Freeway depot, Loveresse BE

2017





The highest precision was required for the workshop on the A16 freeway in Loveresse in the Bernese Jura. The timber construction elements had to fit exactly because of the enormous dimensions of the 150-meter-long hall.

The project

Since 2016, the A16, the Transjurane, has connected the Swiss highway network with that of France. For the maintenance of the southern section of the Transjurane, a large depot was built near Loveresse, replacing several depots.

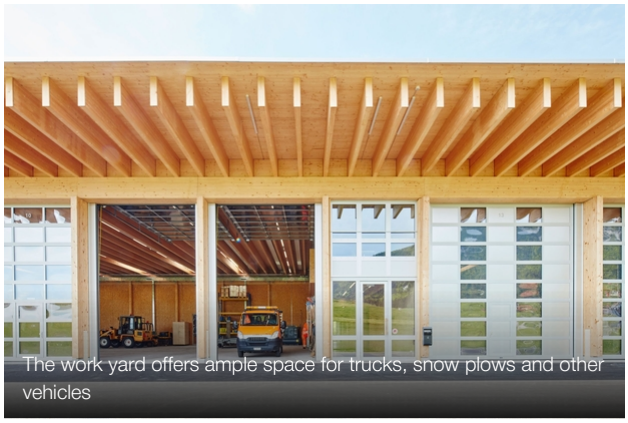
The workshop was built as a wooden structure in accordance with the energy-saving Minergie-P-Eco standard. Practically only wood from Switzerland was used.

The construction method

The supporting structure above ground consists of a skeleton construction lined with timber frame elements. Glulam columns and purlins are arranged in three longitudinal axes. Ribbed beams run above them in the direction of the shorter building dimension. Horizontal stabilization is provided by planked framed walls that have been arranged in selected bays between the columns

The challenge

The dimensions of the structure required extremely precise planning to accommodate any tolerances. Even slight inaccuracies can add up to deviations of several centimeters over a length of 150 meters. The timber construction elements, which were manufactured with millimeter precision, therefore had to fit exactly onto the prepared concrete foundations. Timbatec planned the filler elements in such a way that construction tolerances are accommodated in these elements between the main supports.



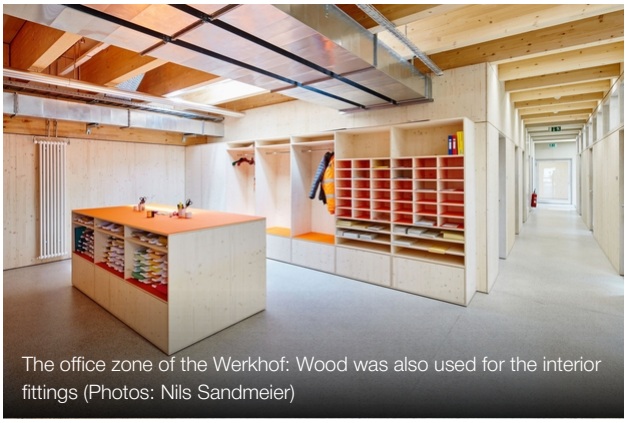
The work yard offers ample space for trucks, snow plows and other vehicles



Cross-stacked supporting structure: the roof beams rest on the purlins



View from the cafeteria, the heart of the Werkhof, to the spacious parking lot



The office zone of the Werkhof: Wood was also used for the interior fittings (Photos: Nils Sandmeier)

Project information

- Glulam: 1'125 m^3
- Frame timber: 110 m^3
- Three-layer boards: 450 m^3
- OSB boards: 110 m^3
- Insulation: 480 m^3

Construction costs

- BKP 1-9: CHF 20.8 million
- BKP 2: CHF 15.0 million
- BKP 214: CHF 3.0 million

Design stages

- SIA Phases 31 - 51

Design services

- Structural Engineering and Analysis
- Construction
- Building physics and acoustics

Additional Expertise

- Technical Construction Management and Site Inspections
- Cost estimate

Building owner

AGG Amt für Grundstücke und Gebäude
3013 Bern

Architecture

Claudia Meier & Markus Bachmann / MBAA
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Timber construction

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4466 Ormalingen

Construction Management

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1003 Lausanne

Civil engineering

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