larger balconies in steel, which are anchored back to the existing building and the wooden structure, provide the apartments with more outdoor space.



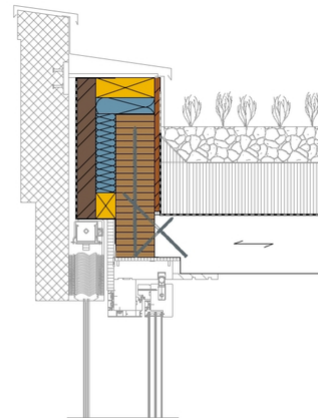
View kitchen

The construction

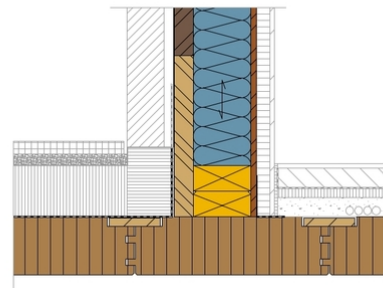
The existing buildings were constructed in solid concrete. Consequently, the alterations in the stairwell with the integration of the new elevator also had to be built in reinforced concrete. The extension was built as a timber frame construction with visible glulam ceilings. Externally, the old balconies were replaced by new ones in steel, which were attached to the existing structure and the timber frame. The new clinker facade also had to be back-fastened to the wooden structure.

The challenge

The exterior wall in wood is located in the insulation level and thus offset from the exterior wall of the existing solid construction. This meant that a support had to be created for the wooden exterior walls and at the same time the tolerances of the solid construction had to be accommodated. The support had to be designed in a statically more complex way, since the concrete edge could not absorb the loads.



Connection of flat roof to existing exterior wall



Connection floor ceiling - terrace to outer wall

Construction Data

- Glulam: about 250 m³
- Building height: about 11 m
- New apartments in wood: 16

Construction costs

- BKP 214: CHF 750'000.-

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
- Statics and construction
- Cost estimate

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