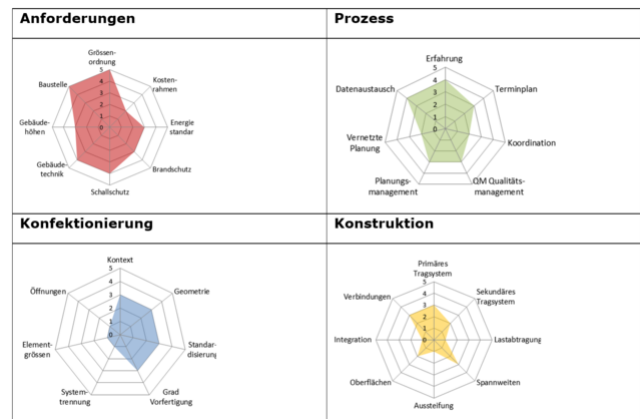# Research project leanWood

The leanWOOD research project at the Lucerne University of Applied Sciences and Arts developed new cooperation and process models for prefabricated construction with wood. Timbatec contributed project data and accompanied the project as an expert.

Goals and collaboration

The leanWOOD research project aimed to better exploit the potential of industrialized timber construction. In order to make this possible, a new, timber construction-oriented planning culture must be established. This includes new structuring of the process flow from planning to execution as well as time- and phase-appropriate integration of relevant know-how. And new cooperation models for increasingly large and complex timber structures. $$$$$$ In collaboration with international research and business partners, a number of construction projects were analyzed in terms of process and collaboration. From this, a level of complexity was identified and described at around 40 points. These will help in future construction projects to determine the suitability for the company's own operations as well as to provide clues for the composition of the planning and execution teams. Furthermore, various award models were analyzed.$$$$$$

The role of Timbatec

Timbatec participated in the project as a business partner. We provided processed data material from our challenging timber construction projects for the analysis. On the other hand, we supported the research team with our research and development know-how in structuring the processes, award models and the results.

Results

1. perform complexity analysis before project start.
2. involve the contractors early, already in the design phase.
3. allow for adaptation of procurement models (construction teams, designers and executors in the same team).
4. single source of truth, a single 3D model on which all planners and planning contractors work simultaneously.

Detailed information about the project can be found on the HSLU website.