# Fasanenhof, Frenkendorf

2021

In Frenkendorf, the first four-story column-and-slab structure made of wood was built. Thanks to TS3, the building once planned in concrete can be built in wood. The planning with the multi-axial load-bearing cross laminated timber panels is similar to reinforced concrete.

## The project

The four-story residential development with 15 comfortable apartments is located in Frenkendorf in Basel-Land. The sustainably constructed timber building is to date the highest building in which TS3 technology has been used. This means that the floor slabs consist of large-format cross-laminated timber panels that are connected to each other at the ends using TS3 technology. In addition to a pleasant indoor climate, this gives the building users maximum flexibility of use. Thanks to the prefabricated components and the precise planning, the entire building could be erected within only three weeks.

## The construction

The Pheasant Court is a column-and-slab construction as known from steel-concrete - simply made of cross-laminated timber panels and with round wooden columns. This allows for a faster construction time as no drying out is required. Only the staircase core was concreted. Here, however, the previously usual sequence was reversed: the wooden structure was erected first and later served as lost formwork for the liquid concrete.

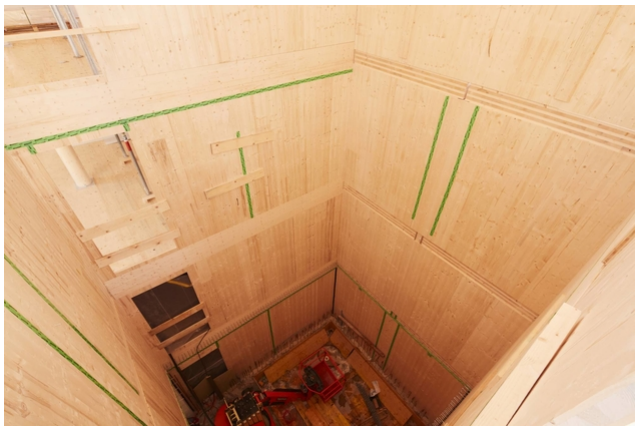
## The challenge

The cold temperatures during the casting of the CLT panels necessitated winter construction measures. For this purpose, the building was temporarily wrapped and heated. This ensured the necessary temperatures for casting and curing.

Virtual Tour:

During the curing of the casting resin, the floor slabs must be additionally supported

Interior view of the finished apartment



The staircase core is in place. The liquid concrete is poured in afterwards

X-Fix was used as a mounting aid

**Construction Data**
- Number of floors: 4
- Floor area: 1221.5 $m^2$
- Glulam: 293.16 $m^3$
- TS3 technology: 567 linear meters of joints

**Services of Timbatec**
- SIA Phase 31 Preliminary design
- SIA Phase 32 Construction project
- SIA Phase 41 Tendering and comparison of offers
- SIA Phase 51 Implementation project
- SIA Phase 52 Execution
- SIA Phase 53 Commissioning
- Planning of building physics
- Fire protection planning

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