



PARKING LOT
MAINTENANCE

A PLM WHITE PAPER

PROTECTIVE ASPHALT SEALCOATING SYSTEMS

THE PLM APPLICATION PROCESS

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Introduction

TAKING A BEATING

There is no question that a parking lot takes a beating day-in and day-out. And, in many climates, just the temperature swings alone are enough to cause accelerated deterioration. Constant freeze / thaw cycles, of course, cause constant expansion and contraction (cracks) - increasing the risk of water infiltration. Then the water freezes, expands the cracks further, and compounds the problem even more.

Also adding stress to the parking lot is the brutal effect of daily traffic; not to mention, it receives its share of small (and large) fuel and chemical spills and leaks from automobiles, equipment, etc. Even our warm and friendly sun adds to the negative effects by constantly spreading its ultraviolet rays helping to cause further deterioration by increasing the rate of oxidation, causing the asphalt to become dry and brittle. The result? Obviously, a greater risk of cracking and more water infiltration.

All of those factors combined make for an uphill battle to properly maintain parking lots. You definitely have to stay in front of the eight ball.

KEEP IT ON THE SURFACE

One way to do that is to keep those deteriorating effects on the actual parking lot surface. After all, the surface was designed to take the beating and, acting as a shield, not allow the deteriorating effects to negatively impact the base material. In order to ensure the surface, or “shield,” continues to meet the demands for many years to come, sealcoating is a key component to any parking lot maintenance program. Sealcoating does just what the name implies of course, sealing the top coat of asphalt pavement further improving its “shielding ability.”

The crews at Parking Lot Maintenance, LLC (PLM) have a well-proven process of delivering a hassle-free sealcoating project. Although each project will vary depending on area, condition, location, etc., the general process is described in more detail below.

The Pre-application Process

ASSESS THE ASPHALT QUALITY

Assessing the quality of your asphalt is important as it helps determine what preparation steps need to be completed before applying the sealcoating. Three key factors are important in that determination and they are:

- I) Well Drained and Stable
- II) Frequency and Size of Cracks
- III) Oil Free Surface

The level of those three factors can dramatically increase or decrease the quality of the sealcoating application and performance. And a PLM project manager will visually inspect the asphalt to help determine the quality.

NEW ASPHALT

For new asphalt sealcoating, it is usually just a matter of the surface having had adequate time to cure and surface oils to dissolve. The Asphalt Sealcoat Manufacturers Association (ASMA) recommends a 6 – 12 month cure time. An easy way to tell if the oils are gone is to broadcast a gallon of water on the surface and watch it move. The water moving in a uniform sheet is a good indication the oils are gone. On the other hand, if you see ‘rings’ or ‘breaks’ in the sheeting action, its probably an indication its not properly cured, or that there is an isolated trouble spot that will need a spot primer.

OLD ASPHALT

During the inspection, the PLM project manager will note any problem areas including those areas that may need patching and/or crack sealing. It is likely too, depending on the age and actual surface condition, the asphalt may need to be primed prior to the application of the protective surface treatment.

The Application Process

Step 1: Cleaning the Surface

Whether the surface can go straight to sealcoating, or if priming is required, the surface must be cleaned thoroughly in order to remove all loose aggregate, powder, dirt, gravel, silt, etc.

The PLM team, in most cases, will either use blowers, pressure washers, steel bristle brooms, or a combination in order to get the best cleaning results.

Step 2: Prepping the Surface

After the surface is well cleaned then repairs, crack sealing, oil spot priming, and any other special treatments will be performed. The PLM team will use only those products compatible with the sealcoat product to be used.

Step 3: Preparing the Material

Different sealcoat mix designs may provide different benefits and the PLM project manager will help determine what product is right for your application. The PLM team will follow the specific manufacturer's recommendations for material preparation including additives, mixing, etc.

Step 4: Applying the Material

As with other material handling, the sealcoat material will be applied by manufacturer's specifications. In most cases, sealcoat products can be applied either by hand, with squeegees and brushes, or by machine. The PLM project manager will determine the most beneficial method depending on coverage area, obstacles, or any other considerations impacting maneuverability.

Because of the amount of traffic parking lots receive, PLM always applies two coats for added protection and durability.

What's Next?

CONSIDER A LONG-TERM PARKING LOT MANAGEMENT PLAN (PLMP)

Now that you have a newly sealed and protected parking lot, it is time to consider a long-term Parking Lot Management Plan (PLMP). After all, just by completing the sealcoating process, the life of the parking lot has been substantially lengthened. And that life can be extended even longer.

As with any piece of equipment, structure, roof, etc. a well-thought and properly executed maintenance plan for a parking lot will continue to add life and at the same time minimize the chances of inconvenient and costly repairs.

The team at Parking Lot Maintenance has the expertise and experience to develop a cost-effective and convenient PLMP specifically tailored to fit your needs.