

Schoolhouse Trachslau, Trachslau

2021



So that the pupils and Kindergarten children of Trachslau do not have to make the journey to Einsiedeln every day, the school building with a gymnasium and a double kindergarten were built entirely in wood.

The project

Timbatec was responsible for the planning of timber construction and fire protection. The two-storey school building including a gymnasium and a basement was built in timber construction from the ceiling slab of the basement. The building was suspended from the concrete staircases, which serve for access and bracing. The facade was also clad with wooden formwork.

The construction

The basement of the school building is built in solid construction, from the first floor onwards both buildings are completely constructed in wood. Wooden ribbed ceilings were used to realize the large spans of up to 8.5 meters, while at the same time integrating the acoustics and building services distribution between the beams. Thus, the appearance of the ribs is visible. The room height is perceived as higher and the component height could be kept relatively slim.

The challenge

The big challenge was to distribute the classrooms above the gymnasium with completely different room layouts as well as the loads of the large gymnasium beams to the small columns in the facade. Timbatec solved this with a distribution beam integrated into the exterior wall and neoprene bearings on the columns.



Gymnasium

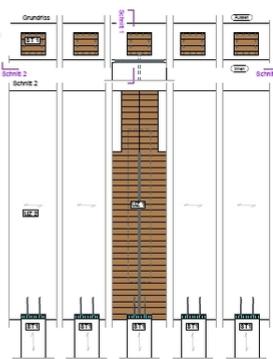
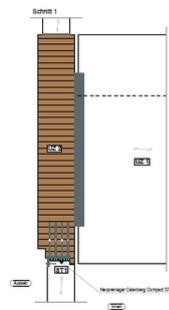


Schoolroom



Staircase with wardrobe

BSH Träger
Lastverteilung der Turnhallenträger auf 5 Außenwandstützen
über einen Querträger mit Neoprenlagern



BSH beam

Construction Data

- 1 gymnasium
- 2 kindergarten
- 6 classrooms
- 2 handicraft rooms
- workrooms
- 2300 m² Ribbed ceilings
- 400 m³ Glulam
- 75 m³ Structural timber
- 3450 m² Three-layer boards

Construction costs

- BKP 1-9: CHF 11'700'000
- BKP 214: CHF 2'300'000

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
- Fire protection planning
- Fire protection quality assurance QSS1
- Fire protection quality assurance QSS2
- Cost estimation
- Site supervision and site inspections
- Client representation HPK Architects

Client

Einsiedeln district
8840 Einsiedeln

Architect

Rohrer Sigrist Architekten
6003 Lucerne

Timberconstruction engineer

Timbatec Holzbauingenieure (Schweiz) AG Zurich
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Timberconstruction

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Photography

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