



BRIDGE PRESERVATION

SERVING THE RAIL AND HIGHWAY MARKETS



Specializing in the rail and highway markets, Bridge Preservation manufactures high performance membrane systems designed to permanently protect rail and highway structures. These rapid setting high build elastomeric systems are impervious to deicing chemicals, water, ballast, stray current and other factors that contribute to accelerated deterioration and wear of elevated structures.



Bridge Preservation products are manufactured and certified under ISO 9001:2008, insuring that stringent quality control standards are met with each batch of product that leaves our manufacturing facility. Quality assurance continues in the field with experienced field support from Bridge Preservation. All critical aspects of the project are reviewed, inspected and recorded to insure that each application meets the standards established by Bridge Preservation and the owner.

BRIDGE PRESERVATION PRODUCT ADVANTAGES:

Type of Product	Advantages
Spray-Applied	Consistent thickness when applied over irregular substrate
Seamless	No seams to seal in order to prevent leaks as you would find with pre-formed sheet membranes
Two-Component System	No powdered catalyst to measure and add at the jobsite by workers
Non-Sag Consistency	Can be applied Horizontally, Vertically and Overhead
Odorless	Can be used in close proximity to the public and other trades without complaint
Exceeds AREMA Requirements	Assurance that the most recent guidelines are met
VOC Compliant	Can be used in all states and provinces
Low Permeance	Will not allow water vapors through the membrane. These vapors can condense between the membrane and substrate resulting in freeze/thaw damage to concrete or rusting of steel decking and reinforcement
High Elongation and Low Temperature Flexibility	Will accommodate both low and high temperature substrates
High Tensile Strength and Puncture Resistance	Resists damage from punctures and tearing
Extremely Fast Cure	Can accept ballast and asphalt overlays within one hour of placement
High Electrical Resistance	Electrically isolate decks from stray current



PRODUCTS

Bridge Deck Membrane

Bridge Deck Membrane is used as a waterproof membrane with dielectric properties for protection against typical corrosion conditions that exist on many rail and DOT structures.

Bridge Deck Top Coat

Bridge Deck Top Coat is used on applications requiring an aggregated topcoat. The slower setting membrane is applied directly over Bridge Deck Membrane, and allows aggregate to be broadcast into the membrane before initial set.

Bridge Deck Membrane Patch Coat

Bridge Deck Membrane Patch is used for incidental patching and touchup. The slower setting membrane allows material to be dispensed through duplex cartridges and finished by brush or trowel.

Bridge Deck Concrete Primer

Bridge Deck Concrete Primer is a specially formulated two-component low viscosity primer used for priming and sealing concrete substrates.

Bridge Deck Metal Primer

Bridge Deck Metal Primer is a specially formulated single-component primer recommended for all metal substrates.

Bridge Deck Multi-Use Primer

Bridge Deck Multi-Use Primer is a specially formulated two-component polymer primer that can be thinned with solvent for better penetration or coverage. Bridge Deck Multi-Use Primer can be used on both metal and masonry substrates.

Bridge Deck Tack Coat

Bridge Deck Tack Coat is a specially formulated, high solids, single component, polymer modified bitumen primer designed to provide adhesion of asphalt overlays to Bridge Deck Membrane or Bridge Deck Membrane with an aggregated topcoat.

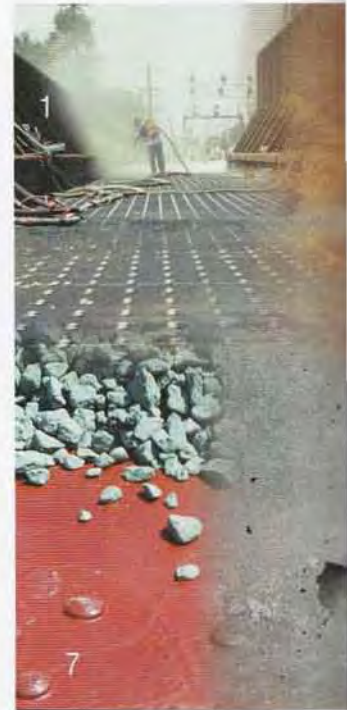
Bridge Deck Membrane Surface Activator

Bridge Deck Membrane Surface Activator is a specially formulated single-component cleaner and surface activator. Bridge Deck Membrane Surface Activator is used to reactivate the surface of the Bridge Deck Membrane when incidental patching or over coating is required.



RAIL

Rail bridge decks suffer deterioration from the corrosive effects of both natural and man-made agents. Freeze/thaw cycles, repeated day after day, year after year, also deteriorate the structures. Granite ballast adds a particular challenge for rail bridge decks because of the punishing effects of its angularity. The tremendous pounding of high point loads adds to the challenge. Bridge Preservation spray-applied elastomeric waterproofing membranes, specifically formulated and highly durable, will provide years of waterproofing protection for rail bridge decks.



Steel Rail Decks:

1. Surface Preparation – Abrasive blasting or shot blasting
2. Blasted Steel – Before and after blasting
3. Filling Steel Channel – Filling plate gap with filler
4. Priming – Single and two-component primers are used
5. Coating Bolt Heads – Insuring water tight application
6. Ballast Loading – Ballast loading within one hour
7. Ballast Close Up – Ballast placed directly on waterproofing membrane

Concrete Rail Decks:

8. Formed Concrete Wall – Honeycombed wall
9. Parged Concrete Wall – Honeycombed wall after parging
10. Priming – Two-component primer application
11. Surface Coating – Spray coating application
12. Protection Board – Not required with Bridge Deck Membrane





DEPARTMENT OF TRANSPORTATION

Highway bridge decks suffer deterioration from the corrosive effects of both natural and man-made agents. Freeze/thaw cycles, repeated day after day, year after year, also deteriorate the structures. Bridge Preservation spray-applied elastomeric waterproofing membranes are specifically formulated to provide years of waterproofing protection for highway bridge decks.

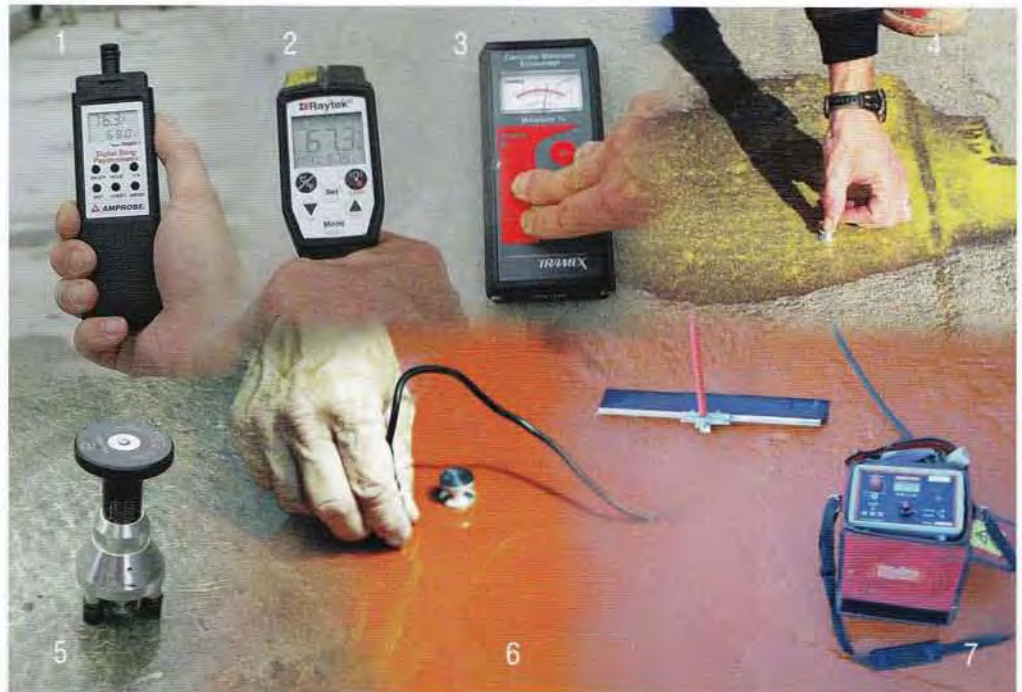
1. Cleaning surface before surface preparation – Removal of all loose materials
2. Surface preparation – Both shot blast and sand blasting are typical
3. Priming – Use of two-component primers
4. Surface Coating – Application of BDM
5. Surface Coating – Application aggregated top coat
6. Sweeping Aggregate – Removing loose aggregate before tack coat application
7. Tack Coat Application – Used to insure wear course bond
8. Asphalt Wear Course Application – Hot asphalt applied after just one hour
9. Asphalt Wear Course Cross Section – Close-up of complete system
10. Finished Asphalt Wear Course – Wear course application complete





QUALITY ASSURANCE

The success of any project depends in large part to the assurance that each construction component of the project is adhered to. Surface preparation, environmental conditions and product placement are key components. Bridge Preservation insures that each project is installed correctly with onsite factory inspection, and a network of specialty contractors. All project conditions are monitored and recorded providing a record of each project from start to finish.

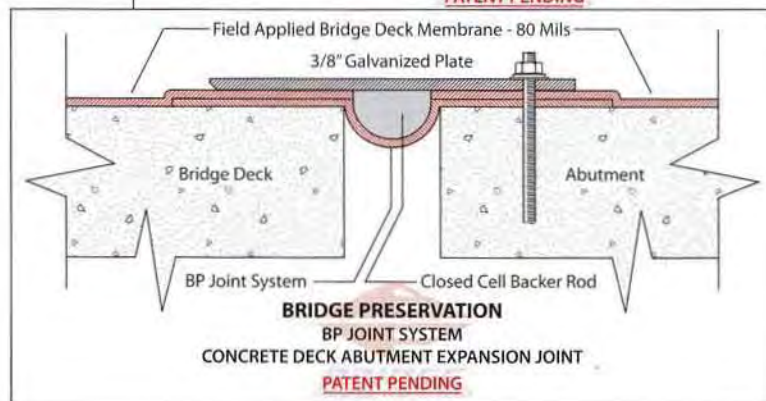
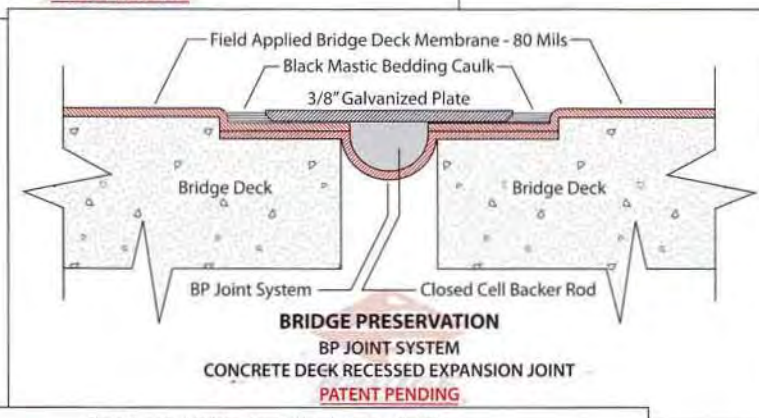
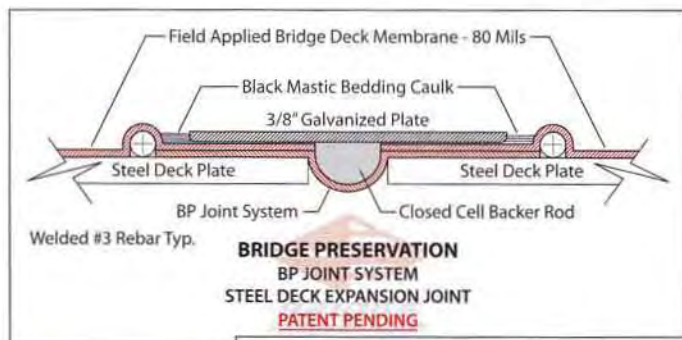


1. Environmental Conditions – Ambient conditions
2. Surface Conditions – Substrate surface temperature
3. Concrete Moisture Content – Concrete moisture content
4. Adhesion Testing Setup – Gluing test dolly to surface
5. Adhesion Pull Test – Tensile pull test instrument
6. Coating Thickness – Non-destructive coating thickness
7. Spark Testing – High voltage spark testing for surface voids



BRIDGE PRESERVATION JOINT SYSTEM

Bridge Preservation Joint System combined with Bridge Deck Membrane provides watertight protection from water leakage for the entire bridge deck structure. Unlike other manufacturers that utilize PVC waterstop joints glued to the membrane, Bridge Preservation's joint system provides a seamless, continuous membrane and joint system that can accommodate up to 50% (+/-) movement while maintaining a watertight seal.





BRIDGE PRESERVATION

Manufacturing and Technical Support:

87 Shawnee Ave

Kansas City, KS 66105

Office: **(913) 321-9000** (Kansas City, KS)

Office: **(800) 392-1981** (Riverside, CA)

Sales Support:

RJ Watson

78 John Glenn Drive

Amherst, NY 14228

Office: **(716) 691-3301**

www.bridgepreservation.com