



Road 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 starter layers and subsequent layers throughout the height of the embankment.



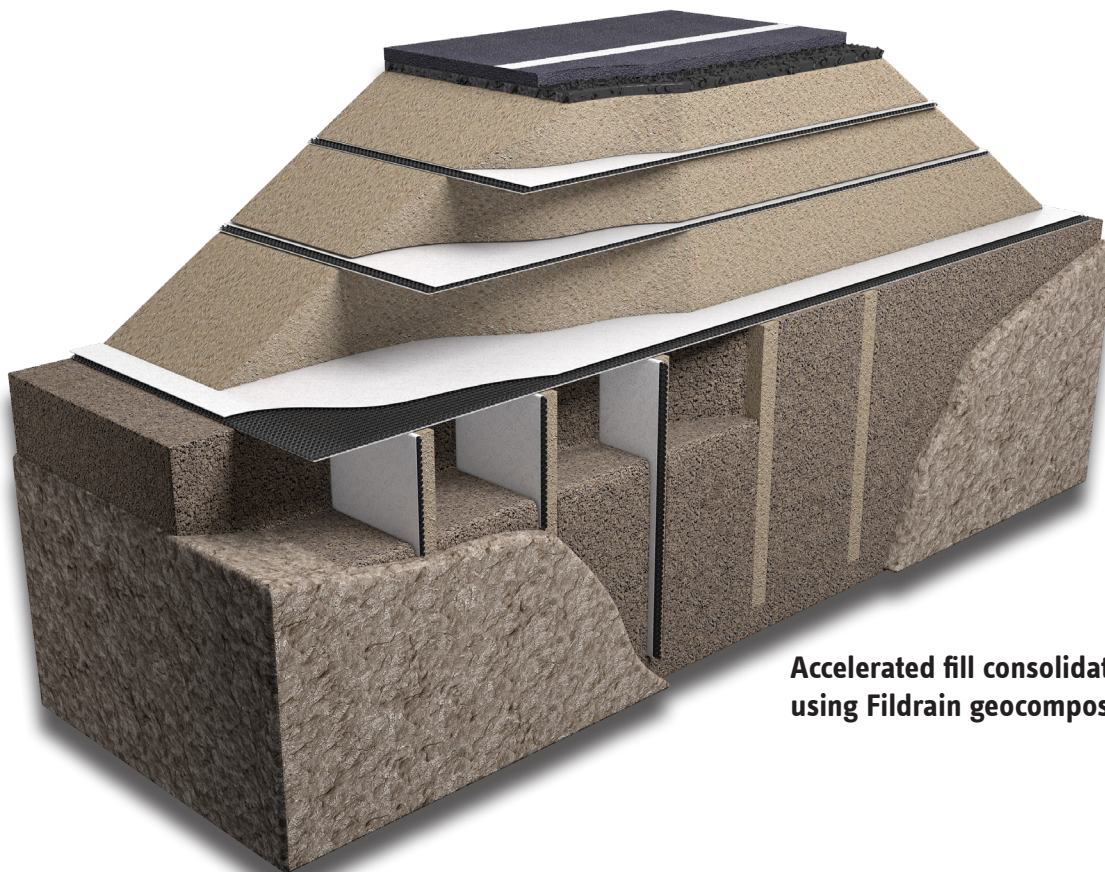
Reduced Consolidation Time

Full settlement of new embankments must be achieved before the carriageway is constructed. 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.

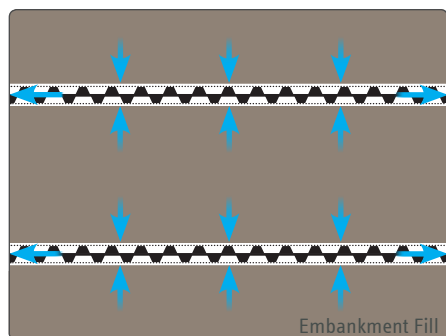
In some situations Fildrain will make unsuitable fill suitable and enable the use of marginal fills.

Cost Effective Fast Installation

Typically installed at one metre vertical intervals, Fildrain creates horizontal drainage layers which rapidly reduce pore pressure and increase the speed of consolidation. Much faster and more cost effective to install than using crushed stone, Fildrain can also allow site-won fill to be used, reducing overall environmental impact of the works. With a virtually impermeable core when laid horizontally, each layer of Fildrain protects the earthworks below from rainfall ingress, further accelerating consolidation. Projects using Fildrain have achieved full consolidation in 25% of the time typically expected.



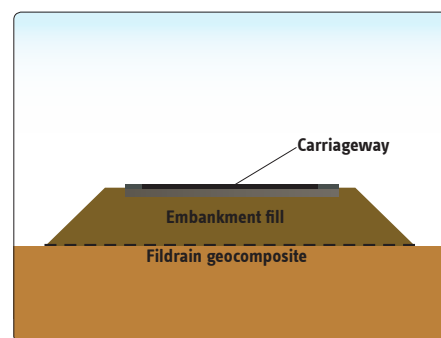
Accelerated fill consolidation using Fildrain geocomposite



Effective horizontal drainage & vertical barrier



Geocomposite layers at 1m vertical spacing



Starter layer for soft sub-formations