Paving Fabric Interlayer with a Modified Asphalt Binder

Reflective Crack Control, Waterproofing

Heavier fabrics (≥6oz /Yd²) have shown to have a greater ability to retard reflective cracking than conventional 4oz/ Yd² paving fabric. Polymer modified liquid asphalt has proven its ability to improve the performance of hot mix asphalt pavements. The combination of a modified liquid asphalt binder and a heavier paving fabric have been proven to increase pavement life in colder regions where pavement environments are harsh. The polymer modified liquid asphalt/paving fabric interlayer system has shown superior performance using polymer modified asphalt binders.

There is a limit as to how many times a pavement can withstand flexural loading before cracking. An overlay in combination with Mirafi’s paving interlayers installed with a polymer modified binder can withstand a higher number of vehicular loadings, improving a pavements overall service life and performance even under today’s heavy traffic loads.

Key benefits:
- Increased life in cold climate
- Improved resistance to reflective cracking
- Moisture barrier
- Longer service life

Case Study

Residential Street with Utility Restrictions
Kensington St., Schaumburg, IL
Mirafi® MPV700 & PG 70-16

The pavement of this street was highly distressed and required a thick pavement section to restore its condition and delay reflective cracking. Because of utility restrictions it was not practical and was too expensive to specify a thick overlay. Mirafi® MPV 700 overlay fabric was selected with a modified asphalt binder to reduce reflective cracking and seal the pavement in this cold environment project with (2 in) of IDOT hot mix asphalt. Construction started with a leveling course to fill in the irregular surfaces. Next a polymer modified asphalt tack coat PG 70-26 modified with an SBS polymer was spread at a rate of .32gal/yd². MPV700 overlay fabric was then placed in the binder. The pavement overlay consisted of 5 cm (2 in) of IDOT hot mix asphalt.