

## FEDERAL WATERWAYS ENGINEERING INSTITUTE Karlsruhe (Germany)

### NEW BUILDING

**Client:** State Building Construction Office, Karlsruhe

**Architects:** Haug + Schmidler Architekten, Karlsruhe

**Our services:**

Full structural design  
Establishing the basis  
Preliminary design  
Final design  
Approval documentation  
Execution drawings  
Preparation of contract award  
Construction supervision

**Brief description:**

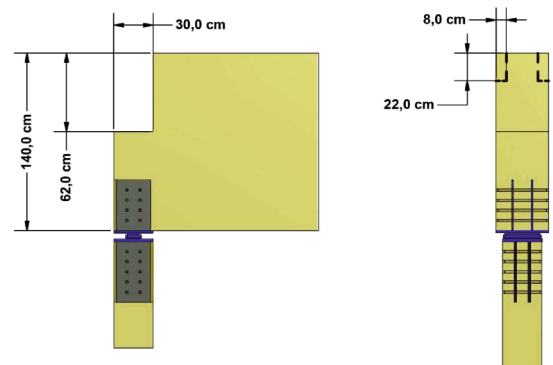
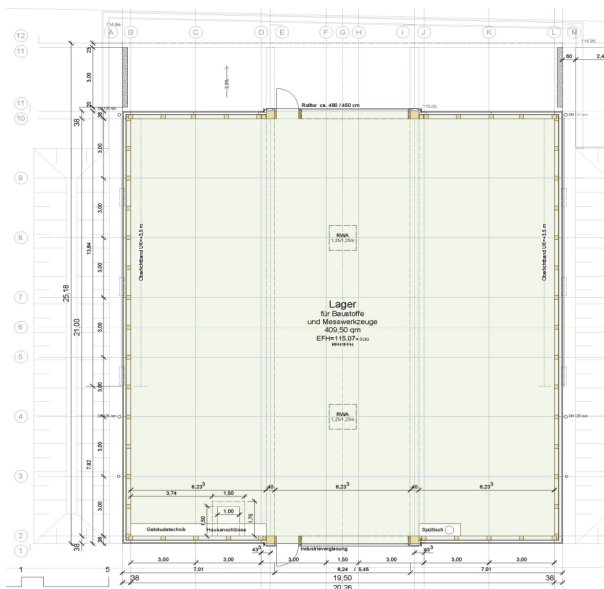
Construction of a new warehouse for the storage of building materials and measuring tools of the Federal Waterways Engineering Institute

- 1-storey, column-free wooden construction (solid wood, glued laminated timber, cross laminated timber)
- 410 m<sup>2</sup> usable area
- shallow foundations over strip foundations
- 2 longitudinally tensioned glulam beams (22 m long)
- stiffening via wooden stud walls and pane formation of the cross laminated timber elements in the roof
- timber ceilings spanning up to 7 m
- canopy as a wooden construction over the entire width of the hall (20 m) with overhang of more than 3m
- flat roof, greened

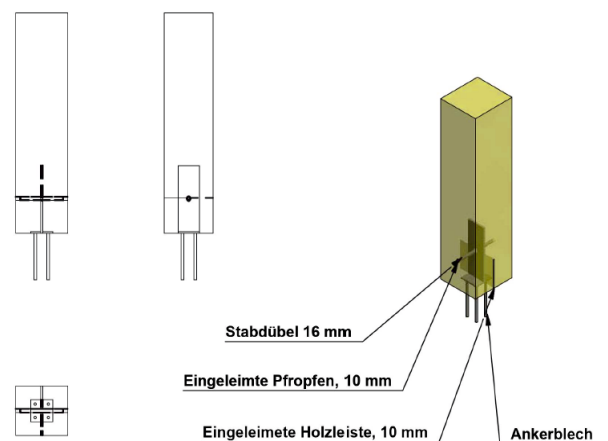
**Completion:** 2018



**Award, Exemplary Building  
Karlsruhe 2012-2018**



Wooden construction, details: connection of the supports to the glulam beam via sheet steel with 2 side plates, embedded in the support, connection via steel dowels



Wooden construction, details: support of the wooden column to the foundation via anchor plate with steel dowel connection