

Multi-family house Hinterer Schermen, Ittigen

2024



The careful renovation of the historic building in Ittigen highlights the different areas of the former factory and emphasizes the interplay between the historic building materials wood and sandstone.

The project

The former pasta factory in Ittigen, built around 1843, was converted into a residential building in 1995 and is classified as worthy of protection. The diverse original room structure was integrated into the new usage concept and remains visible. Various measures were necessary for the renovation: rotten beams were replaced with a new supporting structure, damaged supports were reinforced, and overloaded components were relieved by additional joists, trusses, and supports. Many of these reinforcements are now hidden in the wall and ceiling structures.

The construction method

The floor plan is divided into three areas by a two-story air space in the middle. The southern part ends in an arbor. The roof with its generous canopy has a surrounding eave and consists of four gable roofs, each of which converge at right angles. The beams of the floor slabs are embedded in the exterior walls of plastered sandstone and rest on joists in the interior.

The challenge

Additional supports were installed to preserve and relieve the existing supporting structure. The loads were distributed across several floors via walls and ceilings. Due to the low room height, joists with limited construction height had to be combined. A Vierendeel girder made of glued laminated timber and steel profiles could thus be largely integrated into the ceiling construction.



Two-story entrance area in the central section



Arbor on the south side of the property



Combination of new and existing components in the central section



Visible bottom chord of the Vierendeel girder

Construction Data

- Length 27.8 m
- Width 18.4 m
- Height 16.7 m
- 5 floors

Services of Timbatec

- SIA Phase 11 Condition analysis
- SIA Phase 21 Structural review
- SIA Phase 31 Preliminary design
- SIA Phase 32 Construction project
- SIA Phase 51 Execution project
- SIA Phase 52 Execution
- Statics and construction

Building owner

Laubegg AG
3006 Bern

Architect

GWJ Architektur AG
3001 Bern

Civil engineer

SMT AG Bern
3006 Bern

Construction management

GWJ Architektur AG
3001 Bern

Photography

Susanne Goldschmid
<https://www.linkedin.com/in/susannegoldschmid>