

# Increase Appaloosa, Spiez

2003



A two-story addition was planned on top of the existing building of about 20 x 25 m floor area. The existing building - an approximately 30-year-old object with a flat roof consisted of reinforced concrete columns in a grid of and 3 x 5 m and glulam beams placed above.

## The project

An initial review revealed that most of the existing foundations did not have sufficient load-bearing capacity. Likewise, the live loads from the floors above could not be transferred via the existing flat roof. However, the existing building was already about to reopen after a reconstruction, so foundation reinforcements had to be calculated and installed quickly. At the same time, some kind of support steel members had to be installed in the existing flat roof, which could take the new loads from above. Likewise, the ceiling above the restaurant had to meet all sound and fire protection requirements.

## The construction method

After a thorough discussion, it was realized that a completely new building had to be erected above the existing flat roof. Unfortunately, the planned apartment partition walls were nowhere near the specified column grid, so the roof and ceiling loads had to be transferred into the existing columns via various trusses. These trusses had to be installed in the walls in such a way that all sound and fire protection requirements between the apartments could still be met. This was achieved by a one-piece basic construction and a complete decoupling of the facing shells.



First floor play area

### Construction Data

- Floor area: 330 m<sup>2</sup>
- Height of the extension: 6.5 m
- External walls 58 m<sup>2</sup>
- Inverted formwork 240 m<sup>2</sup>

### Services of Timbatec

- SIA phase 32 construction project
- Statics and construction
- SIA Phase 51 Implementation project
- Technical site management and site inspections



Appaloosa by night

### Timber construction

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### Owner

Charles Brun  
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