All States Materials Group®

Asphalt-Rubber SAM

Asphalt-Rubber SAM is a stress absorbing membrane type surface treatment which creates a highly durable wearing surface for demanding pavements. The innovative surface treatment consists of hot pre-coated 3/8" or 1/2" crushed stone placed over a thick (0.45 to 0.6 gallons per yd^2) hot-applied crumb rubber modified asphalt (CRMA). The CRMA is composed of performance graded asphalt blended with ground rubber from recycled tires and meets the ASTM Specification D-6114 for Asphalt-Rubber Binder. The tire rubber is finely ground at ambient temperatures then blended with asphalt at temperatures exceeding 350° F. The high temperature causes the oils in the asphalt to swell the elastomeric rubber polymer, resulting in a durable, elastic and flexible binder material that is less sensitive to brittleness at low temperatures and bleeding at high temperatures. The tire rubber contributes polymer, carbon black and anti-oxidants. The result is a very adhesive and cohesive high viscosity binder that provides high film thickness on the aggregates, improving durability and resistance to oxidative aging, aggregate loss and delamination. The Asphalt-Rubber SAM durability doubles the life of conventional chip seals while greatly reducing reflective cracking and the propagation of new cracks.

Asphalt-Rubber SAM Benefits

- ☑ Waterproofs and seals small cracks and imperfections on the existing pavement surface
- ☑ Minimizes loss of curb reveal and alignment; thinner than hot mix overlays
- ☑ Uses recycled material, reduces scrap tire inventories
- ☑ More durable than conventional asphalt
- ☑ Developed for higher traffic volume roads
- ☑ Quick construction and traffic return with minimal user delays
- ☑ Long lasting preventive maintenance preserves the value of your structurally sound pavements with distressed surfaces

Asphalt-Rubber SAM Uses

Asphalt-Rubber SAM is designed for demanding, higher traffic roadways; but they may be used on any type of road where a high performance surface treatment is desired. They are ideal for cracked and raveled surfaces where traffic delays, curb reveal, and clearances under bridges and overpasses are a concern. The pavement to be sealed should be structurally sound and properly drained. It should have a good profile, but may have aged asphalt with moderate surface cracking and raveling.

When warranted, potholes and cracks should be filled. The surface should be swept of any stones, sand, mud or other loose debris. Asphalt-Rubber SAM is a long-lasting treatment for distressed-surface pavements that you want to preserve.

All States Materials Group wants to make sure your road surfacing job is a success. We can help with determining the right treatment at the right time for your pavement. Contact our professionals for more information about protecting your roadways with Asphalt-Rubber SAM surfacing.

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Asphalt-Rubber SAMI

Asphalt-Rubber SAMI is a stress absorbing membrane type interlayer placed between distressed pavements and hot mix overlays to seal existing cracks and retard reflective cracking. The process may be used on distressed asphalt, concrete and composite pavements. The innovative interlayer consists of hot pre-coated 3/8" or 1/2" crushed stone placed over a thick (0.5 to 0.6 gallons per yd^2) hot-applied crumb rubber modified asphalt (CRMA). The CRMA is composed of performance graded asphalt blended with ground rubber from recycled tires and meets the ASTM Specification D-6114 for Asphalt-Rubber Binder. The interlayer is then covered with a hot mix overlay or other surface course. The tire rubber is finely ground at ambient temperatures then blended with asphalt at temperatures exceeding 350° F. The high temperature causes the oils in the asphalt to swell the elastomeric rubber polymer, resulting in a durable, elastic and flexible binder material that remains flexible at low temperatures and doesn't flow at high temperatures. The tire rubber contributes polymer, carbon black and anti-oxidants. The result is a thick, very adhesive and cohesive membrane binder that bridges and flexes with cracks, protects the pavement structure from water and retards reflective cracking. Asphalt-Rubber SAMI extends the life of overlays.

Asphalt-Rubber SAMI Benefits

- ☑ Retards reflective cracking
- ☑ Waterproofs and seals cracks and imperfections on the old pavement surface
- ☑ Flexes with the pavement even at temperature extremes
- ☑ Uses recycled material
- ☑ Quick construction and traffic return with minimal user delays
- ☑ Hot mix overlays utilizing a SAMI allow for thinner HMA lifts, improve rideability and smoothness, while adding structure
- ☑ Long lasting corrective maintenance for improving rideability and extending the life of your pavements

Asphalt-Rubber SAMI Uses

Asphalt-Rubber SAMI is designed for waterproofing and sealing the existing distressed pavement surface and retarding reflective cracking when overlaying cracked and raveled surfaces. It has been proven effective on streets, highways and airfields. The pavement to be overlaid should have a structurally sound base and be properly drained. It may have aged asphalt with extensive surface cracking, raveling and other surface distresses. When warranted, potholes and large cracks should be filled. The surface should be swept of any stones, sand, mud or other loose debris. With the right hot mix overlay, Asphalt-Rubber SAMI enables thinner overlay lifts and retards reflective cracking, extending the serviceable life of the overlay.

All States Materials Group wants to make sure your paving job is a success. Our professionals can work with municipal, state or consulting engineers on a job-by-job basis to construct an Asphalt-Rubber SAMI that meets your specific needs. Contact us for more information about Asphalt-Rubber SAMI.