

Innovative Asphalt Technologies for a Sustainable Future

For Installation on All Asphalt Surfaces

Graphene ES:

Graphene ES is a high-quality, 3% fiber-reinforced asphalt emulsion coating designed for use on asphalt surfaces. Using proprietary polymers, specially sized aggregates (20–30 mesh), and a proprietary coating process, Graphene ES is a highly durable surface coating with an increased skid coefficient that significantly prolongs pavement surface life. Graphene ES meets ASTM D8099/D8099M-17 Standard Specification for Asphalt Emulsion Pavement Sealer.

Graphene ES Uses:

Graphene ES is a top-quality pavement coating that is suitable for all asphalt surfaces including but not limited to, high-traffic industrial logistical trucking lots, schools and universities, and airport terminals and taxiways. This specification refers to Graphene ES application on parking lots and roadways.

Material Requirements and Application Rate:

Graphene ES will cover approx. 45-55 square feet per gallon of mix. Apply the correctly mixed Graphene ES (Graphene ES and Aggregate) at a rate of 45-55 square feet per gallon per coat. The application rate may vary depending on pavement condition and the method of application. For optimal durability, apply multiple coats (See Application Procedures and Installation).

Asphalt Preparation:

Asphalt should be swept and clear of any debris or loose substances. Cracks should be routed and filled with Hot-Applied Crack Sealer for best results.

Approved Application Equipment:

Graphene ES should be applied using mechanical squeegee or brush equipment and spray equipment that is capable of spraying aggregate-filled coatings. The equipment must have capabilities to maintain a homogeneous consistency of the Graphene ES and Aggregate mixture throughout the application process. Truck mounted or self-propelled squeegee or brush equipment should have at minimum 2 squeegee or brush devices (one behind the other) to ensure adequate distribution and penetration of Graphene ES into bituminous pavement. It is acceptable to use hand squeegees and brushes in areas where it is not practical to use a mechanical squeegee or brush.

Application Procedures and Installation:

Proper application procedures must be followed to attain the best performance and desired results for Graphene ES.
Graphene ES is a two or three coat system. Graphene ES is to be applied by a certified installer.



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- 1.) Apply the first coat of Graphene ES by squeegee to all drive lanes, entrances, exits and high traffic areas at a rate of 45-55 square feet per gallon. Allow first coat to dry thoroughly before applying the second coat.
- 2.) Apply the second coat of Graphene ES by squeegee or spray (to be determined by certified installer) to the entire pavement surface at a rate of 45-55 square feet per gallon. Allow second coat to dry thoroughly before applying an *OPTIONAL* third coat **if required**. If no third coat, allow 12-24 hours to dry prior to opening to traffic.
- 3.) Apply, by spray application, the third coat of Graphene ES to the entire pavement surface at a rate of 45-55 square feet per gallon. Allow third coat to dry 12-24 hours prior to opening to traffic.

CAUTION: Graphene ES **should not** be applied when temperature is expected to drop below 50°F during application and for a period of at least 24 hours after application.

Restriping and Remarking:

All traffic paint is compatible with Graphene ES.

Packaging Availability:

Graphene ES is available in bulk tanker quantities only.

Warranty and Disclaimer:

The information presented on this specification sheet is deemed to be truthful and precise and is intended to serve as a reference for authorized application methods. However, the outcome of the application may be affected by external factors beyond our authority, such as weather, construction, pavement condition, tool usage, and other variables. As a result, the manufacturer's responsibility is limited to ensuring that the material adheres to product specifications, and any legal responsibility to the purchaser or user of the product is restricted to the cost of replacement only. The manufacturer explicitly disavows any implicit guarantees of marketability or suitability for a specific purpose. If Graphene ES has not been applied by a certified installer, warranty is null in void.

Extended Warranty:

When Graphene ES is installed over newly paved surfaces (within 90 days), Graphene ES will warranty the surface against premature raveling and premature cracking for 3 years from date of Graphene ES installation. Graphene ES Certified installers will return and fill cracks if required during the 3 year period.