

Renovation of the school complex, Grossaffoltern

01.11.2022



The municipality of Grossaffoltern is expanding and renovating the school complex in several phases. A highlight of the project is the single-story new building, which is completely detached from the existing structure. The delicate-looking cantilevered canopy provides optimal protection for both the building itself and for people standing beneath it.

The Project

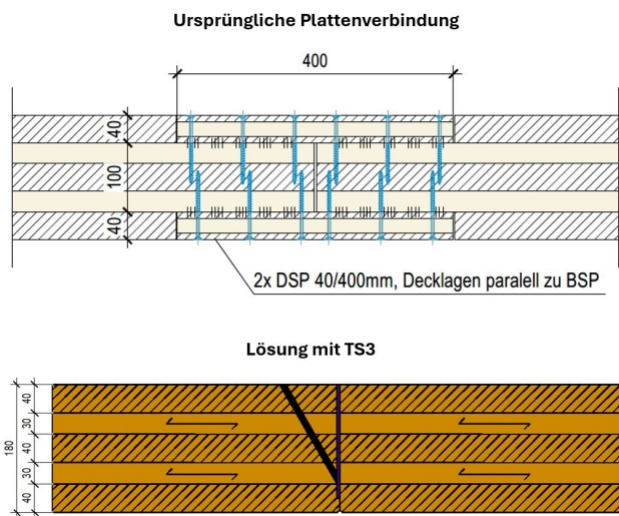
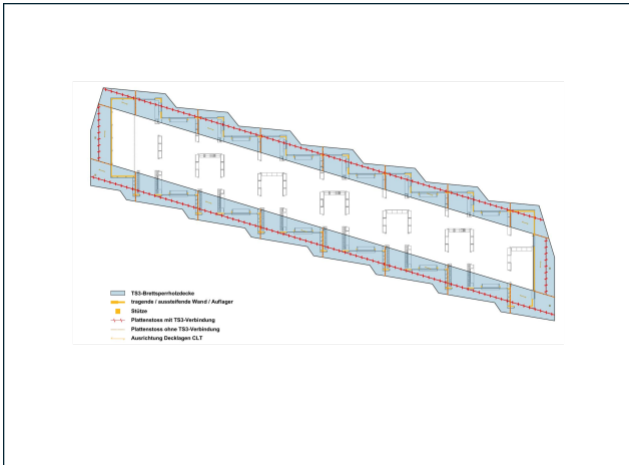
The project kicked off in 2018 with a design competition. The individual rooms are arranged in a staggered configuration. The angle was deliberately chosen to ensure an optimal view. The focus is on health-conscious materials. This, along with the need for rapid completion, was a key reason for choosing wood as the building material. Careful planning and effective communication among all parties involved laid the foundation for the rapid assembly.

The Construction Method

The canopy, designed as a TS3 flat slab, stands out for its large overhang. The interior consists almost entirely of exposed cross-laminated timber panels. In some cases, the structural components also serve as elements of the interior design, including the built-in cabinets. The exterior walls were prefabricated in a timber-frame construction at the factory.

The Challenges

The geometry of the canopy corresponds to that of the floor plan. Combined with the overhang, this resulted in element dimensions that could not be manufactured or transported in a single piece. Thanks to TS3, these element connections—which were originally planned to be very complex—could be simplified and executed in a cost-optimized manner.



Construction data

- Number of floors: 1
- Gross floor area: 715 m²
- Cross-laminated timber: 130 m³
- TS3 technology: 181 running meters of joints

Architecture

Bienert-Kintat Architects, Zurich

Client

Municipality of Grossaffoltern

Timber engineer

Main building: Indermühle Civil Engineers GmbH, Thun
Canopy: Timbatec Timber Engineers, Bern

Timber construction

GLB Lyss

CLT manufacturer: Balteschwiler AG, Laufenburg