

**SECTION 32 18 23.53**

**ASPHALT TENNIS COURT SURFACE COLOR COATING SYSTEM**

**PART 1 GENERAL**

**1.1 DESCRIPTION**

- A. Asphalt tennis court surface color coating system.
- B. Contractor shall completely resurface the tennis and basketball courts. The colors shall match existing.
- C. Contractor shall coordinate with the asphalt pavement restoration to ensure restoration work meets requirements for surface coating system.
- D. Protect existing items that do not receive coatings.

**1.2 RELATED REQUIREMENTS**

- A. Section 32 12 16, ASPHALT PAVING

**1.3 REFERENCE STANDARDS**

- A. American Sports Builders Association (ASBA).
- B. United States Tennis Association (USTA) Rules of Tennis.
- C. International Tennis Federation (ITF).

**1.4 SUBMITTALS**

- A. Comply with Section 01 33 23 - SHOP DRAWINGS, PRODUCT DATA, and SAMPLES
- B. Product Data: Electronically submit manufacturer's product data, including surface and crack preparation and application instructions.
- C. Samples: Electronically submit manufacturer's color samples of color coating.
- D. Test Reports:
  - 1. Submit independent test results for solar reflectance index.
  - 2. Submit independent test results for 2000 Hour ASTM G154, accelerated weathering UV test, to demonstrate long-term durability and fade resistance.
  - 3. Submit independent test results for 2000 Hour, accelerated weathering ASTM G155 Xenon Arc test, to demonstrate long-term fade resistance and quality of pigment.
- E. Manufacturer's Certification: Submit manufacturer's certification that materials comply with specified requirements and are suitable for intended application.
- F. Manufacturer's Project References: Submit manufacturer's list of successfully completed asphalt tennis court surface color coating system projects, including project name, location, and date of application.

- G. Applicator's Project References: Submit applicator's list of successfully completed asphalt tennis court surface color coating system projects, including project name, location, type and quantity of color coating system applied, and date of application.
- H. Warranty Documentation: Submit manufacturer's standard warranty.

**1.5 QUALITY ASSURANCE**

- A. Manufacturer's Qualifications:
  - 1. Manufacturer regularly engaged, for past 5 years, in manufacture of asphalt tennis court surface color coating systems of similar type to that specified.
  - 2. United States owned company.
  - 3. Member: American Sports Builders Association.
  - 4. Manufacturer has surfaces that are classified by the ITF's (International Tennis Federation) pace classification program.
- B. Applicator's Qualifications:
  - 1. Applicator regularly engaged, for past 3 years, in application of tennis court surface color coating systems of similar type to that specified.
  - 2. Employ persons trained for application of tennis court surface color coating systems.

**1.6 DELIVERY, STORAGE, AND HANDLING**

- A. Delivery and Acceptance Requirements: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer.
- B. Storage and Handling Requirements:
  - 1. Store and handle materials in accordance with manufacturer's instructions.
  - 2. Keep materials in manufacturer's original, unopened containers and packaging until application.
  - 3. Store materials in clean, dry area indoors.
  - 4. Store materials out of direct sunlight.
  - 5. Keep materials from freezing.
  - 6. Protect materials during storage, handling, and application to prevent contamination or damage.
  - 7. Close containers when not in use.

**1.7 AMBIENT CONDITIONS**

- A. Do not apply asphalt tennis court surface color coating system when air or surface temperatures are below 50 degrees F during application or within 24 hours after application.

- B. Do not apply asphalt tennis court surface color coating system when rain is expected during application or within 24 hours after application.

## **PART 2 PRODUCTS**

### **2.1 MANUFACTURER**

- A. The solicitation specifies SportsMaster Sport Surfaces as a brand name to establish the colors, attributes of the various coating components, and quality of the coating system used. Proposed alternates will be evaluated based on demonstrated ability to match the SportMaster Sport Surfaces coating system for the new tennis court surface and ensure the same general quality (finish, thickness, and durability).

### **2.2 MATERIALS**

- A. Asphalt Tennis Court Surface Color Coating System: SportMaster Color Coating System or approved equal.
- B. Crack Sealant:
  - 1. 100 percent acrylic emulsion elastomeric crack sealant.
  - 2. Seals cracks up to 1/2 inch wide in asphalt pavement.
  - 3. Weight per Gallon at 77 Degrees F: 8.8 lbs., plus or minus 0.5 lbs.
  - 4. Non-Volatile Material: 61 percent, plus or minus 5 percent.
  - 5. Color: Neutral.
- C. Crack Filler:
  - 1. 100 percent acrylic emulsion trowel-grade crack filler.
  - 2. Fills cracks in asphalt pavement up to 1 inch wide.
  - 3. Chemical Characteristics, by Weight, Minimum:
    - a. Acrylic Emulsion: 10.0 percent.
    - b. Hiding Pigment: 0.2 percent.
    - c. Mineral Inert Fillers: 78.0 percent.
    - d. Film Formers, Additives: 1.8 percent.
    - e. Water: 8.5 percent.
  - 4. Weight per Gallon at 77 Degrees F: 15.2 lbs., plus or minus 1.0 lbs.
  - 5. Non-Volatile Material: 80 percent, plus or minus 5 percent.
  - 6. Color: Neutral.
- D. Patch Binder:
  - 1. 100 percent acrylic emulsion liquid binder.
  - 2. Mix on-site with sand and cement.
  - 3. Levels and repairs low spots and depressions up to 3/4 inch deep in asphalt pavement.
  - 4. Fills Cracks in Asphalt up to 1" in width.

5. Weight per Gallon at 77 Degrees F: 8.8 lbs., plus or minus 0.5 lbs.

E. Filler Course:

1. 100 percent acrylic emulsion resurfacer.
2. Mix on-site with silica sand.
3. Apply to asphalt surfaces or previously colored acrylic surfaces in preparation of color coating system.
4. Chemical Characteristics, by Weight, Minimum:
  - a. Acrylic Emulsion: 44.0 percent.
  - b. Hiding Pigment: 2.0 percent.
  - c. Mineral Inert Fillers: 5.0 percent.
  - d. Film Formers, Additives: 0.2 percent.
  - e. Water: 45.0 percent.
5. Weight per Gallon at 77 Degrees F: 8.5 lbs., plus or minus 0.5 lbs.
6. Non-Volatile Material: 27.5 percent, plus or minus 5.0 percent.
7. Color: Black.

F. Color Coating:

1. 100 percent acrylic emulsion coating.
2. Mix on-site with silica sand and water.
3. Color coats tennis and multipurpose courts.
4. Weight per Gallon at 77 Degrees F: 9.2 lbs., plus or minus 0.5 lbs.
5. Color: Blue (Tennis Court), Dark Green (Tennis Court Surround), Light Blue (Basketball Striping in Tennis Court Area), Light Green (Basketball Lines in Tennis Court Surround).

G. Line Markings Primer:

1. 100 percent acrylic emulsion primer, clear drying.
2. Primes line markings and prevents bleed-under for sharp lines.
3. Chemical Characteristics, by Weight, Nominal:
  - a. Acrylic Emulsion: 38.0 percent.
  - b. Hiding Pigment: 0.0 percent.
  - c. Mineral Inert Fillers: 7.0 percent.
  - d. Film Formers, Additives: 1.5 percent.
  - e. Water: 50.0 percent.
4. Weight per Gallon at 77 Degrees F: 8.9 lbs., plus or minus 0.5 lbs.
5. Non-Volatile Material: 29 percent, plus or minus 5 percent.

H. Line Paint:

1. Pigmented, 100 percent acrylic emulsion line paint.
2. Line marking on asphalt tennis courts.
3. Chemical Characteristics, by Weight, Nominal:

- a. Acrylic Emulsion: 25.89 percent.
  - b. Pigment: 14.90 percent.
  - c. Mineral Inert Fillers: 13.12 percent.
  - d. Additives: 4.73 percent.
  - e. Water: 41.36 percent.
4. Weight per Gallon at 77 Degrees F: 10.65 lbs., plus or minus 0.75 lbs.
  5. Non-Volatile Material: 45.17 percent, plus or minus 5 percent.
  6. Color: White.

### **PART 3 EXECUTION**

#### **3.1 EXAMINATION**

- A. Examine asphalt tennis court surfaces to receive color coating system.
- B. Verify asphalt tennis court meets ASBA requirements.
- C. Notify COR of conditions that would adversely affect application or subsequent use.
- D. Do not begin surface preparation or application until unacceptable conditions are corrected.

#### **3.2 SURFACE PREPARATION**

- A. Protection of In-Place Conditions: Protect adjacent surfaces and landscaping from contact with asphalt tennis court surface color coating system.
- B. Prepare surfaces in accordance with manufacturer's instructions.
- C. Cure new asphalt surfaces a minimum of 30 days before application of asphalt tennis court surface color coating system.
- D. Remove dirt, dust, debris, oil, grease, vegetation, loose materials, and other surface contaminants which could adversely affect application of asphalt tennis court surface color coating system. Pressure wash entire surface.
- E. Repair cracks, depressions, and surface defects in accordance with manufacturer's instructions before application of filler course and color coating.
- F. Level depressions 1/8 inch and deeper with patch binder in accordance with manufacturer's instructions.
- G. Apply 2 coats of filler course as required by surface roughness and porosity to provide smooth underlayment for application of color coating.
- H. Ensure surface repairs are flush and smooth to adjoining surfaces.

#### **3.3 APPLICATION**

- A. Apply asphalt tennis court surface color coating system in accordance with manufacturer's instructions at locations indicated on the Drawings.

- B. Mix materials in accordance with manufacturer's instructions.
- C. Apply Filler Course and Color Coating with a 50-60 durometer, soft rubber squeegee.
- D. Filler Course:
  - 1. Apply 2 coats on new asphalt or existing acrylic surfaces with extensive cracks or low spot repair.
- E. Color Coating: Apply a minimum of 2 coats of color coating to prepared surfaces in accordance with manufacturer's instructions.
- F. Allow material drying times in accordance with manufacturer's instructions before applying other materials or opening completed surface to foot traffic.

**3.4 LINE MARKINGS**

- A. Lay out tennis court line markings in accordance with USTA Rules of Tennis.
- B. Lay out basketball court lines to match existing lines.
- C. Apply line markings primer, after masking tape has been laid, to seal voids between masking tape and tennis court surface to prevent bleed-under when line paint is applied.
- D. Apply a minimum of 1 coat of line paint in accordance with manufacturer's instructions.

**3.5 PROTECTION**

- A. Allow a minimum of 48 hours curing time before opening tennis courts for play.
- B. Protect applied asphalt tennis court surface color coating system to ensure that, except for normal weathering, coating system will be without damage or deterioration at time of Substantial Completion.

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