

Sealcoating SOLUTIONS



Top: Hand-spreading of sealant using a squeegee should occur in corners, edges and in confined areas. *Bottom:* Full-coverage coating applied with a spray machine.

Implement a successful sealcoating program with the right products and approach.

When it comes to maintaining retail parking lots, sealcoating is commonly met with skepticism. Often, retailers question the benefits over the potential pitfalls such as tracking sealant into stores due to improper materials and application, which can result in a costly mess and unhappy customers. Indeed, without a partner that specializes in this area of expertise, it can be easy to fall victim to this and other prevailing concerns.



But, rest assured that sealcoating, when properly specified and applied, is cost-effective and beneficial to any retail parking lot. However, success depends on assessing factors unique to each location and then selecting the appropriate materials or mix design. This article will discuss why retailers should sealcoat and the best approach to specifying the right sealant product for each site in a portfolio.

WHY SEALCOAT?

The biggest case for sealcoating is the bottom line. Asphalt prices continue to rise, making it more and more expensive to replace asphalt substrate. Proper application of the right sealant prolongs the functionality of asphalt pavement and reduces overall maintenance costs by up to 60%. Ancillary benefits include enhanced curb appeal and a smooth and more even surface to aid in sweeping or snow removal.

The purpose of sealant is to function as a protective barrier, minimizing water penetration and shielding the pavement from other irritants such as UV rays, salt, oils, anti-freeze and gas. Reducing water infiltration mitigates cracks caused by natural expansion and contraction of the pavement. Protection from the sun and other chemicals also slows structural breakdown. Sealants fill surface voids and help prevent oxidation (fading of pavement). A fresh, jet-black surface also serves as a nice contrast to line striping, which helps shoppers easily and safely navigate your parking lots.

THE BEST APPROACH

With stores spread out across the nation, it can be difficult for property owners and maintenance managers to create a sealcoating program with the right materials for each site. For this approach, expertise is critical. Relying on a contractor who does not specialize in sealcoat products can result in ineffective treatment, not to mention frustration and even the potential for lost revenue. Listed below are questions and general answers to issues that should be raised during the contractorqualification process. Be sure to seek specific responses for each of your sites, as answers will vary depending on unique factors such as pavement traffic load and property location.

1. When should sealant be applied?

Apply sealant sooner rather than later! There are greater long term benefits of sealcoating on pavements in relatively good condition compared to relatively poor condition. As a general rule of thumb, pavements should be sealed between 6 months and 1 year after initial installation. Also, before beginning to apply the sealcoat, ensure that the contractor repairs all potholes, cracks and thoroughly cleans the parking lot.

2. At what temperature should sealant be applied?

Sealants are best applied at pavement temperatures above 50 degrees Fahrenheit during and for a minimum of 48 hours after application.



parking lots

3. How often should it be reapplied?

The answer depends on many variables including the type of sealant used, traffic volume and pavement condition before application. However, in general, after initial application, sealcoat should be applied every 24 to 48 months depending on the sealant used for the job.

4. SHOULD DIFFERENT AREAS OF THE COUNTRY USE DIFFERENT SEALANTS?

Premium sealcoat products maintain flexibility and adhesion in both high- and low-temperature r anges.

However, for the most economical results, most U.S. contractors west of the Rockies will use an asphaltbased sealant. Moving to the east from the Rockies, contractors may use either asphalt-based sealants or sealants with a refined tar base. Although they differ in longevity, both types of sealants can offer a satisfactory sealcoat job.

5. How does subgrade affect the procedure?

Subgrade material and depths, which vary from region to region, diminish sealant performance over time. This can be mitigated by applying a product designed for the exact geographic specifications. If you have sites that span different regions, be sure to question your contractor on product choice and understand why it is being used.



With stores spread out across the nation, it can be difficult of the sealer. Some premium for property owners and maintenance managers to create formulas contain polymers a sealcoating program with the right materials for each site. which enhance film strength Pictured here is a freshly sealed parking lot. during changes in pavement

6. WHAT ARE THE COM-PONENTS OF PAVEMENT SEALANT AND HOW IS IT MANUFACTURED?

Asphalt pavement sealant is an emulsion, or blend, of either refined tar or petroleum products with clay and water. As the sealant cures after application, the water evaporates and leaves behind a membrane which adheres to the asphalt beneath it. What is left on the asphalt after curing is the "solids content" of the sealer. Some premium formulas contain polymers which enhance film strength during changes in pavement

temperature. A polymerized

formula, for example, has greater tensile strength and elasticity than standard sealant. This helps decrease tearing and cracking due to expansion and contraction of the asphalt. In addition to the basic ingredients, the contractor may add sand to increase traction or additives to accelerate drying.

Ultimately, product performance depends on the right mix design, or the proportion of a sealant's various components. Use a sealer that has been designed to account for the unique characteristics of the site and its functionality. Additives can be helpful, but are never a substitute for having the right percentage of raw materials or solids. Also ask about the product manufacturing process. Manufacturers use either a batch or colloid-mill process to blend all of the raw materials.



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7. WHAT IS THE APPLICATION METHOD?

Just like painting a wall, preparation and attention to detail are critical to an outstanding job. First, handspreading of sealant using a squeegee or brush should occur in corners, edges and in confined areas to "cut in" tight areas and guard against uneven coverage along the perimeter of a parking lot. A quality, full-coverage coating can then be applied with either a squeegee or spray machine.

8. How MANY COATS SHOULD BE APPLIED AND WHY?

With most mix designs, at least two coats should be applied over the entire surface. Depending upon expected traffic volumes, a third coat may be required in some areas such as drive lanes and turn areas to improve wear. Premium sealcoat products, with longer expected durability, may also be considered to reduce the number of applications over the pavement lifespan and minimize downtime, which, in turn, increases revenue.

9. CAN THE PROCEDURE BE COMPLETED IN STAGES?

Typically sealcoat procedures are completed in one mobilization; however, large parking areas may be completed in multiple sections. It is important to note that a two-coat application requires cure time in between applications of the first and second coat. If possible, be on site or appoint a representative to oversee the procedure to ensure the contractor is not applying both coats one right after the other.

10. How much downtime is required for curing?

Be sure to plan ahead and alert customers of changing traffic patterns due to cure time. In general, traffic should be kept off a newly sealed surface for a minimum of 24 hours to allow for drying time. Curing may take up to 30 days, during which minor imperfections in the sealer surface may "heal" or fade as the membrane hardens. If proper cure time is not adhered to, the entire procedure may be compromised.

Sealcoating is an important part of any routine parking lot maintenance program for retailers nationwide. Although seemingly simple, this procedure can be applied improperly, at incorrect intervals, and with the wrong materials. Specialization in sealcoat products and the ability to specify the right material in the right market is vital to the effectiveness of any sealcoat program. Understanding the benefits and proper approach will help you successfully implement and, in turn, protect and prolong your valuable pavement investments for years to come. **RFB**

About the Author: GemSeal manufactures, supplies, and specifies pavement preservation products nationwide, including sealers and additives, lot marking paints, crack sealants, pothole patches, primers, tools, and equipment. GemSeal offers property owners and managers exacting quality control and consistent results across multiple-site property portfolios to protect their valuable investment in asphalt.



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