

Polyfelt® PGM 14 paving fabric

Bus Rapid Transport (BRT) Corridor at New Delhi, India

Project Data

Project	: Bus Rapid Transport (BRT) Corridor, New Delhi
Client	: Delhi Integrated Multi Modal Transit System Ltd.(DIMMITS), Delhi
Consultant	: RITES Ltd
Contractor	: BSC and C&C JV
Products Used	: Polyfelt® PGM14 (174,000m ²)

Overview

In density populated Indian cities like Delhi, traffic congestion is a major problem. To improve public transport efficiency and reduce congestion and pollution a series of Bus Rapid Transport (BRT) corridors have been established across the city.

Application

The first 13km corridor from Ambedekar Nagar to Delhi envisages good quality roads with dedicated lanes for buses, cars and two wheels. The proposed road section comprises 3.5m and 6.7m wide bus and car lanes respectively as well as a cycle track (Figure 1).

To improve the lifespan of the road, Polyfelt® PGM 14 paving fabric was installed between section of the old cracked road and new asphalt overlay. Polyfelt® PGM 14 helps in delaying the onset of reflective cracking from the existing pavement as well as the construction joints between the existing and widened lanes propagating through the new overlays.

Installation

A layer of levelling course was laid over the existing pavement including the widened lane to fill cracks and potholes before installing the

PGM 14. Pure bitumen was sprayed at the rate of 1.1kg/m² over the levelling course prior to the installation of PGM 14. PGM-14 rolls were then unrolled over the tack coat by using an installation rig mounted on a tractor. Pneumatic roller was used to press down the paving fabric to saturate the paving fabric with tack coat to form a Stress Absorbing Membrane Interlayer (SAMI) between the existing pavement and new overlays. An intermediate overlays of 90mm thick CRMB grade 55 was then laid over PGM-14. Finally 50mm thick Crumbed Rubber Modified Bitumen (CRMB) grade 60 was laid as wearing course. As it was not possible to disturb the traffic during daytime so the installation of PGM-14 was carried out at night.



Installed Polyfelt® PGM 14 on the existing pavement.



The installation of Polyfelt® PGM 14 during non peak evening hours.



Overview of the BRT after construction.

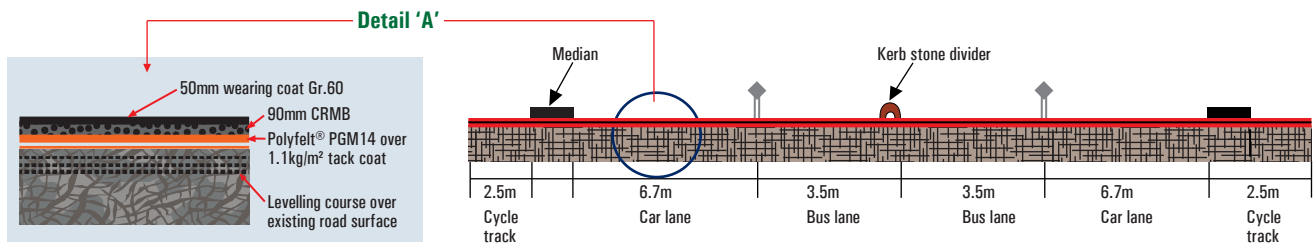


Figure 1: Typical cross section of the multilane road

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Further details of this application and products can be obtained by contacting your nearest TenCate Technical Support Office.

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