



AUSSERFERNBAHN EHRENBERG NEAR REUTTE, AUSTRIAN RAILWAY ÖBB, AUSTRIA

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Rockfall Protection

Ausserfernbahn Ehrenberg near Reutte, Austrian Railway ÖBB

Rockfall Protection

Project Location Country	Ausserfernbahn Ehrenberg near Reutte, Austrian Railway & ÖBB Tirol/Ausserfern/Reutte Austria
Year of installation	2015
Customer Engineering Contractor	Austrian Railway Infrastructure - & ÖBB-Infrastruktur AG & ÖBB-Infrastruktur AG Hilti & Jehle GmbH

Initial situation	<p>Within the concept of "The Rehabilitation of the Karwendel and Ausserfernbahn – A Railway for Mobility", the line was further protected from natural disasters in 2015.</p> <p>Since its commissioning in 1912/13 as the first completely electrical railway in the former Monarchy of Austria–Hungary, the line has now developed into a popular railway. Today, the route is considered a premier historical landmark, with early Alpine railways, numerous railway buildings, bridge structures, and a natural stone tunnel having protected status.</p> <p>Due to damage from storms and harsh winters, the section between the tunnel portal, above the site of the <i>Burgenwelt Ehrenberg</i> castle and mountain road B179, was likely to be struck by rockfall.</p> <p>As far as tourism and infrastructure are concerned, a secure railway connection between Ausserfern-Reutte and Innsbruck is of huge importance.</p>
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Description	<p>Four RXE-500 rockfall barriers were installed to protect the railway line, the B179 road running directly below, part of the area of the <i>Burgenwelt Ehrenberg</i> tourist site, and the highline179 pedestrian bridge against falling rocks, blocks, and trees.</p> <p>A double-walled enclosure of just 13 meters connected to the rock secures the tunnel portal. Three rows of RXE-500 run parallel to the track, with a total length of 207 meters. All barriers were designed with an overall height of 3.5 meters. A series of cables, with a length of 100 meters, has a carrier separation with intermediate suspension after 50 meters. This adheres to the requirements set out by the ONR (Austrian Standards).</p> <p>Due to its exposed position, the task of carrying all construction site equipment and the installation of the RXE barrier had to be undertaken by helicopter.</p>
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Protected object	Road, Railway, Building, Touristic infrastructure, Infrastructure
Corrosion protection	Galvanized, GEOBRUGG SUPERCOATING
Energy absorption capacity	500 kJ
System height	3.5 m
System length	13 m - 100 m

For questions please contact our Geobrugg specialist at your side

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