

Rockfall Protection and Risk Mitigation in Valle d'Aosta

GABY (AO) - VALLE D'AOSTA - Italia



TYPE OF PROJECT
Dynamic Rockfall Barriers

YEAR OF CONSTRUCTION
2022

CLIENT
**Regione Autonoma Valle
D'Aosta**

CONTRACTOR
**Besenal - Cometto &
Tercinod - Dema - IR&B**

DESIGNER
**Ing. Carlo Bartolini,
Dott.For. Valerio Segor**

PROD. RELATED
Rockfall Barriers (Undefined), TerraMesh (Undefined)

Challenge

In the early hours of May 6, 2022, a major landslide struck the municipality of Gaby in Valle d'Aosta, impacting Regional Road 44 (SR 44) near km 16+300, between Serta Desout and Serta Desor.

The event, estimated to have displaced over 500 cubic meters of rock debris (Source: ANSA), caused temporary traffic disruption and highlighted the urgent need for

long-term rockfall protection to safeguard residential areas and infrastructure at risk.

Given the size and energy of the falling boulders, an effective and rapidly deployable solution was required to prevent future rockfall hazards while ensuring the safety of both local residents and road users.



Landslide of May 6, 2022 (Source: Aostanews24)



Rockfall barrier detected in Terramesh Verde, installed

Solution

Maccaferri provided technical support for the risk mitigation design, which included two key interventions. To protect residential buildings in Serta Desout, RB 9000 rockfall barriers were installed along an 80-meter section. These 7-meter-high barriers are designed to withstand high-energy rock impacts, ensuring reliable protection against large-scale rockfall events similar to the one recorded in May 2022. For SR 44, a dual-face rockfall embankment was constructed alongside the road. Built using Terramesh® Verde

reinforced soil structures, the embankment features reinforcement lengths of 3 and 4 meters, an overall height of just over 7 meters, and extends 150 meters in length. The entire project was completed in just over a month, with all protective structures finalized by mid-July 2022. This rapid deployment was made possible by the efficient installation process of Maccaferri's systems and the strong collaboration between all project stakeholders, ensuring the long-term safety and resilience of the affected area.



Rockfall barrier detected in Terramesh Verde protecting



RB 9000 rockfall barriers installed – view from the valley



RB 9000 rockfall barriers installed – view from the uphill side



OPEN GOOGLE MAPS



OPEN GOOGLE EARTH