

# Apartment houses Holleracher, Grossaffoltern



In Grossaffoltern in the Bernese Seeland region, four apartment buildings are being built using the new TS3 technology. This is the first residential development worldwide to use the innovative technology.

## The project

The three-story residential development with 20 comfortable apartments is located in Hollerenacher in Grossaffoltern between Bern and Biel. The first floor and the second floor are each occupied by two apartments, and on the top floor a penthouse apartment with a panoramic view has been realized. The sustainable timber buildings in Grossaffoltern are the first in the world to use the TS3 technology is being used for the first time worldwide. This means that the floor slabs of the buildings are made of cross-laminated timber panels cut to large size and glued to the face using TS3 technology. glued together on the face side. In addition to a pleasant indoor climate, this allows the pleasant indoor climate and maximum flexibility of use.

## The construction

Prefabricated timber elements were erected on the concreted floor slabs. The glulam panels, measuring 13 by 2.5 meters, were glued together at the construction site to form the floor slabs. A total of 2300 square meters of floor slabs were glued and installed in the four apartment buildings.

## The challenges

The impregnation of the end faces of the cross-laminated timber panels presented a major challenge. For this purpose, a tent with a construction crane was erected near the construction site. This allowed the panels to be prepared and precisely bonded into floor slabs at the construction site.



The timber remains visible in the interior



Exterior view of a finished house



Visualisation

### Construction data

- Cross laminated timber: 230 m<sup>3</sup>
- Round timber supports: 12 pieces

### Architecture

Spreng + Partner Architekten AG  
3012 Bern

### Timber engineer

Timbatec Timber Construction Engineers Switzerland AG  
8006 Zurich

### Timber construction

Stuber & Cie. AG  
3054 Schüpfen