

# New construction Geissegg bridge, Eriz and Horrenbach-Buchen

2002

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The communities of Eriz and Horrenbach/Buchen needed to replace the old, dilapidated concrete trough bridge. The choice quickly fell on wood as a building material.

## The project

The bridge The new bridge blends in well with the local and landscape appearance of the Eriztal valley. This is not least because a conventional appearance of the structure and shape of the roof was used for this bridge. This is also achieved by the covering with wooden shingles, which was supported by the Oberland working group for wood. The construction For the construction of the bridge were used 40.1 m<sup>3</sup> of wood was used, which amounts to about 78 m<sup>3</sup> logs or about 35 fir trees in the forest. This amount of wood grows back in the Swiss forest in about 5.5 minutes. This means that about 11 such bridges grow back every hour - amazing!

## The construction

With the Geissegg Bridge, the long tradition of wooden bridges in the Bernese Oberland is being continued or resumed. In contrast to the centuries-old bridges, the payload today is about 10 times higher. Instead of horse-drawn carts with a maximum weight of about 2 - 3 t, today 34 t long timber wagons and touring cars can be expected. With modern timber construction technology, this can be solved without any problems.

## The challenge

Impressive was the short construction time of about 5 weeks for the timber construction, and about 8 weeks for stream shoring and abutments. Despite the danger of flooding at the end of July, during which the temporary crossing had to be restored, the whole project went smoothly. This was due to the good cooperation of all those involved in the construction.



Built-in steel cross member



Pfosten-Support



Shingle work



View of the bridge

#### Construction Data

- Support system: Simple suspension system with struts
- Span length: 12 meters
- Single lane roadway + pedestrian walkway

#### Services of Timbatec

- Statics and construction
- Technical site management and site inspections
- Works planning 3D and 2D

#### Timber construction engineers

Timbatec Holzbauingenieure Schweiz AG, Thun  
3600 Thun

#### Timber Construction Contractors

O. Wyss AG  
3537 Eggwil

#### Timber construction contractor

Stauffer Holzbau AG  
3614 Unterlangenegg

#### Engineering office abutment

Max Gerber  
3612 Steffisburg

#### Client

Communities of Eriz and Horrenbach-Buchen