

SECTION 32 18 23.43

COLOR COATING ON OUTDOOR INLINE HOCKEY RINK

PART 1 GENERAL

1.01 SECTION INCLUDES

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

1.02 RELATED SECTIONS

- A. []
- B. []

1.03 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.

1.04 SYSTEM DESCRIPTION

- A. Provide [one] coat of Acrylic Resurfacer over prepared surface.
- B. Provide [three] coats of Acrylic Color Coating over prepared surface after Acrylic Resurfacer has dried thoroughly.
- C. Provide [one] coat of surface clear coat on the entire surface.

1.05 SUBMITTALS

- A. Product Data
 - 1. Submit Manufacturers printed Product Data Sheets.

1.06 ENVIRONMENTAL REQUIREMENTS

- A. Apply coating in dry weather when pavement 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.

PART 2 PRODUCTS

2.01 MANUFACTURER

- A. Neyra Industries, Inc., Cincinnati, Ohio
 - 1. Materials are listed as standard of quality.
- B. No other material will be acceptable unless approved by the Architect/Engineer/Owner in writing ten (10) days prior to bid date.

2.02 MATERIALS

- A. Color Coating: Dynaflex Acrylic.
 - 1. Maximum water content 60% by weight (ASTM solid test D 2939).
 - 2. Minimum of 0.50 lb./gal. of pure synthetic mineral oxide color pigment.
 - 3. Containing ultraviolet light screening agents.
 - 4. Minimum of 0.10 lbs./gal. of polyolefin.
- B. Resurfacer: Dynaflex Acrylic Resurfacer, an acrylic latex modified with synthetic fibers and fillers.
- C. Surface bonding agent: Pure Coat.
- D. Line Paint: PermaLine, a water-based acrylic striping paint.
- E. 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 eighty (80) 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.
- F. Court Patch Binder: Dynabinder, water-based acrylic, polymer/portland cement/sand patching material.
- G. Acrylic Crack Sealant: AcrylaSeal, minimum dry solids by volume 69%.
- H. 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 Mixes: Per one hundred (100) gallons of color concentrate, add forty (40) gallons of water and five (5) pounds of silica sand.
- 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.
- C. Pure Coat: Per one hundred (100) gallons of concentrate add ten (10) gallons of water.

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/Owner.
- B. Starting installation constitutes contractor's acceptance of surface as suitable for installation.

3.02 PREPARATION - EXISTING ASPHALT

- 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). Such irregularities will be filled 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 according to manufacturer's specification.

- 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 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 PREPARATION - NEW ASPHALT

- 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 (1) or two (2) 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. Minimum of thirty (30) day curing.

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. Acrylic resurfacer can normally be re-coated after four (4) hours of good drying with sun. Color coats can normally be re-coated after two to four (2 - 4) hours of good drying with sun.

- D. Apply a pure coat of Dynaflex at a rate of .03 gallons per square yard to entire coated surface. Allow this 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.

END OF SECTION