

GUDVANGEN - BAKKATUNNELEN

GUDVANGEN, VESTLAND, NORWAY

Dynamic Barriers

Problem

At a connecting road with a tunnel portal at the edge of a section of the Sognefjord, debris flows and rockfall events occurred again and again.

The terrain is very steep and the rock faces are several hundred meters high.

Solution

Fortunately, two years ago, some rows of rockfall barriers type EPFM 5000 with an energy capacity of 5000 kJ were installed to protect the road and road users.

In November 2022, a rockfall with debris flow occurred after heavy rainfall. High up on the steep rock face, several hundred cubic meters of rock came loose and rushed down to the coastal road and BAKKA tunnel. The large boulders were crushed by several impacts and about 150 m³ were stopped by the EPFM 5000 rockfall protection nets.

After this major event, all the material will now be excavated at great expense and the rockfall net will be repaired. For this purpose only 4 new ring nets, some ropes and brakes will be replaced.

Client: Vestland fylkeskommune

Products used (Qty.)

- Rockfall Barriers 150 m

Date of construction: 11/2020 - 12/2020

[Google Maps](#)

[Google Earth](#)



During the installation



after installation



after impact



after impact



after impact



after impact



The map of installation

MACCAFERRI CENTRAL EUROPE s.r.o.
Kaplinské pole 2859/24 - 905 01 Senica - Slovak Republic
Telephone: +421 2 20 24 00 56
E-mail: info@sk.maccaferri.com