# New construction of the cantonal administration building, Burgdorf

2011





The new Neumatt Cantonal Administration Center was built on the former armory site in Burgdorf. A large-volume building with high requirements for sustainable construction.

### The project

The Zeughaus PPP AG, newly founded by the competition winners Marti Generalunternehmung AG Bern and BAM Deutschland AG for this project, was commissioned by the canton to demolish the existing buildings and to construct buildings on the site for the cantonal police, the regional and juvenile court, the tax administration, and the central administration. Also the regional prison, the public prosecutor's office and the road inspectorate / civil engineering office with work yard were built. The entire development was certified Minergie- P- ECO. The administrative buildings were constructed as reinforced concrete skeleton structures. For the facades, elements in timber frame construction were placed in front of the supporting structure in concrete. The assignment for Timbatec was to develop suitable details and to verify the statics for the connections at floor transitions.

### The construction

The main part of Timbatec's work on this project was the design. This included the issuance of plans with measurement of individual elements, control, threshold and facade plans based on the 3D model.

# The challenge

A special angle had to be designed, which had to meet the following conditions: Fixing to concrete slab with at least 2 anchor bolts despite reinforcement Supporting the element of the upper floor. Support of the element of the lower floor Absorption of movements in the concrete (shrinkage, swelling) without loading the lower element. Dissipation of wind forces into the concrete slab.





Fassade



Support structure

### **Construction Data**

- Elements in timber frame 642 pcs.
- Timbatec plans 216 pcs.
- Structural timber 426m<sup>3</sup>
- gypsum fiberboards 6`360m²
- OSB boards 5`600m²

### **Services of Timbatec**

- SIA phase 31 preliminary project
- Cost estimate
- SIA Phase 32 Construction project
- Statics and construction
- Works planning 3D and 2D
- Site supervision and site inspections



Base connection



Visualization

### **Architect Design**

Frick Krüger Nusser Architekten D-81541 München

### **Architect / Site Management**

ANS Architekten und Planer AG 3076 Worb

### Client

Zeughaus PPP AG 3322 Schönbühl-Urtenen

Timber construction**contractors** Haudenschild Holzbau AG 4704 Niederbipp

## Timber construction engineers

Timbatec Holzbauingenieure Schweiz AG, Thun 3600 Thun

