



Keller Zimmerei & Messebau

Flexural strengthening of slab, enhancing serviceability

Location: Villigen, Switzerland

Year: 2017

Contractor: Stahlton Bautechnik

Project description

The reinforced concrete ceiling (material storage of a carpentry) with thickness of 24 cm had to be strengthened because of a reconstruction. Therefore, 14 Fe-SMA lamellas had to be installed over a span of 5.5 m. Limitations in deformation and crack formation under service load were decisive for the design. In addition, also CFRP lamellas were applied crosswise bypassing the insufficient lap of the internal reinforcement after the removal of a masonry wall.

re-fer product

Fe-SMA Lamellar e-plate with anchoring system re-anchor (8 x direct fastening X-NPH2). Activation temperature 160 °C, prestressing 300 MPa (45 kN) per lamella.

