



Rail Embankment Consolidation

Innovative
Fill Consolidation
Solutions

abg | creative
geosynthetic
engineering

Innovative Design Solution

ABG manufacture Fildrain® 7DD and 7DHD geocomposite drainage layers as the most advanced system for relieving pore pressure in the construction of new embankments. This is a proven method of construction that has BBA certification for the starter layer and subsequent layers throughout the height of the embankment.



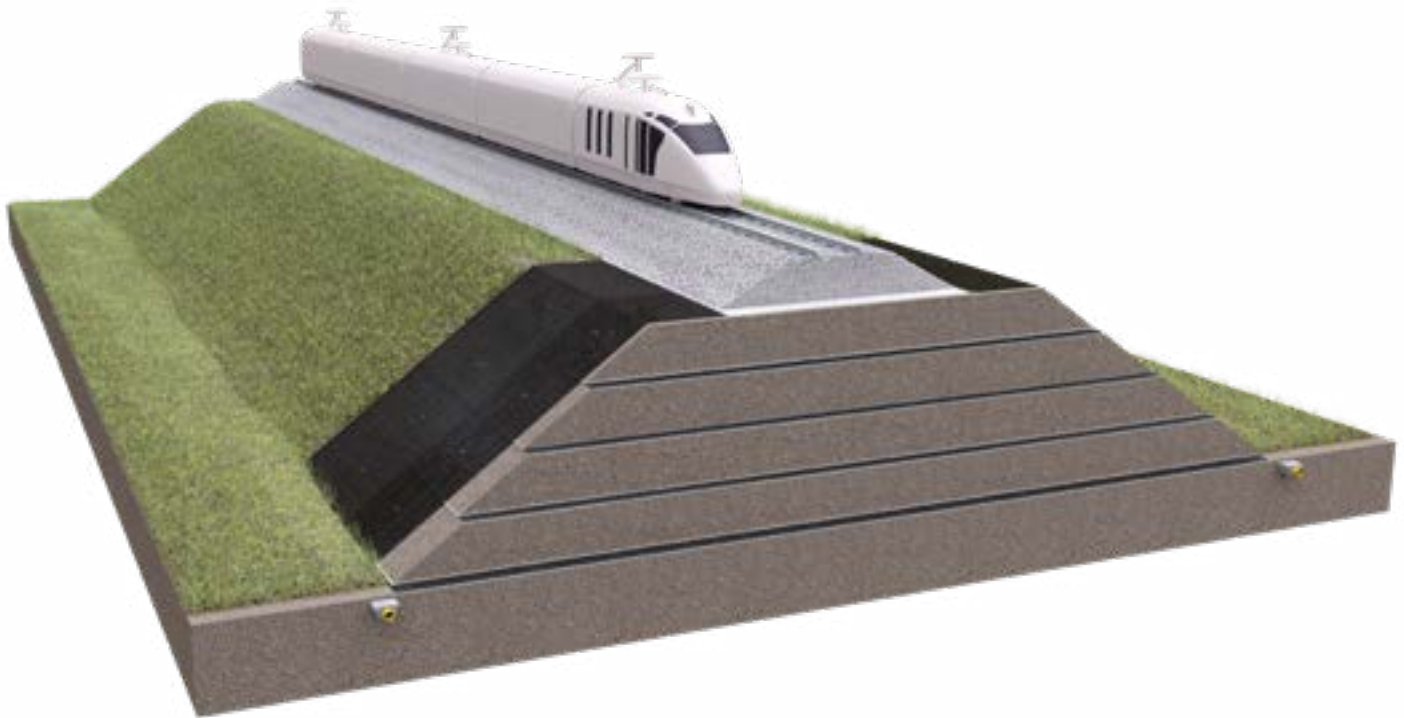
Reduced Consolidation Time

Full settlement of new embankments must be achieved before the ballast and track is laid. Embankment fill is placed at optimum moisture content for compaction. This invariably means that the compacted fill, as a result of pore pressure, is too wet to support long term loads without settlement. Relief of pore pressure and speed of consolidation is critical to the time management of the project.

Cost Effective Fast Installation

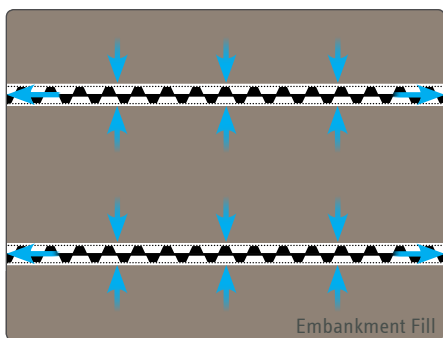
Fildrain creates horizontal drainage layers at typically 1 metre vertical spacing for quick reduction of pore pressure. Compared to crushed stone, it is much faster and more cost effective to install Fildrain geocomposite drainage layer. Fildrain is also impermeable in the vertical plane which means that each layer of Fildrain protects the earthworks below from the ingress of rainfall, resulting in accelerated consolidation.

Projects have gained full consolidation in 25% of the time normally expected.



Accelerated fill consolidation using Fildrain geocomposite

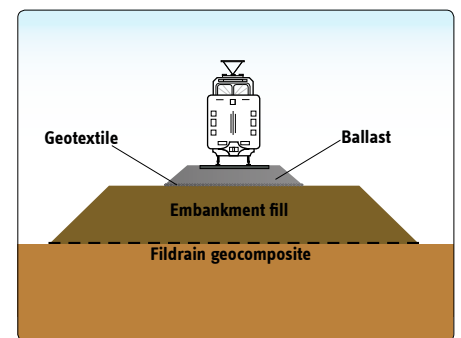
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Effective horizontal drainage & vertical barrier



Geocomposite layers at 1m vertical spacing



Starter layer for soft sub-formations