

SECTION 32 12 36.23

PAVEMENT SEALING SPECIFICATION FOR SUNSHIELD

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Application of polymeric seal coat slurry over prepared asphalt concrete pavement.
- B. Placing pavement markings.

1.02 RELATED SECTIONS

- A. Section: Repairing Asphalt Concrete Pavements
- B. Section: Crack Sealing

1.03 REFERENCES

- A. Neyra Industries, Inc. SunShield Product Data Sheet 110-06
- B. American Society for Testing and Materials (ASTM)
 - 1. C 136 Method of Sieve Analysis of Fine and Coarse Aggregates
 - 2. C 1371 Determination of Emittance of Materials near Room Temperature Using Portable Emissometers
 - 3. D 870 Resistance to Water
 - 4. D 2833 Architectural Paints and Coatings
 - 5. D 4214 Resistance to Chalking
 - 6. D 4587 Resistance to Color Fading
 - 7. D 2939 Section 8 Test Method to Determine Residue by Evaporation
 - 8. E 903 Solar Absorptance, Reflectance & Transmittance of Materials Using Integrating Spheres.
 - 9. E 1980 Calculating Solar Reflectance Index of Horizontal and Low Sloped Opaque Surfaces
- C. United States Environmental Protection Agency (EPA): Toxicity Characteristics Leaching Procedure referenced in SW-846, 3rd Ed; 40 CFR, Part 261

1.04 SYSTEM DESCRIPTION

- A. Provide primer and two (2) applications of the acrylic emulsion slurry coating in all areas.

1.05 SUBMITTALS

- A. Product Data: Submit Manufacturer's printed Product Data Sheets.

1.06 ENVIRONMENTAL REQUIREMENTS

- A. Apply coating in dry weather when pavement and atmospheric temperatures are fifty (50) degrees F. or above and are anticipated to remain above fifty (50) degrees F., and good drying conditions are present and expected for the next eight (8) hours.
- B. Do not apply if freezing temperatures are expected within forty-eight (48) hours of application.

PART 2 PRODUCTS

2.01 PRODUCTS

- A. SunShield: Polymeric emulsion slurry
- B. Polyprime: Acrylic primer for asphalt pavements
- C. AcrylaSeal: Acrylic crack sealant
- D. PermaLine: Acrylic marking paint

2.02 MANUFACTURER

- A. Neyra Industries, Inc., Cincinnati, Ohio
- B. No other material will be acceptable unless approved by the Architect/ Engineer in writing ten (10) days prior to bid date.

2.03 MATERIALS

- A. Coating: SunShield
 1. A grey polymeric emulsion fortified with specifically graded aggregate.
 2. Minimum 75% solids
 3. Minimum reflectance value of 0.36 for LEED 7.1.
- B. Crack sealant: AcrylaSeal - Gray elastomeric type crack sealant compatible with pavement coating
- C. Pavement primer: Polyprime - Acrylic primer compatible with pavement coating

- D. Aggregate: Silica sand
 - 1. Included in the coating, washed dry silica sand
 - 2. Gradation: To have an American Foundry Society grain fineness number that is fifty-five (55) when tested in accordance with ASTM C 136
- E. Acrylic marking paint: PermaLine acrylic fast dry
- F. Mixing water: Clean, potable at a minimum of 50 degrees Fahrenheit

2.03 MIXES

- A. SunShield: Add no more than 10 percent (10%) water by volume to the emulsion and mix with power equipment to a homogenous coating.
- B. Polyprime: Add water to the primer mix as required for application, quantity not to exceed one hundred percent (100%) of concentrated primer.

2.04 EQUIPMENT

- A. Must be able to keep mixture homogeneous at all times and capable of applying required coating weights evenly over the entire width of the application mechanism to provide a smooth uniform coated surface.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Inspect existing pavement surfaces for condition and defect 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.

3.02 PREPARATION - AGED PAVEMENT

- A. Repairing Asphalt Concrete Pavement: Repair areas shown in schedule according to specification provided.
- B. Crack Sealing: Apply crack sealant as detailed in Neyra Product Data #142

- C. Cleaning: Clean pavement surface prior to applying primer coat and coating.
- D. Protection: Protect adjacent curbs, walks, fences, and other items from receiving primer and coating.
- E. Oil Spots: Clean oil spots and treat with oil spot primer.
- F. Priming: 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: Allow new asphalt to cure at least thirty (30) days before applying pavement coating.
- B. Cleaning: Clean pavement surface prior to applying primer coat and coating.
- C. Protection: Protect adjacent curbs, walks, fences, and other items from receiving primer and coating.
- D. Oil Spots: Clean oil spots and treat with oil spot primer.]
- E. Priming: 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 of SunShield uniformly at a rate of 0.11 - 0.12 gallons per square yard per coat using mixed and diluted material.
- B. Allow each coat to dry 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.

3.06 PROTECTION

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

3.07 SCHEDULE

END OF SECTION