

Traversina Footbridge – A wooden stairway crossing a gorge

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Summary

The Traversina Footbridge serves a public footpath in the central part of the Grisons (Switzerland), famous for its attractive landscape. At its site the profile of the valley is asymmetric, with a vertical north flank and a steep hillside in the south. The most appropriate solution was a suspension bridge supporting an angled walkway in the form of a long stair, thus shortening the span. Establishing the appropriate level of comfort for the hiker has been one of the most demanding aspects of the design. The elevated position of the bridge and the unusually long and steep steps called for a somewhat higher standard of feeling of safety. The design of this project was influenced to a large extent by the possibilities and conditions of erection, too.

Keywords: footbridge, rope-truss system, post-tensioning.


1. Introduction

The Traversina Footbridge allows people to walk along the Roman trail leading through the Viamala gorge to the Alpine pass of Splügen on its way to Italy (Fig. 1, 2). It replaces a former one, destroyed in 1999 by a rockfall, connecting two fragments of the historic trail across a deep valley.



Fig. 1 The bridge in the surrounding landscape

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