Case Study
Erosion control for canal slope

As part of the reinforcement of the Monmouthshire and Brecon Canal in South Wales, engineers have specified TERRAM’s specialist geotextiles and cellular Geocell systems to prevent erosion on a section of the waterway.

The canal is a popular tourist attraction and engineers at British Waterways sought to stabilise the banks to preserve the canal. After reading about TERRAM in various civil engineering publications, British Waterways selected the products for a trial section of the canal.

Canals and other waterways are subject to barge- and boat-driven waves which can undermine the stability of the slopes. TERRAM geotextiles possess the hydraulic and filtration characteristics that allow them to replace several layers of stone filters which have been used traditionally to deal with this problem.

The trial involved laying TERRAM 1000 on the clay slope to act as a filter and prevent soil erosion. This was followed by a stone-filled geocell to act as the revetment armour. The geocell will retain the stone and ensure its long-term stability. The geocell is manufactured from a TERRAM geotextile so it will drain easily.

Work on this section of the Monmouthshire and Brecon Canal has now been completed with engineers very pleased with the outcome. Chris Rainger, principal engineer at British Waterways commented, “TERRAM geotextiles and Geocell were easy to install and the works went according to plan. We have been very pleased with the initial installation and hope to roll out a full programme of renovation along the rest of the canal.”

TERRAM is one of the leading specialist manufacturers of geosynthetics and other technical textiles. Its range of products is used across a variety of application including civil engineering, railways and landscaping.