

SECTION 23 18 23.53
ASPHALT TENNIS COURT COLOR COATING

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Application of acrylic color coating system over prepared asphalt concrete pavement.

1.02 REFERENCES

- A. American Society for Testing and Materials (ASTM)
 - 1. C 136 Method of Sieve Analysis of Fine and Coarse Aggregates
 - 2. D 870 Resistance to Water
 - 3. D 4214 Resistance to Chalking
 - 4. D 4587 Resistance to Color Fading
 - 5. D 2939 Section 8 Test Method to Determine Residue by Evaporation
- B. United States Environmental Protection Agency (EPA)
 - 1. Toxicity Characteristics Leaching Procedure referenced in SW-846, 3rd Ed; 40 CFR, Part 261
- C. United States Tennis Association (USTA) - Publication Tennis Courts 1992 - 1993
 - 1. Page 24 Layout of Tennis Court

1.03 SYSTEM DESCRIPTION

Choices regarding number of coats of resurfacer and color finish should be made based on the following general principles;

- New Construction or overlays- will probably require two coats of acrylic resurfacer
- Reseals of existing surfaces- will generally only require one coat of acrylic resurfacer.

A minimum of two slurry color coats are recommended. Very heavy play surfaces should have a third application. To adjust speed of play on tennis courts a third coat without aggregate will result in a slightly faster and less abrasive surface.

- A. Provide [[one (1)] [two (2)] [three (3)]] coat [s] of Acrylic Resurfacer over prepared surface.

- B. Provide [[two (2)] [three (2)] [four (4)]] coats of Acrylic Color Slurry Coating over prepared surface after Acrylic Resurfacer has dried thoroughly.
- C. Place lines on surface in accordance with USTA requirements.

Colors available include green, dark green, red, beige, gray, and blue. Custom color matching is also available from Neyra Industries, Inc. Greens are coolest and easy on the eyes. Blue is primarily intended for indoor courts where reflective color may be desirable.

- D. Colors selected are to be [] inside play lines and [] in the perimeter area.

1.05 SUBMITTALS

- A. Product Data
 - 1. Submit Manufacturers printed Product Data Sheets, stating that coating meets above ASTM and manufacturers standards, and application specifications.

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.

1.07 WARRANTY

- A. A two (2) year written dual warranty signed by contractor and materials manufacturer is available.

PART 2 PRODUCTS

2.01 MANUFACTURER

- A. Neyra Industries, Inc., Cincinnati, Ohio
 - 1. Materials are listed as standard of quality.

[B.]

[C. No other material will be acceptable unless approved by the Architect/ Engineer in writing ten (10) days prior to bid date.]

2.02 MATERIALS

- A. Color Coating: Dynaflex Acrylic or Center Court Acrylic.
- B. Resurfacer: Dynaflex Acrylic Resurfacer
 - 1. An acrylic latex modified with synthetic fibers and fillers.
- C. Line Paint: Dynastripe
 - 1. A water-based acrylic striping paint.
- D. Aggregate
 - 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 seventy (70) and no greater than one hundred (100) when tested in accordance with ASTM C 136 for color coat and not less than fifty (50) or greater than one hundred (100) for Acrylic Resurfacer.
- E. Court Patch Binder: Dynabinder
 - 1. A water-based acrylic, polymer/portland cement/sand patching material.
- F. Acrylic Crack Sealant: AcrylaSeal Acrylic Crack Sealant
 - 1. Minimum dry solids by volume sixty-nine (69) percent.
- G. Mixing Water
 - 1. Potable and free from harmful soluble salts.
 - 2. Temperature of the water: minimum fifty (50) degrees F.

2.03 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. Acrylic Resurfacer: Per one hundred (100) gallons of concentrate add forty-five (45) to fifty-five (55) gallons of water. Then add and mix six (6) to twelve (12) pounds of silica sand as per manufacturer's recommendation.

2.04 EQUIPMENT

- A. All equipment, tools, and machinery used for handling materials and executing work shall be in good working condition and capable of applying required coating weights evenly 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. Do not place coating if defects exist, notify Architect/Engineer.
- B. Starting installation constitutes contractor's acceptance of surface as suitable for installation.

SPECIFIER SHOULD SELECT SECTION UNDER PREPARATION BASED ON JOB REQUIREMENTS.

3.02 PREPARATION - EXISTING ASPHALT TENNIS COURT

- [A. Overlay courts according to requirements detailed in Section 02965.]
- [B. Repair courts as detailed in Section 02950 of this specification.]

OR

- A. Repair grade depressions: Prior to the application of coating materials, entire surface should be checked for minor depressions or irregularities. This is to be done by flooding the courts and after one-half (1/2) hour marking any depressions where water covers a nickel (one eighth (1/8) inch). Fill such irregularities with court patch binder according to manufacturer's specifications.

- B. Clean all cracks thoroughly and fill.

1. Cracks less than one-quarter (1/4) inch in width shall be filled with acrylic crack sealant.
2. Cracks greater than one-quarter (1/4) inch in width shall be filled with court patch binder.

C. Cleaning

1. 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 and/or high pressure water.
2. Thoroughly scrape mud areas and scrub wash with clean water.
3. If fungus is present, use a two (2) percent sodium hypochlorite solution to clean affected area. Rinse thoroughly.

D. Protection: Protect adjacent curbs, walks, fences, and other items from receiving color coat or resurfacer.

3.03 NEW ASPHALT TENNIS COURTS

A. Cleaning

1. 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.
2. Thoroughly scrape mud areas and scrub wash with clean water.

B. Protection: Protect adjacent curbs, walks, fences, and other items from receiving color coat or resurfacer.

C. New pavements which have been accepted by Architect/Engineer/Owner 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 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.

3.04 APPLICATION

A. When making mixes add water first then while agitating add silica sand slowly. Keep mixture homogeneous prior to beginning application and during entire time mixture is being applied.

B. Apply acrylic resurfacer uniformly over entire pavement per manufacturer’s specifications.

C. Allow adequate time between applications for prior coat to dry thoroughly before applying next coat. 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, before allowing foot traffic on surface. Less favorable conditions will require longer drying times.

- D. Playing lines: Base lines shall be [two (2) inches] [three (3) inches] [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 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 accordance 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.

3.05 PROTECTION

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

3.06 SCHEDULE

END OF SECTION