

SECTION 32 18 23.53

PORTLAND CEMENT CONCRETE TENNIS COURT COLOR COATING

PART 1 GENERAL

1.01 SUMMARY

- A. Section Includes:
 - 1. Color coating of portland cement concrete tennis courts.
 - 2. Tennis court marking.

1.02 RELATED SECTIONS

[A.]

[B.]

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 SYSTEM DESCRIPTION

- A. Etch entire surface with a solution of phosphoric or muriatic acid, and flush to neutralize immediately.
- B. Apply one (1) coat of primer over entire area.
- C. Apply color coats to entire area.
- D. Place markings on courts.

1.05 SUBMITTALS

- A. Product Data
 - 1. Submit manufacturer's printed product data sheets.

1.06 ENVIRONMENTAL REQUIREMENTS

- 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.

1.07 WARRANTY

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

PART 2 - PRODUCTS

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

- A. Primer: Dynabond Primer.
- B. Color coat: Dynaflex, fortified color coat or Center Court Acrylic.
- C. Line paint: Dynastripe, acrylic marking 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 ten (10) days prior to bid date.]

2.02 MATERIALS

- A. Color coat: An ultra-violet 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 ultraviolet 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. Primer: Acrylic bonding primer.
- E. Crack sealant: Dynaflex Acrylic Crack Sealant, 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) percent passing forty (40) mesh.

G. Mixing water:

1. Potable and free from harmful soluble salts.
2. Temperature of the water: minimum fifty (50) percent F.

2.03 MIXES

- A. As per manufacturer's specifications on submittals.

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. Do not start surfacing/installation until repairs or entire new surface has been accepted by Architect/Engineer/Owner as to texture, ponding of water, etc.

3.02 PREPARATION

- A. Existing Concrete Tennis Court
1. Remove all loose previous color coats by power washing entire surface.
 2. Repair all bird baths that hold water more than one eighth (1/8) inch deep one (1) hour after rain has stopped with court patch binder.

3. Clean out and fill all cracks less than one quarter (1/4) inch wide with acrylic crack sealant.
4. Clean out and fill all cracks greater than one quarter (1/4) inch wide with court patch binder.
5. Clean entire surface.

[OR]

B. New Concrete Tennis Court

1. Allow all new concrete to cure at least twenty eight (28) days prior to coating.
2. Thoroughly clean entire surfaces to be coated.
3. Light broom finish of new concrete is preferred. Steel trowel finishes are not acceptable for this application.
4. Vapor barrier must be placed prior to installing concrete slabs.
5. Inspect slab for birdbaths one eighth (1/8) inch deep or greater and fill as per manufacturer's written specifications.

3.03 APPLICATION

- A. Application may not start until Architect/Engineer/Owner has accepted entire surface as to texture, ponding of water, and drainage.
- B. Etch entire surface with 1:4 solution of muriatic acid and water and flush to neutralize immediately.
- C. After flushing has dried thoroughly, for at least twenty four (24) hours under good drying conditions, apply one (1) coat of primer over entire area at a rate of .03-.04 gallons per square yard.
- D. Allow adequate time between applications for prior coat to dry thoroughly before applying next coat. Primer requires a minimum of two (2) hours of good drying. Color coats can normally be re-coated after four (4) hours of good drying with sun. 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.

- E. Finished surface shall be free of streaks, pinholes, or uneven distribution of sand and shall have a uniform appearance.
- F. Playing Lines: Base lines shall be [[two (2)] [three (3)] [four (4)]] (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 Lawn 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.

3.04 PROTECTION

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

3.05 SCHEDULE

END OF SECTION