

## **Division 2 Supplemental Specifications – Asphalt Seal Coating**

Note: This standard specification is used for construction of multiple FAA facilities. Based on the scope of work, some sections of this specification may not apply.

### PART 1 GENERAL REQUIREMENTS

#### 1.01 SCOPE OF SPECIFICATION.

- A. Product and application requirements for an engineered resin emulsion sealcoat slurry over new and/or aged asphalt concrete paving.

#### 1.02 RELATED SECTIONS.

- A Department of Transportation Federal Aviation Administration Specification FAA-GL-918C, Construction of Terminal Facilities.

#### 1.03 REFERENCES.

- A. American Society for Testing and Materials (ASTM)
  - 1. C 136 Method of Sieve Analysis of Fine and Course Aggregates
  - 2. D 2939 Method for Testing Emulsified Bitumens used as Protective Coatings
  - 3. D 244 Standard Specification for Emulsified Asphalt
  - 4. D 3910 Practices for Design, Testing, and Construction of Slurry Seal

#### 1.04 SYSTEM DESCRIPTION.

- A. Provide one application of the coating (emulsion slurry) in all areas.

#### 1.05 SUBMITTALS.

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

1.06 QUALITY ASSURANCE.

- A. Certification  
Submit copy of certificate from manufacturer stating applicator is their authorized installer.
- B. Certificate of Authenticity  
Submit a certificate executed by the manufacturer of the sealer stating the specific product was placed on the pavement.

1.07 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.

1.08 WARRANTY.

- A. Submit two (2) year written dual warranty by materials manufacturer and contractor.
- B. Warranty will include statements that warrant performance of the coating against flaking, chipping, loss of adhesion or other abnormal wear.
- C. In the event of abnormal wear within the warranty period manufacturer will supply material and contractor will recoat with specified material to the affected area at no cost to the owner.

## PART 2 PRODUCTS

### 2.01 MANUFACTURER.

- A. Neyra Industries, Inc., Cincinnati, Ohio: Jennite<sup>®</sup>

### 2.02 MATERIALS.

- A. Sealer: Jennite<sup>®</sup>
  - 1. A high solids refined coal tar emulsion with pure high molecular weight polymer rubber hot blended into the tar prior to emulsification.
  - 2. Minimum 52% solids – with ash of non-volatile in a range of 34%-38%
  - 3. Maximum dilution of 15 parts water per 100 parts Jennite
- B. Crack Sealant: Thermo-Seal PLS
  - 1. Hot applied, elastomeric type crack sealant compatible with pavement coating.
- C. Pavement Primer: Polyprime<sup>®</sup> (Priming is not required to obtain manufacturers warranty but may be recommended depending on condition of pavement.
  - 1. Acrylic based primer compatible with pavement coating.
- D. 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.
- E. Mixing Water
  - 1. Potable and free from harmful soluble salts.
  - 2. Temperature of the water: minimum fifty (50) degrees 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 in order to provide a uniformly coated surface.

2.04 MIXES.

- A. Add five (5) pounds of sand to the emulsion and mix with power equipment to a homogeneous condition. (Sand to be added after water)
- B. Add water to the coating mix as required for application not to exceed fifteen (15) per cent of emulsion.

## PART 3 EXECUTION

### 3.01 INSPECTION.

- A. Inspect existing pavement surfaces for conditions 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/owner.
- 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.] Crack
- B. Sealing: Apply crack sealant as detailed in Section 32 01 17.61.]
- C. Cleaning
  - 1. Clean pavement surface prior to applying coating.
- D. Protection
  - 1. Protect adjacent curbs, walks, fences, and other items from receiving coating.
- E. Priming Oil Spots
  - 1. Clean oil spots and treat with primer.
  - 2. (If priming is required apply Polyprime at a rate of .03-.06 gallons per square yard, as per Polyprime data sheet.)

### 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.

### 3.04 APPLICATION .

- A. Apply all coats uniformly at a rate of 0.14 - 0.17 gallons per square yard per coat using mixed diluted material.
- B. Allow 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 any coating from surfaces other than those requiring coating.

### 3.06 PROTECTION .

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

3.07 PAVEMENT MARKING.

A. Pavement marking paint shall be Latex, water-base emulsion, ready-mixed, complying with FS TT-P-1952.

1. Color: White.
2. Color: Yellow.
3. Color: Blue.

End Section