

**EXHIBIT A – Scope of Work  
UPDATED 10/07/2020**

**Division 8**

**8-27 TENNIS COURT PLAYING SURFACE**

**8-27.1 Description**

This work consists of the patching and crack filling necessary for preparing the concrete slab for primer application, filler course application, and installation of the acrylic color playing surface and line paint for the Tennis Courts.

**8-27.2 Materials**

1. **All surface coatings products specified in this section shall be supplied by a single manufacturer and distributor. The distributor is California Sports Surfaces. Contactor must use the distributor contact information that will be provided by the agency to the contractor after award of the contract.**
2. The contractor shall record the batch number of each product used on the site and maintain it through the warranty period.
3. The contractor shall provide the Engineer, upon request, an estimate of the volume of each product to be used on the site.
4. The installer shall be an authorized applicator of the specified system.
5. All surfacing materials shall be non-flammable and have a VOC content of not less than 100g/liter measured by EPA method 24.

**8-27.2(1) Acrylic Patch Mix**

Acrylic Patch Mix for use in patching cracks, holes, depressions and other surface imperfections shall be a 100% acrylic resin blended with Portland Cement and silica sand:

1. Percent solids by weight (minimum) 46%
2. Weight 8.7-8.9 lbs/gallon
3. Manufacturer: Court Patch Binder by California Products, Andover, MA 01810.

**8-27.2(2) Crack Filler**

Crack filler for use in filling fine cracks shall be 100% acrylic resin heavily filled with sand:

1. Percent solids by weight (minimum) 85%
2. Percent solids by weight (minimum) 15 lbs/gallon
3. Manufacturer: Court Patch Binder by California Products, Andover, MA 01810.

**8-27.2(3) Surface Preparation**

It is the contractor's responsibility to prepare the existing surface for the application of the new coating per the coating manufacturer instructions.

#### **8-27.2(4) Adhesion Primer**

Adhesion Primer is a two-component, water-based, epoxy primer for uncoated concrete surfaces:

1. Percent solids by weight (minimum) 34.6-34.8%
2. Weight 8.55-8.70 lbs/gallon
3. Manufacturer: California Ti-Coat by California Products, Andover, MA 01810.

#### **8-27.2(5) Acrylic Filler Course**

Acrylic Filler Course for use as a filler for new concrete surfaces shall be a 100% acrylic filler blended with approved silica sand at the job site and shall contain no vinyl copolymerization constituent and shall contain not less than 3.5% attapulgite:

1. Percent solids by weight (minimum) 26.7%
2. Weight 8.7-8.9 lbs/gallon
3. Manufacturer: Acrylic Resurfacer by California Products, Andover, MA 01810.

#### **8-27.2(6) Acrylic Color Playing Surface**

Acrylic Color Playing Surface for use as the finish color and texture shall be blended at the job site to achieve the correct surface texture and shall be comprised of the following components.

Acrylic Pigmented Latex Coating:

1. Shall be 100% acrylic resin and contain no vinyl copolymerization constituent with selected light fast pigments.
2. Green shall contain not less than 8% chrome oxide.
3. Colors for playing and border area are to be the Plexipave Light Green. These colors **must** be confirmed with the agency before purchase and application.
4. Manufacturer: Plexipave by California Products, Andover, MA 01810. Percent solids by weight (minimum) 36.5%
5. Weight 10.0-10.2 lbs/gallon

Texture Base:

1. Texture Color Base shall be 100% acrylic resin containing no vinyl copolymerization constituent. Contains not more than 63% rounded silica sand.
2. Percent solids by weight (minimum) 74%
3. Weight 13.1-14.1 lbs/gallon
4. Manufacturer: Plexipave Color Base by California Products, Andover, MA 01810.

#### **8-27.2(7) Line Paint**

1. Line Paint is for use as the line marking on the court/playing surface and shall be 100% acrylic resin containing no alkyds or vinyl constituents.
2. Texturing shall be rounded silica sand. Color shall be White.
3. Percent solids by weight (minimum) 60.5%
4. Weight 12.2-12.3 lbs/gallon
5. Manufacturer: Hi-Hide Plexicolor Line Paint, Textured by California Products, Andover, MA 01810.

### **8-27.3 Construction Requirements**

#### **8-27.3(1) Weather Limitations**

1. Do not install when rainfall is imminent or extremely high humidity prevents drying.
2. Do not apply unless surface and air temperature are 50 degrees F and rising.
3. Do not apply if surface temperature is in excess of 140 degrees F.

#### **8-27.3(2) Preparation for Acrylic Color Playing System**

Prior to applying the acrylic color playing system, the net sleeves and fence posts shall be installed and approved by the Engineer.

##### Cleaning:

1. Clean surfaces of loose dirt, oil, grease, leaves, and other debris in strict accordance with manufacturer's installation instructions.
2. Pressure washing will be necessary to adequately clean areas to be coated.
3. Any areas previously showing algae growth shall be treated with chlorine bleach or approved product to kill the organisms and then be properly rinsed.

##### Holes and Cracks:

4. Holes and cracks shall be cleaned and a suitable soil sterilant, as approved by the Engineer, shall be applied to kill all vegetation fourteen (14) days prior to use of the acrylic patch mix according to the manufacturer's specifications.

##### Depressions:

5. Depressions holding enough water to cover a nickel shall be filled with acrylic patch mix.
6. Three (3) gallons of acrylic patch binder, 100 lbs. 60-80 silica sand, 1 gallon Dry Portland Cement (Type I).
7. This step shall be accomplished prior to the squeegee application of the acrylic filler course.
8. The contractor shall flood all the courts and then allow draining.
9. Define and mark all areas holding enough water to cover a nickel.
10. After defined areas are dry, prime with tack coat mixture of two (2) parts water to one (1) part acrylic patch mix.
11. Allow tack coat to dry completely.
12. Spread acrylic patch mix true to grade using a straight edge, not a squeegee) for strike-off. Steel trowel or wood float the patch so that the texture matches the surrounding area.
13. Never add water to mix.
14. Light misting on surface and edges to feather in is allowed as needed to maintain workability. Allow to dry thoroughly and cure. Further work on the playing surface cannot commence until the Engineer has inspected and accepted the surface.

##### Acid Treatment:

15. Etching compound shall be applied to all uncoated concrete surfaces at the rate of .01 to .012 gallons per square yard.
16. Dilute one (1) gallon of etching compound with four (4) gallons of potable water.
17. Apply liberally to the surface and spread with a soft hair push broom.
18. After the surface has dried remove any dust or latent material.
19. Primer: Adhesion Primer shall be applied to all uncoated concrete surfaces prior to application of filler materials.
20. Apply at a rate of 0.25-0.3 gallons per square yard.
21. Mix component A with Component B at a ratio of 1:1.
22. Let stand for 20-30 minutes prior to use.
23. Apply with a short nap phenolic core roller.
24. Allow the adhesion primer to dry for approximately one (1) to three (3) hours until the
25. surface is slightly tacky to the touch. In no case shall the surface be left overnight before receiving an application of acrylic filler course.

Acrylic Filler Course:

26. On the properly applied adhesion primer the acrylic filler course shall be applied to the clean underlying surface in one application to obtain a total quantity of not less than .06 gallons per square yard based on the material prior to any dilution.
27. Acrylic filler course may be used to pre-coat depression and hole/crack repairs to achieve better planarity prior to filler course application.
28. Acrylic Filler Course shall be mixed in according to the following:
  - a. Acrylic Latex Binder 55 gallons
  - b. Water 20 – 40 gallons
  - c. Sand 600-800 pounds / 60-80 mesh
  - d. Liquid Yield 112-138 gallons

**8-27.3(3) Application of Acrylic Color Playing Surface**

1. All areas to be color coated shall be clean, free from sand, clay, grease, dust, salt or other foreign matter.
2. The Contractor shall obtain the Engineer's approval, prior to applying any surface treatment.
3. Blend color base and pigmented latex coating with a mechanical mixer to achieve a uniform Acrylic Color Playing Surface mixture.
4. The mix shall be:
  - a. Color Base 20 gallons
  - b. Pigmented latex coating 20 gallons
  - c. Water 20-22 gallons
5. Application shall be made by 50 durometer rubber faced squeegees.
6. The acrylic color playing surface mixture should be poured on to the court surface and spread to a uniform thickness in a regular pattern.
7. A total of two (2) applications of acrylic color playing surface mixture shall be made to achieve a total application rate of not less than 10 gallons/square yard.
8. The first coat shall be applied lengthwise of the court and the second coat, crosswise of the court.
9. No application should be made until the previous application is thoroughly dry.

**8-27.3(4) Line Painting**

1. Line shall be two (2) inches wide.
2. Lines shall be carefully laid out in accordance with USAPA guidelines.
3. The area to be marked shall be taped to ensure a crisp line.
4. Line Paint shall have a texture matching the surrounding play surface.
5. Application shall be made by brush or roller at the rate of 150 sf/gallon.
6. Temporary barriers shall be erected to protect coatings during drying and curing.
7. Remove all containers, surplus materials and debris.
8. Dispose of materials in accordance with local, state and Federal regulations.
9. Leave site in a clean and orderly condition.

#### **8-27.4 Measurement**

1. The Contracting Agency will not base payment on any unit of measurement for the square yard item Acrylic Tennis Playing surface shall include all surface preparation, priming, acid treatment, crack sealing, patching, leveling, and surfacing to install a playing surface to meet contract plans and specifications.
2. Line painting shall include surface preparation, texture and paint to install line paint in accordance with the contract plans and specifications. The unit of measure in lineal feet.