

Aebnit school complex, Riggisberg

2025



A school building for the future: a new school building constructed using sustainable timber has been built in Riggisberg. A three-story school building with expansion potential was planned and built at a cost of around CHF 2.7 million.

The project

A three-story timber-frame building was constructed on the existing school grounds. With construction costs of around CHF 2.7 million, an energy-efficient school building was created that meets high ecological standards. A full-surface in-roof photovoltaic system enables the use of renewable energy. The attic remains unfinished as a reserve for future expansion. Modern, bright classrooms ensure a good learning environment. They are complemented by spacious group rooms, and the cloakroom area can also be used for group work. The classrooms, built to meet today's requirements, create optimal learning conditions and strengthen the educational location of the central community.

The construction method

The building was designed entirely in timber construction from the floor slab upwards. The stairwell with integrated elevator shaft was constructed using an encapsulated solid wood construction method. The roof was designed as a classic pitched roof. The exterior walls and parts of the interior walls were constructed using a timber frame construction method. The ceilings consist of hollow box elements with acoustically effective wood paneling. The uninsulated attic remains as a reserve for future expansion.

The challenge

The tight budget called for simple, streamlined, and economical component structures that still met the requirements for sound and room acoustics. The few wall panels used for bracing absorb high forces and transfer them to the floor slab via inserts.



Attic as expansion reserve with prepared window openings



Staircase in enclosed solid wood construction



Spacious group rooms support modern teaching methods



Classrooms with optimized acoustics

Construction Data

- Glued laminated timber 92 m³
- Cross-laminated timber CLT 35 m³
- Hollow box ceiling 620 m²

Construction costs

- BKP 1-9: CHF 2.8 million
- BKP 2: CHF 2.7 million
- BKP 214: CHF 880'000

Services of Timbatec

- SIA Phase 31 Preliminary design
- SIA Phase 32 Construction project
- SIA Phase 41 Tendering and comparison of bids
- SIA Phase 51 Implementation project
- SIA Phase 52 Execution
- Specialist planning: building physics
- Structural engineering and construction
- Wood structural engineering
- Support in specialist planning building physics

Architect

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Client

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Timber construction

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