

# Forestry yard, Buchs AG

2016



For over 75 years, the Suhr-Buchs Forestry Administration has been looking after and managing the forests of the municipalities of Suhr and Buchs. In 2016, the forestry workshop was rebuilt and a new firewood store was built.

## The project

The wood from the forests of the communities of Suhr and Buchs is largely used for firewood. The trees are felled each winter and transported to the forest roads by the forest rangers. Before the wood is suitable for heating, it has to dry for about two years. As part of the reconstruction and expansion of the forestry yard in Buchs AG, the municipality built a new firewood store. The felled wood can be stored here. In the municipal forests, wood also grows that is ideal for building. Thus, the forestry administration built the new firewood store entirely from wood from the forest district. The supporting structure is made of logs and consists of nine whole Douglas fir logs. These logs were specially selected and cut in the forest for this purpose.

## The construction

The tree trunks are clamped at the bottom on a concrete base. This means that the supports cannot slip away and transfer forces perpendicular to the longitudinal axis. The supports are clamped to the foundations by means of glued-in threaded rods and a steel flange set in concrete. For gluing in the threaded rods, Timbatec engineers used the two-component adhesive that is also used for the TS3 technologies. With this design, the 16 x 21 meter shelter does not require any other bracing elements such as struts or arches. The exciting construction with Douglas fir from the company's own forests was awarded the Timber Prize 2017.



Supporting structure after assembly



Supporting structure in the finished building



Glued threaded rods



Mounted prop foot

### Construction Data

- Swiss Douglas fir log supports C 24
- Ø 400 mm
- 11 m<sup>3</sup> Beam C 24
- Ø 400 mm
- 10 m<sup>3</sup> Steel column feet
- 520 kg Glued-in threaded rods TS3 Technology
- 120 pcs. screws SSS WT-T 8.2 x 190 mm
- 100 pcs.

### Services of Timbatec

- SIA Phase 31 Preliminary design
- Structural analysis and design
- SIA Phase 32 Construction project
- SIA Phase 51 Implementation project
- SIA Phase 52 Execution
- Award of contract
- Gluing in threaded rods (TS3 technology)
- Technical construction management

### Architect

Hutmacher+Kissling Architekten HTL GmbH  
5033 Buchs

### Timber constructor

Zubler Holzbau AG  
5001 Aarau

### Building owner

Forstverwaltung Buchs

### Timber construction engineer

Timbatec Holzbauingenieure Schweiz AG