



KERENZERBERG, HIGHWAY A3, GLARUS NORD, ELVEȚIA

Protecția împotriva căderilor de pietre

Kerenzerberg, Highway A3, Glarus Nord

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Proiect	Kerenzerberg, Highway A3, Glarus Nord
Loc	Filzbach
Țară	Elveția
Anul instalării	2015
Client	FEDRO Federal Roads Office, Switzerland
Tehnologie	Project Partners Ltd Consulting Engineers, Grancia-Lugano, Switzerland
Antreprenor	CRESTAGEO, Chur, Switzerland
Situația inițială	<p>Highway A3 was opened in 1964 as a 2-lane road passing through the topographic bottleneck of the Walensee. The Walensee is one of the main thoroughfares between the Swiss plains and the mountainous regions and ski resorts. The roadway has always been exposed to rockfall and rockslides from the beginning. In 1986, due to increased traffic volume, one of the most frequented tunnels was expanded to four lanes. Naturally, geohazard protection measures were required to be installed along with the roadway expansion.</p> <p>In 2012 it became apparent to the Swiss Federal Roads Office FEDRO that several hot spots for geohazards would require immediate maintenance to keep Highway A3 open. The identified hot spots include various tunnel entrances, steep slopes and sheer rock faces along the roadway. The project planning phase began in 2013, and by the end of 2015 the first protection systems of Geobrugg's newest generation were installed.</p> <p>Official project name at the FEDRO, Federal Office for Roads: Glarus Nord</p> <p>Overall costs of the protection project (estimated in 2014): 11 Mio. Swiss Francs</p>
Descriere	<p>This description only details the northwest oriented tunnel entrances of Ofenegg and Kerenzerberg.</p> <p>The overall project included a portfolio of Geobrugg flexible barrier systems protection measures to contain rockfall events. The selection was based on extensive rockfall analysis, taking into account bouncing heights as well as energy impacts. System strength, height and line lengths were set to maximize safety and optimize cost-effectiveness.</p> <p>Above the two tunnel entrances the following Geobrugg rockfall protection systems were installed in geographical order from southwest to northeast:</p> <ul style="list-style-type: none">• Barrier 1 : RXE-500, height 3 m, length 31 m• Barrier 2 : RXE-500, height 3 m, length 26 m• Barrier 3 : RXI-150, height 4 m, length 55 m• Barrier 4 : RXI-025, height 2.5 m, length 14 m• Barrier 5 : RXE-1000, height 4 m, length 25 m• Barrier 8b : RXI-150, height 4 m, length 17 m• Barrier 8c : RXE-1000, height 4 m, length 25 m• Barrier 9 : RXE-8000, height 7 m, length 62 m• Barrier 10 : RXE-3000, height 5 m, length 50 m <p>More information:</p> <p>Movie of the 2015 RXE-8000 installation</p> <p>Slope protection of this site "Muehlehorn"</p>

Obiect protejat

Road, Calea ferata

Alte aplicații instalate	Stabilizarea pantelor
Protecție împotriva coroziunii	Galvanized, GEOBRUGG SUPERCOATING
Clasă de energie (kJ)	3000 kJ, 500 kJ, 1000 kJ, 8000 kJ
Înălțime sistem	2.5 m, 3.0 m, 4.0 m, 5.0 m, 7.0 m
Lungime sistem	14 m - 62 m

Pentru întrebări, vă rugăm să contactați specialistul Geobrugg din zona dvs.

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