



Vault strengthening at the underground station Jungfrauoch

Vault strengthening (Flexural strengthening)

Location: Jungfrauoch BE, Schweiz

Year: 2019

Contractor: re-fer AG

Engineering consultant: B+S Ingenieure

Description

In the framework of several extension works in the underground railway station at the Jungfrauoch, re-bars were embedded in a sprayed mortar layer to strengthen a vault. Platform 3 currently offers only a one-side non disability-friendly access. With an extension of the station hall, new platforms will be constructed as well as the new station better adapted for shorter turnaround time spans. The extension of the platform access will also improve the visitor streams, which will also be separated from the freight traffic. Due to the mentioned extension of the access, the existing vault had to be strengthened in flexure in longitudinal direction. re-bars were anchored at both ends in a dry sprayed mortar layer over a length of about 1.5 m. After a sufficient cure, the bars were activated and hence prestressed over their free length., Finally, the complete remaining free length was covered with a Sika®Rock Gunit BE-8 mortar.

re-fer Product

15 memory-steel rebars with a length of 10 m anchored in sprayed mortar and activated.

