

Addition Birkenrain, Zurich Retirement and Nursing Home, Bellariastrasse 21, Zürich

2021



The Birkenrain retirement and nursing home has 35 single rooms and was reopened in May 2021 after a complete renovation. Timbatec supervised the extension and was responsible for the QS fire protection for the whole building (QSS3).

The project

The Birkenrain old people's and nursing home with a dementia ward is in a quiet location in the Enge district on the lower right bank of Lake Zurich. After a total renovation, an extension in the basement and a new floor, the nursing home shines in new splendor. A new room layout in the existing building and the adaptation of the staircase adapt the existing building to today's needs. At the same time, high fire protection requirements had to be taken into account, since the building is an accommodation facility. The rooms are planned in encapsulated cellular construction and the building is equipped with technical fire protection measures such as a fire alarm system and smoke and heat extraction system.

The construction

A new ribbed floor above the existing solid structure serves as a load-balancing slab. This allows the forces of the newly built floor to be transferred to the load transfer points. On top of this now stands the addition in stud construction, partly with an integrated knee wall section. The interior walls are built as an encapsulated construction for fire protection reasons.

The challenge

The load-bearing direction changed several times depending on the support situation and due to urban planning regulations and is longitudinal or transverse. Another challenge was the high requirements for fire protection (QSS3), since the building is an accommodation facility.



View directly into the element construction elevation



Interior view during the construction phase



Exterior view in finished state



Interior view in finished state

Construction Data

- Glulam: approx. 7 m³
- Frame construction scantlings: approx. 53 m³
- Kerto Q: approx. 1.7 m³
- three-layer boards: approx. 2060 m²
- wood fiber boards: approx. 882 m²
- Fermacell boards: approx. 1500 m²

Construction costs

- BKP 214 approx. 400'000.-

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
- SIA Phase 53 Commissioning
- Statics and construction
- Fire protection planning
- cost estimation
- Technical site supervision and site inspections

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