

SECTION 32 01 19

ASPHALT EMULSION SEAL COAT

PART 1 - GENERAL

1.01 SUMMARY

- A. Includes But Not Limited To:
 - 1. Furnish and install emulsion sealer on existing asphaltic concrete paving as described in Contract Documents.

1.02 REFERENCE

- A. American Society For Testing And Materials:
 - 1. ASTM D 977-03, "Standard Specification for Emulsion Asphalt."
 - 2. ASTM D 2397-02, "Standard Specification for Cationic Emulsified Asphalt."

1.03 SUBMITTALS

- A. Product Data: Provide Manufacturer's literature and installation instructions.
- B. Quality Assurance/Control:
 - 1. Provide following information on at least five projects of similar size in area of the Project where sealer has been applied in the last 5 years.
 - a. Project names and addresses.
 - b. Date of installation.
 - c. Name of maintenance supervisor or owner.

1.04 PROJECT CONDITIONS

- A. Project Environment Requirements:
 - 1. Apply sealer at ambient temperatures between 50 and 80 deg F.
 - 2. Do not apply sealer over wet pavement or when precipitation is imminent.

1.05 SEQUENCING

- A. Do not apply sealer over newly laid asphalt paving. Apply only on asphalt paving that has cured for 6 months minimum.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Sealer
 - 1. Asphalt Emulsion: Meet requirements of ASTM D 977, Grade SS-1h or ASTM D 2397, Grade CSS-1h.
 - 2. Weight per Gallon Liter: 10 lbs One kg minimum.
 - 3. Residual Asphalt: 20 percent minimum by weight.
 - 4. Mineral inert Fillers: 35 percent maximum by weight.
 - 5. Water: 40 percent maximum by weight.
 - 6. Latex Additive: Add at plant a rate of 2.0 parts latex to 100 parts asphalt emulsion.

- B. Aggregate:
 1. Clean sand free of silt, clay, salts, and organic matter, and meeting following grading requirements:
 - a. Sieve Percent of Weight Passing
 - 1) NO. 16 100
 - 2) NO. 30 15-85
 - 3) NO. 50 2-10
 - 4) NO. 100 0-2
 - b. Sieve Percent of Weight Passing
 - 1) NO. 30 100
 - 2) NO. 40 0-15
 - 3) NO.100 0-2

PART 3 - EXECUTION

3.01 PREPARATION

- A. Protection: Protect signs, posts, street lamp posts, trees, shrubs, and tops of curb and gutters from being discolored by splashing asphaltic material.
- B. Surface Preparation:
 1. Plane or grid off existing painted lines, grease or oil patches, and spillage of any material that has adhered to pavement.
 2. Remove debris, sand, dirt, and dust from pavement using power brush, power vacuum sweeper, and 15 hp minimum blower as necessary.
 3. Seal areas damaged by oil or grease in accordance with Manufacturer's recommendations.

3.02 APPLICATION

- A. Do not apply sealer until completion of crack sealing specified in Section 32 01 17, if applicable.
- B. Follow Sealer Manufacturer's recommendations in regard to fogging of substrate, priming of substrate, and dilution of sealer.
- C. Apply sealer using power driven machine that continually mixes sealer, water, and sand.
- D. Apply two coats minimum. Apply additional coats if necessary to attain manufacturer's recommended coverage. Allow 24 hours between coats.
 1. First coat shall contain minimum aggregate recommended by Manufacturer for substrate with 2 lb aggregate/gal minimum.
 2. Do not add aggregate to second and subsequent coats.
- E. Application Rate: 0.35 gal per sq yd 2L per sq m minimum.

3.03 PROTECTION

- A. Keep traffic off freshly applied sealer for 24 hours minimum.

END OF SECTION