

GEOSYNTHETICS

Case Study Ref: 521

Paving – Rehabilitation of Haymarket Bus Station, Leicestershire

Challenge

The existing surface was showing evidence of fatigue failure caused by the high traffic volumes associated near a busy Bus Station. To limit disruption to the travelling public and maintain traffic flows during peak periods, the work was approved to be undertaken over a weekend period.

Solution

Tencate PGM-G100/100 was selected not only as a means of inhibiting reflective cracking but also because the fabric component of the composite when impregnated with bitumen at 1.1 litres/m², provided an additional moisture barrier. A 160/220 straight run bitumen spray was applied and Tencate PGM-G installed by our specialist machine on to the milled & regulated surface. The PGM-G was overlaid with a 40mm Ultipave M 14mm SMA surface course.

Product Details

Tencate PGM-G 100/100 paving Geocomposite is a mechanically bonded continuous filament non-Woven Geotextile made from 100% polypropylene and reinforced with high modulus glass filaments. The Product is characterised by its uniform bonding, optimum bitumen storage capacity and efficient load Uptake at very low strains of less than 3% thereby providing the ideal solution for highway maintenance.

In addition, construction plant can traffic the Geocomposite during the surfacing operation without Damage or picking up onto vehicle wheels.

Project Data

Application: Asphalt Inlay

Location: Haymarket Bus Station Redevelopment

Products: Tencate PGM-G100/100

Quantity: 2,400 m²

Client: Leicester City Council

Main Contractor: Tarmac

Date: March 2015



Top Left: Asphalt Grid Systems bespoke laying machine, incorporating a hydraulic pretension mechanism to apply an even tension when installing.

Bottom Left: Installation of PGM-G100/100 over the main access road leading to the bus station.

Right: Construction Plant trafficking PGM-G without picking up onto the wheels. Also, AGS operative removing gully covers after the installation process.