# Single garage Geisshölzli, Schattenhalb-Meiringen





In Geisshölzli in the picturesque Bernese Oberland, the different epochs of timber construction meet: The Maurer family home from 1997 shows the proven art of carpentry. In front of it stands the garage with modern TS3 and Timbase technology.

In the Geisshölzli in the picturesque Bernese Oberland, the different epochs of timber construction meet. The Maurer family's home from 1997 was built using the log construction method (Fleckenbau) and demonstrates the proven art of carpentry. The latest technologies are used in front of this house: Cross laminated timber panels and TS3 technology are used to create the floor slab and base walls of a garage, which stands in the ground on three sides. Thanks to several protective layers and moisture monitoring, wood can now be used in contact with the ground. For a long time, this was considered impossible. The combination of innovations from the fields of timber construction and flat roofs makes the new area of application possible. TS3 technology combines CLT panels to form a stable monocoque box. Various protective layers protect this - just like a flat roof, simply reversed and installed in the ground.

The client Bruno Zumbrunn-Maurer is looking forward to his new garage: "As a timber construction engineer, I am interested in new areas of application for wood. Until now, the components in contact with the ground would have been made of CO?-intensive reinforced concrete. In contrast, trees store this greenhouse gas in the wood during their growth and thus store it in the long term. Thanks to the cross-laminated timber garage, our gasoline car now drives 22,000 kilometers in a climate-neutral manner. For the future, it is important that we permanently use wood in buildings wherever it is possible and makes sense. That's why I'm glad that these requirements have been met in our project."



The gravel bed as the basis for the garage





Cross laminated timber boards are grouted



Auf den CLT-Platten wird der Holzbau aufgerichtet

### **Construction data**

### Client

Bruno & Priska Zumbrunn-Maurer

# TU and TS3 technology

Timber Structures 3.0 AG www.ts3.biz

# Sealing technology

Contec AG www.contec.ch

# **Assembly waterproofing**

Gyger Flachdachbau AG www.gygerflachdach.ch

# Production and configuration moisture monitoring

ProGeo AG www.progeo.com

# **Production cross laminated timber**

Schilliger AG www.schilliger.ch

