

FORTA – stronger lasting fibre reinforcing

PROVEN VERSATILITY IN A VERTICAL APPLICATION TO PROTECT ESSENTIAL INFRASTRUCTURE

FORTA-FERRO® 54 mm concrete reinforcing fibre was chosen for its ability to be used in a shotcrete application and to help complement other remedial structural work.



disruption to rail services

kgs of reinforcing fibres

weeks deadline met

The Site

Utiku – Rangitikei District, New Zealand

The Challenge

Near the small township of Utiku, on the main trunk rail corridor in the North Island of New Zealand, a major slip threatened to undercut the rail line. The general area is susceptible to slips due to its steep hilly nature, rainfall and underlying geology. This particular slip was significant in that it threatened the continuity of the essential rail services. The challenge was to quickly shore up the slip, ensure there were no disruptions to service and to have a solution that continued to last in the challenging terrain.

The Solution

It was realised that, apart from other remedial work that would need to be undertaken (e.g. drainage, mesh and reinforcing rods), adding fibres would ensure that the required tensile strength of the work was achieved. Abseil Access Limited were contracted to protect the line and used FORTA FERRO's 54 mm macro-fibre to reinforce the applied shotcrete. The fibres ensured the required RDP toughness was achieved. This extra heavy-duty fibre also offered maximum long-term durability, structural enhancements, and effective secondary temperature crack control. Abseil Access managed to complete the major project in under the 5 week timeframe, with no disruption to rail services. Quite an achievement.