



BinderTekk™

High Performance Binders



BinderTekk polymer modified asphalts are the newest generation of binder technology that can be engineered to address the specific level of strain tolerance needed for a particular job. BinderTekk is the solution for providing rut resistant base, intermediate, and surface HMA mixtures that are much more crack resistant than conventional HMA layers, whether placed as single or multiple lift pavement designs.

Superior Performance

BinderTekk produced polymer modified HMA's have been shown to provide better rut resistance and far superior crack resistance than conventional HMA or other modified asphalt binder types. Transportation departments that have recognized BinderTekk's superior performance characteristics benefitted from significant reductions in overall project cost. The long-term durability and crack resistance of BinderTekk produced HMA will ultimately provide lower life cycle costs.

BinderTekk allows for multiple HMA layers to be placed under the same specification, each with its own applicable performance criteria- Base, Intermediate, Surface and Bridge Deck. BinderTekk can be utilized in composite pavement sections over PCC, whether as a crack resistant and impermeable interlayer, as a flexible overlay, or as a "system" of both an interlayer and flexible overlay. Depending on the design, BinderTekk can also be used in a stand alone pavement lift placed within the applicable pavement layer structure or for producing highly flexible yet rut resistant and waterproof bridge deck mixes.

"BinderTekk utilized on a New Jersey DOT project, which included bridge decks, saved 7.3%, which represented nearly \$6 million"

2010 NJDOT I-295 Reconstruction



BinderTekk™

BinderTekk allows for multiple layers of HMA to be placed under the same specification, each with its own applicable performance criteria - Base, Intermediate, Surface and Bridge Deck. BinderTekk can be utilized as a "system" when placing as a composite section over PCC, as an interlayer and then a flexible surface overlay. Depending on the design, BinderTekk can also be used as a stand alone pavement lift placed within the applicable pavement layer structure.

The BinderTekk Difference: How You Can Use It:

BinderTekk Base Course:

Designed as a Bottom Rich Base Course, BinderTekk BC provides:

- ◆ Thinner lift with increased durability
- ◆ Cost savings driven by a thinner layer of HMA being used
- ◆ Binder technology that can be placed on rubblized PCC or HMA materials
- ◆ Consistent, dependable performance across a variety of subgrades



BinderTekk Intermediate Course:

BinderTekk IC provides a flexible interlayer or intermediate course:

- ◆ Significantly improves reflective crack resistance, yet maintains rut resistance
- ◆ Can work with a variety of JMF's (Job Mix Formula):
 - Can be used to replace conventional binders in existing conventional JMF's to improve performance
 - Can be used in HMA designed for specific applications such as RCRI (Reflective Crack Relief Interlayers)
- ◆ Effective in binder rich mixes, providing impermeability
 - Little or no "draindown" in binder rich mixes, without the need for fibers (such as with SMA)

BinderTekk Surface Course:

BinderTekk SC is a mix that:

- ◆ Is very effective for improving the fatigue resistance in thin overlay applications
- ◆ Significantly improves crack resistance, yet maintains rut resistance
- ◆ Can work with a variety of JMF's:
 - Can be used to replace conventional binders in existing conventional JMF's to improve performance
 - Can be used in HMA designed for specific applications such as Bridge Deck Mixes (i.e. BinderTekk BD)

BinderTekk Bridge Deck:

BinderTekk BD:

- ◆ Repels water and provides chloride protection
- ◆ Can be placed without a vibratory roller

		Bridge Deck	Surface Course	Intermediate Course	Base Course
STRAIN LEVEL (high to low)		High Strain	High to Low	High to Low	High to Low
Flexural Beam	AASHTO T-321, 10Hz loading frequency	<i>Test temperature and microstrain level as determined by application</i>			
APA	AASHTO T-340; 8k load cycl; 100 lb load	<3mm	<4mm	<5mm	<5mm

For more information about BinderTekk and its benefits, call your local Road Science account manager or 877-354-1851.



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