

# Settlement Oberfeld, Ostermundigen bei Bern

2014

---



On the edge of the Ostermundigenberg, the car-free wooden housing estate "Oberfeld Ostermundigen" was built with around 110 apartments. Close to nature and yet quickly in the center, the settlement combines the advantages of the urban lifestyle with rural idyll.

## The project

As a pioneer building of the 2000 Watt society, the largest wooden housing estate in the canton of Bern was realized in Minergie P construction with around 110 apartments. The energy concept provides for energy to be collected and stored in the ground in summer and used in winter. An absolute novelty. Residents also voluntarily give up their cars; instead, 400 bicycle parking spaces are available. Particular attention was paid to the building physics solutions with good thermal and moisture protection. This ensured that the buildings are comfortable even with minimal heating energy.

## The construction method

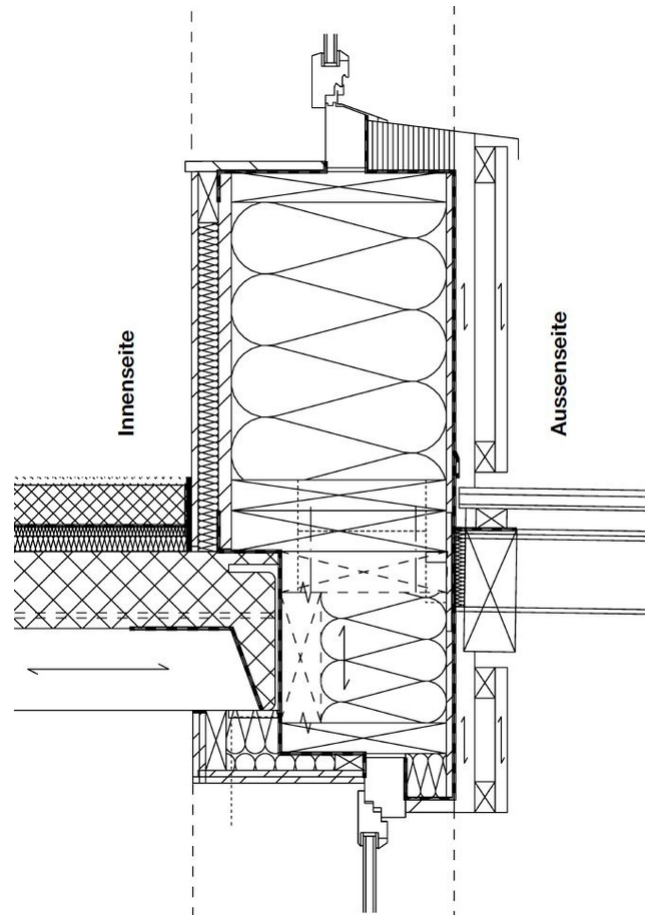
The three buildings were erected as timber structures from the concreted ceiling above ground level. The load-bearing exterior walls and the skeleton structure inside the building were used for load transfer. This allowed the interior walls to be constructed as non-load-bearing plaster walls and the rooms to be freely partitioned. A wood-concrete composite floor with a visible board stack and superimposed concrete was used as the floor slab. In order to meet the aesthetic requirements for flush floor joists, these were designed as steel girders. These are connected to the staircase cores by means of inserts. Naturally, the girders were clad in accordance with fire protection requirements. The structural wood and moisture protection could be ensured with the large arcades.



Playground



House C terrace with view



Cut with continuous wind paper on the outside

### Construction Data

- 685 m<sup>3</sup> Glulam GL24h
- 1285 m<sup>3</sup> Structural timber C24
- 17.6 m<sup>3</sup> Kerto Q
- 4595 m<sup>2</sup> 3-layer boards
- 6585 m<sup>2</sup> Gypsum fiberboards

### Construction costs

- BKP 1-9: 48.7 Mio.
- BKP 2: 36.8 Mio.
- BKP 214: 8.4 Mio.

### Services of Timbatec

- SIA phase 21 structural review
- 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
- Statics and construction
- Fire protection planning
- Fire protection Quality assurance QSS2
- Cost estimation

### Civil engineer

Tschopp Ingenieure GmbH  
3006 Bern

### Architect ARGE PSO (lead)

Halle 58 Architekten  
3005 Bern

### Architect ARGE PSO

Planwerkstatt Architekten  
3013 Bern

### Architect ARGE PSO

Eberhart Bauleitungen AG  
3014 Bern

### Timber Construction Engineers

Timbatec Holzbauingenieure Schweiz AG, Thun  
3600 Thun

### Timber construction

Beer Holzbau AG  
3072 Ostermundigen