

# Noise barriers BLS, Reichenbach i.K.

2007

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Following the principle of the Environmental Protection Act of 1985 to limit noise primarily by measures at its source, the Federal Railway Noise Abatement Act of 2000 prescribes, among other things, "measures on the propagation path."

## The project

The noise barriers in Reichenbach were to feature wooden cladding. To provide the most appealing solution possible, a landscape architect designed a concept with various design elements. The use of different types of formwork (vertical and horizontal), glazed areas and green walls resulted in an attractive project. The frame structure of the walls spans over 5.00 m and is fixed in a restrained steel column. At the bottom, a precast concrete skirting board provides a clean finish and protection from moisture. The top cover is protected with a chrome-nickel steel plate.

## The construction

The laminated safety glass is screen-printed to protect the birds. The wall itself consists of a closed formwork on the resident side, a pressure impregnated frame construction as well as a mineral wool insulation, which is finally covered with a cement-bonded wood wool board. Only for aesthetic reasons was additional lamella formwork hung in front. The section of the noise barrier between the railroad line and the main road is absorbent on both sides and helps to redesign the station square. Timber Construction Award Bernese Oberland, Recognition 2007



View from the track side



Glass strips



Bird screen in glass



Wall mounting

### Construction Data

- Timber: 69.5 m<sup>3</sup>
- Formwork: 1'337 m<sup>2</sup>
- Height: 2.00 m
- Length: 1'155 m

### Services of Timbatec

- SIA Phase 31 Preliminary design
- SIA Phase 32 Construction project
- SIA Phase 41 Tendering and comparison of offers
- 3D and 2D construction planning
- Site supervision and site inspections

### Timber construction contractor

Allenbach Holz + Trockenbau AG  
3714 Wengi bei Frutigen

### Building owner

BLS AG  
3001 Bern

### Landscape architecture

Buchmann  
3550 Langnau

### Timber construction engineers

Timbatec Holzbauingenieure Schweiz AG, Thun  
3600 Thun

### Civil engineer

Ramu Ingenieure AG  
3714 Frutigen

### Timber Construction Contractor

Wenger Holzbau AG  
3613 Steffisburg