

Construction of a canopy in wood, Chamblon, VD



The new parking and cleaning area at the end of the day on Place de Chamblon was built with a wooden roof based on the origami principle. CLT and TS3 panels made this principle possible.

The project

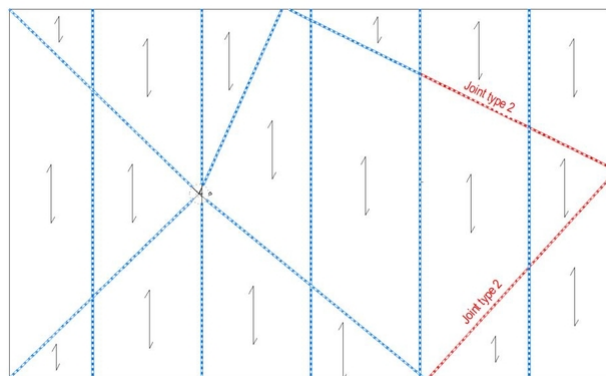
The wooden shelter is located on the Chamblon military training ground near Yverdon-les-Bains. It is situated between the buildings of the recruit school and provides soldiers with a covered and shaded area for cleaning at the end of the day. The roof rests on metal posts embedded in their foundations, ensuring overall stability. The special shape of the roof required special consideration when choosing the construction system to be used. TS3 technology was logically investigated and proved to be the most efficient principle.

The construction method

The shape of the roof with folds in both directions was made possible by TS3 technology. This technology allows CLT panels to be connected to each other at the front. The joints are made at defined angles in two directions, which increases the complexity of the overall system. Prefabrication and assembly therefore had to be planned in detail from the outset. The panels are supported at the ends by recessed steel posts.

The challenge

The entire roof, measuring approx. 19 x 12 m, was assembled on the ground. All TS3 connections were glued: some of the elements in the workshop, others on site for transport reasons. The entire roof was then lifted in one piece and mounted on the steel posts.



Construction Data

- Projected area: 11.5 x 18.8 m
- Total area CLT: 217 m²
- Total volume CLT: 42.6 m³
- Total length of TS3 joints: 106 m

Services of Timbatec

- SIA Phase 51 Implementation project
- SIA Phase 52 Execution
- Statics and construction

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