

SECTION 32 12 36.13

PAVEMENT SEALING SPECIFICATION

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Engineered resin emulsion seal coat slurry over [[new] [and] [aged]] asphalt concrete paving.

1.02 RELATED SECTIONS

- A. [Section 32 17 23.13 Pavement Marking]
- B. [Section 32 01 17.61 Crack Sealing]
- C. []

1.03 REFERENCES

- A. American Society for Testing Materials (ASTM)
 - 1. C 136 Method for Sieve Analysis of Fine and Coarse Aggregates
 - 2. D 244 Standard Test Method for Emulsified Asphalts
 - 3. D 2939 Method for Testing Emulsified Bitumens used as Protective Coatings
 - 4. D 3910 Practices for Design, Testing, and Construction of Slurry Seal
- B. American Association of State Highway and Transportation Officials (AASHTO)
 - 1. T-04481 - Method for Testing the Solubility of Bituminous Materials in Organic Solvents.

1.04 SYSTEM DESCRIPTION

- [A. Provide primer in all areas.]
- B. Provide two (2) applications of the coating (engineered resin emulsion slurry) in all areas.
- [C. Provide third coat in high traffic areas as shown in schedule and on drawings.]

1.05 SUBMITTALS

- A. Product Data
 - 1. Submit manufacturer's printed Product Data Sheet.

1.06 PROJECT/SITE CONDITIONS

A. ENVIRONMENTAL REQUIREMENTS

1. Apply coating when pavement temperature is at least fifty (50) degrees F. and air temperature is fifty (50) degrees F. and rising.
2. Apply coating during dry weather and when rain is not anticipated within eight (8) hours after application is completed.

PART 2 PRODUCTS

2.01 MANUFACTURER

- A. Neyra Industries, Inc., Cincinnati, Ohio: PaveShield

2.02 MATERIALS

A. Sealer: PaveShield

1. An engineered resin emulsion specifically formulated to extend pavement life.

B. Fortifier: Maxum

1. A polymer fortifier for faster drying time and improved durability.

C. Crack Sealant: Neyra Thermo-Sealant PLS or Spec+Plus

1. Hot applied, elastomeric type crack sealant compatible with pavement coating.

D. Pavement Primer: Polyprime

1. Acrylic based primer compatible with pavement coating.

E. Oil Spot Primer: Neyra Petrobond

1. Water based acrylic oil spot primer compatible with pavement coating.

F. Sand: As recommended in printed data sheets by sealer manufacturer.

1. Washed, dry silica sand free of dust, trash, clay, organic materials or other contaminants.
2. Gradation: To have an American Foundry Society grain fineness number that is no less than fifty (50) and no more than seventy (70), when tested in accordance with ASTM C 136.

G. Mixing Water

1. Potable and free from harmful soluble salts.
2. Temperature of the water: minimum fifty degrees (50) F.

2.03 EQUIPMENT

- A. Use equipment that keeps the mixture homogeneous at all times and is capable of applying required coating weights evenly over entire width of application mechanism to provide a uniformly coated surface.

2.04 MIXES

- A. PaveShield: Add water to the coating mix as required for application, quantity not to exceed thirty (30) percent of engineered resin emulsion.
- B. PaveShield: Add 2% Maxum based on gallons of PaveShield concentrate.
- C. PaveShield: Add three (3) to five (5) pounds of sand to the engineered resin emulsion, and mix with power equipment to a homogeneous coating.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Inspect existing paving surfaces for condition and defects that will adversely affect quality of work, and which cannot be put into an acceptable condition through normal preparatory work as specified.
- B. Do not place coating over unsound oil spots softened by fuel or oil. If this condition exists, notify Architect/Engineer.
- C. Starting installation constitutes Contractor's acceptance of surface as suitable for installation.

SPECIFIER SHOULD SELECT ONE OR BOTH SECTIONS UNDER PREPARATION BASED ON JOB REQUIREMENTS. (AGED/NEW PAVEMENT)

3.02 PREPARATION - AGED PAVEMENT

- [A. Repairing Asphalt Concrete Pavement: Repair areas shown in schedule.]
- [B. Crack Sealing: Apply crack sealant as detailed in Section 32 01 17.61.]
- C. Cleaning
 - 1. Clean pavement surface prior to applying primer coat and coating.
- D. Protection
 - 1. Protect adjacent curbs, walks, fences, and other items from receiving primer and coating.
- E. Oil Spots
 - 1. Clean oil spots and treat with oil spot primer.

- F. Priming
 - 1. Apply a diluted mixture of one (1) part primer and two (2) parts water at the rate of 0.03 to 0.06 gallons per square yard.

3.03 PREPARATION - NEW PAVEMENT

- A. Curing
 - 1. Allow new asphalt to cure at least thirty (30) days before applying pavement coating.
- B. Cleaning
 - 1. Clean pavement surface prior to applying primer coat and coating.
- C. Protection
 - 1. Protect adjacent curbs, walks, fences, and other items from receiving primer and coating.
- [D. Oil Spots
 - 1. Clean oil spots and treat with oil spot primer.]
- [F. Priming
 - 1. Apply a diluted mixture of one (1) part primer and two (2) parts water at the rate of 0.03 to 0.06 gallons per square yard.]

3.04 APPLICATION

- A. Apply all coats uniformly at a rate of 0.14 - 0.17 gallons per square yard using mixed and diluted material.
- B. Each coat to cure sufficiently to take traffic without scuffing.
- C. Allow final coat to cure a minimum of twenty four (24) hours under good drying conditions before allowing traffic.

3.05 CLEANING AFTER APPLICATION

- A. Remove primer and coating from surfaces other than those requiring primer and coating.

3.06 PROTECTION

- A. Barricade coated area until the coating has dried sufficiently for traffic.

3.07 SCHEDULE

END OF SECTION