

## LOGISTIKZENTRUM Umkirch (Germany)

### NEW BUILDING

**Client:** TCL Consulting GmbH

**Certified  
Inspection Engineer:** Prof. Dipl.-Ing. Matthias Pfeifer

**Our services:** Structural engineering inspection in accordance with regulations and standards:  
Static calculations  
Execution planning  
Random monitoring of the structure during the building phase

**Brief description:** Construction of a new office building and warehouse for mail-order business with archives, staff and technical rooms

#### Office Buildings

- mixed construction using reinforced concrete, masonry, solid wood, glulam, plywood, wooden panels of solid wood ribs and 3-layer boards (spruce, glued)
- 4-storey, without basement
- building dimensions 13, 5 m x 13.5 m
- bracing with reinforced concrete slabs and reinforced concrete staircase core
- well foundations, transfer of loads into load-bearing soil layers due to poor soil bearing capacity
- reinforced concrete floor slabs, roofing out of plywood

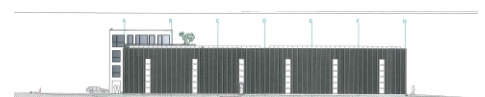
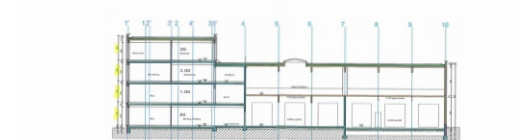
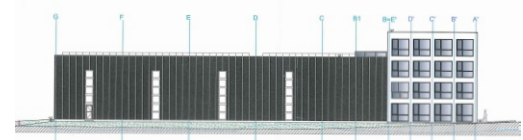
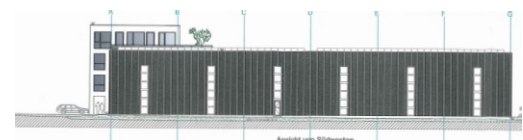
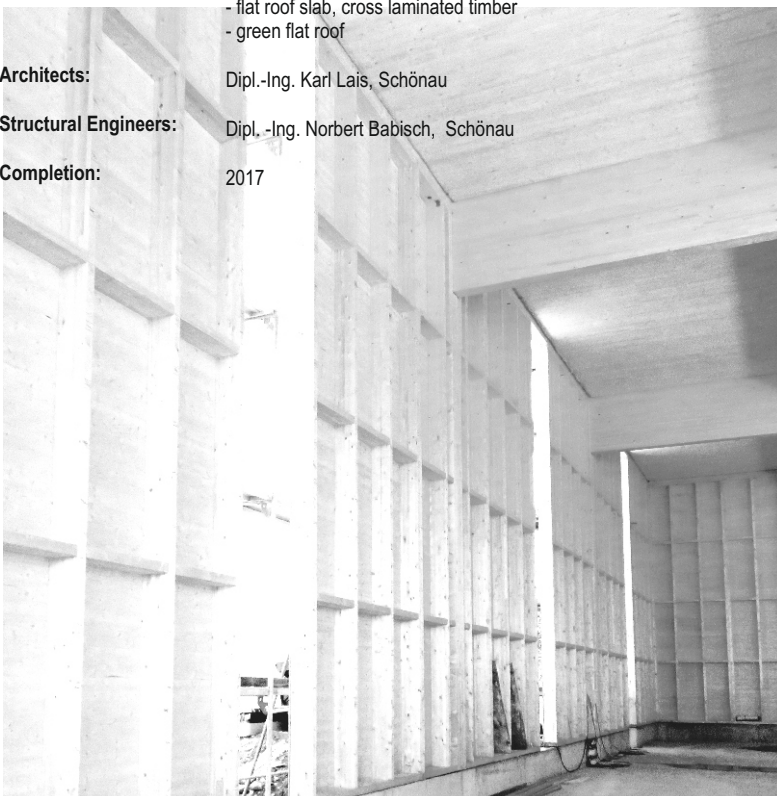
#### Warehouse

- solid construction, reinforced concrete and masonry
- 1-storey with 2 storage levels, partly reinforced concrete false ceiling, partly steel substructure with cross laminated timber ceiling pane, without basement
- building dimensions 60 m x 45 m
- bracing by means of pane-like external wooden panel wall elements
- clamped reinforced concrete inner columns, 15.0 m x 15 m pitch
- well foundations, transfer of loads into load-bearing soil layers due to poor soil bearing capacity
- glulam beams, secondary beams 20/80 cm, 5.0 m spacing, 10.0 m tensioned, main beam 24/140 cm, 10.0 m spacing, 15.0 m tensioned
- flat roof slab, cross laminated timber
- green flat roof

**Architects:** Dipl.-Ing. Karl Lais, Schönaun

**Structural Engineers:** Dipl.-Ing. Norbert Babisch, Schönaun

**Completion:** 2017



Pictures / Illustrations: PfeiferConsult, Dipl. Ing.-Karl Lais