

Retaining and Erosion Control becomes Greener and Stronger

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Historically retaining walls and structures on our railways, and indeed across all infrastructure sectors, have been manufactured from concrete, steel, brick or a combination of such. With the need for projects to find greener solutions to traditional methods it often presents a conundrum for designers and their clients. With a global ambition to reduce the use of cement and steel in construction there are some fantastic innovations becoming more readily available. Once such product is FlexMSE, distributed by Scott Parnell Ltd.

This unique, patented engineering solution is a vegetated retaining wall system with a design life of 120 years. Using MSE (mechanically stabilised earth) principles along with geotextile technology, the combination of FlexMSE bags and interlocking gripper plates allows for strong, fast, cost effective and green builds to take place.

FlexMSE can be formed into near vertical retaining walls, green landscaping structures and erosion resistant sidings to waterways. The structure, when built, is then vegetated via hydroseeding, live staking, live planting or brush layering. Vegetation selection can be of paramount importance when working in AONB or SSSI schemes; to support this the system can be planted with a grand selection of flora and/or



forna to assist the biodiversity of the area in which it is built. Local wildlife can also be factored into the build, with previous sites allowing for voles, badgers and kingfishers to burrow and nest in the structure with no adverse effect.

Impressively a shift to this system has up to 98.5% less Green House Gas output than traditional methods, offers installation efficiencies of 66% and costs up to 60% less too. On site efficiencies are found through the speed of installation which can be accredited to the foundation requirements being minimal, the omission of steel rebar and the installation being achievable with no mechanical equipment.

Just a handful of common applications for FlexMSE are slope repairs, noise barriers, green flood barriers, landscaping, greenwalls, culvert headwalls and ditch linings.

In this carbon aware era, which sees a desire to protect and repair our planet, this product fits perfectly into sustainable builds. Eligible for BREEAM credits it is evidently the future for our projects. If you would like to learn more on this system, CPD training is available with Scott Parnell Ltd who are UK distributors of the product. Please contact Sharon Meek, Head of Rail Strategy and Specification on 07525858254 for further details.



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