

# EVERYTHING ASPHALT

## Martin Asphalt Products for Preserving Pavements



"We pay for good roads whether we have them or not." FHWA

### Protecting Our Infrastructure Investment

Just as a stitch in time saves nine, highway departments have found that each dollar spent on pavement preservation saves up to ten dollars in future rehabilitation costs. A sound road asset management program protects the taxpayers' investment, lowers life cycle costs, delays future deterioration, extends pavement life, reduces user delays during reconstruction and improves the overall functional condition of the road network.

Asphalt ages and becomes more brittle after exposure to ultraviolet sunlight as well as hot and cold temperatures. Traffic wears asphalt off of the road surface and initiates micro-damage and eventual fatigue cracking. Construction abnormalities can cause surface defects. Prolonged exposure to moisture can debond the asphalt from the aggregate, and, if allowed to penetrate through cracks, water washes away the underlying pavement base structure. Without maintenance, these conditions cause cracking, potholes, rutting, raveling, loss of skid resistance and loss of structural strength. By treating pavements before there is major damage, street and highway departments can cost-effectively prolong pavement life.

### Martin Asphalt Makes It Easy

There are a variety of treatments available for effectively keeping "good pavements good". Choosing the right treatment can make the best use of funds and give taxpayers smooth and safe roads while avoiding costly reconstruction and extended road closures. Through Martin Asphalt, you get **Everything Asphalt**—a full range of products for your pavements. In addition, you receive technical assistance in selecting the right materials and application. The company's AASHTO Certified Laboratory makes sure the products meet your specifications. And your products are delivered both on spec and on time via Martin's Gulf Coast network of production plants, storage facilities and transportation fleet including ocean-going and inland barges, rail cars and tanker trucks.

### Maintenance Treatments

The applications below all serve as preventive maintenance, adding additional asphalt to waterproof the surface, seal micro-cracks and prevent aggregate loss. Some of these treatments also correct deficiencies such as loss of friction, raveling and minor rutting. Many of these treatments can be effective at prolonging both asphalt and Portland cement pavements. The table summarizes the treatments. Contact us for more information on selecting the right process and product for your projects.

Treatment	Process	Frequency*	Benefits	Martin Asphalt Products
Fog Seal	Diluted emulsion of asphalt or rejuvenator oils is lightly sprayed on the road surface	2-4 yrs	Enriches hardened asphalt, seals surface, inhibits raveling; lowest cost treatment	CSS-1 ETR-1 Reclamite® SS-1 ARA-1
Spray Patch	Special equipment blows clean and applies asphalt emulsion and aggregate to potholes	As needed	Delays further deterioration	CRS-2 CRS-2h CRS-1hP CRF® HFRS-2 RS-2 CRS-1P
Chip and Sand Seals	Emulsified, cutback or heated asphalt is sprayed by a distributor then covered with aggregate by a chip spreader.	4-8 yrs	Seals and waterproofs surface, corrects surface deficiencies, retards reflection cracking, improves skid resistance; low cost. Broom, scrub and squeegee seals with CRF restorative seal and sand fill cracks.	CRS-2 CRS-2P CRS-2h CRS-1P CRF® AC-20-5TR AC-15-5TR HFRS-2 RS-2 HFRS-2P RC-250 AC 15P AC-15XP
Slurry Seal	An asphalt emulsion is mixed with fine aggregate and applied to the surface in a single machine	4-10 yrs	Seals surface cracks, waterproofs, corrects raveling, enriches surface, fills minor surface irregularities, improves skid resistance	CQS-1h CQS-1hP SS-1h
Micro-surfacing	Polymer modified asphalt emulsion is blended with fine aggregate and placed with a single machine	6-12 yrs	Seals, waterproofs, corrects surface deficiencies, improves skid resistance, fills minor ruts, inhibits reflection cracks, cures quickly	CSS-1hP
Thin lift hot mix asphalt	Conventional paver lays thin lift of hot mix asphalt on surface	8-15 yrs	Seals and waterproofs, improves skid resistance, reprofiles surface, cures quickly	PG 64-22 PG 70-22 PG 76-22
Dust Palliative	An emulsion is sprayed on an unpaved road to mitigate dust.	1-2 yrs	Keeps down dust, gives some waterproofing and surface protection	CSS-1 PCE Coherex® EAP&T SS-1

\*Treatments on roads in good condition will last longer than those in fair or poor condition. Life extension also depends upon the materials used, traffic, climate and quality of construction.