

SLOPE PROTECTION



In June 2018, Concrete Canvas® GCCM* (CC) was used to protect a slope adjacent to a rail line in Parla, Madrid, Spain.

The slope, a suburban rail embankment, had been undermined by rabbit burrows and had suffered weathering erosion. Both issues were compromising the integrity of the slope, and resulted in a requirement for protecting it to prevent slip and further damage. The works were carried out by TRAGSA on behalf of ADIF.

In preparation for the installation, all vegetation was removed from the slope section to be lined. Bulk rolls of CC5TM were then delivered to the site and deployed vertically down the slope, starting above a small drainage channel which was created prior to installation to divert rainwater. The bottom edge were captured in an anchor trench and secured using ground pegs, and the top edge then covered with a longitudinal length of CC, overlapping by 100mm and secured using screws. The top edge was then captured in another anchor trench before both were backfilled to prevent undermining and ingress. Following installation, hydration was given.

600m² of CC5™ were installed in a single day and without any need for line possession, allowing trains to run as usual.

*Geosynthetic Cementitious Composite Mat







