

«Krokodil» house in Lokstadt, Winterthur

2019



Where locomotives and machines were once built, a new district is now being created. Urban living and working space for over 1,500 people is being created right next to Winterthur railroad station. Timbatec was responsible for the timber engineering services for the first building of the new Lokstadt.

The project

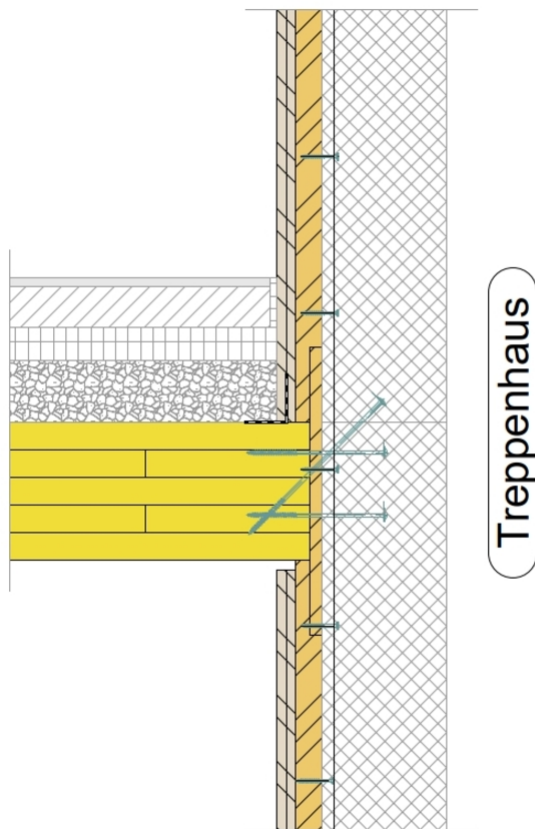
The Lokstadt site was once the most important production site for new locomotives and trains in Switzerland. Between 2018 and 2025, a new district will be built on this site in accordance with the 2,000-watt society's guidelines. The site consists partly of valuable listed industrial buildings and partly of modern new buildings. The renovations and conversions demand great respect for the existing buildings, but also technologically innovative solutions. In the new construction projects, great importance is attached to sustainable building materials. For example, most new buildings are constructed using timber. The «Krokodil» building is the first new building on the site and comprises 254 apartments in various living arrangements.

The construction method

The perimeter block development with an inner courtyard of 2,000 m² is designed as a skeleton structure. The wooden columns become a defining part of the architecture. The visible timber structure gives the living spaces a clear structure and creates a natural sense of space. In the «Krokodil», only the basement floors and the stairwells are made of reinforced concrete; the rest of the building was constructed from timber elements.

The challenge

The «Krokodil» was planned using Building Information Modeling (BIM) methods throughout. Coordinating the interfaces and the collaboration between the various parties involved was a major and exciting challenge, which we were happy to take on.



Treppenhaus

Connection of storey ceiling to staircase core

Construction Data

- 248 apartments
- 5'500 m³ CLT panels
- 1'500 m³ Glulam
- 700 m³ Frame timber
- Exterior wall 320 mm. Ventilated and internal installation facing shell
- CLT ceilings 220 mm with 100 mm grit fill
- 19 meter length

Construction costs

- BKP 214 16'500'000 CHF

Services of Timbatec

- SIA Phase 31 Preliminary project
- SIA Phase 32 Construction project
- SIA Phase 41 Tendering and comparison of offers
- SIA Phase 51 Execution project
- SIA Phase 52 Execution
- SIA Phase 53 Commissioning
- Statics and construction
- Specialist planning fire protection
- Fire protection quality assurance QSS2
- Site management and site inspections



Interior view of the finished apartment

Architect

Baumberger & Stegmeier AG
8004 Zurich

Timber construction engineer

Timbatec Holzbauingenieure (Schweiz) AG Zurich
8005 Zurich

Timberconstruction

Implenia Schweiz AG Rümlang
8153 Rümlang

GU/TU

Implenia Schweiz AG
8152 Opfikon

Photography

zimmermannfotografie
8038 Zurich