

SECTION 32 18 23.53

ASPHALT TENNIS COURT CUSHION/COLOR COATING

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes:

1. Application of cushion underlayment and color coating of asphalt concrete tennis courts.

1.02 DESCRIPTION

- A. Provide [[four (4)] [six (6)] [eight (8)]] coats of cushion in all areas.
- B. Provide [[two (2)] [three (3)]] color coats of tennis court material in all areas.

The number of coats of cushion and color depends on the porosity of the surface, the degree of cushion desired, and is at the discretion of the architect/engineer. As a guide six (6) coats of cushion will result in approximately one-eighth (1/8) inch thickness.

- C. Stripe the courts as shown in schedule and on drawing.
- D. Patch the areas shown on drawings.

1.03 REFERENCES

- A. American Society for Testing and Materials (ASTM)
 1. C136 Method of Sieve Analysis of Fine and Coarse Aggregates
 2. D2939 Section 8 Test Method to Determine Residue by Evaporation

1.04 SUBMITTALS

- A. Product Data: Submit manufacturer's printed product data sheets.
- B. Certification: Submit letter from manufacturer stating applicator is a qualified applicator.

1.05 QUALITY ASSURANCE

- A. Tests and Inspections: Architect/Engineer/Owner reserves right to employ a testing laboratory to conduct testing and inspection of materials, and mixtures.
- B. Applicator: Certified Applicator of color coat manufacturer.

1.06 JOB CONDITIONS

- A. Environmental Requirements: 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. for four (4) hours after completing application.

PART 2 PRODUCTS

2.01 ACCEPTABLE PRODUCTS - all by Neyra Industries of Cincinnati, Ohio.

- A. Cushion: Sport-Mat, polymer emulsion cushion, and Sport-Top, final cushion coat. All coats except final one or two cushion coat [s] shall be Sport-Mat. Final cushion coat [s] shall be Sport-Top.
- B. Final color coats: Dynaflex Acrylic Color coating or Center Court Acrylic.
- C. Line paint: Dynastripe, acrylic striping paint.
- D. Patching Material: Dynabinder, acrylic patching material.
- E. Crack Sealant: AcrylaSeal - Acrylic Crack Sealant or Dynabinder, acrylic patching material.
- [F. No other materials will be accepted unless approved by Architect/Engineer/Owner in writing 10 days prior to bid date.]

2.02 MATERIALS

- A. Final color coat: an ultraviolet light stabilized, pure synthetic mineral oxide pigmented, acrylic color coating system in concentrated form, specifically formulated for original coating or re-coating of recreational surfaces meeting the following requirements.
 1. Maximum water content, sixty (60) percent by weight (ASTM solid test D2939).
 2. Minimum of 0.50 lbs. per gallon of pure synthetic mineral oxide color pigment.
 3. Containing ultra-violet light screening agents.
 4. Minimum of 0.10 lbs. per gallon of polyolefin fiber.

- B. Line paint: Water-based acrylic striping paint recommended by color coat manufacturer.
- C. Patching material: Water-based acrylic, polymer/portland cement/sand patching material recommended by color coat manufacturer.
- D. Cushion Coating: Water-based acrylic polymer emulsion with SBR rubber encapsulated in the latex coating.
- E. Crack sealant: Acrylic, minimum dry solids by volume sixty nine (69) percent.
- F. Aggregate:
 - 1. Washed, dry silica sand free of dust, trash, clay, organic materials or other contaminants and supplied in bags to insure correct measurement.
 - 2. Gradation: To have an American Foundry Society grain fineness number that is no less than sixty-five (65) and no more than ninety-five (95), when tested in accordance with ASTM C136 and with ninety-nine (99%) passing forty (40) mesh.
- G. Mixing water:
 - 1. Potable and free from harmful soluble salts.
 - 2. Temperature of the water: minimum fifty (50) degrees F.

2.03 COMPOSITION OF MIXES

- A. Color Coating Slurry Mixes: Per one hundred (100) gallons of color concentrate, add forty (40) to fifty (50) gallons of water, then add and mix from four (4) to eight (8) pounds per gallon of silica sand as per manufacturer's written specification. (If Center Court is used, no additional sand is required.)
- B. Cushion Coating: Per one hundred (100) gallons of cushion concentrate add thirty (30) to thirty-five (35) gallons of water.

2.04 EQUIPMENT AND TOOLS

- A. All equipment, tools and machinery used for handling materials and executing any part of work shall be subject to approval by Architect/Engineer/Owner before work is started.
- B. Use equipment for applying mixture that is designed for applying tennis court color coating and capable of applying required coating weights evenly to provide a smooth, uniformly coated surface.

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 below.
- B. Starting installation constitutes Contractor's acceptance of surface as suitable for installation.

3.02 PREPARATION

- A. Existing Asphalt Tennis Court
 - 1. Repairing asphalt paving: Repair areas shown in schedule according to color coat manufacturer's recommendations.
 - 2. All cracks shall be cleaned thoroughly and blown out with compressed air.
 - a. Cracks one eighth (1/8) inch to three quarter (3/4) inch shall be filled with Dynaflex Acrylic Crack Sealant.
 - b. Cracks greater than three quarter (3/4) inch shall be filled with Dynabinder/concrete mix to within one half (1/2) inch of surface and when cured, brought to level with Dynaflex Acrylic Crack Sealant.
 - 3. Cleaning:
 - a. Thoroughly clean surfaces to be coated to remove all foreign debris (dirt, silt, gravel, leaves, etc.) using mechanically powered forced air sweepers, mechanical street sweepers, steel bristle brooms or high pressure water.
 - b. Thoroughly scrape mud areas and scrub wash with clean water.
 - c. If fungus is present, use a two (2) percent sodium hypochlorite solution to clean affected area.
 - 4. Protection: Protect adjacent curbs, walks, fences, and other items from receiving color coat and cushion.
- B. New Asphalt Tennis Court
 - 1. Cleaning:
 - a. Thoroughly clean surfaces to be coated. Remove all foreign debris (dirt, silt, gravel, leaves, etc.) using mechanically powered forced air sweepers, mechanical street sweepers, steel bristle brooms, and/or high pressure water.
 - b. Thoroughly scrape mud areas and scrub wash with clean water.
 - 2. Protection: Protect adjacent curbs, walks, fences, and other items from receiving color coat.
 - 3. New pavements shall be allowed to cure and pass the "no water break" test before application. Cast one or two gallons of clean water from a suitable

clean container (such as a five (5) gallon pail) out on the surface. The water should sheet out and wet the surface uniformly without ribboning, crawling, or showing oil rings (comparable to water on very clean glass vs. dirty or greasy glass). If the clean water does not wet the surface uniformly, the asphalt is not ready for coating and should age longer.

3.03 APPLICATION

- A. When making mixture, mix in water first. For Dynaflex Color Coating, while agitating, add sand slowly. Keep mixture homogeneous prior to beginning application and during entire time mixture is being applied.
- B. Apply cushion and color coat slurry uniformly over the entire surface per schedule.
- C. Allow adequate time between applications for prior coat to dry thoroughly (tack free) before applying next coat. Apply no more than two coats of cushion per day. Upon completion of final coat, keep all foot traffic off sealed surface. Allow the final coat to cure at least twenty-four (24) hours, under good drying conditions, (at least seventy (70) degrees F.) before allowing foot traffic on surface. Less favorable conditions will require longer drying times.
- D. Playing lines: Base lines shall be [[two (2)] [three (3)] [four (4)]] inches (be sure to state width of base lines) wide and playing lines not more than two (2) inches wide, accurately located and marked in accordance with the rules of the United States Tennis Association, and painted with a paint recommended or approved by the manufacturer of the color finish material; however, use of traffic, oil, alkyd, or solvent-vehicle type paint is prohibited. The painting shall be done by skilled mechanics in a workmanlike manner in accord with the manufacturer's standard printed instructions. Prior to white line paint application, line paint tape gap filler shall be applied to reduce incidence of fuzzy lines.

3.04 PROTECTION

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

3.05 SCHEDULE

END OF SECTION