

Courtyard Waberg, Adetswil



The St. Michael Association runs the Waberg farm, which provides a home and work for people in need of support. Timbatec was responsible for the timber engineering, fire protection, and building physics aspects of the farm renovation.

The project

Above Lake Pfäffikon in the municipality of Bäretswil, people in need of support live and work on the Waberg farm with a farming family. Timbatec was asked to contribute to the planning of the renovation in terms of timber construction engineering, fire protection, and building physics. The project comprises two sub-projects: on the one hand, the agricultural building complex was expanded to include a modern free-range barn for dairy farming and a new shed. The existing barn was converted; the ground floor now houses cloakrooms, an office, and the building services for the entire site, while the attic now serves as a hayloft. On the other hand, a replacement building with a guest apartment was constructed on the site of the old barn.

The construction method

Free range barn and shed: The agricultural building has half-timbered walls and a primary and secondary supporting structure in the form of a rafter-purlin roof. Conversion of the barn: This was insulated on the inside. A crane runway was integrated into the existing hayloft. Replacement building: This consists of a timber frame construction with curtain wall elements. The ceilings are solid wood ceilings with large-format cross-laminated timber (CLT) panels and a dry screed floor.

The challenge

In the hayloft, a strut frame construction enabled the installation of a crane runway into the existing supporting structure.



Ceiling insulation in barn conversion.



Exterior view of barn renovation.



Optimally insulated components ensure a comfortable living environment.



Building technology and building envelope are coordinated.

Construction Data

- Construction volume $V = 6880 \text{ m}^3$

Construction costs

- BKP 1-9: CHF 5.35 million
- BKP 2: CHF 4.63 million
- BKP 214: CHF 0.98 million

Services of Timbatec

- SIA Phase 11 Condition analysis
- SIA Phase 31 Preliminary Project
- SIA Phase 32 Construction project
- SIA Phase 41 Tendering and comparison of bids
- SIA Phase 51 Implementation project
- SIA Phase 52 Execution
- Structural engineering and construction
- Specialist planning: building physics
- Specialist planning for fire protection
- Fire protection quality assurance QSS1
- Specialist construction management and site inspections

Client

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